

THE EDUSEMIOTICS OF IMAGES: ESSAYS ON THE ART~SCIENCE OF TAROT

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The Edusemiotics of Images

Essays on the Art~Science of Tarot

By

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In the beginning is the relation

Martin Buber, *I and Thou*

The spirit ... moves between and among signs ...

Robert S. Corrington, *Nature's Self:
Our Journey from Origin to Spirit*

CONTENTS

Prologue: Educating for three Is.....	1
Chapter 1: At the edge of chaos	11
Chapter 2: Signs in action	39
Chapter 3: The language of images.....	67
Chapter 4: Transversal communication.....	95
Chapter 5: Becoming-woman.....	123
Chapter 6: Toward integral consciousness	153
Chapter 7: An ethics of integration	183
Chapter 8: Signs and information.....	213
Chapter 9: Exploring educational futures.....	243
Chapter 10: The paradox of inquiry	273
Epilogue: Ghosts in the machine?.....	301
Works Cited	313
Acknowledgements	329
Index	331

PROLOGUE

EDUCATING FOR THREE IS

The word *edusemiotics* was coined by Marcel Danesi (2010) to indicate a new interdisciplinary field of inquiry that has emerged as a result of the last decade of my research in the intersection of educational *philosophy* and semiotics – or the *science* of signs. Edusemiotics transcends the long-standing disciplinary boundaries between humanities and sciences. According to the American pragmatic philosopher and founder of modern semiotics Charles Sanders Peirce, the whole universe is perfused with signs whose action in nature, culture and the human *psyche* constitutes the dynamical process of *semiosis*. Semiosis – from the Greek σημείωσις, *sēmeiōsis*, a derivation of the verb *sēmeiō* meaning “to mark” – is the name given by Peirce to the process of the evolution of signs.

Briefly, semiotics is the study of signs and their signification; as such, it is considered to be of eminent importance to interdisciplinary research. In ancient times semiotics was a specific branch of medicine, with signs describing symptoms. Later semiotics became a branch of philosophy, with signs, verbal or nonverbal, describing the nature of things. The Scholastic tradition, for example, posited a sign to be something that we can not only directly perceive but also connect with something else, its other, by virtue of our or somebody’s else experience. A sign not only represents but also causes other signs to come to mind as a consequence of itself: this relation is expressed in the medieval formula *aliquid stat pro aliquo*, which is translated as something standing for something else.

The word symbol is derived from Greek *symbolon*, that is, a token composed of two halves used to verify identity by matching one part to the other. Symbol is usually a concrete sign or image that stands for some other, more abstract, entity or idea by virtue of either convention, analogy, or metaphor. But signs can be polysemic, that is, they may connote more than one meaning. Therefore meanings may be characterized by their surplus. A symbolic connotation may demonstrate a deeper layer of meanings, sometimes with complex emotional associations, or having a cryptic character as pointing to something beyond itself.

Semiotics exceeds the science of linguistics, the latter limited to verbal signs of words and sentences, and encompasses both natural and invented signs, such as culturally specific artifacts. Human beings are sign-users, and semiotics can also serve as a meta-language, the function of which is to describe human action. Semiotics both constructs models, or sign-systems, and considers them to be its own object of research. Among semiotic systems there is such language substitute as Morse code. In contrast to the immediate sense data of the surrounding world, the human mind uses mediation and interpretation when, within experience, it crosses what philosopher Alfred North Whitehead called the semiotic threshold.

PROLOGUE

All thinking proceeds in signs, and the continuous process of semiosis is theoretically unending; thus human development is potentially unlimited.

Semiosis is a communicative, interactive, relational, and interpretive process. Communication, that is, the flow of information and the mutual transformation of signs that are being translated into other signs, is an important concept in semiotics. Semiotically, communication as information sharing is considered to be a natural organizing principle. However, signs are not only intentionally produced for the purpose of communication, as in semiology; the sign-function as the semiotics of signification, of meaning-making, is equally important, and the action of signs manifests also in symptoms, or in dreams, or in the unconscious in psychoanalysis.

Images belong to a category of signs, and from a semiotic point of view a mental image is an icon, or representation, of the real world. An internal or mental image serves as a semiotic tool, called the interpretant, so as to conceptualize, bring to knowledge, and create meaning for something that has been experientially perceived. An interpreter of signs connects the antecedent with its consequent by means of a specific inferential sign-relation. An interpretative act gives a sign its meaning: without a lived experience signs remain lifeless and mute. Signs perform an instrumental function: they can serve as tools of/for human knowledge, learning, and development. The semiotic dimension is therefore implicit in the philosophy of education.

The semiotic tropes, such as interpretation, development and evolution; dialogic structures and processes; metaphor and metonymy, have entered educational discourse, manifesting in educational research a move away from the prevailing model of social sciences. What first started as the doctrine of signs, elaborated by John Locke in his *Essay Concerning Human Understanding*, became over the centuries, in the words of the great contemporary semiotician John Deely, a new intellectual movement. A head start to what will have been later called edusemiotics was provided during my presentation at the 1999 Annual Meeting of the Semiotic Society of America (SSA) where, while still a post-graduate student, I read a paper titled *The adventures of a postmodern Fool, or: the semiotics of learning* and that, with its modified and updated content, forms a substantial part of the opening essay in the book you are about to read. At the next SSA meeting in 2000 this paper received the First Roberta Kelson Memorial Award for its contribution to the research program promoted by the Semiotic Society of America.

Several special issues of edited journals that focused specifically on leading philosophical figures in the context of discourse in educational philosophy and semiotics followed over the period 2004-2007; such as *Pierce and Education* and *Deleuze and Education (Educational Philosophy and Theory)*; as well as *Semiotics and Education (Studies in Philosophy and Education)*. My book *Deleuze, Education and Becoming* (Semetsky, 2006a) positioned the philosophical thought of French poststructuralist philosopher Gilles Deleuze alongside the philosophies of Charles Sanders Peirce and John Dewey in the context of their analogous approach to logic and learning experience (cf. Semetsky, 2003a, 2003b, 2004a,

2004b, 2010a). This common theoretical platform will support the arguments developed in the chapters of the present book.

A substantial development was a recent cooperative research project with international participants across the disciplinary fields of education, philosophy and semiotics in the form of the edited volume *Semiotics Education Experience* (Semetsky, 2010d), for which Marcel Danesi wrote a Foreword indeed subtitled *Edusemiotics*. The edited volume *Jung and Educational Theory* (Semetsky, 2012a) and a special issue of the journal *Educational Philosophy and Theory* devoted to Jungian currents in education (Semetsky, 2012b) partake of edusemiotics in terms of the significance of images and symbols for educational experience.

The present book further develops edusemiotics – and, specifically, the edusemiotics of images – by completing a trilogy comprising *Semiotics Education Experience* and the other important precursor: my latest monograph *Re-Symbolization of the Self: Human Development and Tarot Hermeneutic* (Semetsky, 2011a), which summarized both empirical and theoretical research that I have been conducting in the area of education, counseling and human development since 1992. It has laid down a necessary foundation so as to further detail the philosophical dimension to be specifically addressed in the present book in the context of education and the construction of novel theory-practice nexus centered on learning from signs comprising a semiotic system of Tarot images and symbols.

According to contemporary cognitive scientist Ray Jackendoff (2001), who holds an ecological perspective on mind, even verbal utterances should be understood semiotically rather than strictly linguistically, that is, in terms of their establishing a relation between a conscious mental representation (an expression) and an unconscious mental representation (a hidden message). Making the unconscious conscious is the prerogative of Tarot edusemiotics.

In brief, the Tarot sign-system consists of 78 images called Arcana, the 22 Major Arcana and the remaining 56 Minor. The meaning of the word Arcanum (singular) is this creative, but often missing or obscured, element in our experiences, which is necessary to know, to discover in practical life so as to become fruitful and creative in our approach to multiple life-tasks situated in the midst of experiential situations, events and our complex relationships with others when we face decisions and choices or encounter moral dilemmas.

Therefore by its very definition each Arcanum – each Tarot image – implies a moral dimension pertaining to what John Dewey (1922/1988) called human conduct. If and when discovered – that is, made available to consciousness – it becomes a powerful motivational force to facilitate a change for the better at our emotional, cognitive or behavioral levels and thus to accomplish an important ethical and educational objective. What is called a Tarot layout or spread is a particular pattern of pictures that are full of rich symbolism “embodying” intellectual, moral, and spiritual “lessons” derived from collective human experiences across times, places and cultures; yet the moral of these symbolic lessons – the very meanings of Tarot signs – may be “hiding” deep in the midst of the field conceived by psychologist Carl Gustav Jung as the collective unconscious. Since the images denote archetypes of the collective unconscious or

PROLOGUE

universal memory pool shared by humankind, their messages would have the same significance cross-culturally, at different times and in different places.

Learning from signs demands their reading and interpretation at the level of practical action in search for the deepest meanings of experience. This learning is “marked” by Tarot symbolism. *Such is the edusemiotics of Tarot images.* As pictorial artifacts, Tarot images represent meaningful patterns of thoughts, affects, emotions, feelings and behaviors, thus embodying the very values implicit in collective experiences that transcend times, places, language barriers, disparate beliefs and cultures. Learning occurs not only in formal settings such as a classroom; the concept of learning pertains to real-life human experiences and cultural events that can embody significant meanings. Cultural artifacts are capable of semiotic or communicative potential; different objects and events in our life carry cultural, psychological and social significance and represent symbolic “texts” to be read and interpreted.

Reading and interpreting diverse cultural “texts” embodied in Tarot images partakes of *semanalysis* – a term coined by French cultural theorist and semiotician Julia Kristeva (cf. Nöth, 1995). *Semanalysis* is a *portmanteau* word referring to both semiotics and psychoanalysis and emphasizing interpretation and becoming conscious of the unconscious. Kristeva’s concept “subject in process” would have challenged a self-conscious subject as the fixed product of the traditional educational system. Human subjectivity is continuously produced in experience: Tarot edusemiotics is equivalent to constructing and respectively learning “critical lessons” (Noddings, 2006) that, in their symbolic form, are embedded in the semiotic process of human experiential growth, both intellectual and ethical.

Nel Noddings, a renowned philosopher of education and founder of the relational ethics of care, addresses a maternal ability to “read” her children as the “capacity for ‘empathy’” (Noddings, 2010a, p. 6) and an instinct for survival in the course of human evolution pertaining specifically to the *maternal factor* (also, the title of her latest book). She refers to “the ‘reading’ process” (2010a, p. 53) in terms of cognitive apprehension motivated by love and accompanied by the attitude of care and “*empathy* [as] the constellation of processes” (p. 56) that connects Self and Other in a relation, which is as such necessarily “ontologically basic” (Noddings, 2010b, p. 390; also 1984/2003).

A *relation*, which is ontologically, epistemically and ethically fundamental, is a province of semiotics and semiosis. A sign, by definition, is essentially a relational entity that indicates something other than itself which is not immediately apparent. It needs mediation between itself and its own other in the interpretive process enabled by the inclusion of the third category of an interpretant, as Peirce called it, into formal logic. Applying this unorthodox logic to reading and interpreting Tarot signs permits us to empathically relate to something essentially *other* but nevertheless potentially understandable, knowable and, ultimately, known.

The relation thus established between the generic Self and Other in our real practical life is significant and has both epistemological and ontological implications. The dimension of foremost importance is however ethical, considering that we live in a time of globalization and uncertain multiculturalism

with different values continuously competing, conflicting and clashing. In our current global climate permeated by diverse beliefs, disparate values, and cultural conflicts, understanding ourselves and others and learning to *share* each other's values is as paramount for the survival of our species as is the maternal instinct for the survival of helpless babies.

We can awaken such a maternal caring attitude towards others at both individual and social levels via the medium of Tarot: as Marshall McLuhan famously made clear, the medium is the message. Rather than being “merely a passive conduit for the transmission of information, [a medium of communication is] an active force in *creating* new social patterns and new perceptual realities” (Logan, 1986, p. 24; italics mine). Such creative logic, foregrounding semiotics, is the paradoxical and at first sight self-contradictory logic of the included middle, the included third, in contrast to the propositional logic of analytic philosophy grounded in the principles of non-contradiction and the excluded middle. Therefore Tarot, despite being traditionally perceived as mystical and irrational, is still logical. Its logic is a semiotic logic of the included middle that, importantly, will be traced and elaborated in every essay comprising this book.

Contrary to narrow instrumental rationality, Tarot helps us achieve an expanded and intensified scope of awareness that encompasses the level of meanings and values. However Tarot is not altogether foreign to scientific reason: its very logic can be defined as “a science of the necessary laws of thought, or, better still (thought always taking place by means of signs), it is a general semeiotics, treating not merely of truth, but also of the general conditions of signs being signs” (Peirce, CP 1.444). Such science, underwriting semiotics, will be explored in this book in terms of the cutting-edge science of coordination dynamics based on the “reconciliation of complementary pairs” (Kelso & Engström, 2006, p. 63) in a relation expressed as the squiggle “~” (used in the title of this book) versus the habitual binary opposition between self and other, mind and world, subject and object.

Indeed, John Deely (2001) acknowledges what he calls Peirce's grand vision that has the advantage of being rooted in science rather than in mysticism: our deep thinking – so deep that we may remain non-conscious of the inferential processes at this subtle level – proceeds in signs, in images, and not solely in the language of propositions employed by the conscious mind reduced to the Cartesian Cogito! As embedded in the process of semiosis, Tarot readings *work* in practice; suffice it to say how popular this phenomenon is at various levels of subculture worldwide. The nuances pertaining to the quality of readings and the many subtle and not so subtle “situational variables” associated with it (including the personality of a *reader* and their level of consciousness) have been addressed in detail in my preceding book (Semetsky, 2011a). Still, “it must be admitted ... that no-one has ever been able to explain *how* it works” (Gettings, 1973, p. 9; italics in original). *How does Tarot work?*

By positioning Tarot in the framework of semiotics, this book will help us arrive at an understanding of both Tarot structure and its functioning as the action of signs that comprise signosphere (Deely, 2001) – or, as it is alternatively called,

PROLOGUE

semiosphere (Lotman, 1990; Hoffmeyer, 1993) – and which represents a symbolic analogy to the biosphere of organic life. As a science of signs, semiotics differs from linguistics which reduces signs to their solely verbal equivalents, words. Semiotics generalizes signs as embedded in any medium or sensory modality, hence not only broadening the range of sign systems and sign relations but simultaneously extending the very definition of language to include its analogical or metaphorical sense. I have indeed been addressing Tarot in terms of a specific, pictorial, language of signs, symbols, and images in a number of earlier publications (e.g., Semetsky, 2006b, 2010b, 2010c).

The language of Tarot images speaks “in a different voice” that brings forth the subtleties of Carol Gilligan’s (1982/1993) pioneering work, which challenged habitual assumptions about human moral development; as well as bringing to the fore “women’s ways of knowing” (Belenky, Clinchy, Goldberger, & Tarule, 1986) that, in addition to purely cognitive understanding, would have included insight, imagination and intuition (Semetsky, 2004b, 2011a; Noddings & Shore, 1984; Greene, 2000). Non-incidentally, Michael Peters and John Freeman-Moir dedicate their recent volume, *Edutopias: New utopian thinking in education* (2006), to future generation of educators capable of understanding that, with imagination, education can transform individuals, raise collective consciousness, and contribute to the development of global civic society.

Learning from signs is equivalent to pursuing education in the three Is as the aforementioned insight, imagination and intuition; contrary to the long-standing tradition of three Rs of formal education. As noted by Irish abbot and philosopher Mark Patrick Hederman in his remarkable book *Tarot: Talisman or Taboo? Reading the World as Symbol*, it is Tarot that provides us with the system to fill the gaps produced by the area “where education and trained sensibility are in short supply” (Hederman, 2003, p. 86). I share his conviction that

each of us should be given at least the rudiments of one of the most elusive and important symbolic systems if we are even to begin to understand human relationships. This would require tapping into a wavelength and a communication system other than the cerebral, reaching what has been called the “sympathetic system” as opposed to the cerebro-spinal one which covers the three Rs of traditional education. (Hederman, 2003, p. 87)

Such an emotional, sympathetic system does not simply relate to empathic understanding as one of the prerogatives of Carl Rogers’ humanistic theory in psychology. Significantly, educating for the three Is by utilizing the pictorial language of Tarot images would involve sympathy as an ability of “feeling with” (Noddings, 2010a, p. 73). Jim Garrison, a philosopher of education, refers to sympathetic data as describing intuitions and perceptions that would make possible our understanding of others; he is aware nonetheless that “our culture has not evolved highly refined methods of collecting [those] data ... researchers do not perform careful interpersonal experiments, [and] the theories of human thought, feeling, and action remain ... remarkably underdeveloped” (Garrison, 1997, p. 35). Yet, it is precisely sympathetic, inter-subjective, data that are maximally “relevant

to the topic of teaching” (Garrison, 1997, p. 36) and learning, to pedagogy as a whole.

Sympathy thereby is directly connected to the developed feminine capacity of “learning to read the other” (Noddings, 2010a, p. 73) as a natural caring and also as a prerequisite for practicing the Tarot hermeneutic method described in minute details in my earlier book (Semetsky, 2011a) as reading and interpreting the images together with a self-reflective and critical “reevaluation of what is read” (Noddings, 2010a, p. 73).

Analyzing the historically evident conflict between word and image, Leonard Shlain (1998) notices “the plunge in women’s status” (p. viii) as contingent on literacy taking over nonverbal means of expression, such as image. Even if the development of literacy has been habitually equated with progress, “one pernicious effect of literacy has gone largely unnoticed: writing subliminally fosters a patriarchal outlook. Writing...especially its alphabetic form, diminishes feminine values and with them, women’s power in the culture” (Shlain, 1998, p. 1). Shlain reminds us of anthropologist Claude Lévi-Strauss challenging the supremacy of literacy and insisting that the establishment of hierarchical societies was linked to the appearance of writing: “misogyny and patriarchy rise and fall with the fortunes of the alphabetic written word” (Shlain, 1998, p. 3).

Noddings, describing the two paths to morality (Noddings, 2010a), expresses a hope for the convergence between traditional and feminine ethics, the latter naturally grounded in caring relations. She points to the maternal, feminine, capacity for “reading the emotional state, needs, and intentions of others” (Noddings, 2010a, p. 170) and notices that with appropriate guidance such capacity can be brought to a high level. It is the Tarot sign-system that can indeed provide the required guidance when a reading assumes the function of an educational “aid” or a counseling “tool” that can contribute to human development (Semetsky, 2011a); but also by virtue of its potential ability to bring back the *becoming-woman* (using Gilles Deleuze’s poignant expression) as symbolic of the revitalization of society that has long been subscribing to a solely masculine worldview embedded in “*linear, sequential, reductionist, and abstract* thinking” (Shlain, 1998, p. 1; italics in original).

This book will demonstrate the possibility of yet another, complementary, perceptual mode in terms of “*holistic, simultaneous, synthetic, and concrete*” (Shlain, 1998, p. 1; italics in original) qualities that appear to have been lost in the course of modernity during which the verbal word became the major medium of communication. Learning to read the pictorial language of Tarot signs equips us with the ability to understand the deepest meanings of individual and collective life-experiences expressed in the multiplicity of images. The implications for human evolution and the expansion of consciousness – what John Dewey defined as growth – are profound. Dewey pointed out that

What [a person] gets and gives as a human being, a being with desires, emotions and ideas, is ... a widening and deepening of conscious life – a more intense, disciplined, and expanding realization of meanings. ... And

PROLOGUE

education is not a mere means to such a life. Education is such a life.
(Dewey, 1916/1924, p. 417)

As a philosopher of education, I share Dewey's sentiment. But not only. I am especially sensitive to the present urgency of creating such a meaningful life – a mode of *education* – whenever pessimism, superstitions, and inert (as Alfred North Whitehead would call it) useless knowledge disengaged from important life experiences still lurk as they did at the time of Dewey's almost century-old creed.

The UNESCO report (Fauré et al., 1972) identified a gap between education and life as a dehumanizing disease that should be overcome. Still, the educational system today as a whole rarely addresses the questions of meanings and values, focusing instead on the accumulation of factual, yet often meaningless, information and preparing students for "adult life" in terms of, for example, such abstract ends as dubious economic success or "access to college" (Noddings, 1993b, p. 9) in lieu of meaningful, educative, lived experience. Tarot images, as symbolic representations of humankind's typical experiences, comprise what I call a metaphorical informal school of life (Semetsky, 2011b).

The current times of economic downturn demand the revaluation of values. A new, spiritual, dimension of experience can be discovered in practical life. Presenting feminist spirituality as an alternative to traditional patriarchal religion, Noddings (1993a) acknowledges that women have long suffered inferiority under the prevailing theological and philosophical theories. The different, feminine, language of Tarot images not only "voices out" new, spiritual, values that can be re-created and absorbed into culture, but also puts these values into practice so as to help those *in need*.

As Noddings (2010a) emphasizes, the ethics of care derives not from human *rights* but from human *needs*. Still, educational theorists and policy makers working with the concept of needs often remain uncertain of how to identify and interpret needs. In the framework of the ethics of care, inseparable, in the context of this book, from Tarot edusemiotics, a basic need foregrounding the practice of Tarot readings is

the need to be heard, [to be] recognized. In the condition of natural caring, each human being is comfortably aware that *if* a need arises, someone in the circle of care will respond ... A particular need may or may not be met, but it will receive a sympathetic hearing. (Noddings, 2010a, p. 181)

The circle of caring is enabled by the process of semiosis, by the action of signs as basic relations that, by virtue of the triadic logic, establish a semiotic bridge connecting Self and Other. So it is the natural dynamics of sign-process together with the "conditions of natural caring [that] establish the best climate for the identification of needs" (Noddings, 2010a, p. 181). In this sense, Noddings' *ethical* theory in education becomes necessarily complemented by *epistemic* and *ontological* platforms in terms of semiotics, the science of signs; and specifically the edusemiotics of Tarot images as the following essays in this book will demonstrate.

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PROLOGUE

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CHAPTER 1

AT THE EDGE OF CHAOS

The very first picture in the sequence of the Major Arcana of the Tarot deck, called The Fool, depicts a youth who projects the image of wide-eyed innocence, curiosity, and a trusting heart (Figure 1.1):



Figure 1.1. The image of The Fool.¹

The Fool is standing at the edge of the cliff, but with his head high in the clouds the Fool doesn't seem to notice an uneven road or the possibility of falling down. The image portrays the symbolic child within many of us, the archetypal *puer aeternus*, symbolizing new beginnings, the potentiality of life, novelty itself. The Fool's childlike topological perception of the world, in accordance with Piaget's developmental theory (cf. Merrell, 1997, pp. 335-336), is not restricted by conventional Euclidean geometry; conversely, his world is not conceptualized merely in terms of rigid axioms of propositional logic.

The chaotic world symbolized by the abyss just a step away is full of encounters and experiences, of which the Fool has no knowledge yet. Still, independently of that, the phenomenal world is here, and has always already been here even before the youth approached the edge. The Fool's youthfulness, bordering on infantile

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CHAPTER 1

carelessness, expresses a sense of connection that is present in a small child's perception of the world as undifferentiated totality, where inner and outer realities are movable and transient. Only venturing into unknown territory might bring a relative order into chaotic flux of childish perceptions. And the free choice – while not a strictly rational choice because formal logic is as yet beyond a symbolic child's grasp – of coming to a decision to make a step ahead so as to separate himself from the unstable present and leap forward into the future in search of authentic experiences in the process of what Carl Gustav Jung called individuation, is transmitted by this image.

The goal of individuation is the achievement of a “greater personality” (Jung, CW 7, 136) culminating in the Self, the archetype of wholeness. The search for wholeness is an experiential process that, in the framework of Jung's depth or analytical psychology, means becoming conscious of many unconscious factors in the psyche. Wholeness as the integration of the unconscious into consciousness is marked by a change of attitude when the center of the personality shifts its position from the Ego to the Self. Individuation as at once a developmental and learning process was defined by Jung in terms of *self-education* during which both unconscious and conscious aspects of life-experiences become integrated.

Jung was explicit that education should not be confined to schools, nor should it stop when a child grows up. Presenting his depth psychology as a method of/for self-education, Jung (1954) emphasized *self-knowledge* that can be achieved by means of its symbolic mediation via images in the analytic process:

There are ... many extremely psychic processes which are unconscious, or only indirectly conscious ... there is ... something as impersonal as a product of nature that enables us to know the truth about ourselves Of the unconscious we can learn nothing directly, but indirectly we can perceive the effects that come into consciousness. (Jung, 1954, p. 49)

Such an indirect mediated criterion for knowledge borders on the pragmatic maxim postulated by Charles Sanders Peirce as his theory of meaning aiming to attain

clearness of apprehension ... Consider what effects, that might conceivably have practical bearings, we conceive the object of our conception to have. Then, our conception of these effects is the whole of our conception of the object. (Peirce, CP 5.402)

Nel Noddings (1993, p. 105) points out that, as producing observable effects, Jungian analytical psychology may be considered a pragmatic method. And so, in his experiential journey in search of the authentic Self, the Fool will step – as if by chance – on the road of self-discovery and will begin apprehending the multiplicity of experiences. The Fool's first step is motivated by curiosity or what John Dewey called interest, which represents a connection in the sense of an engagement of the self as *subject* with the world of *objects*. To be of interest is equivalent to being “‘between’ the agent and his end” (Dewey, 1916/1924, pp. 149-150), and one way of arousing interest is by bringing about a sense of connection; as a result

What [a person] gets and gives as a human being, a being with desires, emotions and ideas, is not external possessions, but a widening and deepening of conscious life – a more intense, disciplined, and expanding realization of meanings. ... And education is not a mere means to such a life. Education is such a life. (Dewey, 1916/1924, p. 417)

The Fool thus begins his experiential, albeit symbolic, school. In this “school of life” he will be learning from a series of encounters and events, each symbolized by all subsequent Arcana in a Tarot deck. His “eagerness for experience” (Dewey, 1991a, p. 30) that lies ahead, in the abyss, contains “the germ of intellectual curiosity” (1991a, p. 32) because “to the open mind, nature and social experiences are full of varied and subtle challenges to look further” (1991a, p. 33).

The in-between, *intermezzo*, quality of interest is equivalent to what Gilles Deleuze called the radical conjunction *and* that serves as an unorthodox basis, the included middle, for his a-signifying semiotics that defines an alternative logic. The Fool’s lived experience is “fundamentally linked to a logic – a logic of multiplicities” (Deleuze & Parnet, 1987, p. viii) as relational entities or signs in contrast to the propositional, signifying logic grounded in the logical copula “is” and directly establishing identity due to the *excluded* middle.

The Fool’s individuation begins when he connects with the world of objects in accord with “a theory and practice of relations, of the AND” (Deleuze & Parnet, 1987, p. 15) functioning on the basis of the logic of the *included* middle. By jumping into the abyss the Fool will have engaged with the phenomenal world, thus defying the dualistic *either-or* split between thought and experience, the sensible and the intelligible, between ideas and sensations. His practical logic embedded in life, in experience, is not “subordinate to the verb to be. ... Substitute the AND for IS. A *and* B. The AND is ... the path of all relations, which makes relations shoot outside their terms” (Deleuze & Parnet, 1987, p. 57) and form multiple interconnections in a network constituting a rhizomatic structure.

Rhizome is a biological metaphor for unlimited growth through multiple transformations, which are characterized by “new connections, new pathways, new synapses” (Deleuze, 1995, p. 149) as a result of experimental and experiential learning embodied in the new image of thought versus the dogmatic Cartesian image. The rhizome, as a complex network of relations, describes an open system of interactions; there isn’t a single crossing point but rather a multiplicity of “transversal communications between different lines” (Deleuze & Guattari, 1987, p. 11). Such conceptualization permits a shift of focus from the static body of factual knowledge to the dynamic process of experimental knowing, of *becoming*, thereby having far-reaching implications for education as a developing and generative practice.

The Fool, rather than being “doomed to act along lines predetermined to regularity” (Dewey, 1922/1988, p. 208) is an experimenter because contrary to arborescent regularity, the rhizome must contain an a-signifying rupture to allow for the conjunction *and* to intervene as the included third so as to initiate the Fool’s “veritable becoming” (Deleuze & Guattari, 1987, p. 10). The new relations

CHAPTER 1

generated via rhizomatic connections are not copies but artistic creations: never reproduction of the same, but repetition of the different. Relations are prior to their terms; they are, as Noddings says, ontologically basic. The relations are described by machinic becomings and not classical mechanical laws: they are uncertain, “probabilistic, semialeatory, quantum” (Deleuze, 1995, p. 149) and often initiated by chance encounters; such presence of the chance symbolized by the image of the Fool. Sure enough, Charles Sanders Peirce proposed his thesis of *tychism* (from the Greek word for *chance*, τύχη) as the presence of spontaneity, of chance, in nature itself.

The Fool, then, at the ontological level of interpretation, is a symbol for the first principle of Peirce’s evolutionary cosmology and the origin of the universe *per se* under yet another regulative principle of continuity or *synechism*. John Dewey, who was Peirce’s student, described continuity as the “interdependence of all organic structures and processes with one another” (Dewey, 1925/1958, p. 295); in other words, their relational nature. Peirce’s philosophy of objective idealism (not unlike Jung’s objective psyche) considers matter to be just a special, partially deadened, mind, thus overcoming the mind-body dualism that has haunted us since the time of Descartes and still represents an unfortunate model for educational research.

The rhizomatic structure that originates with The Fool Arcanum becomes a model of “singular processes of learning” (Deleuze, 1994, p. 25) rather than falling back “as upon a stereotype, upon some previously formed scheme” (Dewey, 1934/1980, p. 52) prevalent in the dogmatic, Cartesian, model of thought. The Fool indeed could not have formed any such scheme prior to having started his practical journey as a first explorer, an inquirer! The conjunction *and* is a principal characteristic of the logic of signs, or semiotics, making it operational in the sense of “being-multiple” (Deleuze & Parnet, 1987, p. viii). Such logic remains however “underground or marginal in relation to the great classifications” (Deleuze & Parnet, 1987, p. 15) represented by the reductive empiricism or rationalism alike.

First, “the surprising fact ... is observed” (Peirce, CP 5.185), and the Fool’s inquiring mind begins apprehending experience by means of the peculiar Peircean logic of discovery or the rule of abduction, a sort of as yet uneducated (if education is taken formally) guess. Abduction belongs to those “operations of the mind which are logically analogous to inference excepting only that they are unconscious and therefore uncontrollable and therefore not subject to logical criticism” (Peirce, CP 5.108); still abduction exceeds direct Cartesian intuition understood as a merely dyadic relation between the knowing mind and the known object that delivers the self-evident truths. Peirce denounced “the Cartesian maxim” (CP 5.265): immediate intuitions are to be replaced with a community conducting a semiotic inquiry, an inquiry in signs and of signs that stand in the relation of intelligibility to other signs.

Despite being initially unconscious and necessarily vague, the abductive inference is part of logic as semiotics understood as the “laws of thought ... thought always taking place by means of signs” (Peirce, CP 1.144). In semiotic terms, the Fool is a sign of the self at the very beginning of identity formation, and

vice versa the self itself is just a sign in the semiotic process of evolution, learning and growth. Peirce regarded all the regularities in nature and mind alike as products of growth (cf. Peirce, CP 5.313). The relevance of Peirce's semiotics to the problematic of human subjectivity manifests through the life lessons embodied in Tarot images.

The Fool's symbolic journey is embedded in the continuity of a developmental and learning process. And this objective process as semiosis – or the action of signs to be addressed in detail in the next chapter – exists independently of whether “a general idea, living and conscious now...is already determinative of acts in the future to an extent to which it is not now conscious” (Peirce, CP 6.156; Colapietro, 1989, p. 76).

The triadic nature of relations between signs led to Peirce's classifying signs in terms of basic categories of Firstness, Secondness and Thirdness: “First is the conception of being or existing independent of anything else. Second is the conception of being relative to, the conception of reaction with, something else. Third is the conception of mediation, whereby first and second are brought into relation” (Peirce, CP 6.7). Mediation ensures the included middle that constitutes a relation between what otherwise would have remained two disconnected opposites as “conflicting, or competing aspects – *contraries*” (Kelso & Engström, 2006, p. 186). It is by virtue of relations that “all thinking is dialogic in form” (Peirce, CP 6.338).

Contemporary semiotician Floyd Merrell (1995) asserts that in order for there to be three Peircean onto/logical categories of Firstness, Secondness, and Thirdness, there must exist some extra principle holding them together, some undifferentiated “field within which semiosis plays out its drama” (Merrell, 1995, p. 217) acknowledged yet by Peirce as pre-Firstness or nothingness. The nothingness (nothingness) is expressed by numeral Zero, an ambiguous symbol of ultimate wisdom or total folly, a number that historically, and perhaps not totally arbitrary, has been assigned to The Fool Arcanum in the majority of Tarot decks.

In a series of translations into other “more fully developed” (Peirce, CP 5.594) signs, signified by the rest of the Arcana, the naive Fool will learn and grow, will become something other and something more than he was when he just began his experiential school of life. Zero can then be described as “the germinal nothing ... boundless possibility [and] boundless freedom” (Peirce, CP 6.217); this sense of freedom and *infinite potential* (Peat, 1997) available for the Fool in his non-Euclidean non-metric world of topological space, in which void coincides with plenitude – they “seem to be inextricably connected to each other” (Kelso & Engström, 2006, p. 186).

In such an ambivalent and “radically conjunctive” (Merrell, 1997, p. 63) world the classical principle of the excluded middle is by definition invalid (cf. Rotman, 1993). Pre-Firstness thus becomes a symbol of a preconscious and tacit knowledge, which would be a contradiction in terms within the boundaries of formal rationalization. This tacit knowledge must exist in order to bring the Firstness of abduction into being, to initiate the process of that which might be, and confirmed by thisness as Secondness of the Peircean “brute facts” that the Fool will have

CHAPTER 1

encountered while in the experiential abyss, ultimately finding an indirect or mediated conclusion in that which would be as Thirdness, provided of course that certain circumstances will have been met.

The preconscious state of mind, connoted by The Fool imagery and manifested in “the fascination of children with ... Winnie the Pooh, and ... Alice’s adventures – also a favorite pastime of logicians, mathematicians, and physicists – attests to their import of ‘primitive’ perceptual and conceptual modes, keenly picked up by philosopher Gilles Deleuze” (Merrell, 1996, p. 141). The Fool’s conscious decision-making is deferred for a moment. Dewey (1991a), addressing the problem of “how we think,” said that “we *de-fer* conclusion in order to *in-fer* more thoroughly” (p. 108) at a later stage. The Fool’s stopover at the edge of the cliff takes place at a level below awareness and hence is barely perceptible.

The Fool is subsisting behind a looking glass in a transient and shifting state of “pure reserve” (Deleuze & Guattari, 1994, p. 156) as a *virtual* event situated “at the surface of things” (Deleuze, 1990, p. 19) in its *actual* embodiment in the material, pictorial, form. The incorporeality of pure events, according to Deleuze, finds its expression in language; but the notion of language *per se* is re-conceptualized. Rather than being reduced to strictly verbal propositions of the conscious mind, it becomes “the marriage of language and the unconscious” (Deleuze, 1990, p. xiii); indeed, the expressive means of Tarot edusemiotics.

Such is the Fool’s predicament in the play of semiosis, the image *per se* expressing an instinctual and “quasi-immediate...though...not purely accidental or aleatory” (Merrell, 1995, p. 204) sense of spontaneous decision-making and taking chances in the over-determined world of pure potentialities that constitutes Deleuze’s virtual reality. The world of choices comes about as if by chance, seemingly from nothingness, out of Zero; our Fool was wandering without any specific purpose or destination – he wouldn’t be the Fool otherwise – yet his abductive leap represents a selective, even if bordering on unconscious, choice, a subliminal decision-making; that is, an interference of as yet imperceptible difference that would have made a difference in practice.

The domain of nothingness always already contains the seeds of all future possibilities; in fact they are here, in the picture, subsisting in a void, or metaphorical abyss of freedom, behind the cliff; so in some sense experiential reality does exist for the Fool in its future perfect tense of *future anterior* and “everything culminates in a ‘has been’” (Deleuze, 1990, p. 159). The Fool acquires information about the world by means of experiencing this world first-hand, that is, *participating* in it and letting go “of the constraints of habitual responses [when performing] a saltus step off the edge” (Kevelson, 1999, p. 15; brackets mine).

The Fool’s saltus is a transaction, which is embedded “in the organization of space and time prefigured in every course of a developing life-experience” (Dewey, 1934/1980, p. 24) and extends beyond the spatio-temporal boundaries of the sole organism to the whole of an environment. The meaningful reorganization of experience involves both organism and its environment. Significantly, in such a “continuum ... there is no attempt to tell exactly where one begins and the other ends” (Dewey, 1934/1980, p. 227): the transaction is what constitutes “the

intercourse of the live creature with his surroundings” (Dewey, 1934/1980, p. 22). Transaction ensures the operational closure of the system open at large, making each end-in-view a temporary means for a new end, thereby correcting and ordering the course of events.

This is the Fool’s prerogative in the play of semiosis: to establish an initial transaction. His action precedes any conscious choice, however. He does not know the range of experiences that will have been encountered in his journey even if

what enters the mind as information always depends on a selection, [but] this selection is mostly unconscious. In this sense one should not speak about “getting” information, rather information is something we “create.” (Hoffmeyer & Emmeche, 1991, p. 122)

While the continuity thesis “means that rational operations grow out of organic activities, without being identical with that from which they emerge” (Dewey, 1938/1998, p. 166) – the symbol for such an organic activity being the Fool’s seemingly non-rational jump into the abyss – this very jump presents itself as the imperceptible discontinuity within a “zone of indetermination, of indiscernibility” (Deleuze & Guattari, 1994, p. 173) between the Fool and the abyss of experiences. It is this discontinuity that entails the creativity inherent in the Fool’s experiential learning process. Holder (1995), addressing the conception of creativity in the context of Dewey’s logic as a theory of inquiry, presents a powerful example of such an element of discontinuity in “the instance of a great work of art – for example, the thinking that coordinates the emergence of Michelangelo’s *David* from a hunk of marble – [this is] a degree of discontinuity that epitomizes the kind of thinking that is called creative” (Holder, 1995, p. 186).

The key word for interpreting the meaning of this Major Arcanum in the process of the Fool’s semiotic voyage is the concept of creative becoming. The Fool’s unavoidable jump into the abyss proceeds along a paradoxical “line of becoming [that] is not defined by points that it connects, or by points that compose it; on the contrary, it passes *between* points, it comes up through the middle” (Deleuze & Guattari, 1987, p. 293). Deleuze addresses paradoxes of logic in his book *The Logic of Sense* (1990). The French word *Sens* means at once sense (or meaning) and direction, therefore having both epistemological and ethical connotations.

The logic of sense, as Deleuze scholar James Williams points out, is not “the logic of a language. It is a description of the [semiotic] structures that appear when being is understood as the encounter of events and series” (Williams, 2008, p. 23; brackets mine). This is logic pertaining to diverse regimes of signs irreducible to verbal propositions but encompassing also the pictorial nonverbal language of Tarot edusemiotics based on the interpretation of images – their *reading* – and functioning on the basis of the included middle that defies the classical principle of non-contradiction. Williams notices that the key cases in Deleuze’s book relate to contradictions and paradoxes, and Deleuze demonstrates how these indeed “make sense” despite their apparent “logical invalidity” (Williams, 2008, p. 24) within the framework of the classical logic of the excluded middle. Indeed, the line of becoming *passes through* the middle.

CHAPTER 1

Narrating the pictures brings to the surface the structural homology in the relations between the image and the *Sens* of the concept. This surface is both metaphorical and literal, as Tarot pictures, or sign-events, are sure enough laid-out or spread on the flat surface in a particular layout during Tarot readings. The complex and forever *incorporeal* concept, or pure event, is capable of being expressed in a pictorial, that is *corporeal*, language and thus of acquiring meaning via its very *embodiment*. It is surface that serves as “the locus of sense, signs remain deprived of sense as long as they do not enter into the surface organization which assures the resonance of two series” (Deleuze, 1990, p. 104): incorporeal mind and corporeal matter.

The wandering Fool, who is always on the road, always embedded in the process of becoming, who carries his sack on a stick as the universal symbol of vagabonds and minstrels, is pictured as if subsisting in a fleeting moment of having stopped at a pivotal point on the edge. He “is barely in touch with any facet or fashion of Firstness; hence ... remains vague in the extreme” (Merrell, 1996, p. 141). The dynamics of becoming is characterized by the process in which every sign, or what Deleuze, following Henry Bergson, dubbed qualitative multiplicity, is described by “changes in nature as it expands its connections” (Deleuze & Parnet, 1987, p. 8): the Fool, in his open-ended reciprocal interaction with the environment, is continuously transformed into other signs, thereby becoming-other.

The symbolic jump into the abyss symbolizes, in a way, the death of the subject in its current state, which, however, is not to be mourned but is to be considered as a condition of possibility, or “the body’s potential” (Massumi, 1992, p. 70) of becoming-other in the process of creative individuation. Respectively, each sign, each Tarot image, indicates “an event rather than an essence” (Deleuze, 1995, p. 25) and is to be understood as a rhizomatic network of relations produced by the wandering Fool. Subjectivity becomes constructed in a multileveled field, and the individuated Self is *a priori* collective and plural; as a sign or relational entity, it is a multiplicity expressed via the distribution of pictures in a particular Tarot layout or spread.

Deleuze said that it is “events [that] make language possible” (1990, p. 1). This assertion seems but incomplete; it is language – to be precise, expressive language as a regime of signs – that makes events actual. The latter statement accords with the capacity of incorporeal events to be expressed in the corporeality of Tarot pictures, each image embodying a sign-event. Perhaps that’s why the ancient Stoics had only a single word *lekta* for describing the incorporeal surface of events and meanings as well as physical appearances and *expressibles*, or concepts capable of expression.

Each of a series of events unfolding in the course of the Fool’s archetypal journey “contests both model and copy at once” (Deleuze, 1990, p. 2); not only because of the doubling of directions, that is, always becoming-other at the same time as becoming-self, but also because of the reversal of cause and effect or effect collapsing into the cause. Indeed in the Fool’s atemporal and tenseless topological world, where everything is folded or stretched, premises coincide with conclusions, effects may precede causes, and Jungian archetypes – symbols of the *depth* of the

psyche – present themselves as pure events distributed on a *flat* surface in the guise of Tarot pictures.

Each image embraces its own original and as such carries on, albeit in a silent voice, the Peircean paradoxical self-referential refrain “I says to myself, says I” (Merrell, 1992, p. 185) thus engaging with its own “other” in the powerful, never mind preconscious, dialogue, irreducible to verbal propositional thinking. Subjectivity has a dialogic form because “[o]ne’s thoughts are what he is ‘saying to himself,’ that is, saying to that other self that is just coming to life in the flow of time” (Peirce, CP 5.421). It is via Tarot images that we can become conscious of the yet unconscious subtle dialogue with our “selves-becoming-other” in the flow of semiosis.

The dynamics of semiosis is ensured by the triadic structure of signs that are continuously being translated into other signs; still, the first step (as initiated by the Fool) is to form a hypothesis by a simple “conjecture. These ideas [guesses] are the *first logical interpretants* of the phenomena that suggest them, and which, as suggesting them, are [themselves] signs” (Peirce, CP 5.480; Colapietro, 2000, p. 143).

Deleuze, talking about “double causality” (1990, p. 94), maintained that the physics of surfaces demand that events have both causes and quasi-causes, that is, some other event “intervening as nonsense or as an aleatory point, and appearing as quasi-cause assuring the full autonomy of the effect” (p. 95) in its relation to this secondary cause. The Fool in his paradoxical pre-Firstness seems to *signify nothing* (Rotman, 1987) and is an aleatory point; but – not quite so! Although barely touching upon the abductive inference present in Firstness, the Fool definitely remains not purely accidental or aleatory. Indeed,

as soon as sense is grasped, in its relation to the quasi-cause which produces and distributes it at the surface, it inherits, participates in, and even envelopes and possesses the force of this ideational cause ... This cause is nothing outside of its effect ... it maintains with the effect an immanent relation which turns the product, the moment that it is produced, into something productive... Sense is essentially produced. It is never originary but is always caused and derived. (Deleuze, 1990, p. 95)

The symbolic stopovers in the Fool’s experiential sense-producing journey are represented by the 22 archetypal lessons. The word Arcana derives from the Latin *arca* as a chest; *arcere* as a verb means to shut or to close; symbolically, Arcanum (singular) is a tightly shut treasure chest holding a secret: its implicit meaning. In reference to Greek etymology, Arcana relate to *arce* which means origin or inception. The 22 images of the Major Arcana are shown in [Figure 1.2](#).

CHAPTER 1

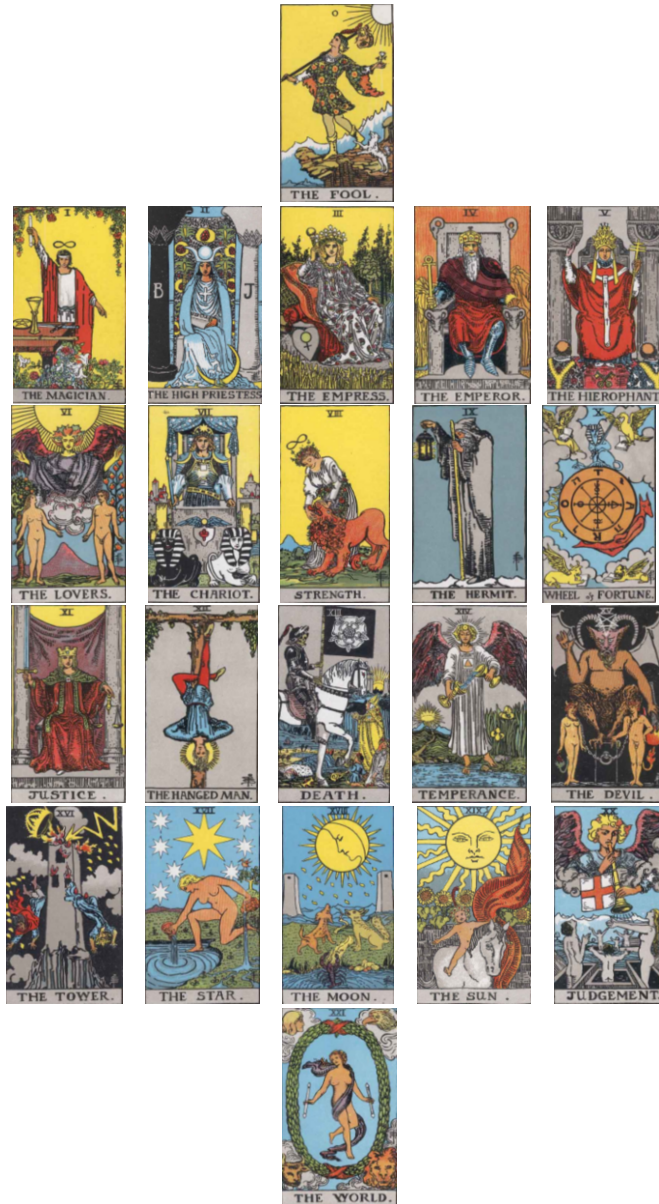


Figure 1.2. The images of the Major Arcana.

The Fool is present in all subsequent Arcana (one plus zero is still one; two plus zero is still two) and represents nothingness or nonsense (non-sense) in the guise of

a “floating signifier” (Williams, 2008, p. 72) that donates meaning to the series of events. It is nonsense that functions as “a ‘donation of sense’ ... it generates a paradox” (Williams, 2008, p. 72) simultaneously defying the uniformity of meanings: sense is created anew. The meaning of each sign – each Arcanum – is derived in the edusemiotic process irreducible to the transmission of facts but devoted to the production of meanings and values for experiences. It is at once associative and inferential, thereby inconsistent with “the operation of the principle of non-contradiction *as a response to paradoxes*” (Williams, 2008, p. 71; italics in original).

The resolution of paradoxes depends on two modes, thought and unthought; one with “conscious cogitation and [one] with the unconscious” (Williams, 2008, p. 73). Importantly, the unconscious or the “unthought [mode is] not external to thought” (Deleuze, 1988a, p. 97) but is being folded into “its very heart” (Ibid.). The concept of fold points to the relational, enfolding and unfolding, dynamics of the semiotic process. In the fold the boundaries between the habitual dualistic opposites, such as subject and object, inside and outside, etc. are blurred because of the symbolic conjunction *and* that mediates between them.

The presence of the medium is a must; as we said in the Prologue, the medium itself is a message. The medium of Tarot images is the expression of subjectivity that learns from experience by means of passing through the Arcana, each representing a lesson to be learned. Importantly, the transaction ensures modifications at both sides, subjective and objective alike. As Dewey pointed out,

Everything depends upon the way in which material is used when it operates as a medium ... It takes environing and resisting objects as well as internal emotion and impulsion to constitute an expression. ... [T]he expression of the self in and through the medium ... is ... a prolonged interaction of something issuing from the self with objective conditions, a process in which *both* ... acquire a form and order they did not at first possess. ... Only by progressive organization of “inner” and “outer” material in organic connection with each other can anything be produced that is not a learned document or an illustration of something familiar. (Dewey, 1934/1980, pp. 63-65, 75)

The series of Tarot pictures are Peircean *icons* that, in a mode analogous to the existential graphs posited by Peirce, render “literally visible before one’s very eyes the operation of thinking *in actu*” (Peirce, CP 4.6). The pragmatic world of action comprises the Fool’s experiential school of life because the Fool is learning by means of going through many life lessons embedded in the archetypal images and symbols. As Deleuze says,

A flat image or, conversely, the depth of field, always has to be created and re-created – signs ... always imply a signature. ... All images combine the same ... signs, differently. But not any combination’s possible at just any moment: a particular element can only be developed given certain conditions. ... So there are different levels of development, each of them perfectly coherent. (Deleuze, 1995, p. 49)

CHAPTER 1

These different levels of development are represented by Tarot Arcana. Human subjectivity grows and develops, indeed. Still, how can the immaterial, non-substantial, un-extended and timeless psyche have reference to an extended and spatio-temporal material world? It is because of the logic of the included middle that Cartesian mind-body dualism is rendered invalid!

As early as 1908, Dewey, asking whether reality possesses practical character, acknowledged the existence of “a peculiar condition of differential – or additive – change” (Dewey, 1908/1998, p. 131), the peculiarity appearing because of the present condition having both emerged from the prior state and related to the consequent, yet absent, state of affairs as its own constituent part, a condition of possibility. Stressing the difference between the pragmatic logic of inquiry and traditional epistemology, the former focusing on “*the relation to one another of different successive states of things*” (1908/1998, p. 132, Dewey’s italics), Dewey considered this relation to be a powerful substitute for the eternal question of “how one sort of existence, purely mental ... immaterial ... can get beyond itself and have valid reference to a totally different kind of existence – spatial and extended” (p. 132).

It is because of the conjunction *and* as a feature of the logic of the included middle that “the physical universe ceases to be merely physical [but] becomes caught up in the semiotic web, and the universe becomes perfused with signs” (Deely, 2001, p. 621), which are always subject to evolution, growth, and becoming-other in the process of learning from experiences. Similar to the loss of her name “throughout all Alice’s adventures” (Deleuze, 1990, p. 3), the Fool’s identity will be contested and will reappear under the guise of other Major Arcana in the Tarot deck. The Fool becomes a nomad, never disappearing, always one of the “haecceities” (Deleuze, 1995, p. 141) comprising the regime of signs. Nomads are intrinsically “becoming ... they transmute and reappear in the lines of flights of some social field” (Deleuze, 1995, p. 153) as well as of psychological field because of “the interrelation and interpenetration of the social and psychological spheres of experience” (Bogue, 1989, p. 4) in the radically conjunctive, semiotic world.

This psycho-social field partakes of the field of the collective unconscious posited by Jung as “populated” by archetypal patterns. A self-conscious Cogito is “replaced by processes of individuation” (Williams, 2008, p. 135) through the experiential becoming-other *qua* signs as archetypal patterns within the “substratum in the depth of the subconsciousness, the basic pattern of the relations of the live creature to his environment” (Dewey, 1934/1980, p. 150). The depth of the psyche is capable of making sense only when it, “having been spread out became width. The becoming unlimited is maintained entirely within this inverted width” (Deleuze, 1990, p. 9), the meaning of a pure event “all the more profound since [it] occurs at the surface” (p. 10) in its projection as a nomadic distribution.

In fact, without an event being a nomadic distribution, that is, “already past and yet in the future ... always the day before and the day after” (Deleuze, 1990, p. 77), the convergence of the series of past and future singularities into the present would not happen; yet past-present-future coexist in a Tarot layout, which is a paradoxical element *par excellence* in accord with Deleuze’s definition. As grounded in the

logic of the included middle, “the life of nomad is the intermezzo” (Deleuze & Guattari, 1987, p. 380), always in-between. Those are indeed genuine nomads that can “act on the basis of the absent and the future. ... [For them] nature speaks a language which may be interpreted. To a being who thinks, things are records of their past, as fossils tell of the prior history of the earth, and are prophetic of their future” (Dewey, 1991a, pp. 14-15).

The logic of the included middle, the affective logic of nomads’ lived experience precludes the nomadic ideas from meeting “the visual condition of being observable from a point in space external to them” (Deleuze & Guattari, 1987, p. 371); in accord with Dewey rejecting the spectator theory of knowledge in favor of the logic of inquiry situated in experience, in life. The Fool’s apparent undecidability reminds us of Alice’s persistent question, “Which way, which way?” The limit case of vagueness would be “this mad element which subsists and occurs on the other side of the order that Ideas impose and things receive” (Deleuze, 1990, p. 2), and there is but a fine line separating the dynamics of pure becoming, the unlimited, from the retarded state of a static order, the boundary condition of being a fool in a literal sense. Still, a seemingly illogical choice made by the Fool belongs to the “immensely more intimate and fundamental part of ourselves than are...conscious choices” (Dewey, 1922/1988, p. 21).

What Dewey, in his analysis of thinking, described as a pre-reflective state of mind, is a necessary condition arising from “the disturbed and perplexed situation” (Dewey, 1933/1998, p. 139) that calls for the momentous state of suspense, which is reflected in the imagery of the Fool portrayed as standing at an uncertain pivotal point at the edge of the cliff. The Fool’s self-reflective consciousness has not yet been developed; the unconscious has not been integrated; the Fool is standing on shaky ground ... Still, how “can one ... attain wisdom without foolishness?” (Jung, CW 11, 953). It is the Fool’s natural, even if not yet realized, “eagerness for experience” (Dewey, 1991a, p. 30) to be gained in the school of life symbolized by all subsequent Arcana.

The Fool’s mode of functioning in the world as an element of creativity and novelty is able to present “life as a work of art” (Deleuze, 1995, p. 94), always being capable of inventing new possibilities of life. The world is *folded* and as such

we can endure it, so that everything doesn’t confront us at once. ... “Children are born with twenty-two folds. These have to be unfolded. Then a man’s life is complete”² ... There is no subject, but a production of subjectivity: subjectivity has to be produced when its time arrives ... The time comes once we’ve worked through knowledge and power; it’s this work that forces us to

² Deleuze, in *Negotiations 1972-1990* (1995) refers to French author Henri Michaux. Deleuze’s quotation on the twenty-two folds is from *The Space Within* by Henri Michaux, in The New Directions Series, printed in France by Henri Marchand & Company. Michaux’s book was first published by Gallimard in Paris in 1944 under the title *L’Espace du Dedans* and then appeared in English as *Selected Writings: the space within* (translated, with an introduction by Richard Ellmann).

CHAPTER 1

frame a new question, it couldn't have been framed before. (Deleuze, 1995, pp. 112-114)

We are born with 22 folds; there are the 22 Major Arcana that have to be unfolded; we have to re-create ourselves anew in the school of life. The Fool will begin to consciously learn from experience when in his journey he will have encountered The Hermit, Arcanum number IX, as the embodiment of the Jungian archetype of the Old Wise Man; hence becoming-wise while becoming-other. Despite his incapacity for totally rational decision-making, the Fool is nevertheless inclined to make the right choice; as a matter of fact he is not at all haunted by Alice's question. His apparently irrational jump seems to confirm the Peircean insight that an "abductive leap comes by way of a fundamental human instinctive potential for generally being more right than wrong in the face of an indefinite number of possibilities for erring" (Merrell, 1992, p. 14) if and when the Fool would have chosen some other rhizomatic line available in the abyss of freedom.

When the Fool spontaneously "decides" to jump into the abyss, he is bound to create novelty and become-other by virtue of embodied experiences. For Dewey, novelty may be created precisely at such a critical point where the human mind "comes in contact with the world ... When the new is created, the far and strange become the most natural inevitable things in the world" (Dewey, 1934/1980, p. 267).

The production of subjectivity initiated by the Fool's jump depends on the capacity "to affect and be affected" (Deleuze & Guattari, 1987, p. xvi). His experience is permeated with an affective, pre-cognitive, dimension. The intensity of the encounter with an affect in the world of possibilities marks the passage between the Fool's experiential states and, accordingly, almost in a physical sense affects his capacity for action as the power to multiply and intensify connections. Experience is a *milieu* full of affective qualities. It cannot be otherwise in the world of semiotic reality where experience is not shut off from nature but defies the dualistic split, because it "is *of* as well as *in* nature" (Dewey, 1925/1958, p. 4). It is the totality of experience that emits signs that exceed any pre-given system of significations.

Perplexing situations abound in the abyss, and are characterized by what Deleuze dubbed difference; learning from experience, then, can be conceptualized as the empirical mapping of such a difference, which continuously becomes repeated in a process, thus contributing to multiple "becomings [that] spill over whoever lives through them (thereby becoming someone else)" (Deleuze, 1995, p. 137). This does not mean that the subject becomes a "fixed self, but the present self in its dialogic projection toward that self of becoming which is as yet absent but which will have been present, given the appropriate set of conditions" (Merrell, 1992, p. 201). Here we arrive at an important concept for interpreting the meaning of The Fool Arcanum, potentiality, which is "an indispensable facet of semiotics" (Merrell, 1992, p. 44) and represents an opportunity to make a fresh start, to be creative.

The Fool, as if adopting Deleuze's philosophy of transcendental empiricism – even without being aware of it but solely by means of his own “admittedly pure spontaneity” (Peirce, CP 6.59) – will jump into the abyss of real albeit as yet sub-representative experiences and will eventually make sense out of “their implicit conditions or presuppositions” (Bogue, 1989, p. 58) in his journey from sign to sign, unfolding all 22 images, the 22 folds, of Major Arcana and explicating the “unconscious ideas/intensities [to the level of] conscious conceptual representations of common sense” (Bogue, 1989, p. 59).

The individuated Self “has little to do with any subject. It's to do, rather, with an electric or magnetic field, an individuation taking place through intensities...it's to do with individuated fields, not...identities” (Deleuze, 1995, p. 98). Deleuze, describing his philosophical method, said, “I wasn't better than the others, but more naive, producing a kind of art brut, so to speak; not the most profound but the most innocent (the one who felt the least guilt about ‘doing philosophy’)” (Deleuze, 1995, p. 89); indeed as though guided by the archetype of The Fool, displaying the qualities of naiveté and innocence, hence being *a priori* authentic.

The Fool's ultimate creativity arises from nothingness, which is symbolized by the abyss in the picture where nothing “stands for the ‘absolute indifference’ qua the abyss of pure Freedom that is not yet the predicate-property of some Subject but rather designates a pure impersonal Willing ... that wills nothing” (Žižek, 1997, p. 15). Here we have an archetypal force, Will, as a pure potentiality, “pure enjoyment, of an unassertive, neutral Will that wants nothing” (Žižek, 1997, p. 16). Yet precisely because it is the archetypal force, that is, Will, it “wants this ‘nothing’ ... actively [and] effectively” (p. 16), as if putting into practice Peirce's pragmatic maxim and transforming virtual potentialities into their actual effects as “practical bearings” (Peirce, CP 5.402).

In the world described by the conditions of deterministic chaos (cf. Prigogine & Stengers, 1984) the Fool's ultimate freedom is itself a necessity. The Fool, who is just about to establish a relation with an environment by leaping into this very environment, is a symbol of an open-ended, interactive, semiotic system as a complex whole that cannot be reduced to the sum total of its isolated parts but represents an interconnected network of relations. The emergence of “another kind of causation” (Peirce, CP 6.59) would not be possible without the aspect of free play, a throw of the dice symbolized by the Fool's teetering at the edge of chaos.

In this respect, the familiar philosophical problematic strikes again: “What if the thing to be explained is not freedom but the emergence of the chain of reason, of the causal network – or, to quote Schelling ... “The whole world is thoroughly caught in reason, but the question is: how did it get caught in the network of reason in the first place?” (Žižek, 1997, p. 3). Well, as it appears, by chance – yet the chance or new opportunity wouldn't have arisen without the open space of potentialities that are ready to be actualized by the Fool in the experiential school of life. Sure enough, it is not an empty space as nothingness but a significant “place of emergence of a new growth ... a new paradigm in its potential and not yet realized form” (Kevelson, 1993, p. 41) indexed by the zero sign.

CHAPTER 1

The sign of The Fool indicates that the “world must actually be such as to generate ignorance and inquiry: doubt and hypothesis, trial and temporal conclusions ... The ultimate evidence of genuine hazard, contingency, irregularity and indeterminateness in nature is thus found in the occurrence of thinking” (Dewey in Kellert, 1993, p. 1). The presence of “objective chances” (Deleuze, 1994, p. 83) in the world demands new conceptual categories of description such as “interaction, transaction, teleology” (Bertalanffy, 1972, p. xix) irreducible to linear models. Knowledge exceeds pre-given facts and becomes an outcome of “an interaction between knower and known” (Ibid.). Importantly, the “interactions do not have to be *physical*; they can also be thought of as a transference of information” (Cilliers, 1998, p. 3). The Fool’s symbolic leap into the abyss represents an instance of transaction or nonlinearity as a feature of complex dynamical systems.

Complexity theory is a conceptual framework for analyzing the behavior of systems that consist of a large number of interacting components. Human culture is a prime example of a complex system; but so too is the natural world: the presence of The Fool defies the universality of linear laws. The term *complexity* combines the “classic Latin preposition *cum* [with] the modern Latin term for network, *plexus*, which derives from the verb *plicare*, to fold. What is complex is...folded onto itself” (Borradori, 2011, pp. 924-925): fold is “the inside *of* the outside” (Deleuze, 1988a, p. 96) forming a qualitative multiplicity.

In mathematical terms, if the equations describing a system contain nonlinear, algebraic terms that represent interactions, then an exact, closed-form solution to such an equation is impossible, and the long-term behavior of such a system would be described in terms of *qualitative* accounts rather than a single *quantitative* prediction about its precise future state. Tarot Arcana as signs or multiplicities are such qualitative means of description, regardless of whether the system in question is psychological, cultural, or natural.

The process of semiosis – the flow of signs – characterizes the dynamics of the system as fundamentally relational. We repeat that it is a relation, or a sign, that is ontologically basic (cf. Noddings, 1984/2003, 2002). The whole of the system is greater than the sum of its parts, because the system’s nonlinearity – such as the Fool’s leap – precludes its dynamics being described by a simple linear addition of the isolated parts. As Dewey pointed out, the reorganization of experience is a process, a movement that should never stop but always produce more education; its arrest and stasis may lead to “death and catastrophe” (Dewey, 1925/1958, p. 281).

The reference to “death” is poignant: in complex systems discourse “death” would represent a state of total equilibrium of the system or its closure to further interactions. It is the Fool’s transaction that brings “mind ... in contact with the world” (Dewey, 1934/1980, p. 267). This is not just an attractive metaphor. The established relation acquires an almost physical reality because the Fool functions so as to overcome the dualistic split between the knower and the known by means of expanding the boundaries of a system.

The zero numbering of the picture appears to signify nothing, but this is not quite so. The Fool’s pure potentiality is akin to “what the world was to Adam on

the day he opened his eyes to it, before he had drawn any distinctions, or had become conscious of his own experience” (Peirce, CP 1.302). The Fool exemplifies zero-point energy, a quantum fluctuation or chaotic information just about to be ordered (see Chapter 8). The Fool’s leap intervenes in the supposedly deterministic world and ensures the human “capacity to change the course of action, to experience novelties ... [I]t signifies the power of desire and choice to be factors in events” (Dewey, 1922/1988, p. 209), even if such unorthodox spontaneous choice may lie outside our awareness.

Novelty, as a change in a system’s behavior, is described as a phase transition, symbolized by the Fool at the edge of the abyss in the state of “uneasy or unstable equilibrium” (Dewey, 1925/1958, p. 253). This uncertain chaotic state represents the Fool’s subconscious “striving to make stability of meanings prevail over the instability of events” (Dewey, 1925/1958, p. 50). We can recognize the isles of (in)stability in the individual Tarot images; as signs they are “marked by individuality” (Dewey, 1934/1980, p. 266); indeed, as indicated in the Prologue, the verb *sēmeiō* – the root of the word semiotics – means “to mark.”

The process of semiosis is grounded in continuity, which is defined as “the intimate, delicate and subtle interdependence of all organic structures and processes with one another” (Dewey, 1925/1958, p. 295). Human experience and the whole of culture cannot be separated from nature. Each fold, each Arcanum, represents a change described by a novel probability distribution of parts acting within the overall dynamics of the complex system; a lesson learned; subjectivity-becoming-other. Dewey considered a part as always “already a part-of-a-whole ... conditioned by the contingent, although itself a condition of the full determination of the latter” (Dewey, 1925/1958, p. 65). As embedded in the process of semiosis, signs are always already parts of the whole.

Cilliers (1998) comments that the dynamics of open systems, in neural network terminology, would be understood as *unsupervised learning* (p. 100) and contrasted with the direct information-processing model of knowledge structure. Such unsupervised learning, which would be above and beyond educational models based on direct instruction, is a condition of the creative logic of education (Semetsky, 2008). This is logic as semiotics enabled by the included middle. There are two kinds of systems understood as ordered wholes: first-order systems effectuating adaptation to the environment, or stabilization, by means of negative, or error-reducing, feedback. Error describes an initial instability, chaotic fluctuation, or disequilibrium as the tension or difference between an organism and its environment that makes the very situation problematic, unstable and uncertain.

Of greater interest to us in the context of Tarot edusemiotics are the second-order systems (cf. Brier, 2008) functioning on the basis of error-amplifying, positive feedback that enables the evolution of a system towards ever higher levels of complexity as a progressive re-organization based on learning from experience. Error as difference is then a prerequisite for learning, for growth. Yet, there are other “misadventures besides error” (Deleuze, 1994, p. 149). Referring to teachers, Deleuze (1994) says that they know how rarely literal errors are found in their students’ homework. Much more frequently, there are banalities, nonsensical

CHAPTER 1

sentences or poorly posited problems. Nonsense is a significant concept. There is a subtle relation between sense and nonsense. Non-sense is neither true nor false but has its own intrinsic value in producing meaning.

Non-sense exemplified in The Fool Arcanum is necessary for meaning-making because this sign functions as a paradoxical – apparently, nonsensical – semiotic “entity [that] circulates in both series ... and [is] equally present in the signifying and signified series ... [as] at once word and thing, name and object, ... etc. It guarantees ... the convergence of the two series which it traverses, but precisely on the condition that it makes them diverge” (Deleuze, 1990, p. 40). This convergence/divergence is a feature of the sign in which the a-signifying rupture is bridged by the conjunction *and* by virtue of the logic of the included middle.

Dewey was adamant that the more an organism learns, the more it still has to learn; and the signs’ growth is possible only through the “observer’s” very *participation* in the dynamical process enacted in the rhythmic fluctuations between disequilibria and the restoration of equilibrium at a new level within the process of semiosis whenever signs develop and become other as a result of multiple transactions. The notion of rhythm is poignant. Constant rhythms are created by virtue of the tension (error, rupture, difference) represented by the apparent loss of integration with the environment – symbolized by the Fool portrayed as if suspended at the edge of the cliff – followed by the recovery of a new union (cf. Dewey, 1934/1980, p. 15), when the Fool will have connected with the phenomenal world in the images of the subsequent Arcana.

These rhythmic fluctuations of signs-becoming-other-signs enable evolution and growth as a function of the continuous reconstruction of experience based on the “integration of organic-environmental connections” (Dewey, 1925/1958, p. 279). When the Tarot signs are read and interpreted, this edusemiotic process produces self-reflective feedback and entails transformation or evolution of signs toward their becoming-other in the form of increasingly adapted yet further unstable future states. The system “learns”! This transformation, understood as a transfer to a new level of complexity, can be expressed in terms of “the focal culmination of the continuity of an ordered temporal experience in a sudden discrete instant of climax” (Dewey, 1934/1980, p. 24). Such decisive climax, a new awareness, is produced in the semiotic process of reading and interpreting the constellations of Tarot images.

Contrary to the spectator theory of knowledge, Dewey’s transaction – just about to be performed by the Fool, metaphorically – is an “unfractured observation” (Dewey, 1991b, p. 97), which may seem to be a contradiction in terms – but only in the framework of the logic of the excluded middle with its gulf between the observer and the observed. Transaction, however, such as that between the Fool and the greater milieu of experiences, represents an event encompassing a semiotic *triad* of “the observer, the observing, and the observed” (Ibid.). In biological living systems, processes of a similar kind are referred to as autopoietic (Varela, 1979) or, literally, self-making and devoted to the making-of-the-self. The Fool’s individuation is a creative self-making, indeed. The Fool will ultimately become the fully individuated Self embodied in the last image in the deck numbered XXI

and called The World (see [Figure 1.2](#)). This is a symbol of the connection with, and not separation from, the greater, social and natural world achieved by the Fool along the learning path from chaos to order.

Signs, which are full of implicit meanings, speak to us in the language of pictorial semiotics, provided we can read and interpret this language and *make sense* out of it, make explicit the meanings implicated in the images by means of unfolding the experiential folds symbolized by Tarot Arcana. It is “Sense [that] speaks and not individual” (Williams, 2008, p. 91). As Jung was also saying, “it is not the personal human being who is making the statement, but the archetype speaking through him” (Jung, 1963, p. 352).

Peirce’s pragmatic maxim presupposes the discovery of meanings, notwithstanding that the “meaning lurks perpetually in the future” (Merrell, 1992, p. 189). However, in the Fool’s paradoxical, but semiotically real world, that which exists as a possibility, a might-be-ness which turns into could-be-ness only in some indeterminate future, the future *per se* is not totally indeterminate but subsists as *future anterior*. Future that *will have been* means that it surely culminates in the aforementioned “has been,” which makes it always already projectable (see Chapter 10); such a conceptualization is not only in accord with the Deleuzian logic of sense in theory, but appears in practice as a projection of ideas-signs in the material form of Tarot icons.

Since icons in general “play a key role in modeling, whether speaking of the ‘semiotically real’ object to be modeled or the source from which the model is derived” (Merrell, 1992, p. 189), meaning or sense is always already implicated on the flat surface within the layout of pictures, into which “an adimensional profondeur” (Bogue, 1989, p. 63) of the psyche is being projected. The ultimate intensity as “the force of individuation” (Bogue, 1989, p. 64) is symbolized by the undifferentiated field of the groundless abyss in front of the Fool conveying the meaning of the very beginning of the individuation process.

The Fool’s growth and development, his informal education, depend on the symbolic leap into unfamiliar territory; as Deleuze would say, deterritorialization. This leap is not a result of cognitive decision-making; rather, the Fool’s acquired capacity for learning, thinking, and assigning meaning to his own experiences is contingent on the “veritable becoming-mad” (Deleuze, 1990, p. 1) in the paradoxical act – “which destroys common sense as the assignation of fixed identities (p. 3) – of jumping into the abyss as if “towards the border of a compelling danger” (Williams, 2008, p. 82).

It is in the action, through the actual events at the level of the body that the Fool will have integrated the unconscious dimension of experience. The unconscious is not exhausted by its personal, Freudian dimension or “playing around all the time with mummy and daddy” (Deleuze, 1995, p. 144). The unconscious is Anti-Oedipal and demands “a different mode of operation, in another dimension, with other uses of syntheses that feed the autoproduction of the unconscious – unconscious-as-orphan, the playful unconscious, the meditative and social unconscious” (Deleuze & Guattari, 1983, p. 100). Syntheses

CHAPTER 1

are possible via autoproduction; in other words, via self-reflection. All thinking and learning starts from “reaching the absent from the present” (Dewey, 1991a, p. 26) and involves

a jump, a leap, a going beyond what is surely known to something else accepted on its warrant ... The very inevitableness of the jump, the leap, to something unknown, only emphasizes the necessity of attention to the conditions under which it occurs so that the danger of a false step may be lessened and the probability of a right landing increased. (Dewey, 1991a, p. 26)

The Fool’s inevitable leap is the very condition for initiating learning and becoming conscious of the unconscious; such is the art and science (as the science of signs, or semiotics) of the future-oriented productivity of affect embedded in experience. The Fool/Zero, due to its quality of paradoxical disjunction, does in fact perform the synthesizing conjunctive role of the production of meaning, of sense, from its own opposite, nonsense; non-sense, no-thing-ness being the epitome of the Fool. It is nonsense that produces sense as its own becoming-other via the series of symbolic conjunctions “and ... and ... and” (Deleuze, 1995, p. 45).

Each consequent whole number that “indexes” each Arcanum describes the property that contains zero in itself as an empty set. Each number is marked off from the consequent one by basic marks or braces {}. Noddings and Shore in their book *Awakening The Inner Eye: Intuition in Education* (1984) refer to the mathematical process of iteration, during which the basic marks or braces are repeated and “the empty set, {} ... correspond[s] with zero; then 1 [becomes] the name of the property belonging to all sets containing the empty set, {{{}}” (p. 51).

The process of becoming-other embedded in the infinite series of events is illustrated in [Figure 1.3](#).

The braces and marks (also used by Bertrand Russell and Alfred North Whitehead) are being repeated within the logical process starting from nothing, from the empty set or zero, symbolized by the Fool in the context of Tarot edusemiotics. The Fool plays the role, symbolically, of what Deleuze in *The Logic of Sense* called an *empty square*; yet this emptiness (nothingness) is what connects the heterogeneous series becoming as such a precursor for putting them into relation to each other “by virtue of its own power” (Deleuze, 1994, p. 119). Such is the Fool’s paradoxical significance in his signifying nothing!

In opposition to Russell, mathematician Spencer-Brown (1979) demonstrated that logic can be arithmeticized, that is, it is possible “to construct logic from the basic intuitive act of making a distinction and two fundamental arithmetical acts: (1) making a mark to signify the distinction, and (2) repeating the mark” (Noddings & Shore, 1984, p. 51), precisely as it is shown in [Figure 1.3](#) and in agreement with Deleuze’s philosophy of difference and repetition and with Dewey’s assertion that “recurrence makes novelty possible” (Dewey, 1925/1958, p. 47).

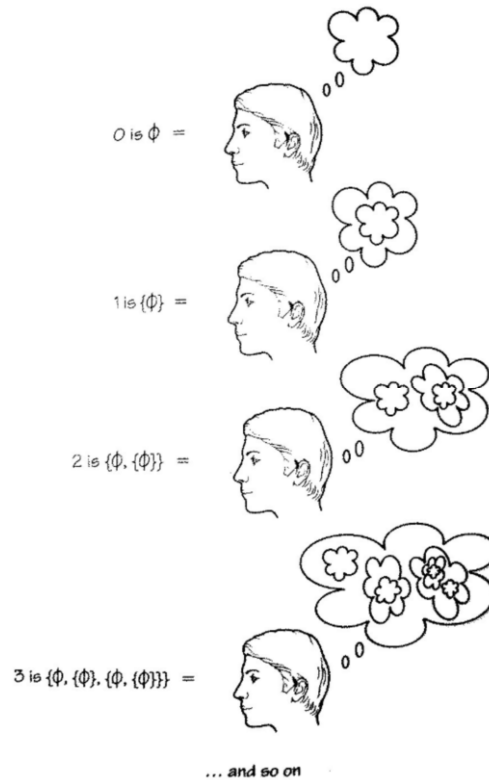


Figure 1.3. The infinite series.
 (Reproduced with permission from Barrow, 2000, p. 160; cf. Rucker, 1982, p. 40)

The Fool’s leap establishes what Deleuze called a line of flight; this line “upsets being” (Deleuze 1995, p. 44), yet along this very line “things come to pass and becomings evolve” (p. 45). Becoming-other indicates diversity, multiplicity, a movable borderline, the conjunction *and*; it involves the destruction of old subjectivity and the creation of a new one as “always a temporary and unstable effect of difference” (Grossberg, 1994, p. 13).

Psychologically, thinking starts from “intuition as a way of knowing” (Noddings & Shore, 1984, p. 46); logically, it originates with the Fool’s abductive leap into the abyss comprising his experiential school of life. Each conjunction *and* is a pure relation that, in its own in-between-ness, acts as a distributed marker of “a new threshold, a new direction of the zigzagging line, a new course for the border” (Deleuze, 1995, p. 45) and, respectively, a new subjectivity that, as contingent on new encounters and experiences symbolized by the Tarot Arcana, is capable of expressing itself within the nonverbal, pictorial discourse of Tarot edusemiotics, in

CHAPTER 1

our learning journey through multiple Tarot images. As Deleuze and Guattari (1987, p. 4) said, “‘Long live the multiple,’ difficult as it is to raise this cry.”

The unconscious enfolded in subjectivity entails the insufficiency of reducing subjectivity to a single and fixed identity of the intentional speaking subject. The unconscious extends throughout a sociocultural and natural *milieu* and manifests indirectly by virtue of its effects at the level of cultural, historical, and collective practices:

It is a question of ... identifying races, cultures, and gods with fields of intensity on the body without organs, identifying personages with states that fill these fields, and with effects that fulgurate within and traverse these fields ... there is no ego that identifies with races, peoples, and persons in a theatre of representation, but proper names that identify races, peoples, and persons with regions, thresholds, or effects in a production of intensive quantities. (Deleuze & Guattari, 1983, p. 86)

The unconscious belongs to the collective domain as the field of the Jungian collective unconscious. Tarot Major Arcana all have “proper names” denoted by the archetypes that “fill” this field, thereby generating effects. According to Deleuze, the conscious “intentionality of being is surpassed by the fold of being, Being as fold” (Deleuze, 1988a, p. 110). Because “there is no ego,” there cannot be an *a priori* self-consciousness: the consciousness of the Self is an effect, a product of informal learning and development by virtue of the creative “logic of discovery [as] abductive or hypothetical inquiry ... which is concerned with levels and degrees of the ‘possible’” (Kevelson, 1993, p. 30).

The unconscious represents “a productive machine ... at once social and desiring” (Deleuze, 1995, p. 144) and is constituted by “races, tribes, continents, history, and geography, always some social frame” (Ibid.). The different image of thought includes an affective, unconscious, dimension that “guides the creation of concepts” (1995, p. 148) in consciousness. The cultural unconscious manifests in “new connections, new pathways, new synapses ... [and is produced] not through any external determinism but through a becoming that carries the problems themselves with it” (Deleuze, 1990, p. 149).

Embedded in the process of becoming, The Fool is called into play whenever novelty appears; or conversely, novelty appears if and when the collective psyche is guided by this archetype. In this respect The Fool, despite being equated with Zero, once again establishes his own significance: chance is to be considered not simply as a feature of randomness but in its creative function “as a principle, or as ineliminable” (Grosz, 1999, p. 20). As a cultural sign, the Fool is inscribed in cultural practices, and his archetypal journey becomes a process of tracing the signifier (cf. Silverman, 1998) in the guise of a nomadic singularity within cultural semiosis.

The Fool’s traces, though, are not easily recognizable, unlike many activities of the Trickster (cf. Spinks, 1991) that finds its expression in a complementary aspect of yet another image in the deck, Arcanum I, The Magician (Chapter 4). The Magician’s semiotic function implies a matter of Firstness, but the wandering Fool,

functioning as pre-Firstness, perhaps finds it easier to escape reasoning and therefore signification. Nevertheless, as a signifier of innocence and nostalgic wholesome times, the Fool's presence can be traced, for example, in the cultural artifacts of Walt Disney's world(s) or Kasdan's *Grand Canyon*, the title itself implying the image. With regard to the latter, this archetype has been interpreted in terms of a "radical innocence [as] the signifier for a hegemonic practice ... where luck and chance" (Giroux, 1994, p. 42) acquire power vis-à-vis "struggle and agency." Such an interpretation, albeit negating the positive qualities of the childhood motif, indicates the diversity of meanings that may be assigned to the notion of innocence and points toward the danger that a naive Fool may encounter when he, facing the brute facts at the level of Peircean Secondness amidst the interplay of signs, becomes not only subjected to manipulation by others but also downgraded from the activated archetype into an ideological construct.

Despite the threat of being reduced to what Henry Giroux qualified as an ideological appeal to nostalgia, the Fool's presence in contemporary culture is a sign of resilience. The Fool's adventure is high-spirited, even heroic, and as such is capable of erasing hegemonic practices that might seem to exist as his own counterpart. In this respect the incorporeality of the sign as an intangible *idea* does not diminish any effect it may produce at the level of cultural practices; sign-event is a *lektion*, that is, "an incorporeal surface effect" (Bogue, 1989, p. 69), but in the meantime it is a potentiality of individuation, a powerful archetypal force persisting in its effort of expressing itself; in short, a paradox the "function of [which] in contemporary thought and culture" (Merrell, 1992, p. 116) should not be underestimated.

The Fool is marked off by Zero, which seems to signify nothing, that is, to be an instance of Deleuze's incorporeal non-sense, yet the very instability of the Fool makes this sign "a state of readiness to receive a certain piece of information" (Bateson & Bateson, 1987, quoted in Hoffmeyer & Emmeche, 1991, p. 159), that is, to start functioning as a production of meaningful ordered structures. The Fool's pragmatic cash-value, then, is not at all Zero; the quasi-purpose of this sign is to produce sense and initiate the process of creating order out of chaos. We are reminded of the symbolism of the Fool portrayed at the edge of chaos when Peirce says that "primeval chaos in which there was no regularity was mere nothing, from a physical aspect. Yet it was not a blank zero; for there was an intensity of consciousness there" (Peirce, CP 6.265); even if such virtual field of consciousness – the collective unconscious, in Jung's parlance – is as yet undifferentiated.

Analogously, Deleuze posits the transcendental field as a-subjective, impersonal and "containing" the non-conscious traces of the self. These traces become nonetheless perceived during the edusemiotics of Tarot when the folds are "flattened out, or fully ex-plicated [reaching as such] ... pure perception, which coincides with matter itself" (Borradori, 2011, p. 925). The archetypes imperceptible by themselves become available to awareness in the material form of Tarot images "flattened out" in the layout. The abductive leap partakes of intuition "that grants us access to the concrete flow of duration" (Ibid.), of semiosis.

CHAPTER 1

In a state of an unstable equilibrium, standing at the pivotal point at the edge of chaos – which is “seen as Creative (as source of the unpredictable)” (Hoffmeyer & Emmeche, 1991, p. 162) – the Fool finds himself between the two extremes of knowledge and ignorance, fleeing constantly from one to another, explicating the experiential folds and, in such an experimental process, always producing a rhizome and not planting a root. The logic of the included middle is a must: “one connects with something else. One never commences; one never has a *tabula rasa*; one slips in, enters in the middle; one takes up or lays down rhythms” (Deleuze, 1988b, p. 123) in the semiotic process of becoming-other.

The Fool, embedded in the edusemiotics of “learning [as] a process of growth and change” (Garrison, 1997, p. 5) may, within a split-second, become an instance of blissful, albeit semi-aleatory, ignorance and risk-taking; what Schelling would call a moment of blindness (Žižek, 1997, p. 34). Significantly, in the deck of Old French Tarot the Fool is portrayed wearing a blindfold (Figure 1.4):



Figure 1.4. The image of The Fool (*Le Fou*) from the Old French Tarot.

The significance of the Fool pictured as blindfolded indicates the prevalence of a chaotic movement, a fluid Brownian motion (cf. Briggs & Peat, 1984) or – in the world of semiotic reality that expresses itself in the form of images, symbols and indices (all Peircean categories of signs) – an implicate perception of a child *prior* to language acquisition! The image accords with the importance allotted by Peirce to visual notation and the diagrammatic mode of reasoning and thinking as part of logic embedded in a learning process. The logic of the *excluded* middle simply represents the *same*; the logic of the *included* middle enables learning, thus makes a *difference*. The Fool in his pre-First, pre-conscious, and pre-verbal state of mind, cannot yet reason diagrammatically and self-reflectively; still this sign initiates this very process.

The information is “perceived” by the blindfolded Fool via the three Is of insight, imagination and intuition, and is oriented inward, towards deep inner knowledge as *Gnosis* (Greek for knowing) which will have been achieved when the Fool becomes his authentic Self, a whole person. However by the time the child acquires language and “learns” to reason with cognitive tools solely, ignoring abductive leaps of imagination, these three Is might be irretrievably lost!

An engagement of a symbolic child in the continuous play of semiosis signifies the multiple becomings of a nomadic distribution of singular and transitory identities; and now and then there appears that “precious, universal, ‘innocent’ instance in which we can all recognize ourselves” (Copjec in Giroux, 1994, p. 42) as young, adventurous, and paradoxically wise fools.

While keeping untouched Peirce’s “supreme maxim of philosophizing” (Peirce, CP 1.56) let us now invoke his pragmatic maxim and turn to the practical aspect of everything that has so far been said. We repeat after Peirce that “the meaning and essence of every conception lies in the application that is to be made of it” (Peirce CP 5.532) at the level of human experience, in *praxis*. The psychic reality of Jungian archetypes becomes the semiotic reality of human experiences ascertained by their effects. The effect produced by Tarot edusemiotics is what Deleuze and Guattari called transformational pragmatics, that is, the possibility of change in real human habits, real attitudes and, in the final analysis, real, even if still potential, selves. The Tarot signs are the signs of potential transformation; as such they contribute to our becoming more conscious of ourselves and the objective world in which we are situated. By recognizing ourselves as semiotic agents in the semiotic process we, like other signs, acquire potential to develop and grow. The next essay will focus on the very process of semiosis: the action of signs.

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CHAPTER 1

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CHAPTER 2

SIGNS IN ACTION

This chapter addresses the process of semiosis as an action of signs from the threefold perspective of Peirce's semiotics, Jung's depth psychology, and systems theory. The word sign is ambiguous. The notion of a sign as it pertains to Tarot edusemiotics follows Peirce's triadic conception so as to underline the dynamic character of a sign and the important role of this sign-component that Peirce called *interpretant*. A sign can be anything that stands for something else, its object, in such a capacity so that it generates yet another, different, sign: it is through the interpretant that a sign tends to become-other. The structure of a genuine tri-relative sign is the following (Figure 2.1):

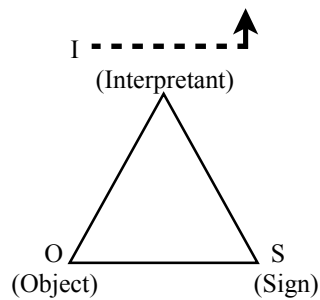


Figure 2.1. Peirce's Triadic sign.

The dotted line in Figure 2.1 indicates the dynamic and evolving character of sign-relations as the function of a series of interpretants analogous to the dynamics pertaining to Tarot readings as the interpretation of images and the construction of meanings for experiential situations which are embodied in these very images. Signs' development, growth, and synthesis implies a "sense of learning" (Peirce, CP 1.377) when these very signs are being read and interpreted. According to the *Encyclopedic Dictionary of Semiotics*, Tarot readings belong to "a branch of divination based upon the symbolic meaning attached to individual Tarot cards...interpreted according to the subject or purpose of a reading and modified by their position and relation to each other from their specific location in a formal 'layout' or 'spread'" (Sebeok, 1994, Vol. 1, p. 99).

This definition, while acknowledging the symbolism of the pictures, still harks back to the stereotypical perception of Tarot as mere fortune-telling that exists at the low end of popular culture (cf. Auger, 2004) and that I have deconstructed in my prequel (Semetsky, 2011) to the present book by developing an empirically

based argument for the hermeneutics of Tarot as an educational aid and a valuable tool for human development.

It was Russian critical psychologist and sociocultural theorist Lev Vygotsky who emphasized the role played by signs in social interactions: by virtue of cultural mediation signs serve as the powerful pedagogical tools and learning aids for developing intelligence. In recent years, a number of educational philosophers and educational psychologists noticed the value of Peirce's conceptualizations specifically for teaching and learning (e.g., Nöth, 2010; Semetsky, 2005b, 2005c, 2005d, 2010b). In the context of philosophy of education, Nel Noddings (1998) acknowledged Peirce's pragmatic theory of meaning as an important contribution to the field.

Together with William James, John Dewey, and George Herbert Mead, Charles Sanders Peirce belongs to a school of philosophy that posited logic in terms of dynamic inquiry irreducible to some indubitable and certain knowledge. Learning, for Peirce, is achieved by *synthetic* consciousness that constitutes an expanded field of meanings in the process of learning from experience, which is always already perfused with signs. Defining signs as fundamentally triadic and comprising three universal categories of Firstness, Secondness and Thirdness, Peirce "located" them at the psychological, logical and ontological levels alike and noticed that "in psychology Feeling is First, Sense of reaction Second, General conception Third, or mediation. ... Chance is First, Law is Second, the tendency to take habits is Third. Mind is First, Matter is Second, Evolution is Third" (Peirce, CP 6.7).

Firstness is quality, possibility, freedom. Secondness is physical reality, billiard-ball forces, rigid deterministic laws, direct effects, actions and reactions. Thirdness relates seconds to thirds; it is a category of synthesis, communication, memory, mediation and learning! It is a triad of Firstness (feeling), Secondness (action) and Thirdness (as reason or *intelligence* exceeding a solely instrumental rationality grounded in the excluded middle) that together constitute a dynamical structure of experience as an *extended* mind irreducible to the personal isolated Cogito of a Cartesian subject.

The Thirdness of interpretation is what governs Secondness, it produces the objects of knowledge not by means of *a priori* given sense-data but as an outcome of the logic of inquiry embedded in the process of *semiosis* comprising the action of signs. Thirdness performs a mediative function and creates or "brings information ... [it] determines the idea and gives it body" (Peirce, CP 1.537) in the material world of our practical actions. The semiotic bridge as a communicative link between ideas (mind) and practice (body) is thereby created.

An utterer, as the producer of signs, is not reducible to a solely human dimension. Nature, in its act of dialogic communication with human mind, is assigned the function of the quasi-utterer by Peirce that, for example, "utters" signs of weather; and mind, respectively, performs the function of a quasi-interpreter. Peirce's logic as semiotics – the science of signs – thus defies a classical *tertium non datur* principle, the law of the excluded middle, which is the very basis of propositional thinking established long ago by Aristotle's syllogisms: something is

either true or false, there is no in-between. Ditto for Bertrand Russell, who formulated his laws of thought as grounded in the principle of non-contradiction.

In the West, it was John Dewey's logic as the theory of inquiry (Dewey, 1938), misunderstood by Russell (Burke, 1998) that together with Peirce's doctrine of signs dealt a fatal blow to dualisms. Holder (1995), in the context of Dewey's pragmatic inquiry, contends that "higher mental processes are said to be *continuous* with lower ones (e.g. thinking with the biological pattern of need and search) but such 'higher' processes are *not* reducible to lower ones (e.g. thoughts are not reducible to brain states)" (p. 190f). Two separate Cartesian substances – *res extensa* (corporeal; material; body) and *res cogitans* (incorporeal; immaterial; mind) – thus become connected in a flow of semiosis.

Merrell (2002) suggests the all-encompassing term *bodymind* as pertaining to Peirce's semiotics and Eastern philosophy, including *I Ching* (the Chinese Book of Changes) and Buddhism. I agree with Merrell that we *live to learn*, and we *learn to live*, within the stream of signs that grow, develop and undergo evolution. Contrary to the Eastern, integrative, mode of thought, mainstream Western philosophy suffered long enough from the "great bifurcation" (Merrell, 2002, p. 54) between body and mind. However, Tarot as continuing the legacy of alternative Western esoteric tradition, namely Hermetic philosophy that I addressed in detail in the prequel (Semetsky, 2011), elicits vast implications for our practical life and education by virtue of healing the split produced by Cartesian dualism.

The crux of the ancient Hermetic tradition that can be traced via Neoplatonic philosophy to its revival during the Renaissance (Yates, 1964; Faivre, 1994, 1995) is the relational worldview grounded in correspondences, sympathies, interdependencies and analogies between the realities of *above* and *below* with yet another included third in-between: the archetypal world or, as philosopher Henry Corbin called it, the *Imaginal* world. Still, the relations appear hidden, secret and hieroglyphic; they need to be deciphered or interpreted just like Peircean signs so as to acquire meaning. Nel Noddings (2006), non-incidentally, wants the profession of education to comprise teachers who, like Renaissance people, would have had a broad knowledge of perennial questions.

Peirce's semantic criterion of sign-object relation includes icons, indexes and symbols; all three, depending on the pragmatic function of each, are liable to mutually exchange their roles. The icon is a sign, which is capable of signifying by its own quality, the index is in some way causally dependent on its object, and the symbol, as saturated with significance, usually designates a conventional sign. Examples of icons include pictures and diagrams to the extent that they signify by virtue of some relative similitude, an analogous structure, between the sign and what it stands for. Iconicity in turn can be further classified into three categories, the first being hypoicons that, according to Peirce, include both images and metaphors, or even a "pure fiction" (Peirce, CP 4.351) as an imaginary object represented by an icon. Importantly, signs as "used by every scientific intelligence ... may embody any meaning" (Peirce, CP 2.229).

The pedagogical role of icons and images has been known since antiquity: visual arts were used as educational tools already in the fourth century presenting

CHAPTER 2

imagery as a means of edification especially valuable for the illiterate. Ivanovic (2010) refers to the doctrine of John Damascene in relation to the “conception of an icon as an educational instrument useful for the communication with the divine” (p. 71). The communicative function serves as a semiotic bridge that forms a *relation* between what we habitually perceive as binary opposites that supposedly can never be reconciled, such as subject and object or, on the metaphysical scale, the human and the divine.

The table of contents in Shlain’s book, to which I referred in the Prologue, is exemplary in this regard: Shlain (1998) starts from singling out image versus word and traces the perceived dualisms through history via the figures of Dionysus versus Apollo, to mystical thought versus scholastic thought, to sorcery versus science, to right brain versus left brain, to page versus screen; while contrasting, both explicitly and implicitly, feminine *holistic* thinking with stereotypically male “cool” reason.

In other words, for the modern Western thought historically “there could be no *tertium quid*” (Merrell, 2002, p. 204) defined as something of uncertain or unclassifiable nature, which is related to, but distinct from, two – perceived as opposite, things – precisely as the interpretant in [Figure 2.1](#), which is related to, yet distinct from, a sign and its object and serves as a necessary component, the included middle, of a triadic structure comprising a genuine sign. Similar to the indirect mediated relation between a sign and its object, the causal influence embedded in the semiotic process of cognition is indirect and mediated by means of inclusion of the third category that breaks down the direct dyadic cause-effect connection.

Nonetheless the formal, albeit vague, principle, called by Peirce the rule of abduction – and exercised by the Fool, as we stated in the preceding chapter – enables mind to reason from a vague premise to an uncertain conclusion; such an inference being described by the following logical form: if A is B, and C can be signified by B, then maybe A is a sign of C. The interpretation of Tarot images is triggered by the Firstness of abduction which, functioning as a sort of perceptual judgement, is a hypothesis-bearing statement that asserts its conclusion only conjecturally; yet, according to Peirce (CP 5.189), there is a reason to believe that the resulting judgement is true.

The given premise must entail some empirical consequences in terms of producing pragmatic effects by virtue of a sign taking upon itself “value, meaning, and importance” (Merrell, 2002, p. 209). The explication of the initial perception is achieved by *analogical* reasoning which unfolds into inferences to the would-be consequences of abductive conclusions eventually leading “to a result indefinitely approximating to the truth in the long run” (Peirce, CP 2.781) and merging into synthetic inference in this process.

The epistemic process, for Peirce, means denial of the Cartesian notion of arriving at propositions that exactly represent reality. The notion of a proposition, whose subject designates reality and whose predicate describes the essence of said reality, is transformed by Peirce into the *interpretation of reality and living it out experientially*. Indeed, this is a sign by knowing which we can know something

more and something other than a sign itself. Pragmatism as a method of ascertaining the meaning of ideas, understood by Peirce as intellectual concepts that are nonetheless enriched with the qualitative Firstness of affects and emotions, is essential for communication and creating new knowledge, ultimately leading to the transformation of our old outlived habits of mind and actions alike.

As Noddings (2006) notices, the task of critical lessons should be to “challenge deeply held beliefs or ways of life” (p. 1) that tend to become our unconscious habits. It is the creation of novel meanings for lived experience versus transmitting some pre-existing facts from a generic teacher to a generic student that breaks the old habits of thinking or behaving and should become the aim of education from the perspective of *edusemiotics*. Meanings are to be verified in experience, but they are fallible and always already exceed their own verifying instances; a meaning can always be determined further.

What is the aim of education, we may want to ask. Or, rather, what are the (plural) aims of education? This long-controversial question renders multiple answers. Dewey asserted that the aim of education is *more* education, Maxine Greene emphasized the role of imagination (cf. Semetsky, 2011), and Alfred North Whitehead explicitly stated the aim of education as our guardianship against useless and harmful, inert, ideas. Dewey defined education as a continual process of the reconstruction of experience, that is, real-life experiential problem-solving activity based on the human mind actively interacting with an open world. For Dewey *all* education is necessarily moral education devoted to the realization of meanings in lived experience.

The edusemiotics of Tarot not only agrees with this but also, because of a string of interpretants during the readings, assists in transforming a particular situation embodied in the layout of pictures from what Dewey would call problematic and obscure into “clear and luminous” (Dewey, 1934/1980, p. 266). Abduction – a mode of inference – functions like intuition; however intuition that enables Tarot readings and the interpretation of images is not reducible to Descartes’ direct and immediate intuition (see Chapter 10). For Peirce, all cognition is mediated by signs. What makes Tarot readings efficient is a perceptual judgement triggered by an abductive guess that partakes of intuition as a sort of paradoxical “mediated immediacy” (Peirce, CP 5.181). Psychological immediacy and logical mediation coalesce. Abduction is hypothetical conjecture that Peirce describes in the following form: a surprising fact is observed; but if our hypothesis of this fact was to be true, then this fact would be a matter of course; therefore there is reason to suspect that our hypothesis is true.

The process of Tarot readings accords with Peircean diagrammatic reasoning when an authentic reader, passing from one picture in the layout to the other, from one image to yet another, “from one diagram to the other ... will be supposed to see something ... that is of a general nature” (Peirce, CP 5.148), even if abductive leaps proceed below the level of awareness and cannot be expressed in the precise language of propositions that are supposed to be either true or false with nothing in between. Abduction appears to function instantaneously but not because there is no

CHAPTER 2

temporal – even if appearing imperceptible to the conscious mind – interval produced by the inferential, reasoning, process.

Peirce noticed that “the first premise is not actually thought, though it is in the mind habitually. This, of itself would not make the inference unconscious. But it is so because it is not recognized as an inference; the conclusion is accepted without our knowing how” (Peirce, CP 8.64-65), as though intuitively. Intuition, albeit achieving intellectual knowledge, related to what the ancients described as the *Nous*, is not *of* something but *is* something; as an epistemic pragmatic method, it is a process of knowing rather than knowledge as a scientific *episteme*. Developing one’s intuition is a challenge for the reader, and the information “contained” in the collective unconscious, outside Cogito, intensifies and widens the boundaries of the individual consciousness, contributing to its organization at a higher level of complexity.

In the context of Tarot edusemiotics, intuition functions in accord with its literal meaning, that is, learning from within, from the very depth of the psyche, thereby affirming its place in the semiotic process founded on “communication ... across the ... levels of perceptions” (Jantsch, 1975, p. 145). Access to knowledge then, “and this is a crucial point, is available *within* ourselves” (Jantsch, 1975, p. 146) as much as *without*, making a semiotic “*relationis transcendentalis*” (Spinks, 1991, p. 444) in fact immanent in perception! Two opposites are thereby reconciled: “immanence and transcendence [are] inseparable processes” (Williams, 2010, p. 94) embedded in the symbolic dialogue. Dewey, addressing intuition, puts the word *per se* in quotations marks so as to strengthen its unorthodox, anti-Cartesian, definition:

“Intuition” is that meeting of the old and new in which the readjustment involved in every form of consciousness is effected suddenly by means of a quick and unexpected harmony which in its bright abruptness is like a flash of revelation; although in fact it is prepared for by long and slow incubation. Oftentimes the union of old and new, of foreground and background, is accomplished only by effort ... [T]he background of organized meanings can alone convert the new situation from the obscure into the clear and luminous. (Dewey, 1934/1980, p. 266)

The old and new together is a province of semiotics: signs grow and become-other because of a string of interpretants creating novel meanings as new signs. As a result of interpretations – the creation of meanings – signs are continuously becoming-other-signs, enriched with ever new meanings; they grow and engender other signs because the triadic logic leads to signs always already becoming something else and something more, contributing – in the process of their growth – to human development and the evolution of consciousness. Importantly signs embody real experiences: “thoughts are events” (Peirce, CP 5.288).

When we look at the patterns created by the Tarot pictures comprising the constellation of images representing real events in human experience (Semetsky, 2011), we enter what Noddings and Shore (1984) called an intuitive mode of perception. Etymologically, intuition is derived from the Latin verb *intueri*, which

means to look upon. The word intuition in the Middle Ages was used “to describe an ineffable mystical experience of identification with God” (Noddings & Shore, 1984, p. 11).

Dewey used the metaphor of a spark – “old and new jump together like sparks when poles are adjusted” (Dewey, 1934/1980, p. 266) – that implies a sense of connection, which is established via relation rather than an immediate contact; it is a relation that brings “mind ... in contact with the world” (Dewey, 1934/1980, p. 267), yet such a contact is what contemporary physics would describe in terms of non-local, that is, indirect, connections. It was in collaboration with physicist and Nobel laureate Wolfgang Pauli that Jung posited his principle of synchronicity as an acausal correlation between two different, non-local, events: mental and physical.

Synchronicity addresses the problematic of meaningful patterns generated both in nature and in human experience, linking the concept of the unconscious to the notion of “‘field’ in physics ... [and extending] the old narrow idea of ‘causality’ ... to a more general form of ‘connections’ in nature” (Pauli, 1994, p. 164). Pauli envisaged the development of theories of the unconscious as overgrowing their solely therapeutic applications by being eventually assimilated into natural sciences “as applied to vital phenomena” (Pauli, 1994, p. 164).

Referring to various phenomena that may appear random and senseless if not for their meaningful synchronistic significance and addressing a problem of forming a picture of the symbolic process Jung referred to alchemy, Tantric chakra system and Chinese meridians. He also stated that it “seems as if the set of pictures in the Tarot cards were distantly descended from the archetypes of transformation” (Jung, CW 9i, 81). Those habitual patterns of behaviors, feelings, and thoughts below the level of awareness that have been accumulating within the course of humankind’s evolutionary history Jung described as the archetypes acting in a field that he dubbed the collective unconscious.

Jung’s brief mention of Tarot subsequently inspired a substantial body of work produced by contemporary post-Jungians. Andrew Samuels refers to “systems such as that of the *I Ching*, Tarot and astrology” (1985, p. 123) as probable, even if questionable, resources in analytical psychology, and quotes Jung who wrote in 1945: “I found the *I Ching* very interesting. ... I have not used it for more than two years now, feeling that one must learn ... or try to discover (as when one is learning to swim) whether the water will carry one” (Samuels, 1985, p. 123).

Jung’s biographer Laurens van der Post, in his introduction to Sallie Nichols’ (who was Jung’s student) book *Jung and Tarot: an Archetypal Journey*, notices Nichols’ contribution to analytical psychology in terms of “her profound investigation of Tarot, and her illuminated exegesis of its pattern as an authentic attempt at enlargement of possibilities of human perceptions” (in Nichols, 1980, p. xv). Irene Gad (1994) connected Tarot cards with the process of individuation and considered their archetypal images “to be ... trigger symbols, appearing and disappearing throughout history in times of transition and need” (1994, p. xxxiv); the very *need* that Noddings posited as the core of her ethics of care in education. It

CHAPTER 2

cannot be emphasized strong enough that Tarot edusemiotics represents an urgent response to one's *needs*.

When the images are narrated and interpreted, the information encoded in symbolic form becomes decoded and, in a seemingly astonishing way, novel meanings become available to human consciousness. It is the absence of a linear cause-effect link as a reductive form of mechanistic causality in the apparently random distribution of the pictures that is the reason for such customary astonishment and the flavor of mysticism usually associated with the phenomenon of Tarot. What takes place, however, is an indirect, non-local – nonlinear and mediated via the process of interpretation – synchronistic connection ensured by the triadic structure of signs embedded in semiosis. Tarot edusemiotics as such provides an unorthodox epistemic access to the Peircean semiotic, virtual, reality; the reality of Jungian archetypes.

The nature of the archetypal patterns *inhabiting* the collective unconscious is analogous to Peircean *habits*, or deep unconscious dispositions to act in a certain way under specific circumstances. Tarot edusemiotics is consistent with Peirce's pragmatic maxim by means of creating an expanded field of meanings via a series of interpretants. Such an approach agrees in principle with the view that regards Peirce as one of the founders of postmodern, post-positivist, philosophy (Deely, 2001; Griffin, 1993).

Peirce, as long ago as 1868, stated that cognition exists only "in the relation of my states of mind at different instants In short, the Immediate (and therefore in itself unsusceptible of mediation – the Unanalyzable, the Inexplicable, the Unintellectual) runs in a continuous stream through our lives; it is the sum total of consciousness, whose mediation, which is the continuity of it, is brought about it by a real effective force behind consciousness" (Peirce, 1955, pp. 236-237) enabling the recursive process of re-presentation upon presentation – or dual representation defined as such by Noddings and Shore (1984).

Cognition as learning is achieved, for Peirce, only by synthetic consciousness in which the unconscious dimension is fully integrated. Even if we usually "think of ... learning as a conscious mental process [there is also] chiefly bodymind learning" (Merrell, 2002, p. 15) – or what Australian educator Marian de Souza has been referring to as "nonconscious learning" (de Souza, 2009, p. 677). Addressing young people's spirituality and wellbeing, de Souza notices that a specific and distinct role of the nonconscious mind in the learning process is often overlooked. She draws our attention to the importance of multi-sensory environments as significant for developing students' emotional and spiritual intelligences.

As Jung (1963) contends, "there are things in the psyche which I do not produce, but which produce themselves and have their own life ... there is something in me that can say things that I do not know and do not intend, things which may even be directed against me" (p. 183), that is, which act at the unconscious level beyond one's voluntary control or conscious will. In terms of semiotic categories, Thirdness as consciousness will have always included Firstness in itself as an unconscious subtle feeling which nevertheless functions as

a real force behind consciousness: Peirce's onto/logical categories are expressed in *cardinal* numbers with Thirdness encompassing Firstness in itself.

For Peirce, "the mode of being of a representamen [i.e., a sign] is such that it is capable of repetition" (CP 5.138), that is, of creating recognizable patterns. Yet, because every interpretant may be a precursor to a new meaning, different from the preceding one, the repetition is never the repetition of the same. In the broadest sense, Peirce used the word representamen to designate a sign, in agreement with the word representation describing *both* the dynamic process of signs becoming yet other signs *and* the terminus of such a process. For Peirce, "our concepts ... literally 'participate' in the reality of what is conceived" (Esposito, 1980, p. 42) thereby implying a sense of holism and self-reference – a recursive feedback – between the inner and outer realities.

Every sign is subject to interpretation by a series of subsequent thought-signs, and the whole triad enveloping the "the relation-of-the-sign-to-its-object becomes the object of the new sign" (Sheriff, 1994, p. 37) as demonstrated by the semiotic triangle in [Figure 2.1](#). A genuine sign both *closes* on itself in the ternary structure and also *opens* itself to its becoming-other-than-itself because of novel meaning due to the inclusion of interpretants. Such is the paradox of self-reference (cf. Kauffman, 2010; Semetsky, 2001a, 2001b; Kelso & Engström, 2006) elicited by the logic of the included middle peculiar to semiotics.

By virtue of their meanings, ideas in the mind play part in the real physical world; they produce effects in accord with Peirce's pragmatic maxim. A sign can become "sedimented into bodymind; it becomes habituated, it becomes part of individual or cultural practices" (Merrell, 2002, p. 128). It is the very nature of habits that, "when imagination and perception and conceptions of a sign" (Ibid.) occur again and again, the signs may sink deep into the unconscious and become fixed and rigid habits of which we are likely unaware. Nonetheless, they function as real, effective and affective archetypal forces even if staying out of one's conscious awareness akin to the near-physicality of Deleuze's affects embedded in experience. These habitual, typical, patterns of human behaviors, thoughts and feelings are reflected in Tarot images; each constellation of images in a particular reading denoting a specific psychodynamic process in the context of each particular problematic situation (Semetsky, 2011).

The instance of Firstness is manifest in the postulate of propensity that assigns "an ontological status to the tendencies or propensities of the various possible outcomes of a singular chance event" (Shimony, 1993, Vol. II, p. 237) – not unlike the dynamics initiated by the Fool's chance encounters with chaotic events "populating" the abyss of experiences as we said in the preceding chapter. The natural world, for Peirce, is *tychistic*, although at the level of Seconds, among the brute facts of action and reaction, the physical world appears strictly deterministic. Considering however that the real world, contrary to classical conception, is not reducible to the category of Secondness, knowledge is always already fallible and laws themselves are subject to evolution and change.

"The idea of fallibilism objectified" (Peirce, CP 1.171) implies the diversity embedded in nature. What may bring about a change is chance itself (illustrated by

CHAPTER 2

the image of The Fool in Chapter 1) that defies the absolute necessity of a cause. There are no axiomatic truths for Peirce, instead chance or the absence of a direct causal link has to be admitted as a paradoxical part of natural laws. As a sign of the uncertain character of the real *per se*, knowledge for Peirce is constituted by both observable and unobservable instances of general laws. The field of knowledge is greater than a single Truth and includes virtual potentialities that become actualities in our very experience.

The inferential process of interpretation is a series of thought-signs, and the meaning of each thought becomes understood in each subsequent thought creating a process of unlimited semiosis. No thought is ever instantaneous because it needs an inferential stretch for its own interpretation. Still, the immediacy of Firstness is always presented in an instant and, as Firstness, it is *had* prior to being mediated by Thirdness; hence making an abductive inference border on association and guessing. The value of knowledge is in its practical import, that is, the way we, humans, will act, think, and feel – in short, assign meaning and value to our own experience – as the pragmatic effect of the said knowledge. As embedded in Tarot edusemiotics, learning is not only cognitive; it is moral as well, thereby strengthening Dewey's point that all education is always moral.

Importantly, the field of knowledge must include generalizations independently of their having been already actualized in one's experience or taking place in the past, present or potential future. Reality is not reduced to the actual, in fact "the will-be's, the actually-is's and the have-been's are not the sum of the reals. They only cover actuality. There are besides would be's and can be's that are real" (Peirce, CP 8.216), the would-be-ness constituting the realm of the virtual: the semiotic reality of signs. Peirce attached a special significance to the community of inquirers:

The real ... is that which, sooner or later, information and reasoning would finally result in, and which is therefore independent of the vagaries of you and me. Thus the very conception of reality shows that this conception involves the notion of an unlimited COMMUNITY, without definite limits and capable of a definite increase of knowledge. (Peirce, CP 5.311)

By virtue of the pragmatic maxim, such ontology asserts the reality of potentialities not yet actualized, as Firstness. The natural world, as Secondness, becomes an object of interpretation, and human cognition may be considered the necessary Thirdness in this relationship because "man is nature's interpreter" (Peirce, CP 7.54) and both are embedded in the process of semiosis. Peirce asserted that all logical relations – hence, the process of semiosis – can be studied by being displayed in the form of existential graphs or iconic representations; such diagrammatic thinking may yield solutions to the otherwise unsolvable logical and moral problems, that is render a perplexing problem potentially solvable.

Diagrammatic thinking takes place in the mind; it is an act of imagination; still all signs have a tendency "to affect certain others which stand to them in a peculiar relation of affectability" (Peirce, CP 6.104) analogous to Deleuze's (and Spinoza before him) conceptualizations. It is a set of relations that are capable of

constructing the unpredictable experiential world, which unfolds in a paradoxical manner resembling:

a Harlequin's jacket or patchwork, made up of solid parts and voids, blocs and ruptures, attractions and divisions, nuances and bluntesses, conjunctions and separations, alternations and interweavings, additions which never reach a total and subtractions whose remainder is never fixed. ... This geography of relations is particularly important ... one must make the encounter with relations penetrate and corrupt everything, undermine being ... The AND ... subtends all relations ... The AND as extra-being, inter-being. (Deleuze & Parnet, 1987, pp. 55-57)

The relations that put "to flight terms and sets" (Deleuze & Parnet, 1987, p. 57) elicit the intensive capacity "to affect and be affected" (Deleuze & Guattari, 1987, p. xvi). It appears impossible to know ahead of time "the affects one is capable of" (Deleuze, 1988b, p. 125): human life is experimental and experiential as constituted by our encounters with affects. However these affective, archetypal, forces become *exteriorized* in the process of Tarot edusemiotics during the *embodiment* of the diagrammatic thinking in practice when a particular Tarot layout as such represents the very "portraiture of Thought" (Peirce, CP 4.11).

The meaning created by Peirce's diagrammatic method is "altogether virtual ... [it is always contained] not in what is actually thought, but in what this thought may be connected with in representation" (Peirce, CP 5.289); a series of representations ultimately culminating in our actual actions at the level of practice. Tarot edusemiotics therefore, both theoretically and practically, demonstrates *the reality of the virtual*, which is imperative for both Peirce and Deleuze (May & Semetsky, 2008; Semetsky, 2006, 2009). Never mind meaning being virtual, it is maximally real because of its capacity to produce real effects in terms of consequences, or "practical bearings" (Peirce, CP 5.402) in accord with Peirce's pragmatic maxim.

Peirce considered consciousness a vague term and asserted that "if it is to mean Thought it is more without us than within. It is we that are in it, rather than it in any of us" (CP 8.256). Everything is a sign: the whole universe is perfused with signs; yet "nothing is a sign unless it is interpreted as a sign" (Peirce, CP 2.308). What seems to be a paradoxical statement is derived from the nature of the pragmatic method itself. The meaning and essence of every conception depends, in a pragmatic sense, on the way the latter is applied: it "lies in the application that is to be made of it" (Peirce, CP 5.532) at the level of practical life. In this respect, Jungian depth, or analytical, psychology not only involves the interpretation of signs, and specifically Tarot signs in terms of the archetypal images constituting the realm of the collective unconscious, but partakes of Peircean unlimited semiosis in terms of the archetypes' "manifold meaning [and] their almost limitless wealth of reference" (Jung, CW 9i, 80).

The combination of words *analytical psychology* may seem to be a contradiction in terms unless we remember that Peirce's semiotics blurs the boundaries between logic and psychology; it blends them into an area of interest for contemporary

CHAPTER 2

cognitive science; Peirce, in fact, introduced the distinction between token and type. Signs are not merely tokens of the actual semiotic process. As types – or archetypes – they delineate the potential field of meanings because of their pragmatic ability to produce effects in practical experience via sign-users.

Respectively, the archetypes of the collective unconscious and the acausal connective principle of synchronicity postulated by Jung in 1952 are not solely mystical entities. What is required is a change in conception. An acausal connection seems to be an irrational statement; for Peirce, however, a paradoxical, that is, “a self-contradictory proposition is not meaningless; it means too much” (Peirce, CP 2.352). Semiotics recognizes that the principle of non-contradiction is not all there is to logic. Similar to Peirce, Jung rejected solely dyadic logic and in an anti-dualistic manner asserted that “psyche and matter are two different aspects of one and the same thing” (Jung, CW 8, 418).

As if anticipating the post-Cartesian philosophies, Jung did not draw a line of great divide between the products of imagination and those of intellect: both affect thinking, and all thinking aims at the creation of meanings. Briefly, Jungian depth psychology in its practical sense incorporates “the paradigm of an *active, interventionist therapist*” (Samuels, 1985, p. 197) who facilitates an analytic session by means of interpreting images that appear as unconscious material in the analysand’s dreams, or art forms like drawings or pictures, including the Tarot images, or in the course of the active imagination during sessions.

The unconscious is specified as lacking meaning, that is, as yet staying out of our conscious awareness prior to being mediated due to the included middle of interpretation, in Peircean terms. The unconscious is collective – it “includes” the experiential heritage and history of humankind; its content is determined by the activity of archetypal dynamical patterns manifesting as universal motifs in human behavior in the course of evolution as “habits-taking” (Peirce, CP 1.409). Habits, for Peirce, are dispositions to act in a certain way “when actuated by a given motive” (Peirce, CP 5.480).

Considered as a sign, the unconscious *per se* belongs to the category of Firstness that functions, according to Peirce, as a powerful and real force behind consciousness. As for unconscious archetypes, they were conceptualized by Jung as being “a real force charged with specific energy” (1963, p. 352). Acknowledging their powerful effect on human conduct, Jung also defined archetypes as “system[s] of readiness for action” (CW 9, 199). A sign, “in order to fulfill its office, to actualize its potency, must be compelled by its object” (Peirce, CP 5.554), therefore it strives to appear in the mode of Thirdness and become available to integration into consciousness. A sign is *genuine* only if and when it is interpreted; that is, its logical structure is triadic with an interpretant being the included Third.

For Jung, the archetypal images are “endowed with a generative power; ... [the image] is psychically compelling” (Samuels, Shorter, & Plaut, 1986, p. 73). The goal of Jungian psychology – the very purpose of life that as such becomes the aim of education – is individuation, which is seen as a process of integration of conscious and unconscious aspects in the psyche. Integration as the production of

meanings implicated in the archetypal imagery of Tarot pictures leads to potential change in one's habitual ways of thinking, feeling and behaving as eventual effects of the interpretive process in accordance with Peirce's maxim that regards our conception of practical "effects [as] the whole of our conception of the object" (CP 5.402).

Tarot edusemiotics does not contradict Peirce's pragmatic maxim. We can infer the reality of the archetypal patterns embedded in images from the effects these very patterns as signs produce at the level of our observable, actual, actions. The world of ideas is connected with the world of practical action. Such active relation between the ideal (or virtual) and actual has been considered by John Dewey as a representation of the idea of God in all forms of human action grounded in specific religious attitude in contrast to dogmatic religion as a set of beliefs.

Jung conceptualized the archetypes of the collective unconscious as primordial images engraved in our psychic constitution; these archaic unconscious images may have inspired the artists who designed the Tarot pictures. Never mind the archetypes' status as ideas, or rather because they are indeed regulative and generative ideas of the collective unconscious or what Jung called the objective psyche, archetypes as symbols of transformation are effective in the physical world: Peirce's objective idealism posits ideas as a constitutive part of the real world. Tarot images are not pure icons, they become enriched with indexicality; they perform a definite sign-function and point to some real event in the present, past or potential future that may have left its traces in the collective unconscious.

The field of the collective unconscious thereby functions as what Deleuze, following Henry Bergson, called the memory of the future and which, together with all of the past, is enfolded in the cosmic "gigantic memory" (Deleuze, 2001, p. 212). New information, derived from the unconscious as the effect of interpretation, not only determines the idea conceptually but also "gives it body" (Peirce, CP 1.537) in the world of practical action. The archetypal images in Tarot pictures are *edusemiotic* by virtue of enabling our *learning* from the embodied, symbolic, representations of typical human experiences, situations and events embedded in the collective unconscious: we remember that the unconscious is capable of spontaneously producing images "irrespective of wishes and fears of the conscious mind" (Jung, CW 11, 745).

Jung used the word symptom (cf. Sebeok, 1991) within clinical discourse. However symptoms do not serve merely a diagnostic purpose. The collective unconscious encompasses possibilities and potentialities, even if to the rational mind they may seem to be just a fantasy; still, a "purposively interpreted [image], seems like a symbol, seeking to characterize a definite goal with the help of the material at hand, or trace out a line of future psychological development" (Jung, CW 6, 720), that is to perform a prospective, prognostic function. The synthesis of time inscribed in the collective unconscious as the universal memory pool accords with Peirce's semiosis acting within a shared layer of human experiences that includes dimensions of past, present and future:

CHAPTER 2

A man denotes whatever is the object of his attention at the moment; he connotes whatever he knows or feels of this object, and is the incarnation of this form ... his interpretant is the future memory of this cognition, his future self, or another person he addresses, or a sentence he writes, or a child he gets. (Peirce, CP 7.591)

Dewey, stressing the ethical task of the reconstruction, or reevaluation, of experience, pointed to the necessity of both *diagnosis* and *prognosis* as related to a particular situation. While diagnosis refers to assessing the symptoms as the signs of the present, a problematic situation demands also “a look into the future ... anticipation, or a prediction ... of some possible future experiences” (Dewey, 1933/1998, Vol. 2, p. 143). Dewey compared reflective, critical, thinking with the task of a physician who has to make “a prognosis, a forecast of the probable future course of the disease. And not only is his treatment a verification – or the reverse – of the idea ... but the result also affects his treatment of future patients” (Dewey, 1933/1998, Vol. 2, p. 143). Such self-reflective thinking is a feature of Tarot edusemiotics, indeed.

In this respect, Peircean modal categories of might-be-ness and would-be-ness “located” at the level of virtual reality pertain to potentialities implicit in the Jungian collective unconscious defined not only as the repository of human past dispositions, but also future developments. Jung’s position appears to affirm the concept of final causation – lost in the scientific “progress” of modernity – in his saying that “the archetype determines the nature of the configurational process and the course it will follow, with seeming foreknowledge, or as if it were already in a possession of the goal” (Jung, CW 8, 411).

This configurational process is semiosis, the action of signs permeated with the archetypal dynamics. The archetype’s function is that of a Peircean “general idea [which] is already determinative of acts in the future to an extent to which it is not now conscious” (Peirce, CP 6.156). The interpretation of the Tarot signs, symbols and images – in the process of Tarot hermeneutic (Semetsky, 2011) – performs the mediating, what Jung called transcendent, function. The pictures are the amplifiers that as such constitute the basis of the synthetic method which implies the emergence of novelty – that is a leap to a new meaning in the semiotic process of signs-becoming-other – as carrying the utmost significance.

The synthetic method thus reflects the future-oriented path to knowledge, the memory of the future, or what Jung called a prospective function of the unconscious, and Tarot readings take us above and over traditional Freudian psychoanalysis, which was considered by Jung as reductive because of its sole orientation to the past marked by a single signified. For Jung, as for Peirce, “psychological fact...as a living phenomenon... is always indissolubly bound up with the continuity of the vital process, so that it is not only something evolved but also continually evolving and creative” (Jung, CW 6, 717).

Moreover, Jung’s defining the collective unconscious as the objective psyche posits it analogous to “the Reality which ... contrives to determine the Sign to its Representation” (Peirce, CP 4.536). Reality, as if contriving to determine the sign

to its representation, is, for Jung, the psychic reality: as a sign, the very depth of the psyche creates a relation between the worlds of mind and matter. Jung called the deepest level *psychoid* and asserted that it is at this level where, in a holistic manner, body and mind, *physis* and *psyche*, become united as two different aspects of one world, *Unus Mundus*. He used the Latin term *coincidentia oppositorum* for the apparently mystical coincidence of opposites, such as psyche and matter, occurring in synchronistic experiences.

Archetypes are general tendencies and subsist, rather than actually exist, *in potentia* only. As skeletal concepts, their significance is not exhausted by noumenal ideas: in their semiotic Firstness, they are only “forms without content, representing merely the possibility of a certain type of perception and action” (Jung in Spinks, 1991, p. 448). But the vague and unconscious forms are to be filled with informational content embedded within real, flesh-and-blood, human experiences in the phenomenal world. Situated in the midst of the Seconds, within real human actions and reactions, they need thought and interpretation as Thirds so as to acquire meaning by virtue of being “altered by becoming conscious and by being perceived” (Jung in Pauli, 1994, p. 159). And it is in the *form* of Tarot images that we can discover the meaningful *contents* implicit in the collective psyche.

The Tarot images as icons are *immediate* objects – as Peirce was saying, “this is present to me” (CP 5.289) – but the meanings of the archetypal patterns that are embodied in pictorial artifacts accord with the Peircean definition of the *dynamical* object “which ... the Sign ... can only indicate and leave to the interpreter to find out by collateral experience” (Peirce, CP 8.314). The plurality of evolving meanings finds their expression in the symbols of transformation represented by Tarot Arcana that comprise a series of thought-signs and sign-events.

A sign “points beyond itself to a meaning that is ... still beyond our grasp, and cannot be adequately expressed in the familiar words of our language” (Jung in Nöth, 1995, p. 119) but needs a relevant medium of communication for its expression. Importantly, as Shlain (1998) remarks,

images approximate reality: they are *concrete*. The brain simultaneously perceives all parts of the *whole* integrating the parts *synthetically* into a gestalt. The majority of images are perceived in an all-at-once manner. Reading words is a different process. When the eye scans distinctive individual letters arranged in a certain *linear sequence*, a word with meaning emerges. The meaning of a sentence, such as the one you are now reading, progresses word by word. ... The use of analysis to break each sentence down into its component words, or each word down into its component letters, is a prime example of *reductionism*. ... An alphabet by definition consists of fewer than thirty meaningless symbols that do not represent the images of anything in particular; a feature that makes them *abstract* ... the comprehension of written words emerges in a *one-at-a-time* fashion. (Shlain, 1998, pp. 4-5)

CHAPTER 2

The *complementarity* between word and image as a feature of edusemiotics is important in the hermeneutic process of Tarot readings. When mental images are externalized and take their most concrete, pictorial, form, they need to be filled with meaningful content. During their interpretations, the meanings are narrated and articulated; however they are not exhausted by verbal expressions. The words are *abstract* – but the feelings, emotions, and the transformation of habits that they elicit are *concrete* and particular and determine our actual behaviors at the level of practice. Human development engenders itself via the symbolism of the pictures as multiple expressions of the unconscious that precede and exceed the verbal expressions of the conscious mind: “it is not the personal human being who is making the statement, but the archetype speaking through him” (Jung, 1963, p. 352).

The imaginative narratives created during the interpretive edusemiotic process make us aware of the unconscious archetypal dynamics. The relationship between the collective unconscious and individual consciousness was of utmost importance for Jung. Signs are “always grounded in the unconscious archetype, but their manifest forms are molded by the ideas acquired by the conscious mind. The archetypes [as] structural elements of the psyche ... possess a certain autonomy and specific energy which enables them to attract, out of the conscious mind, those contents which are better suited to themselves” (Jung, CW 5, 232). Referring to the *tertium non datur*, Jung was looking for the *included third* that, even if not logically foreseeable, will have reconciled the opposites in a conflict situation whenever the tension between the opposites has been held in consciousness, and

the analysis has constellated the opposites so powerfully that a union or synthesis of the personality becomes an imperative necessity [This situation] requires a real solution and necessitates a third thing in which the opposites can unite. Here the logic of the intellect usually fails, for in a logical antithesis there is no third. The “solvent” can only be of an irrational nature. In nature the resolution of opposites is always an energetic process: she acts *symbolically* in the truest sense of the word, doing something that expresses both sides, just as a waterfall visibly mediates between above and below. (Jung, CW 14, 705)

The supposedly irrational nature of the included “third thing” is of course problematical; the *central idea* of this book is that it is the triadic semiotics that gives logical, rational, legitimacy to Thirdness represented by Peirce’s interpretant in its many guises among which the edusemiotics of Tarot is exemplary! Signs always express “both sides,” partaking of their objects in accord with a genuine Peircean triad that transcends, or crosses over, the dualistic gap between the apparent opposites.

Jung posited the transcendent function that arises from the tension between consciousness and the unconscious and effectuates their union by virtue of transcending the opposites, in other words enabling a sign to become-other. He called this function transcendent because of its ability to make the transition from the unconscious into consciousness, “from one attitude to another organically

possible” (Jung, CW 8, 145). The effectiveness of the transcendent function depends on us becoming aware of the unconscious material such as in dreams or, indeed, during Tarot readings.

New meanings produced in the course of Tarot edusemiotics will have governed “the whole [new] attitude, putting an end to the division and forcing the energy of the opposites into a common channel. The standstill is overcome and life can flow on with renewed power towards new goals” (Jung, CW 8, 827) in the lifelong, at once developmental and learning, process of individuation as self-education. Jung noticed that habitually “we educate people only up to the point where they can earn a living and marry: then education ceases altogether ... Innumerable ... professional disappointments, are due to this lack of adult education” (Jung, 1954, p. 47).

Significantly, “the education of the educator ... will eventually rebound to the good of [the] pupils” (Jung, 1954, p. 47). Such self-education, however, should not be defined in terms of the currently popular professional development or lifelong training, but “should make [one] properly conscious of himself” (Jung, 1954, p. 47, brackets mine). This is a prerogative of Tarot edusemiotics as the means for self-education, for reorganization of experience.

Peirce has stated that “the most perfect of signs are those in which the iconic, indicative and symbolic characters are blended as equally as possible” (CP 4.448). Such an optimal combination is displayed in the sign-system of Tarot pictures. Pictures are by definition iconic, and the patterns displayed in the layout are indexical by virtue of their pointing to real events and experiences (even when they “subsist” in the archetypal field of the collective unconscious); and it is an interpretant that fixes symbolic meanings, which however are always already subject to further interpretation, to becoming new signs from which we learn amidst ever new experiences.

Each Tarot image positioned in a layout is “an Icon of a peculiar kind” (Peirce, CP 2.248); together the images perform the function of “rendering literally visible before one’s very eyes the operation of thinking *in actu*” (Peirce, CP 4.571). Functioning in the mode of Peircean existential graphs, a Tarot layout asserts “the epistemological thrust” (Spinks, 1991, p. 446) by virtue of enabling epistemic access to unconscious, what Michael Polany dubbed *tacit*, knowledge. The Thirdness of interpretation of Tarot images reconstructs this *implicit* knowledge by making it *explicit* via the mediation of pictorial language so that this deep inner unconscious knowledge becomes available to consciousness. In this manner, Peircean symbolic logic, when embodied in its own visual notation, does contribute to reasoning and the creation of meanings implicated in the layout.

As signs, that is relational entities, that cross over the perceived separation between culture (experience), nature, and the human mind, the archetypes embodied in Tarot images demand their “naturalistic interpretation” (Laszlo, 1995, p. 135). Asserting their naturalistic, and not supernatural, status, systems philosopher Ervin Laszlo approached Jungian archetypes from the perspective of dynamical systems theory (that we touched upon in the preceding chapter) and respectively argued that they, as well as “the collective unconscious that frames

them, are not just ‘in the mind’: they are in nature” (Laszlo, 1995, p. 135) thereby making Jungian psychic reality conceptually analogous to “the collective, space-and-time-dimensionless” (1995, p. 136) field in nature that was first conceptualized as such by Pauli.

To reiterate, it is the interpretation of images as Thirdness that “brings information ... determines the idea and gives it body” (Peirce, CP 1.537). The idea of Tarot as *embodied mind* has been addressed by systems theorist Erich Jantsch (1975) who has included Tarot in his systematic overview of approaches and techniques of the inner way to knowledge. Jantsch placed archetypes and Tarot at the mythological level among genealogical approaches and, emphasizing the continuous self-organization of systems through self-realizing and self-balancing processes, has noted that “Tarot cards may be seen as embodying ... [and] mapping out the field of potential human response” (Jantsch, 1975, p. 163).

In its capacity as a semiotic system, and following Peirce, Tarot can be moved up to a level identified by Jantsch as evolutionary and at which he acknowledged the human potential of being capable of “tuning in” (1975, p. 150) to the aforementioned field in nature, thus overcoming the limitations of three-dimensional space or chronological time. As for the complicated task of tuning in to such a field, Jantsch anticipated a dynamic “communication mechanism, which is at work across the ... levels of perception, so that, for example, ‘insight’ from the evolutionary level may be received in some other form at the mythological level, e.g., in the form of intuition, or dreams, or general vibrations felt as quality” (Jantsch, 1975, p. 149) at the subtle, affective, level.

Such a communication mechanism as semiosis is grounded in the logic of the included middle represented by the Peircean interpretant and embodied in the layout of Tarot images, which are to be read and interpreted. The transformational pragmatics of Tarot, that is, the potential effect of each reading on human development and learning, is provided by means of the intervention of the Thirdness of interpretation as conducted by a reader. The authentic reader’s interpretive strategies (Semetsky, 2011) are based on the semiotic principle of polysemy.

In contrast to popular publications that usually present a given set of keywords for each picture, there cannot be a forever-fixed meaning attached to an image; rather meanings are contextualized depending on a particular situation, as well as inferred from specific positions occupied by this or that picture in a typical Tarot layout. While some positions in a spread traditionally describe common semantic categories, the archetypal content as the information embodied in the imagery will vary as a function of their place, of relational topology. The subjectivities of both participants in a semiotic communication – a reader and a person seeking a reading – are equally important and represent significant “situational variables.”

For Jung, there are as many archetypes as there are typical situations in life. The 78 images of Major and Minor Arcana in a deck can combine in many unpredictable combinations and permutations reflecting the richness and unpredictability of human experiences and their associated affective states. What may be “predicted,” though, is the *tendency* for an event to occur or a singular state

of the system which embodies the corresponding informational content. Interpretation contributes to *trans*-formation of *in*-formation from the unconscious into consciousness; such transformation implying a possibility of not only habits-taking but also *habits-breaking!* This transformation would be practically improbable if not for the future acting upon the present, being pulled into the present by the archetypal, affective, forces that play the role of “inward [or] *potential* actions ... which ... influence the formation of habits” (Peirce, CP 6.286).

Jantsch (1980), from his systems-theoretical perspective, acknowledged a somewhat backward causation as a feature of anticipation pertaining to a self-organized, self-referential complex system, the present state of which contains “not only the experience of past evolution, but also the experience of anticipated future [that] vibrates in the present” (Jantsch, 1980, p. 232). A Tarot layout reflects on the possibility of anticipating the future by enabling a peculiar “gazing” into the possible future that may be described as “the options in further evolution” (Jantsch, 1980, p. 232) in the overall dynamics of Tarot edusemiotic system.

As the necessary Thirdness, the Tarot spread itself mediates between one’s conscious mind and the collective unconscious, thus serving as a logical interpretant *of* the latter, as well as a dynamical interpretant *for* the subject of a reading. So in our physical world the *structure* of a layout seems to appear as if from nowhere, by virtue of synchronicity, but in fact appears out of the *process* of semiosis due to the action and the interplay of signs representing the *relational nature of Nature itself!* This process, as the Peircean category of Thirdness, indeed governs Secondness and creates or brings information. Therefore, Jungian synchronicity as “an acausal connection may manifest itself in the form of non-local correlations that appear to lie outside the normal confines of space and time” (Peat, 1992, p. 199).

Each Tarot image, by definition, is a sign. As such, and in the animate manner of “living signs” (Merrell, 1999) it “endeavors to represent, in part at least, an Object which is therefore in a sense the cause, or determinant of the sign” (Peirce, CP 6.347); these determinants being the archetypal ideas of the collective unconscious embedded in the semiotic reality. Jung maintained that in analysis “every interpretation necessarily remains ‘as-if’” (Jung, CW 2, 265). Indeterminacy abounds, “certain fundamental meanings ... can only be grasped approximately” (Jung, CW 8, 417) in agreement with Peirce’s asserting any prediction as being of general and incomplete character. Ultimately however, if the images just like “certain sorts of ink spots ... have certain effects on the conduct, mental and bodily, of the interpreter” (Peirce, CP 4.431, in Von Eckardt, 1996, p. 151), then it is quite logical to assume that eventually interpretation will lead to habit-change according to some lawful relationship.

Peirce asserted the possibility of transformation not only at the mental level but at the level of actions: habit-change means “a modification of a person’s tendencies toward action” (CP 5.476), such a modification at the social level being the ultimate purpose of Tarot edusemiotics. Habits, however, are resilient – they wouldn’t be habits otherwise – and their function is similar to the action of

CHAPTER 2

archetypes that, according to Jung, can sometimes possess the psyche in a guise of an individual or collective Shadow, the latter corresponding to Arcanum XV, The Devil (see Chapter 7). Archetypes can be “the ruling powers” (Jung, CW 7, 151). The encounter with one’s own powerful Shadow constitutes a fundamental part of Jungian depth psychology and Tarot hermeneutic alike.

The Tarot system functions as a dynamical interpretant by virtue of it being a sign that stands for one’s real emotional, behavioral and cognitive patterns expressed via the symbolism of the pictures. Jung commented that “our brains might be the place of transformation, where the relatively infinite tensions or intensities of the psyche are tuned down to perceptible frequencies and extensions” (Jung in Laszlo, 1995, p. 135) so as to enable reading and interpretation. Due to the mediating function of interpretation, the latent, unconscious, contents of the mind are rendered conscious, and the signs which are brought to the level of awareness, that is, amplified up to the point of their integration into consciousness, are capable of creating a momentous feedback – a semiotic bridge, a synchronistic connection – in the psychodynamic processes of the subject of a reading. A current structure – or a person’s present level of self-knowledge – tends to some instability threshold.

Importantly, the “integration is not continuous but rather marked by the kind of discontinuities and phase transitions associated with complexity theory, as formulated, for example by Thelen and Smith (1994)” (Muller, 2000, p. 59; cf. Semetsky, 2010a); such dynamics capable of producing “a change in the subject’s mental life which, in turn, changes his or her disposition to act ... in ways dependent *on the content of representation*” (Von Eckardt, 1996, pp. 283-284). This change takes place in the actual physical world asserting the objective reality of the archetypes embodied in the Tarot images and also warranting Peirce’s pragmatic maxim as the production of real, and not just metaphorical, effects.

“The habit alone” (Peirce, CP 5.491) is capable of abruptly interrupting the semiotic regress, effecting its own transformation by the operational “closure of the process ... a closure which itself opens possibilities” (Colapietro, 2000, p. 145), such temporary closure represented by a singular Tarot reading (Semetsky, 2011). Indeed, the *explication* of the information *implicated* in the collective unconscious is grounded in *complication* – the unconscious becoming conscious – thus fulfilling the edusemiotic, learning, function. It is “the deliberately formed, self-analyzing habit” (Peirce, CP 5.491) that is produced by means of self-reference, when the subject of the reading can reflect on her own psychodynamic process due to the interpretation of Tarot signs; such habit also ultimately verifiable in the reconstructed experience.

“An acausal parallelism” (Jung, 1963, p. 374) of synchronicity would perhaps, in Peircean terms, be classified as a precognitive quali-signification, that is the qualitative immediacy of experience. The immediate Firstness, a sort of pre-modern natural attraction, was together with the Thirdness of mediation left out as insignificant by positivist science and substituted by dualistic signification and instrumental rationality based on the conventional logic of the excluded middle. However in the Tarot edusemiotics we witness dual representation: a layout prior to the Thirdness of interpretation is just “the presentation of the unconscious, not

[yet] the representation of consciousness” (Deleuze, 1994, p. 192) and ultimately demands the Thirdness of interpretation so as to integrate that which is still *unconscious in and of itself*.

It is in the very “interstice ... between seeing and speaking” (Deleuze, 1988a, p. 87) – between seeing the Tarot images and interpreting or narrating them – where meaning emerges! The interstice functions as the included, in-between, middle; the Third! The actualization – via the “magnitude of thirdness” (Deely, 1990, p. 102) – of many potentialities “hiding” in the unconscious is taking place due to the subjective, bottom-up, “intervention of the mind” (Shimony, 1993, Vol. II, p. 319) of the interpreter into a signifying chain of semiosis. Yet this very intervention may be considered objective in the sense of itself being implemented by a choice of a global, top-down, character, analogous to the semiotic functioning of the relation between immanence and transcendence embedded in one inseparable process of semiosis.

A choice of this kind may be accounted for by means of what philosopher of science Abner Shimony, addressing “the status of mentality in nature” (in Penrose, Shimony, Cartwright, & Hawking, 1997, p. 144) dubbed the hypothetical super-selection rule in nature that enables the very “transition between consciousness and unconsciousness ... not ... as a change of ontological status, but as a change of state” (p. 150). What takes place is a transcendental relation (*relationis transcendentalis*) in the form of projection (see Chapter 10): the *static structure* of the layout may be considered a projection, in the framework of projective geometry, or a minute snapshot of a *dynamic process* of semiosis as the action of signs.

This conceptualization is supported by the psychological function of Tarot as a kind of projective technique (Semetsky, 2005a, 2011) or a psychological tool that not only parallels but even exceeds the Rorschach method used in clinical practice for the purpose of assessment and testing: the ink spots used in projective testing function as signs. By definition, the projective method is viewed as a structured interview or a dialogue, that is, an open and flexible arena for studying interpersonal – and intrapsychic (Semetsky, 2011), in the case of Tarot – transactions.

The transformational pragmatics of Tarot is effectuated because of the included middle of Peircean Thirdness, but the interpretation itself is triggered by abduction that is always already present as Firstness: a first, hypothetical, step to interpretation. Such Firstness-in-Thirdness is being “tested” and deliberated upon during the reading among the continuous interplay of all three forms of inference: abduction, deduction and induction. The latent, unconscious, contents of the mind become available to cognition and are therefore rendered conscious because of the logical *coupling* – the included third – created by interpretation.

So in Tarot edusemiotics we witness a strict self-referential function: as a sign of a deep psychodynamic process, the reading “addresses somebody, that is creates in the mind of the person an equivalent sign or perhaps a more developed sign” (Peirce, CP 2.228), notwithstanding that “the first sign” (Ibid.) is still *the same yet different*, because one was not yet conscious of oneself as “somebody.” The Tarot

layout, when narrated, functions as the ultimate “interpretant of the first sign” (Ibid.). The interpretant stands for its object “in reference to a sort of idea” (Ibid.) as the mind’s archetypal ground.

A singular Tarot reading then performs a double function of being a *sign-object* for the signs which act in, or in-*habit*, the collective unconscious, as well as a *sign-interpretant* contributing to one’s *habit-change* and the creation of subjectivity in practice by means of learning from experience. Jung pointed to amplification as a cornerstone of his analytical method. Another function operative in the psychological process was, as Jung noted, compensation, that is, a tendency of the unconscious to maintain balance and stay in a homeostasis with the conscious mind for the purpose of self-regulation.

In other words, and in terms of information theory, there is a natural presence of negative feedback as self-correction necessary for adaptation. But the functioning of Tarot is more complex. It functions in the twofold manner of second-order cybersemiotics (cf. Brier, 2008): both as an amplifier by rendering the subtle aspects of one’s psyche vivid and substantial, and as a positive feedback that directs the amplified information back into the system and hence leads to transforming it by virtue of making the latent unconscious contents manifest and rendering them meaningful. Peirce used the terms *ampliative* and *explicative* to distinguish between those forms of reasoning that aim at increasing knowledge and, by contrast, to make hidden or implicit knowledge explicit, to make manifest what is latent. Indeed, what is implicated in the mind is not only explicated but complicated as well in the process of acquiring meaning in the format of more fully developed signs.

The double contingency (cf. Luhmann, 1995) embedded in Tarot complex, self-organizing, dynamics leads to a new level in the system’s organization; the surplus of information immanent in the collective unconscious leads to learning and changes in the levels of complexity: from unconscious into consciousness. The double-folding is a feature of a nonlinear evolutionary process of semiosis, which can be defined from the “systems-theoretical viewpoint [as] a circular process that constitutes itself in reality... Every system that participates in interpenetration realizes the other within itself as the other’s difference between system and environment, without destroying its own system/environment difference” (Luhmann, 1995, p. 216).

This means that only by virtue of our own participation in the multiple interactions and transactions that comprise the fullness of human experience, and the quantity and quality of which, even if finite in our human lives, cannot be predicted in advance, can we achieve full self-realization as individuation constituting the aim of Jungian self-education and Tarot edusemiotics alike. It is such *participation* comprising a relational dynamics of experience – and not an objective detached *observation* as belonging to the “scientific method” of modernity – that mystics around the world have been practicing for centuries.

Mystics traditionally played a participatory, *embodied*, role in what today is called the knowledge economy. Their practical “epistemology” was based on the method of analogy or likeness comprising the relations, correspondences and

sympathies embedded in life, even if the relations as such appear at first sight to be hidden as ciphers, hieroglyphs or, sure enough, Arcana; thereby in need of interpretation for their very deciphering. What common sense habitually perceives as mysticism, such as the phenomenon of Tarot, is therefore thoroughly semiotic: *it is the same logic of the included middle that underwrites the science of signs and mystical experiences alike*. As Matthew Fox (1990) commented, “more and more scientists come out of the closet as mystics” (p. 19); and vice versa, mystical experiences appear to be open to explanation, provided of course that science itself is re-conceptualized as the science of signs or semiotics.

We are signs among signs in a continuous flow of semiosis that blurs the boundaries between opposites. It is our active participation in the process of semiosis – whence our actions, experiences, thoughts, feelings, emotions, hopes, fears, desires, and the relationships with significant others (Semetsky, 2011) are symbolically represented in Tarot images – that contributes, from the evolutionary perspective, to our growth and learning from experiences in a continuous process of becoming other and “more fully developed” (Peirce, CP 5.594) signs.

Individuation, as a never-ending process toward a maximally integrated personality, was used by Jung in the same holistic sense as Peirce’s: “the identity of a man consists in the consistency of what he does and thinks” (Peirce, 1955, p. 250). And because “consistency belongs to every sign ...the man-sign acquires information and comes to mean more than he did before” (Peirce, 1955, p. 249). Psychic residues are formed by recurrent experiences and are laid down in the archetypal structures, but – we repeat, as “system(s) of readiness for action” (Jung, CW 9, 199) – those structures themselves in a self-referential manner can “exert an influence on experience, tending to organize it” (Samuels, et al., 1986, p. 24) thus effecting transformations and changes, thereby creating new possibilities in the experiential world.

The ethical question arises of how to treat the information that becomes available as a result of Tarot readings and implies, by virtue of it being a motivational force behind the transformation of habits, a possibility of producing new modes of action in the social world. The ethics of care (Noddings, 1984/2003) becomes a must. Care theorists recognize not the abstract universals of moral philosophy as a theoretical discipline, but particular, though typical, experiences – that is, those arising from concrete human conditions. Those common human feelings and desires are inscribed in Tarot images because they are ingrained in the human constitution at the level of the psyche, of the soul, each image representing an archetypal pattern subsisting in the collective unconscious.

Importantly, a caring attitude foregrounding relational ethics will also have to, by definition, respect the presupposed “anomaly” of Tarot. In the framework of objective science and logical positivism that used it as a model, Tarot of course appears to us as a mystical and mysterious phenomenon located outside this very science, hence falling into the range of anomalous or paranormal experiences. But it is considered anomalous only in the strictly causal terms of classical mechanistic science when an observable effect directly follows an equally observable cause

CHAPTER 2

without mediation or interpretation that interrupts and breaks into a presumed linearity.

The acausal principle of synchronicity, understandably, does not belong within the reductive paradigm. It is “another kind of causation” (Peirce, CP 6.60) due to which a perceived anomaly falls into the range of normal, albeit novel, science, effecting as such a definite *paradigm shift* grounded in the “different logic of social practice: an intensive and affective logic of the included middle” (Bosteels, 1998, p. 151). It is our practical experience that performs the role of the Peircean interpretant whenever our own behavioral patterns and mostly unconscious actions offer us, upon critical reflection, a glimpse into the deeper reality of the archetypes, into the very depth of the psyche at the unitary level of existence reflected in the Tarot images.

It is the continuous process of semiosis as the action of signs – crossing over the Cartesian bifurcation between nature and mind – that allows for, in the words of contemporary physicist Henry Stapp, “the emergence, in human brains, of holistic structures that can mirror, simultaneously, both the structural forms and functional effects of human thoughts” (Stapp, 1993, p. 178). To participate fully in a play of semiosis we have to be able to read, understand, interpret, and speak its language. And the perfect language is available, a language encoded in beautiful images, each one telling a story which is happening, or could be happening, or would be happening providing certain circumstances are met, to its protagonists – ourselves! This language is the subject matter of the next chapter.

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CHAPTER 2

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THE LANGUAGE OF IMAGES

In Jerome Bruner's famous empirical study in the field of cognitive psychology participants were presented with a set of cards for the purpose of the so-called concept attainment task. The findings, however, did not match the experimenters' expectations. The cards were in due course interpreted by the participants, but not according to the logic anticipated by the researchers. In fact, as a result of the experiment, the study's subjects were proclaimed to be "plainly involved in forming 'dramatic hypotheses' ... They ... were not 'processing' the cards in the analytic way. ... They were constructing narratives and, like good literary critics, looking for metaphoric kinship between them" (Bruner, 1986, p. 92).

Such an apparently non-rational interpretation was a way of "constructing realities, even of building categories" (Bruner, 1986, p. 92) in practice. Psychological processes have been shown to constitute an underlying foundation for people's interactions with the world at large. Yet another conclusion that could have been equally well derived from the aforementioned study is that cards with a set of attributes embedded in them may be one of the means used by people for "negotiating their transactions with the world" (Bruner, 1986, p. 92). By articulating the attributes pertaining to each card, the study's participants were involved in the edusemiotic process of reading, interpretation, and meaning-making not unlike reading and interpreting Tarot pictures.

Pictures (Sonesson, 1989), as well as stories consisting of pictures (Posner, 1989), do belong to the category of signs. Not only do "pictures have a continuous structure ... [but] it [also] induces the reader to ... read the picture as if it were a written text" (Posner, 1989, p. 276). Even a photographic image is polysemous, that is, capable of potentially acquiring a variety of meanings depending on its interpretation in the varieties of broad contexts that may adopt a specific cultural code. According to Roland Barthes' now-classic example of the photo of the bald eagle, a physical image serves as a signifier, while the concept *per se* of the bald eagle is the signified.

The photographic image of an eagle as such, that is, representing what Barthes would have called the level of denotation, is a sign or a signifier. But importantly it is also a signified at the higher-order level of possible connotations; as such, the signified is polysemic and may connote a plurality of meanings. Functioning as a potential signified, the sign is characterized by a surplus of signification: it may mean either patriotism, or be a symbol of the American flag, or represent endangered species, or whatever else might be associated with it in a given cultural code, thereby producing a sign called by Barthes an associative total. Despite the form remaining the same, the conceptual content – or a sign's meaning – is polyvalent.

CHAPTER 3

Importantly, as noted by physicist David Bohm, “process exists even in so-called ‘static’ objects, such as a picture” (Bohm in Peat, 1997, p. 237). As we demonstrated in the preceding chapters, the edusemiotic structure of Tarot as a system of signs is dynamic and representative of the process of semiosis. Tarot Arcana comprise a pictorial “text” that as such has its own syntax, semantics, and pragmatics even if not in written linear alphabetic form. Yet, “[b]efore there was writing there were pictures” (Shlain, 1998, p. 45); and, according to a Chinese proverb, one image may be worth a thousand words.

The Chinese image of *yin* and *yang* is the symbol for Taoism as a harmonious Oneness that conjoins two energetic principles, feminine and masculine, to form a synthetic whole which cannot be reduced to its isolated parts. The harmony goes askew however with developed literacy that, whilst “a salutary, exhilarating stimulant to human progress” (Shlain, 1998, p. 377), tends to simultaneously destroy the original balance; as Marshall McLuhan (1980) famously remarked, a consequence of literacy may well be schizophrenia.

Significantly, Deleuze and Guattari relate the figure of the schizophrenic to the mystical participation in the very reality of that what is produced. A mystic is the one who lives within his intense connection to the unconscious, at the very interface with Nature, without however being aware of this very predicament. Remaining in the state of Oneness with the unconscious Nature, his consciousness may very well be represented by the zero degree, not unlike the numbering of The Fool Arcanum (Chapter 1) at the start of his symbolic learning journey. Yet such a state would remain pathological or schizophrenic only in the context of the scientific medical discourse of modernity. Within a semiotic worldview, however, the zero category of “Pre-Firstness learning” (Merrell, 2002, p. 17) exists in the experiential school of life even if “the apprentice must learn in a self-reflective, and often painful, way [through] bizarre acts [that] are a far cry from learning by explicit instructions” (2002, p. 16).

It is by learning from life experiences and interpreting signs implicit or immanent to these very experiences that the unconscious becomes integrated into consciousness when engaging with the psyche and making it whole, healing it. Common archetypal life experiences are symbolically represented in the Tarot Arcana. The 22 images of the Major Arcana (as per Figure 1.2 in Chapter 1) are accompanied by the 56 images of the Minor Arcana that include the so-called court figures as shown in Figure 3.1.

The symbolic journey through Arcana includes multiple life-lessons that need to be learned so that the traveler – a learner – can achieve individuation in the form of the Jungian archetype of the Self as the ideally individuated, integrated personality inseparable from her life-world. It is the Tarot edusemiotics and the hermeneutic process involved in the interpretation of images that helps us in achieving

widened consciousness [which] is no longer that...egotistical bundle of personal wishes, fears, hopes, and ambitions which always has to be

THE LANGUAGE OF IMAGES

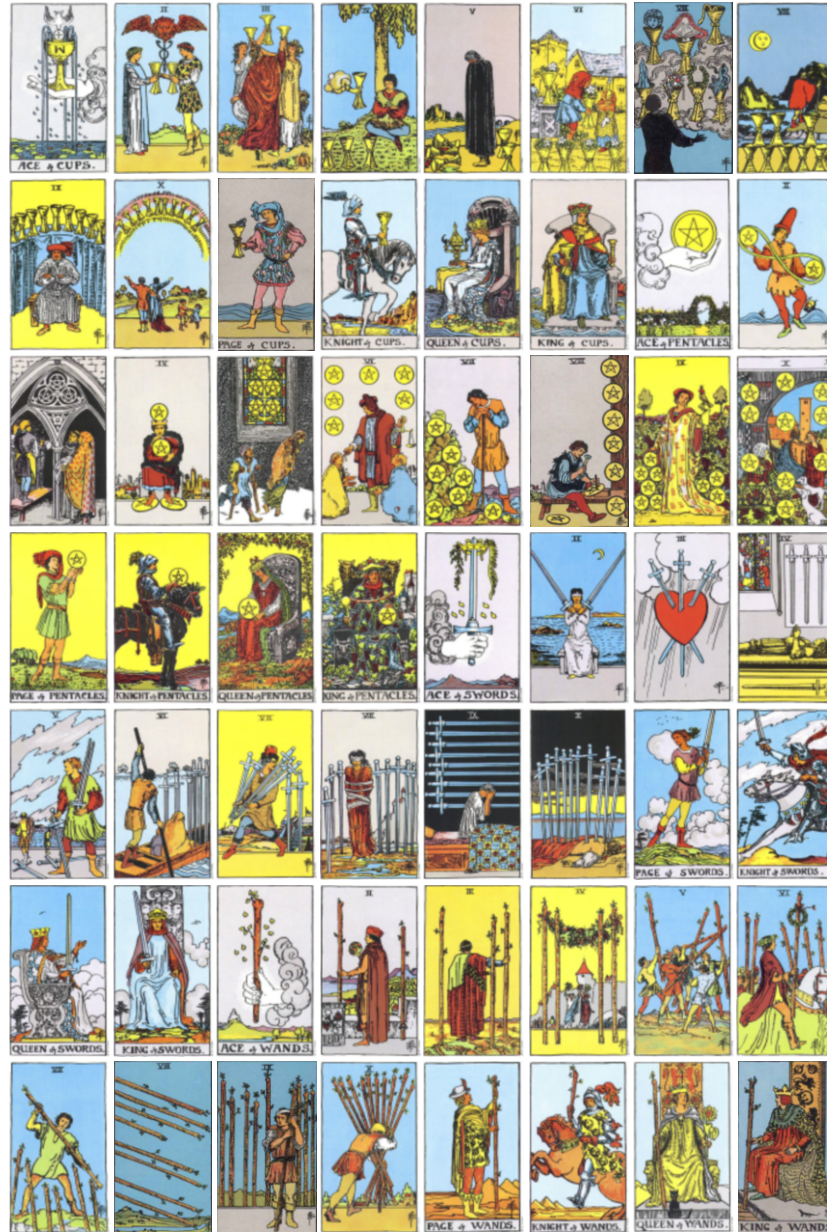


Figure 3.1. The 56 images of the Minor Arcana.

CHAPTER 3

compensated or corrected by unconscious counter-tendencies; instead, it is a function of *relationship* to the world of objects, bringing the individual into ... indissoluble *communion* with the world at large. (Jung, CW 7, 5; italics mine)

The human psyche, functioning as “unextended intensity” (Jung in Laszlo, 1995, p. 135) becomes *extended* by virtue of its material embodiment in Tarot images. The psyche is typically marked by tensions or bifurcations, which signify “a fundamental characteristic in the behavior of complex systems when exposed to high constraint and stress” (Laszlo, 1991, p. 4). During readings, a specific Tarot layout may indicate the presence of a highly unstable situation or a state of mind, although the mind itself, at the conscious level, may be quite unaware of its own situation but still *feel* the latter’s emotional impact by being in a certain affective state because the brute facts of life may intervene quite “against [one’s] will” (Peirce, CP 8.144). The typical affects are reflected in Tarot Arcana.

The outcomes of such a tension imposed on a system will vary: similar to the bifurcations classified according to their degree of manifestation, as well as the dynamic regime of signs in which a system will potentially settle, various Major Arcana (as per [Figure 1.2](#) in Chapter 1) are signs of either subtle (e.g., Wheel of Fortune), catastrophic (e.g., Death), or even explosive (e.g., The Tower) bifurcations. The semiotic relation, established by means of a synchronistic connection between the collective unconscious and an individual mind, enables insight into the meaning of a current problematic situation, thereby *making sense* out of it.

The images of the Minor Arcana in [Figure 3.1](#) give us a glimpse into typical real-life situations, plentiful in the school of life, which can make us feel insecure, angry, depressed, frustrated, anxious, confused, exhausted, overwhelmed, sad, or betrayed as well as happy, joyful, sexy, loved, victorious, etc.; and expressing numerous other emotions and feeling-tones (using Jung’s terminology) that accompany our actions in practical life (Semetsky, 2011a). It is not only that Tarot images signify events and occurrences, but also that the edusemiotic process of the action of signs realizes itself as a signifying practice, not unlike what contemporary philosopher and psychoanalyst Julia Kristeva called *semanalysis* (see Chapter 7).

A hybrid term that blends semiotics and psychoanalysis, Kristeva’s *semanalysis* incorporates psychology, linguistics and literary criticism. By generating meaning out of its own signs, the layout of Tarot images as a whole becomes a sign of transformation because it does not just signify but by this very signification as the production of meanings “it participates in the transformation of reality, capturing it at the moment of its non-closure” (Kristeva in Nöth, 1995, p. 322) in what may appear as a mystical process, but is in fact a semiotic one, grounded in the very *science* of signs.

Tarot edusemiotics is structured in accord with the Peircean genuine, triadic, self-referential sign and as such is self-reflective and even “bootstrapping” incorporating the triad of a reader, a person seeking a reading, and a deck of pictures. The significance of synchronistic correlations across levels of perception

in a self-organized sign-system makes Tarot images irreducible to random parochial symbols. In this respect, assigning total arbitrariness to the symbolism of pictures and, accordingly, asserting usage of “a pack of Tarots” (Eco, 1997a, p. 47) in “absolute freedom” (Ibid.) in contrast to their proper interpretation would be violating the logic of the included middle and the self-organization of information.

Umberto Eco is however right in noticing “the subtlest limit separating interpretive and hermeneutic cooperation” (Eco, p. 47) especially in the context of the capacity of a pictorial text to bring to life something not yet verbalized. The decoding of potential meanings, however, proceeds not by means of linear information-processing as a prerogative of the left hemisphere. The *art* of Tarot readings belongs to the right hemisphere as a sympathetic system capable of utilizing the three Is comprising insight, intuition and imagination (Semetsky, 2011b) in contrast to the left, cerebral, hemisphere, which is oriented to the three Rs of formal education.

Still, it is when the integration of both sides takes place that the mind is capable of fulfilling its full creative potential. Shlain (1998) remarks that the right side of the brain is “wise ... more familiar with needs and drives stemming from the earlier stages of evolution” (p. 18). The right hemisphere is permeated by “feeling-states [that] are *authentic* ... An internal voice verifies the experience... The right hemisphere is ... the portal leading to the world of the invisible” (Shlain, 1998, p. 19; italics in original). It is signosphere (Deely, 2001) that exceeds, yet encompasses, our empirical observable world and is semiotically real by virtue of the signs’ pragmatic effects at the level of practical experience. Gilles Deleuze (2003) described the right hemisphere as capable of interpreting the “language of relations, which consists of expressive movements, paralinguistic signs ... the analogical language par excellence” (p. 93).

Hence the interpretation of the pictorial text consisting of Tarot images represents a response to needs “articulated” by feminine, maternal instinct (cf. Noddings, 2010) as the core of the ethics of care and which is exercised in the hermeneutic process performed by a genuine Tarot reader (Semetsky, 2011a). While “scientific” knowledge comes to us in the form of facts about the external, objective, “real” world, the internal world of our subjective experiences is no less real. Such subjective, inner, Gnostic knowledge is habitually posited outside science and delegated to mystics and poets.

How can we understand the language of signs, the language of images? Shakespeare singled out poets whose *imagination bodies forth the forms of things unknown and turns them into shapes thus giving to airy nothing a local habitation and a name*; and Peirce has logically extended the province to the interpreters of signs. Signs may be just *airy nothings* but still those to which, as Peirce said, paraphrasing Shakespeare, *the mind of a poet, pure mathematician, or another might give local habitation and a name!* Poets and mathematicians, for Peirce, share the same logic embodied in semiotics as the science of signs, thus defying a strict border between humanities and sciences.

Gilles Deleuze considered philosophers, artists and writers to be first and foremost semioticians and symptomatologists who can read symbols and signs as

CHAPTER 3

symptoms of life! Tarot signs “imply ways of living, possibilities of existence, [they are] the symptoms of life gushing forth or draining away ... There is a profound link between signs, events, life and vitalism” (Deleuze, 1995, p. 143). The knowledge of the language of signs embedded in Tarot edusemiotics becomes imperative for our very life and survival (see Chapter 7).

The language of Tarot images is “intensive, a pure continuum of ... intensities. That is when all of language becomes secret, yet has nothing to hide” (Deleuze & Guattari, 1987, p. 98) because the implicit meanings become explicit when embodied in the language of images. The images are hieroglyphic in character, hence taken to be secret or esoteric; still they have nothing to hide but all to expose: their meanings need to be deciphered. The revaluation of experience leads to the “intensification of life” (Deleuze & Guattari, 1994, p. 74) ultimately achieving the pinnacle of intensity in the form of inner Gnostic knowledge that, in the absence of reading and interpretation, would have remained hidden in the depth of the psyche.

Any object of experience contains potentialities as virtual or implicit meanings, even if they are not yet actualized or made explicit. In the process of narrating hidden meanings, “the im-plicit is made ex-plicit; what was unconsciously assumed is exposed to the light of conscious day” (Dewey, 1991, p. 214) leading to the emergence of themes in the course of Tarot edusemiotics that illuminate the multiplicity of moral problems and dilemmas embedded in real life with its abundance of ambiguous situations and events.

The language of Tarot signs functions on the basis of a “paradoxical code [that] takes analogy as its object” (Deleuze, 2003, p. 95): analogy-becoming-code in our very experience when the images are interpreted and their meanings become relatively fixed for *each specific context* reflecting a concrete particular – and quite often problematic, as Dewey would say – situation. The term code (Nöth, 1995) entered semiotics via the terminology of information theory. A semiotic code serves as a relative “correlation or correspondence between sign repertoires or signs and their meanings” (Nöth, 1995, p. 205); that is, how the images that appear in the specific positions of a particular layout can be interpreted or decoded.

Winfried Nöth (1995) points out that “analogic coding [pertains] to pictures, models and nonverbal signs” (p. 208); still, during the interpretation of a particular message communicated by the combination of Tarot images, such “analogic coding” becomes digitized: “ultimately every act of semiosis involves a digital transformation of messages, namely, at the neurologic level” (Nöth, 1995, p. 208). From this perspective, Tarot edusemiotics can be related to such system of signs as Morse code: both communicate messages. The difference lies not only in the level of motivation but also in the level of interpretation: Tarot edusemiotics proceeds to decode the deep structures at the level of the psyche, of the unconscious.

Subtle affects and sensations inhabiting the unconscious psyche have “the irreducibly synthetic character” (Deleuze, 2003, p. 33); it is synthesis that produces learning and creates meanings versus simply processing the information in an analytic way from input to output without any symbolic mediation as interpretation and amplification of the information. The events and experiences encoded in Tarot

images become messages transmitted in a nonverbal mode, and it is precisely “the constitution of messages [that] forms the subject matter of semiotics” (Sebeok, 1991, p. 22). New meanings find their way into the here-and-now of the present experience. The mode of communication in a creative semiotic process is represented by

a release and amplification of energies that enter into it, conferring upon them the added quality of meaning. The quality of meaning thus introduced is extended and transferred, actually and potentially, from sounds, gestures and marks, to all other things in nature. Natural events become messages to be enjoyed and administered, precisely as are song, fiction, oratory, the giving of advice and instruction. (Dewey, 1925/1958, p. 174)

Earlier studies by Soviet semioticians equated the phenomenon of Tarot mainly with fortune-telling asserting that the pictures were used for a specific pragmatic purpose by a fortune-teller whose task was to “exert a strong influence on the person whose fortune is being told” (Lecomceva & Uspenskij, 1977, p. 70). Playing cards were regarded as a simple semiotic system with a limited vocabulary, in which “divination of past and present is a game” (1977, p. 71) and the future is foretold. In comparison with natural languages, the formal structure of “the system of cartomancy [as] a language with a finite number of states” was considered analogous to “certain artificial languages with a limited semantics” (1977, p. 73).

Functioning, however, in the capacity of “the typology of plots” (Egorov, 1977, p. 77), a reading of the spatial distribution of the pictures pointed to the existence of certain narrative units and “motif-functions” (p. 81) as well as predicates expressing “categories of place, cause and effect” (p. 84) together with “formulization” (p. 83) in terms of the ordering of information. The original study by Aphek and Tobin (1989) has advanced cartomancy and taromancy to the level of a complex, dynamic, meta-semiotic system, in which the multiple meanings of the cards were seen as representing “the possible semantic, cultural and social attributes of an umbrella term or theme attributed to that particular card” (1989, p. 13).

An interdisciplinary notion of the “dynamic relativism in human communication” (Aphek & Tobin, 1989, p. 2) placed fortune-telling in a framework of autopoiesis (cf. Varela, 1979) therefore permitting us to view “the very act of perception itself as an individualized autopoietic process” (Aphek & Tobin, 1989, p. 3). The concepts of *poiesis*, or making, and *autopoiesis*, as self-making or creating the Self are ubiquitous to the semiotic functioning of Tarot as embodying the Jungian process of individuation in a series of transformations culminating in the Self, the ideal archetype of wholeness.

Still, Tarot was presented as just one of many branches of fortune-telling in general, that is, “a specific instance of persuasive dyadic human communication” (Aphek & Tobin, 1989, p. 175) thereby ignoring the triadic logic of Peirce’s semiotics. In the comprehensive study by Heeren and Mason (1984), the authors, adopting a sociolinguistic method, presented both the ethnography of communication used by contemporary spiritual readers as well as therapeutic

CHAPTER 3

discourse as guiding their analysis, which focused on the precise form of readers' statements. They specifically distinguished between separate fields of discourse; namely style of everyday life, interview style and visionary style, the latter characterized as "the most unusual and distinctive" (1984, p. 197).

Heeren and Mason (1984) acknowledged the ethnomethodological "et cetera principle" (p. 200) as being employed by readers; that is, conforming to the practice that

in everyday conversation participants are expected to 'fill in' meanings when others make ambiguous statements. [It] means that one supplies contextual information to make sense of the indexical expressions of others. So it is in spiritual readings. Readers are not expected to spell out precise details of the persons and situations in their clients' life. Instead clients must play an active part by trying to access the applicability of visionary statements to their life. (Heeren & Mason, 1984, p. 200)

In principle this observation, especially from the third-person perspective, is fair. What, however, has been overlooked in the examples of readings presented in those studies is the almost complete absence of any meaningful informational content as the necessary component for a sign to be indeed a genuine, Peircean, sign despite the readers' discourse and utterances. And if there is a lack of information then no transformation is possible either, so the reading remains just a reading without any implication for the possibility of the transformational pragmatics of becoming-other that would have involved a habit-change.

The very meaning of information as a unit of communication suggests "a channel which can carry a unit of communication with the least amount of uncertainty" (Pribram in Laszlo, 1995, p. 145). The semiotic system of Tarot is such a channel comprising the images of Major and Minor Arcana as the projected archetypes of the collective unconscious combined in a layout. But, importantly, the archetypal ideas are considered today to be *both* the structuring patterns of the psyche *and* the dynamic units of information (Samuels, 1985) modeled on strange or chaotic attractors (Van Eenwyk, 1997) as a feature of complex dynamical systems in agreement with "Prigogine's description of the path to order from chaos" (Pribram in Laszlo, 1995, p. 145) – not unlike the symbolic process initiated by the Fool (Chapter 1).

It is by virtue of the included third of the Peircean interpretant that information becomes transformed and signs-are-becoming-other-signs thus creating novel meanings and transmitting something of the thought's general nature that cannot be reduced to either "merely a physical [or] even merely a psychical dose of energy" (Peirce in Deely, 2001, p. 629). This level of significance is semiotic in its core and, by analogy with the organic biosphere, it has been given the name semiosphere by the famous semiotician of the Tartu-Moscow school, Yuri Lotman (1990).

Independently from Lotman, biosemiotician Jesper Hoffmeyer (1993) also posited a semiosphere, defining it as a *holistic* structure that "penetrates to every corner of these other spheres [the atmosphere, the hydrosphere, and biosphere],

incorporating all forms of communication [and constituting] a world of *signification*" (1993, p. vii) comprising the field of meanings. Recently, Stuart Kauffman (2008) equated semiosis with meaning-production, emphasizing that "a sign means something" (p. 86) hence includes "[V]alues, meaning, doing, action [as] real parts of the furniture of the universe ... central to ... moral reasoning" (p. 87). The furniture of the universe, then, won't be represented by substances, but by relations, by *sign-processes*.

It appears that we can come full-circle in ontogenesis and phylogenesis of the mechanism of communication: from Vladimir Vernadsky's and Stuart Kauffman's biosphere in nature to the semiosphere of culture and back to the semiosphere as a natural phenomenon that showcases itself in the coded format of Tarot images; and vice versa from the cultural archetypes to the archetypes in nature (cf. Laszlo, 1995, p. 135) projected into the layout in the array of images. Laszlo (1995) noticed "a growing number of phenomena where events are instantly or quasi-instantly correlated. These range from Josephson effect ... discovered also in living systems, all the way to the time-and space-transcending phenomena investigated by Jungian and transpersonal psychologists" (p. 127). Those phenomena have been empirically demonstrated in the twin-photon experiment at The University of Geneva in June 1997 that manifested the existence of non-local (synchronistic) correlations over large, theoretically unlimited, distances.

A spread of Tarot images, as a projection of the archetypal field of the collective unconscious, which has been related by Ervin Laszlo to the quantum vacuum interactive field in physics, expresses the specific spatio-temporal distribution of information or, in Jungian terms, the structure and dynamics of the psyche, although psyche itself, according to Jung, would have no dimension in space and time. But functioning as a projection (to be addressed in more detail in Chapter 10), the layout represents a compactified "scope of space and time that [becomes] accessible to observation" (Jantsch, 1980, p. 4) in its material, embodied, form due to the reduction in dimensions that in cosmology is termed *compactification*. We do not know, in general, the total number of hidden dimensions that may have been compactified (cf. Lloyd, 2006).

In contemporary cosmology, the so-called weak holographic principle (Smolin, 2001) posits the world as consisting of processes or events, which can only be perceived through representations. Theoretically, representations – or, in semiotic terms, signs (Peirce, as noted earlier, used the word *representamen* to designate a sign) – are all there is; they indeed comprise the furniture of the world (the dynamic and evolving, *not* static or substance-like, furniture; semiosis). The semiotic, or process, ontology supports the view that there is only one kind of "things" in the world: they are signs or "representations by which one set of events in the history of the universe receives information about other parts of the world" (Smolin, 2001, p. 177). Still, the word representation is rather misleading; the term expression as one of the "assemblages of enunciation" (Guattari, 1995, p. 59) is more appropriate: the unconscious or virtual dimension implicit in the depth of the psyche finds its expression, it *speaks up* and becomes explicated.

CHAPTER 3

Tarot images “speak” in the language of signs grounded in interpretation and meaning-making due to the logic of the included middle. Because the action of signs exceeds ordinary human perception, signs *per se* can be seen only in their projected format; the analogy being a cinematic screen representing a three-dimensional reality in only two dimensions: a loss in dimensions – or compactification – is thus implied. The screen metaphor is potent: it accords with the Tarot layout being spread on a flat surface making such a surface a locus of meaning (cf. Deleuze, 1990) because

the area of a screen – indeed, the area of any surface in space – is really nothing but the capacity of that surface as a channel for information. So, according to the weak holographic principle space is nothing but a way of talking about all the different channels of communication that allow information to pass from observer to observer. ... In short, the holographic principle is the ultimate realization of the notion that the world is a network of relationships. These relationships are revealed by this new principle to involve nothing but information. (Smolin, 2001, pp. 177-178)

Respectively, Shlain (1998) addresses page-screen dualism in the context of the present informational “Iconic revolution” (p. 413) characterized by a renewed trust in images as represented by both new technologies and cultural “icons”; and accompanied by a decline in literacy. With a recovered “respect for iconic information *in conjunction with* the ability to read, [we] can bring our two hemispheres into greater equilibrium and allow both individuals and cultures to become more balanced” (Shlain, 1998, p. 429; italics in original).

A return to iconic information represents a shift toward an alternative, feminine, mode of expression that “will prepare us for the *next* great communication revolution, in which we are already deeply engaged” (Shlain, 1998, p. 429; italics in original). Tarot edusemiotics that embodies a feminine mode of expression (see Chapter 5) must become a significant part of both personal and social revitalization (Semetsky, 2011a) in the process of holistic education. We emphasize that icons and images are signs; they are relational, rather than substantial, entities.

To reiterate, the action of signs is constituted by the relationship between an object and a mind by virtue of a sign, so that a sign is both affected by the object and is affecting the mind via an interpretant, the included third, thus producing an effect as the sign’s *meaning*. Such is the radical capacity of signs to both affect and be affected as posited by Deleuze (and Spinoza; and Peirce). The object to which the sign refers may not have a solely physical existence; importantly signs include thoughts, dreams, mental images and altogether imaginary entities. Signs can always be meaningfully interpreted. The layout – functioning as a screen, or projection – presents a spatio-temporal organization of informational bits (pun intended) and pieces encoded in signs represented by individual pictures.

The structure and dynamics of the psyche does not contradict Lee Smolin’s (2001) quantum account of the structure of space and time and his paying tribute to Charles Sanders Peirce, indeed. It only makes us further question whether we should continue to believe, following Descartes, in *res cogitans* as unextended

mind. Through projection, the dimensionless, beyond-the-event-horizon, invisible realm of Ideas is rendered visible and sensible. Projection implies causality, however not in a customary linear manner, but in the sense of an acausal synchronistic connection mediated via the implicate order of reality posited by David Bohm (1980); it is just an appearance of causation.

What Bohm called the implicate order is the level of invisible reality underlying the explicate order of our visible, sensible, physical world. The enigma and prejudice associated with the mystery of precognition associated with Tarot and other mystical realms that reflect the existence of transpersonal realities and worlds “above” and “below” should disappear: as embedded in the process of semiosis, all

causation is “vertical,” from the bottom up (projection) and then from the top down (reinjection). ... So-called precognition would really involve only the resonance of an event that is explicate *now* with an event that is *later* – from the viewpoint of the explicate order, which orders events sequentially – to become explicated. (Griffin, 1986, p. 129)

A certain event “arises out of the whole (‘projection’) and thereby affects the whole” (Griffin, 1986, p. 129). In the Tarot layout all events, circumstances, relationships comprising semiosphere are explicated to the point of becoming visible iconic signs in front of our eyes. Tarot edusemiotics thus serves as not only a theoretical but also a practical “model [providing] the basis for a solution to the mind-body problem” (Ibid.).

By definition, an icon is simply an image, figure or likeness. Almost all of the 78 pictures of Major and Minor Arcana in a deck display an image of a human figure that, however, has as its referent not a simple object but the whole typology of human behaviors, feelings, affects, and thoughts. As pertaining to analogical reasoning, it is the *likeness* feature that is significant in interpreting Tarot images. I often say, *It’s like* ... when referring to a feeling, action, or emotion during readings (cf. Semetsky, 2000, 2009, 2010b, 2011a). And sure enough, biblical image and likeness are reflected in Tarot symbolism, and the mystery of continuous creation demystifies itself in the repeating self-organized patterns of information: the “synapse” on Michelangelo’s fresco is not a void but is filled with communicative, even if barely perceptible in the absence of interpretation, action!

The language of pictorial semiotics is symbolic or indirect. The four suits subdividing a deck traditionally correspond to the four natural elements and the four Jungian psychological functions; different colors may denote certain emotions; the figure on the icons may be moving or standing still, not to mention the Major Arcana, the images of which are accompanied by their names and thus combine “two different codes in a complementary fashion, as in Baroque emblems” (Posner, 1989, p. 276).

As a total edusemiotic system Tarot also demonstrates its indexical, quasi-causal feature in a “vertical” non-local sense (recall Deleuze’s and Peirce’s quasi-cause exercised by the Fool in the process of production of meanings and making sense of his lived experience) thus blending all three Peircean categories of images, indices and symbols in one perfect genuine sign! The spread of the images reflects

CHAPTER 3

“some of the relational principles that determine the larger discursive field, otherwise known as a symbolic order ... The alignment of signification with the symbolic order ... has ... been made possible by the inclusion of a third category – that of subjectivity” (Silverman, 1984, p. 42).

It is the development of human subjectivity as the task of moral education that was the focus of my preceding book devoted to the re-symbolization of the Self. A particular layout is as yet “an elusive blend of idea and form” (Silverman, 1984, p. 164) reflecting the archetypal patterns acting in the collective unconscious and mediated via what David Bohm called a quantum potential and that has inspired Nobel physics laureate Brian Josephson to speculate about the possibility of including esoteric entities – God or Universal Mind – in the framework of *science*. This possibility becomes our very reality in the context of Tarot edusemiotics!

The translation of pictorial symbolism into spoken word is the function of a genuine reader who knows and understands what Gilles Deleuze dubbed the *silent discourse*. The as yet silent – prior to being interpreted and narrated – expressive language of Tarot signs exceeds and spills over the limitations of our conscious discourse and verbal language. Deleuze would have agreed with Lacan that the unconscious is structured like a language, but language is re-conceptualized as the assemblage of signs that can properly be said to have structure, “be it an esoteric or even a nonverbal language” (Deleuze, 1968, in Stivale, 1998, p. 259) such as in dreams, memories, or Tarot images.

While acknowledging Lacan’s critique of Jung because of the general hostility of structuralism towards “the methods of the imaginary” (Deleuze, 1968, in Stivale, 1998, p. 269), Deleuze – like Jung and Peirce – nonetheless presents ideas as “unconscious, [and] necessarily overlaid by their products or effects” (in Stivale 1998, p. 270); quite in accord with Peirce’s pragmatic theory of meaning. A sign, as always already becoming-other, is Janus-faced: it constructs a semiotic bridge, a relation, between events as though engaging into Leibniz’s “dance of particles folding back on themselves” (Deleuze, 1995, p. 157) within the self-organized, self-referential dynamics of semiosis.

A picture is a material object, but the general paradigm of self-organization or self-reference is not limited to merely material structures: it “embraces ... also mental structures, such as ideas, concepts or visions” (Jantsch, 1980, p. 50) comprising archetypal patterns that are at once sources and destinations of information. The prophetic mind of Erich Jantsch envisaged that “the self-organization of information is an aspect of the self-organization of life and the gestalts it produces are the gestalts of life... They form their own world of symbolic representation of reality and are capable of emancipating themselves from reality. Thus they can change and redesign reality” (1980, p. 161)!

A picture falls out after a picture until they form the semiotic structure of the layout representing events and experiences in the format of iconic signs. A pictorial phrase, another one, yet another, unfold into a narrative: the story of the Fool’s learning journey in his experiential school of life. At the level of semantics information is transmitted due to resonance-like communication, vertically, but it unfolds horizontally in front of our eyes in a spatio-temporal organization

according to the type of spread or layout, similar to a cinematic syntax that may be defined by images organized into a sequence of shots.

In the typical layout, traditionally, a certain meaning is assigned to each individual position of the pictures. Thus they may be considered *signa data*. As for the Jungian archetypes denoted by pictorial symbolism, they are universal by definition and therefore *signa naturalia*. It was St. Augustine, a pagan turned Christian, to whom we owe certain important developments in semiotics that are still subject to debates; in particular a distinction that he posited between natural and conventional signs, that is, *signa data* and *signa naturalia*, affecting the philosophical conceptualization of intentionality or the “aboutness” of consciousness.

The question (both philosophical and practical) arises: If natural signs are non-intentional and by signifying something beyond themselves make us aware of that category like the oft-quoted smoke which signifies fire; and if unseen emotions behind facial expressions are included in the class of natural signs; and if the same unseen emotions are encoded in the iconic image of the particular Tarot picture – because it stands for a specific feeling, affect or emotions as transmitted by the archetypal images of the Major Arcana, such as Strength, or Justice, or Temperance, or Lovers, etc. – then we arrive at a paradox and have to question again whether the category of genuine signs presupposes intentionality (cf. Deely, 2007) and/or involves the idea of intention.

Or, again, are we coming full-circle – or rather entering a spiral with ever higher levels of order – from Lotman’s “Universe of the Mind” (Lotman, 1990) to the Mind of the Universe in the dialogic communication between semio- and biosphere as the totality, “which determines everything without exception that happens in it” (Vernadsky in Lotman, 1990, p. 125)? The universal field of communication phenomena envisaged by Russian neo-semioticians as part of the typologies of culture called for identification of the specific systems representing their languages as texts. And a universal field of communication phenomena in nature needs to identify its own system which would represent the language it speaks, albeit in a specific extra-linguistic mode.

Lotman saw culture as a set of texts generated by some yet unknown rules and a non-hereditary collective memory. As for nature, its generative rule is the principle of self-organization pertaining to physical and mental, according to Jantsch, structures alike. Nature and culture are bridged via the flow of semiosis. Tarot functions in the capacity of a meta-language by means of which self-organizing collective memory implicit in the unconscious “speaks” to us, its very producers, and as such, in a metaphorical sense, giving birth to a new “text” within each communicative act.

Sir Michael Dummett (1980), a famous British philosopher of language, had a great interest in what he referred to as the history and mystery of Tarot; however he presented Tarot as simply belonging to a family of card games integral to specific cultures. Sure enough, the pictures’ silent discourse by definition does not belong

in the framework of analytic philosophy of (verbal) language based on the logic of the excluded middle.³

Yet since time immemorial, humankind has searched for a universal language in the quest for the perfect means of communication that would transcend prevailing cultural, religious, and language barriers. The hero of a poetic tale (Coelho, 1993), in his spiritual quest for the language once understood by everybody yet now forgotten, arrived at the understanding that it's all *written there*. Medieval symbolism considered the World as a book of God written in a *codex vivus*, which is to be deciphered. Francis Bacon, in his 1605 epic *Advancement of Learning* criticized human spoken language as an unreliable means of communication and understanding because of the false appearances imposed on us by words. He discussed the idea of a real character as a symbolic system irreducible to verbal expressions and referred to “Chinese writing and Egyptian hieroglyphics [as] such systems of real characters” (Nöth, 1995, p. 272). It was Descartes who nonetheless criticized “the protolanguage of mankind” (Ibid.) and remained skeptical of the project of the *universal language* as it became known.

Leibniz had envisaged a formal *scientia generalis* of all possible relations between all concepts in all branches of knowledge taken together. This unified science of all sciences called *mathesis universalis* would employ a formal universal language of symbols with symbols themselves immanent in life, in nature. Leibniz included pictures and “various graphic geometrical figures” (Nöth, 1995, p. 274) as a possible medium of such a symbolic language. As Merrell (2002) comments, “Leibniz ... acknowledged that the 64 combinations of the *I Ching* ... was a forerunner to his thought” (p. 136).

Leibniz conceived of *lingua characteristica* as a universal pictographic or ideographic (pictorial, diagrammatic) alphabet of human thought complemented by *calculus ratiocinator* and reflecting *ratio* embedded in Nature. He envisaged the universal *ars inveniendi* for the invention of new truths as well; still his “fragmentary project ... remain[ed] utopian” (Nöth, 1995, p. 274). Ultimately,

³ When I was researching material for this chapter I received an email dated 22 December 2010 and sent to the philosophy-list in Australia. The AHRC Project on “Intuitions and Philosophical Methodology” at the Arché Philosophical Research Centre was hosting a major Conference on Philosophical Methodology 23-25 June 2011, at the University of St. Andrews. The conference theme was described as follows:

It has become increasingly popular to claim that the subject matter of philosophy is neither linguistic nor conceptual. In this sense, it has been suggested that the so-called “linguistic turn” was a mistake and the target of philosophy properly conceived is nonconceptual and nonlinguistic (e.g., Williamson, *The Philosophy of Philosophy*). Despite this, philosophers still routinely appeal to ordinary linguistic use and linguistic theory in constructing and criticizing philosophical theories. The contrast between the alleged target of philosophy and continued reliance on linguistic information in solving philosophical questions raises a number of issues which are the focus of this conference.

The present book, emphasizing a “semiotic turn” versus “linguistic turn” and pre-conceptual, affective, pictorial or nonverbal information versus linguistic or verbal, indeed represents a “back to the future” response to the theme of the conference.

Leibniz's "characters were to be isomorphic with the concepts designated by them; [and] the universal signs were to be isomorphic with the facts of nature" (Nöth, 1995, p. 274) – precisely like Peirce's Janus-faced triadic signs, engaged in the flow of semiosis across nature, culture, and the human mind.

However the contemporary transference of Leibniz's dream into research in Artificial Intelligence or analytic philosophy of language has not so far brought us closer to realizing his project even as the urgency of understanding *human nature* is paramount for our very survival in a global climate permeated by diverse beliefs, disparate values and cultural conflicts; "the...ambitious project of Leibniz was never completed" (Nöth, 1995, p. 270). It is the Tarot edusemiotics that can fulfill his dream; it can and should become "an instrument of universal communication" (Nöth, 1995, p. 276) especially considering the value and scope of the ethical implications of such a stance (see Chapter 7).

Mathesis as such would be a perfect science of life, of human nature; and the universality of Tarot signs partakes of the universal language immanent to mathesis indeed. The following chapters in this book will demonstrate that Tarot in fact *is* such universal symbolic language. The corollary of a universal language is that, ultimately, the correspondence between primitive signs and the complex ideas for which they stand is natural and not simply arbitrary or conventional (see Chapter 8).

Leibniz's project refers to the injunction of knowledge representation. Analytic philosophy presents language as a system of representations *a priori* distinguished from signs. The representational system presupposes a class of things represented which are *not* representations themselves, hence outside language and outside thought. A linguistic sign (and other regimes of signs are to be ignored) is supposed to represent transparently or literally. On account of this, a poetic, artistic, or nonverbal regime of signs as a type of language that "represents" symbolically or indirectly via mediation cannot be "objective" in describing reality.

But reality is habitually taken as empirically observable physical reality, reduced as such to the level of Peircean Secondness without realizing that *semiotic* reality has its own language of expression even if such a discourse indeed appears silent. The dynamics of silent nonverbal discourse constitute the continuous creation of self-referential feedbacks as the included middle in agreement with "the image of the semiosphere. ... All elements of the semiosphere are in dynamic, not static, correlations whose terms are constantly changing" (Lotman, 1990, p. 127): signs-become-other within the holistic semiotic process.

Umberto Eco (1997b) draws our attention to such a "crucial definition ... [and] the concept of a text as a unity" (p. 58). In this respect the Tarot images inscribed in the pictorial text not only represent intentional states, but plausibly belong to the category of signs used with communicative intent. They represent archetypal ideas not as the classical natural unintentional signs in the framework of nature equated with "dead matter," but signs at the very interface of nature and culture that are communicated with a sort of unconscious intention. Indeed, the science of self-organization, the science of complex *open* systems constantly interacting with their

CHAPTER 3

environments, agrees with the ancient Hermetic worldview that considers Nature *alive* even if hieroglyphic.

Mathesis is the long sought-after, even if so far hypothetical, science of life that finds its symbolic language of expression in Tarot edusemiotics. It thus combines both *art* and *science*, as does semiotics. Philosophy is habitually reduced to analytic thought; however the creative path to Gnosis that embodies the ancient “Know Thyself” principle involves also non-philosophical understanding. For Deleuze and Guattari (1994), “[A]rt thinks no less than philosophy, but it thinks through affects and percepts” (p. 66) and not solely concepts; concepts are products, the outcomes depending on the reevaluation of experience.

It is the ultimate knowledge of life that is a prerogative of such a unified science, which differs from the positivist paradigm grounded in direct observation and human perception as limited to the physical senses. Here we approach the subtle issues of

a deep affinity between communication ... and perception. ... While it is true that medical “semiology” is purely a study of the natural indices of pathology, psychosomatics, by contrast, sees in such symptoms reactions which are destined to communicate information ... which the subject is not able to express any other way. Psychoanalysis – particularly Lacan’s school – considers the manifestations of the unconscious as a mode of communication and a language. Parapsychology, too, postulates the notion of subliminal messages which are not conscious. These notions have been taken up by literary criticism, the study of myth, the psychosociology of behavior ... under the heading of “depth psychology,” and semiology must take this into account. ... The relation between signifier and signified may be ... intuitive ... and subjective. Signification is more or less codified, and ultimately we are left with open systems. ... Here ... we have the frontier between logics and poetics; though it is true that certain poetic systems are ... highly codified. Codification ... is a process: usage renders the sign more precise and extends its convention. ... This relativity of the sign is common to the most of the operational systems of semiology; depending on each particular case, signs are *more or less* motivated, and sign systems *more or less* structured. (Guiraud, 1975, pp. 22-25)

In other words this relativity correlates with multiple levels of complexity, not unlike David Bohm’s implicate and explicate orders of reality. The confluence of the science of self-organization with the Hermetic philosophy is striking: both postulate that all manifested phenomena are based on the principle of homology and the only difference between any of them is just the degree of their evolutionary development. *More or less!* If so, the schizophrenic gap between the sensible and the intelligible, between *Logos* and *Mythos*, is indeed moot.

The Hermetic tradition posited imagination and memory as blended together: as Faivre (1994) notices, “a part of the teaching of *Hermes Trismegistus* consisted of ‘interiorizing’ the world of our *mens*, from whence the ‘arts of memory’ cultivated” (Faivre, 1994, p. 13). A Tarot layout may be considered an embodied,

material representation of *Memoria*, posited by St. Augustine who described in his *Confessions* “the fields and spacious places of memory (*campos et lata praetoria memoria*), where are the treasures (*thesauri*) of innumerable images” (in Yates, 1966, p. 46). *Memoria* is a realm of images, the paradoxical realm of objective, impersonal, psyche as Jung’s collective unconscious; a semiosphere filled with archetypal images.

By affording *Memoria* a privileged place, the Hermetic tradition may have anticipated the theory of the unconscious, as we know it today. Plotinus, for example, defined soul in terms of its as yet unknown memories: “even when one is not conscious that one has something, one holds it to oneself more strongly than if one knew” (Ennead 4.4.4, in Miles, 1999, p. 79). Soul, for Plotinus, “is and becomes what it remembers” (Ibid.). The depth of the psyche creates a relation between the realms of the sensible and the intelligible as the included third between the human and the divine. Human mind, in Hermeticism, is a reflection of the divine *mens* equipped with its full creative potential.

Frances Yates (1966) describes the art of memory via its relation to the psyche and affirms that it is the very aim of memory to be able to unite intellect and psyche by means of the organization of significant images. Archetypal psychologist James Hillman contends: “using the terms of today, we might translate this art [of memory] as a method for presenting the organization of the collective unconscious” (Hillman, 1972, p. 179). This organization comprises the semiosphere. Somewhere or everywhere, in space-time and beyond, there is the semiosphere, an “initially undifferentiated field” (Deleuze, 1993, p. 10) filled with potentially meaningful information.

This field has recently been referred to by Ervin Laszlo (2004/2007) in terms of the *Akashic* field, of which our habitual space-time is but an aspect and that, according to Hindu (Samkhya) philosophy, contains the records of all human experiences and the history of the cosmos. That’s where multiple levels of order “originate” and manifest themselves as the evolution of consciousness: from the lowest and slowest material form to the energy to the fastest one as pure consciousness which then is transformed back into matter due to the communication of information by virtue of semiosis as the action of signs.

The ultimate feedback loop created by the edusemiotics of Tarot manifests as “the quality of self-organization of the dynamic processes characterizing the system and its relationship with the environment. ... Mind in this view is no longer the opposite of matter, but ... co-ordinates the space-time structure of matter” (Jantsch, 1980, p. 14) establishing a coordinating relation, or analogy, between the worlds of above and below not solely in theory but, significantly, in practice!

The mystical *coincidentia oppositorum* stops being mystical: the conjunction of opposites takes place in our actual practice via the included third of Tarot edusemiotics! The relation thus established represents an intelligent, noetic (from the Greek word *noēsis* as understanding) activity that harks back to Aristotle’s *Intellect* (*Nous Poetikos*). In the context of Tarot edusemiotics, intelligence correlates with the definition provided by Lotman (1990) as determined by three

functions: the transmission of textual information, the creation of new information, and memory as a capacity to preserve and reproduce information.

The Tarot deck, then, is a symbolic lexicon used by the universal intelligence, the *Nous*, and the Tarot layout is a pictorial text transmitting available information which was preserved – virtually recorded in the field of the collective unconscious – and is reproduced during a reading for the purpose of re-creating this information; or from our human perspective, to create it *anew*, to write yet another chapter in the text comprising the *school of life*. The layout thus becomes a visible, material link in a signifying chain of a larger symbolic order. And sure enough, because it represents an instance of the diachronic, *ex-Memoria*, unfolding of this signifying chain, this instance being but one synchronic slice in the here-and-now of a particular Tarot reading, in this silently discursive (*not* a contradiction in terms) unfoldment the meaning emerges.

When the past, present and potential future are combined together we not only observe but also *participate* in the instance of our own evolution – evolution of knowledge, evolution of consciousness (see Chapter 6). The path from the past to the present to potential, coming into being, future embedded in a signifying chain of a layout, which “must... be understood as the product of a psychic ‘assembly-line’” (Silverman, 1984, p. 54), denotes meaningful non-random self-organization of information, and the pictorial text of the spread cannot be reduced to just a myth or pure art-form!

Stuart Kauffman conceptualized “a fate map” (1993, p. 579) on the basis of existing patterns that ultimately give rise to specific behaviors; still there is no guarantee that the person in question will be “committed ... to that perspective fate” (Kauffman, 1993, p. 579). The brute facts of physical existence are always accompanied by Peircean modalities of might be-ness and would be-ness. Deleuze, describing the multiple lines of becomings, affords a special place to the line which is “not foreseeable, not pre-existent. This line is simple, abstract, and yet the most complex of all ... the line of flight and of the greatest gradient. ... [T]his line has always been there, although it is the opposite of a destiny” (Deleuze & Parnet, 1987, p. 125).

It is the opposite of destiny not because fate as such does not exist, but because we can emancipate ourselves from its firm grip and become free to choose the line of flight in our experiential journey, thereby potentially changing our very destiny! We just need more information about the possible options in our own evolution! What is called destiny

never consists in step-by-step deterministic relations Consider what we call repetition within a life – more precisely, within a spiritual life. Presents succeed, encroaching upon one another ... [and] each of them plays out ‘the same life’ at a different levels. That is what we call destiny. ... That is why destiny accords so badly with determinism but so well with freedom: freedom lies in choosing the levels. (Deleuze, 1994, p. 83)

The pictorial language of Tarot edusemiotics allows us to explore different options regarding a particular course of action. Even if and when some lines of becoming

become foreseeable in the layout, we are still free to choose between several alternatives unless the hold of the unconscious is so strong that a particular archetype begins to possess, as Jung would say, individual or social psyche! Still the interplay of the archetypal forces can be perceived and understood via the hermeneutics of reading and interpretation (Semetsky, 2011a), and it is the edusemiotic process of becoming aware of their effects in real life that indeed educates us!

The many potentialities become articulated in the course of creating imaginative narratives when reading and interpreting Tarot images. The practice of Tarot edusemiotics relates to a process addressed by John Dewey in the context of ethical principles underlying education as

imaginative rehearsal of various courses of conduct. We give way in our mind, to some impulse; we try, in our mind, some plan. Following its career through various steps, we find ourselves in imagination in the presence of the consequences that would follow. ... Deliberation is dramatic and active. (Dewey, 1932/1998, p. 335)

We try, in our *embodied* mind, some plan! It is the *Imaginal* world that is reflected in the *material* layout of Tarot images. Henry Corbin, who was a professor of Islamic Studies at the Sorbonne in Paris till his death in 1978, coined *mesocosm* as an intermediate realm between micro- and macrocosm. The *Mundus Imaginalis* or *mundus archetypus*, the archetypal world, is a distinct order of reality corresponding to a distinct mode of perception in contrast to purely imaginary as the unreal or just utopian. The multiple narratives created by means of interpreting Tarot signs are, sure enough, dramatic and active.

As philosopher of education Jim Garrison asserts, “deliberation has the power of genesis” (1997, p. 121) by virtue of creating new meanings in the process of re-organization of experience. It “terminates in a modification of the objective order, in the institution of a new object ... It involves a dissolution of old objects and a forming of new ones in a medium ... beyond the old object and not yet in a new one” (Dewey, 1925/1958, p. 220), but within a “zone of indiscernibility” (Deleuze & Guattari, 1994, p. 173) between what would have otherwise remained the binary opposites of matter and mind, of old and new.

The act of imagination completes “the intercourse of the live creature with his surroundings” (Dewey, 1934/1980, p. 22) due to which the collection of potential meanings becomes activated. Those meanings are realized in the process of carrying over “the past into the present that imaginatively anticipates and creatively constructs the future” (Garrison, 1997, p. 144). Such dialectics is expressed in the Tarot spread that, functioning in the capacity of a current state of a dynamic regime of signs, combines in itself the interplay between such binary opposites as chance and necessity, freedom and responsibility, determinism and probabilities, novelty and confirmation (see Chapter 8), in the selection of the next dynamic regime.

The ratio between the opposites, or the measure of their complementarity (cf. Kelso & Engström, 2006) is a controversial question because “the phenomenon that appears as freedom in the individual case is in fact a statistical constraint

CHAPTER 3

manifested in the ensemble” (Laszlo, 1995, p. 9) at the different level of complexity. The naturalistic stance of semiosis that includes us, humans, as *signs among signs* permits to adopt a similar stance on morality as “that huge domain that treats how we should behave, what we hold as good or right and how best to achieve it” (Noddings, 2010, p. 16). Nel Noddings asserts, however, that a wholly naturalistic study of morality appears unrealistic because human choice and responsibility play their role and cannot be evaluated strictly by the approach applicable to mathematical problem-solving in terms of “rational choice or some branch of game theory” (2010, p. 17).

Noddings comments on several textbook moral problems that call for making a decision: “Researchers studying morality present a problem [such] as the Trolley Dilemma [or] the Lifeboat Dilemma” (2010, pp. 18-19) and other artificially construed situations, in which “something is logically amiss” (p. 21). She argues against reducing moral problems to mathematical dilemmas. I agree – but only when mathematical logic is taken in its dyadic, true versus false, form without this vague fuzzy in-between area represented by the included middle as the prerogative of the science of signs grounded in the triadic logic.

Real-life moral dilemmas border on what Jung characterized as impossible situations. Referring to the symbolic process as an experience *in images* and *of images*, Jung pointed out that its development usually demonstrates “an enantiomorphic structure like the text of the I Ching...Its beginning is...characterized by one’s getting stuck in a blind alley or in some impossible situation and its goal is, broadly speaking, illumination of higher consciousness, by means of which the initial situation is overcome” (Jung, CW 9i, 82).

In his memoirs, *Memories, Dreams, Reflections*, reflecting on his own development as an adult, Jung (1963) said that the years when he was pursuing his inner images were the most important in his life; it is via images that the essential decisions were made. And it is through Tarot edusemiotics which embodies the symbolic language of images that we can reevaluate our experiences; hence can create new concepts, new meanings, new values and make ethical choices in life.

The problem is not so much that the unconscious may possess one’s psyche as Jung said, but that such possession occurs when one’s current value system is too narrow to accommodate the ups and downs of real experiences (cf. Gad, 1994). The Greek word *enantios* means opposite, and *dromos*, running course. Jung has used the term to refer to the unconscious acting against the wishes of the conscious mind; but still in accord with the objective psyche’s grand plan. The edusemiotic approach creates room for a naturalistic approach to morality that will indeed have taken into consideration both freedom and responsibility. The word naturalistic here pertains to Nature which is irreducible to its empirical, actual, level but encompasses its semiotic, virtual, dimension. *Ethics necessarily recapitulates ontology* (cf. Semetsky, 2010a)!

Even if an impossible, “disturbed and perplexed situation” (Dewey, 1933/1998, Vol. 2, p. 139) “calls up something not present to the senses” (Dewey, 1991, p. 75) directly, it is the Tarot edusemiotics that potentially allows us to solve a moral problem in practice, in our real life by, sure enough, presenting it to senses in its

embodied, pictorial, mediated format; what is needed, however, is knowledge of the Tarot pictorial language so that we can read and understand it!

For Dewey, Peirce and Deleuze alike the given situation is problematic not due to the personal uncertainty of a Cartesian *subject*, but because uncertainty arises out of the *objective* conditions foregrounding this very situation; as Noddings would say, out of the “given” (2010, p. 20); this unorthodox “given” partaking of William James’ blooming, buzzing confusion. Still, we can resolve it – even if not by means of mathematical symbols or formulae but by using symbolic language of Tarot icons. Peirce, sure enough, emphasized the utility of “likeness,” that is, the principle of the included third, for mathematicians; he compared an algebraic formula to an icon by virtue of the former’s rules of commutation, association and distribution of symbols (cf. Clarke, 1990). It is these subtle rules, this paradoxical logic encoded in its analogue form that is used when Tarot images are read and interpreted.

Old and new come together, as we said earlier, citing Dewey; and that’s when “novelty breaks in, the law of large numbers is rendered invalid and the fluctuations of consciousness prepare the decisions for the next autopoietic structure” (Jantsch, 1980, p. 308). The next structure is in fact a new level of self-awareness; in the semiotic process of self-reflection and amplification through what Russian formalists used to call estrangement (*otstranenie*) from oneself, the opportunity to look from “above” at oneself projected into the layout “below” is given.

During the dynamic process of creating own Self by structuring its symbolic representation via Tarot images, the eternal alienation between “oneself” and “other” in one’s psyche – which in its alterity was supposedly “never able to represent that other to itself” (Roustang in Borch-Jacobsen, 1988, p. viii) – is overcome and integrated into consciousness. The significance of Tarot as a meta-language – the language of signs, the language of images – derives from meta-language itself functioning as a signifying practice (Kristeva, 1984): the otherwise inaccessible object of knowledge literally becomes “constructed, deduced and known from a position in front and above” (Kristeva, 1984, p. 94) via the interpretant of a Peircean triad.

A person becomes aware of the unconscious because of the possibility to become “another” for herself and be able to perceive her own “responses” as new “stimuli” in the relation, the significance of which was anticipated as long ago as 1925 by Russian sociocultural psychologist Lev Vygotsky. The dyadic behaviorist model gives way to the triadic, semiotic, model of human consciousness as “a sense of taking habit, or disposition to respond to a given kind of stimulus” (Peirce, CP 5.440) even if the stimulus may present itself as barely liminal, therefore demanding an abductive guess (prior to being “deduced”) as the first response.

New cognition, situated quite literally in the geometric structure of a layout, acquires both psychological and social order. Positions in the typical Tarot spread denote both external situations and internal mental or emotional states described in detail in the prequel to this book (Semetsky, 2011a) and thus provide a rich context within which each particular picture that happened to fall out in the specific

position, is being read and interpreted. While each position of the layout indicates a part of both the inner and outer realities experienced by the person, they, however, can be read only in the totality of the whole layout and only with regard to this person's current, here-and-now, situation.

Thoughts, emotions, hopes, fears, interpersonal relationships, intra-psychic conflicts, immediate environment; significant others; in short, the whole phenomenology of a person's life-world, of which, however, she may not yet be aware at the conscious level, are being projected in the layout that functions as the symbolic representation of this very life-world. The pictorial text that is being read must be first written; metaphorically, of course. The emergence of the particular pattern in the layout represents the process of unorthodox nonlinear "writing." An invisible realm acquires visibility and legibility, and in this respect the pictorial text of a layout is the result of the ordering of signs in accordance with the generative grammar of self-organization.

The subject of the reading "speaks" (even if only by means of silent discourse, prior to interpretation) through the pictures' projected content and is simultaneously "spoken to" by "getting" the meaning of this informational content during a reading: the ultimate individuation as becoming-other or the very transformation of human subjectivity does require information. The subject of the reading, similar to cinematic *suture*, "inserts itself into the symbolic register in the guise of a signifier, and in so doing gains meaning at the expense of being" (Silverman, 1984, p. 200), but – and this is crucial – for the purpose of becoming. Habit-change is based on the principle of creating a new level of order, not maintaining an existing one; and sure enough, re-construction of experience does imply de-construction in this process.

In the larger frame, the written text – expressed not in words but in pictures – is itself an interpretive semiotic system, within which it acquires the status of the text when its writer, the subject of the reading, perceives it as such. A reader's function is to translate the language of the unconscious into the spoken word, to facilitate the transformation of information thus making the subject's very subjectivity conceptually and empirically present. Tarot edusemiotics derives from simultaneous perception of synchronic and diachronic dimensions in a layout, very much like reading and decoding an orchestral score (using the beautiful metaphor by Claude Lévi-Strauss).

The pictures that follow each other in the particular order of a layout seem to represent the much searched for "organizational categories and forms through which the mind is able to experience the world, or to organize a meaning in what is essentially in itself meaningless" (Jameson, 1974, p. 109). The associative and inferential process involved in reading and interpretation is obviously over and above the sum total of reasoning strategies. It derives its properties from the same subtleties which comprise the semiotic worldview as identified by John Deely (1990). Functioning as a sign or "a purely relational being ... playing precisely this mediating role, beyond the dynamics of physical interaction" (Deely, 1990, p. 58), the archetypal ideas embodied in Tarot images belong as yet to the virtual semiosis in which the triadic quality is latent.

The actualization of the virtual takes place because the reading and interpretation, as human reasoning proper that encompasses all three Peircean forms of inference, brings into being this “further phase, a new magnitude of thirdness” (Deely, 1990, p. 102) that allows intuition to turn into knowledge and communication to turn into signification. This deep self-knowledge is Gnosis. It is a symbolic language of interpretable signs, symbols and images – contrary to the verbal propositional language, which directly refers to empirical sensible objects – that expresses the deep “truths of *gnosis*” (Martin, 2006, p. 37).

Nöth (1995) presents a synopsis of a triadic sign tracing its definitions and disparate terminology from Plato, to Stoics, to Frege, to Peirce, to Ogden and Richards, and notices that in order to construct a semiotic triangle (Figure 3.3) connecting, in the most general terms, sign-vehicle, sense, and referent, the path of mediation, represented by a dotted line between a sign-vehicle and a referent, must be present.

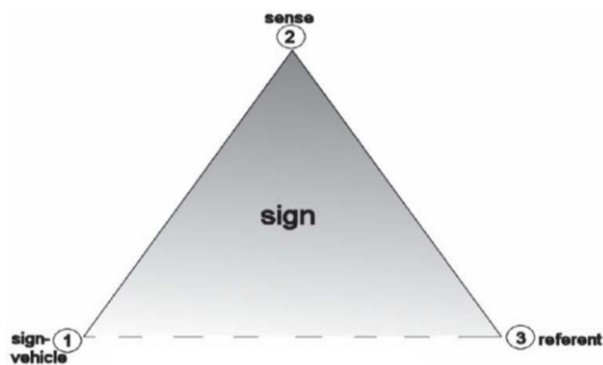


Figure 3.3. *Semiotic Triangle* (Nöth, 1995, p. 89).

It is through the included middle that sense (meaning) is produced: “sense is the mediator of the referent” (Nöth, 1995, p. 89). Nöth (1995) points out that different sign models, albeit retaining triadicity, do suggest different interpretations of the relata: “the order of the relata in the process of triadic mediation has been interpreted in a different way” (Nöth, 1995, p. 89), which means that the sequence of the dotted line may shift for as long as it “closes” the triangle. In other words, the 1-2-3 series and a respective return from 3 to 1 is always a genuine triad, but the correlates of the triad may vary.

Tarot performs a double function: from the viewpoint of the semiosis in nature, or sign-production, as well as from the viewpoint of the interpreter in the here-and-now of the reading. The reading, as a means of indirect communication mediated by Peirce’s interpretant, “fills up” a dotted line, creating a meaningful story of life-experiences. Let us turn to St. Augustine once again:

CHAPTER 3

Whoever, then, is able to understand a word, not only before it is uttered in sound, but also before the images of its sounds are considered in thought ... is able now to see through this glass and in this enigma some likeness of that Word of whom it is said, "In the beginning was the Word" For of necessity ... there is born from the knowledge itself which the memory retains, a word that is altogether of the same kind with that knowledge from which it is born. ... And the true word then comes into being ... equal to Him from whom it is, and with whom it is wonderfully co-eternal. (Augustine, 1948, in Clarke, 1990, pp. 26-27)

To reiterate, the transformation into "that Word," that is, the action of signs from the viewpoint of sign-production is a function of intelligent communication. Moreover, as Faivre (1994) points out referring to the Hermetic tradition, the objective reality of intelligence is asserted.

Intelligence is an entity or universal interaction of the same nature as electricity or gravity and there must be some existing *formula of transformation*, analogous to the famous equation of Einstein ... in which intelligence would be put into equation with other entities of the physical world. ... If intelligence is a universal property of matter, the universe then represents a terrifying amount of mental potential, and *anima mundi* must exist. (Firsoff in Faivre, 1994, pp. 281-282)

Faivre (1994) traces the Western esoteric, Hermetic, tradition from its ancient and medieval sources to Christian theosophy up to the 20th-century physicists as the "gnostics of Princeton and Pasadena" (Faivre, 1994, p. 280) and refers to Tarot as a specific form of esoteric knowledge. The ultimate archetype of *Anima Mundi* or the soul of the world expresses itself by means of semiotic communication in the format of Tarot signs, symbols, and images. Noetic intelligence, which encompasses memories of both the past and the future, becomes accessible to human reason by virtue of Tarot edusemiotics and understanding the language of images.

The implicit information, albeit preserved, is being re-organized and re-distributed and thus contributes to the appearance of a new chapter in the text of life. The information becomes meaningful or functional (cf. Kelso & Engström, 2006) and active (cf. Bohm, 1980), that is, capable of effecting transformations in the material world, the world of practical action, inhabited by us, human beings. From our human, subjective, perspective, this means creating the text in its novelty, as if anew; to speak the "Word," which therefore comes into being. Ultimately, the structure of Tarot is based on the universal, speculative grammar: *speculum* expressing the correspondence between the two kinds of signs: words and things; this correspondence or analogy indeed forming a semiotic relation.

For Peirce, everything is a sign: the whole universe is perfused with signs; still "nothing is a sign unless it is interpreted as a sign" (Peirce, CP 2.308). The presence of a Peircean interpretant, as a third in its relation to words and things, blends all three in a single event, a genuine sign always having a triadic structure.

The Word thus has the potential of recursively becoming a Thing again in the guise of new object, new knowledge; thereby ultimately becoming, as a matter of self-reference, what Peirce designated as a sign of itself (cf. Kauffman, 2010).

The language of Tarot images, itself an icon, is literally functioning as an icon of reality expressing the Hermetic wisdom of the world, according to which the divine powers of human intellect are implicit in the “man’s mens” (Yates, 1966, p. 147). Mark Patrick Hederman notices that it is the Tarot pictures that provide a “route to the unconscious. This alternative route uses some of the materials, shapes, signs, and symbols used by artists and our dreams ... The major arcana ... are visual aids to the unconscious. They are vivid shorthand portraits ... akin to the Chinese ideograph” (Hederman, 2003, p. 27).

Sure enough, Leibniz considered *ideograms* as comprising the alphabet of a universal language. His unfinished project continues in Tarot edusemiotics, and the principle of pre-established harmony in his metaphysics appears to partake of Tarot structure: “the whole world is virtually represented in every individual mind as a *facultas cogitandi*” (Nöth, 1995, p. 22). We should keep in mind, however, that to unconditionally agree with this statement, *all* individual minds will have to be ultimately gathered in the Peircean unlimited and infinite *community* of inquirers.

Still, while the expressive means of “graphic symbols (which include iconic and indexical signs) are a semiotically still largely unexplored field of research” (Nöth, 1995, p. 219), the postmodern interdisciplinary discourse is clearly giving way to a philosophical worldview that combines “the enterprise of *experimental metaphysics*” (Shimony, 1989, p. 27) with “criticism at its best ... displaying the rich art of evaluating and analyzing with knowledge and propriety the works of civilization” (Deely, 1990, p. 82). Among these works of civilization, the Tarot symbolic system is one of the oldest, thereby strongly defying its perceived “low” status as a card game or fortune-telling device.

Tarot represents an exemplary edusemiotic system that can teach us about ourselves and the world at large. It actually creates the very connection between ourselves and the outside world as a genuine sign partaking of both. The next chapter will analyze the meaning of Arcanum number I in the Tarot deck called The Magician as a sign of communication, or connection, between the multiple levels comprising a semiotic system.

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CHAPTER 3

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CHAPTER 4

TRANSVERSAL COMMUNICATION

This chapter centers on the image of The Magician, Major Arcanum I (Figure 4.1) that immediately follows the unnumbered Fool/Zero in a Tarot deck.



Figure 4.1. The image of The Magician.

Often perceived as a mystical or even magical spooky craft, the value of Tarot in the context of education and counseling is by now established (e.g., Semetsky, 2005, 2009b, 2010b, 2011). The origins of magic as

a form of semiosis ... are connected with the early history of semiotics. But according to the criteria valid for normal communicative acts, magic is based on a semiotic fallacy, a misjudgment of the pragmatic effects of signs and their semantic object relation. Viewing magic as a semiotic fallacy ... is inadequate without taking the complementary perspective of magic as a potentially effective form of communication, according to which it may be seen as a semiotic therapy. (Nöth, 1995, p. 188)

The division between educational and therapeutic discourses as two separate disciplines can be blurred because both involve either implicit or explicit inquiry into the nature of human subjectivity and self-other relations. In my prequel to the present book (Semetsky, 2011) I have addressed the Tarot hermeneutic method as comprising an educational and learning process as well as embodying a form of *therapeia* defined as a practice of human service to those who need it. Carol

CHAPTER 4

Wetherell (1991) notices that, ideally, each professional activity, education and therapy, “furthers another’s capacity to find meaning and integrity” (p. 84) in lived experience. Importantly, both practices are “designed to change or guide human lives” (Wetherell, 1991, p. 84).

This chapter will further problematize the presupposed “semiotic fallacy” of magic by positioning it in the framework of the action of signs (as addressed in Chapter 2) in nature, culture and the human mind that blurs the absolute line of division between habitual dualisms including such supposedly binary opposites as magic and science. The sign-function of The Magician will help to elucidate this point. In the *Tarot de Marseilles* deck this picture is called Le Bateleur, which means the Juggler or Trickster. Sallie Nichols (1980), in her original work on Jung and Tarot, assigns to this Arcanum two meanings that seem to be, at first sight, incompatible, those of Trickster and Creator (1980, p. 46).

Jung posited the archetypes of the collective unconscious as having both light and dark poles; and while the symbolism of The Magician connotes knowledge, wisdom, insight, vision, and creativity, his alter-ego the Trickster exhibits, on the other hand, not wisdom but cleverness, not knowledge but caprice, not insight but wit, not vision but voyeurism, and not creativity but trickery. The *creative* aspect embodied in the image of this Arcanum is especially important.

It is almost ironic how the instrumental rationality of the modern epoch has separated science and magic into a pair of binary opposites. While acknowledging what the pure reason of modernity considered to be a *supernatural* action, the attempt to explain it was made in terms of *natural* science; “natural” understood of course in its reductive mechanistic sense of a linear cause-effect connection. The “prompt” logical conclusion was simple: either an anomalous effect (as in magic) or an anomalous cause (as in mantic). Specifically, the semiotic anomaly of reading cards was to be considered to rest on mantic signs being “interpreted as an index of supernatural forces determining the world” (Nöth, 1995, p. 190).

However, what scientific *episteme* habitually posits as its own binary opposite and accordingly delegates it to the *ipso facto* unscientific or mystical realm does belong to science, which is, however, reconceptualized as the science of hidden relations, of signs. Smoke is a sign of fire, even if fire *per se* may not be visible to us but only indirectly inferable. Noticing the ambiguity of this notion, *relation*, Dewey emphasized the symbolic dimension pertaining to symbol-meanings even in the absence of the actual thing in sense-observation.

Recently, Lewis and Kahn (2010) challenged contemporary Western education by conceptualizing *exopedagogy* as representing “a *rupture* of a new sensorium that attempts to suspend the logic ... underlying contemporary power relations” (p. 101). They present “faery” as symbolic of “a particular ... and savage imagination threshold [in the] ethical and aesthetic response to overcoming the boundaries between the human and the nonhuman [and representing] transgressions of contemporary forms of anthropocentric domination and destruction of complex natureculture assemblages” (Lewis & Kahn, 2010, pp. 101, 103).

Together, nature and culture represent what Deleuze and Guattari called assemblage, a dynamic multiplicity as a sign-system; and “faery” is an indigenous

psycho-spiritual formation, “a rupturing element...that intensifies and revitalizes the constituting powers of a form-of-life that escapes measure” (Lewis & Kahn, 2010, p. 103), that is, tends to get out of the narrow bounds of the logic of the excluded middle prevalent in measurable, quantifiable, systems. Respectively, Tarot edusemiotics belongs to a form of “posthumanist” (Lewis & Kahn, 2010, p. 1) pedagogy – or exopedagogy – that transgresses boundaries of narrow rationality and does take education out of its narrow bounds.

The sign of The Magician escapes measure, indeed. From the evolutionary perspective, our awareness of the presence of semiosis that, as a flow of signs, “brings nature and culture together in its net” (Deleuze & Guattari, 1987, p. 236) is a necessary and sufficient condition not only for eliminating the prefix *super* from the word supernatural but also for opening doors to semiotic inquiry as a method of research and pedagogy; that is, learning to apply in practice the logic of the included middle and to reason with all three Peircean categories, including abduction.

According to Yates (1964), the event of Giordano Bruno’s burning at the stake was provoked by his advocacy of a new religion centered on love, art, magic and mathesis. Mathesis, as addressed in the preceding chapter, is a universal science that is *not* opposed to art, religion and magic; it reconciles them (cf. Semetsky, 2008b, 2009a). In the same way that Lewis and Kahn contrast “fairy” as a cultural artifact with the “inoculating trace of the faery [as] a utopian promise” (2010, pp. 103-104), the symbolism of The Magician bypasses the meaning of the cultural archetype represented by Trickster. The Magician is a symbol of creative and communicative action that has its place in nature as part of the action of signs, of semiosis.

The Magician’s action is not expressed in merely *signa data* but *signa naturalia*, thereby manifesting itself as a natural principle, even if not one represented in some of the equations of mathematical physics. Initiated by a Trickster, however, such action would be implicit and latent, similar to some hidden variable, aka *arcana*, which has long been waiting for the right time in the history of ideas to get out of the dualistic closet of modernity and the prison-house of verbal language; and eventually taking its place among the evolving laws defined by Peirce as habits-taking.

At the mythical level, The Magician’s “ancestor,” Hermes Trismegistus, was associated with the Egyptian god Thoth and the Greek Hermes, a deity of communication and wit, quick action and quick thinking. The Magician conveys the idea of communication, interaction, and transaction aiming towards connecting the One (as the number corresponding to this sign) with the Many, discovering unity in diversity and creating diversity out of unity. As it naturally follows the spontaneous Fool, the preceding Arcanum signified by Zero, that is, unnumbered, The Magician symbolically represents a path to ultimately “knowable if not [yet] known” (Dewey, 1925/1958, p. 269).

Being a pure Idea, a thought-sign, The Magician, prior to his own action as a Peircean interpretant for this very sign, is as yet disembodied: for Peirce, mind has to be entrenched in habits so as to congeal, as he says, into matter. According to

CHAPTER 4

Peirce, “genuine mediation is a character of a sign” (Peirce, CP 2.92) by virtue of the coordinating, “generalizing or associating element” (CP 8.144), which is symbolized by The Magician Arcanum. The world of Nature is full of as-if-magical, semiotic and anti-dualistic, logic bordering on the “logic of artistic construction” (Dewey, 1998a, p. 199; cf. Semetsky, 2008a): in the universe, which is self-organizing (Jantsch, 1980), the different and new levels of complexity emerge as if from nowhere, by means of spontaneous structuration and the establishing of an autopoietic regime. Autopoiesis literally means self-making; it is effectuated by means of recursive communicative feed-forward and feed-back loops created, metaphorically speaking, by waving the Magician’s wand. The classical definition of autopoietic systems is as follows:

An autopoietic system is organized (defined as a unity) as a network of processes of production (transformation and destruction) of components that produces the components that: (1) through their interaction and transformations continuously regenerate and realize the network of processes (relations) that produced them; and (2) constitute it (the machine) as a concrete unity in the space in which they exist by specifying the topological domain of its realization as such a network. (Varela, 1979, p. 13)

Jantsch (1980) defined consciousness as the degree of autonomy a system may gain in the dynamic relations with its environment; thereby even the simplest chemical dissipative structure can be said to possess “a primitive form of consciousness” (Jantsch, 1980, p. 40). The Magician represents such a trace of consciousness embedded in the material universe, in agreement with Peirce asserting that mind is not a sole property of us, conscious human beings, but pervades the natural world in various degrees.

Alfred North Whitehead, respectively, attributed proto-mentality to the physical world. Among the Whiteheadian ontological categories, creativity, many and one are the ultimate, and it is creativity that constitutes the condition of possibility for all existence. The number I corresponding to The Magician is symbolic of the Whiteheadian *one* world without and within. Whitehead’s metaphysics defines existence in self-structuring and self-ordering terms, and order and structure themselves are constantly evolving and developing. Whitehead’s philosophy posits actual occasions as events endowed with proto-experience that, albeit dim and not fully conscious, nevertheless defies the sharp bifurcation of nature into mindless matter and conscious mind.

As an occasion of experience, the sign of The Magician contains the condition of its own unity (indexed by the numeral I) and creativity within itself. Its objective character as a sign ensures that it is the natural world that paves the road for cognition, and not the other way around. The Magician’s action is constituted by self-referential feedbacks, the processes of folding and unfolding that comprise a network of interactions as though establishing what Varela (1979) dubbed conversation in terms of a developed communication between an autopoietic system’s heterogeneous levels. Autopoiesis describes continual renewal and self-organization pertaining to living, as well as social (cf. Luhmann, 1995), systems so

as to maintain the integrity of their structures as a result of multiple interactions and transactions comprising the process of signs-becoming-other.

Order is not limited to being imposed from without – which would be an intervention from outside the system, thus making the system’s functioning allopoietic – but, as Dewey pointed out, “is made out of the relations of harmonious interactions that energies bear to one another. Because it is active (not anything static because foreign to what goes on) order itself develops Order cannot but be admirable in a world constantly threatened with disorder” (Dewey, 1934/1980, pp. 14-15).

Jung noticed that it is the very quality of the archetypes to be able to *order* themselves: the objective psyche is self-regulating, self-organizing. The re-organization of experience proceeds as to order the information so that it creates novel meanings for experience. Analogously, Deleuze’s “critical and clinical” (Deleuze, 1997) philosophy is concerned with creating novel concepts, meanings and values for experience. Communication encompasses diverse regimes of signs, and a novel concept becomes a product of inquiry and meaning-making: it is an emergent property embedded in a communicative process of semiosis. Such a creative act is a prerogative of an autopoietic system, which is organized around “environmental perturbations/compensations” (Varela, 1979, p. 167f).

The communicative and mediating action of The Magician is expressed in coordination, or the Peircean relation of Thirdness, that this sign establishes between the noumenal and phenomenal realms, and may be considered to be a precursor to neo- or morphogenesis as the process within which “the properties that appear during the origin of the new set are not the simple sum of the components that make up the set” (Grobstein in Juarrero, 1999, p. 12) but establish different and new relations between components in the form of metaphorical communications across levels. The very act of communication is capable of establishing relations between components because it triggers a compensatory operation; the *inside* of the system, which itself is part and parcel of the environmental perturbation, the *outside*.

In this way, old boundaries are crossed and traversed, and new boundary conditions of the system, or its external structure, are being established, meanwhile sustaining the integrity of its internal structure or what Deleuze aptly called the *fold* of “the inside *of* the outside” (Deleuze, 1988, p. 97). The “inside” and the “outside” are interconnected in the manner of the Möbius strip that, strictly speaking, has *one* side; there is a continuous mediation between “the non-external outside and the non-internal inside” (Deleuze & Guattari, 1994, p. 60) – which means that they cannot be confined to isolated binary opposites; rather, they represent a bipolar unity symbolized by the number I as the index of The Magician.

So, the sign of The Magician is an indication of how mind, or Firstness, becomes embodied in matter, or Secondness, through the evolutionary semiotic Thirdness as “mediation, whereby first and second are brought into relation” (Peirce, CP 6.7). In any complex semiotic system a meaningful signal is produced at the moment of structural coupling (an operational closure) between a heterogeneous series of events operating at different levels. This does not mean

CHAPTER 4

that something actually “flows” through the information channel constituting semiosis as a sign-process; just that a relation – or coordination – is being established: such is the very action of signs embedded in the relational process of semiosis.

The action of The Magician is the action of signs grounded in the natural principle that indirectly connects human experience with the “outside,” non-human, world. The humanist discourse gives way to exopedagogy “for a Posthuman Age” (Lewis & Kahn, 2010) and as informed by edusemiotics. The subtlety of course is that to fully realize the active principle of The Magician in human culture, the whole Peircean community of inquirers, theoretically unlimited and unbounded by time, is required – *unless we can establish the necessary coordinating relation not only theoretically but in practice!* And it is Tarot edusemiotics that can do this by virtue of itself being the included third; what is needed is our knowledge of the language of signs – the language of images addressed in the preceding Chapter 3.

The Magician is a sign of a *machinic*, as Deleuze would say, universe, irreducible to its description in terms of Newtonian *mechanics*. Rather, it is a self-organized system, the dynamics of which “is established between the parts of each system and between one system and another, which crosses them all, stirs them all up together and subjects them all to the condition which prevents them all to be absolutely closed” (Deleuze, 1986, p. 59). Deleuze posits “transversal communications” (Deleuze & Guattari, 1987, p. 11) between the heterogeneous levels pertaining to the regime of signs. Deleuze would have explained the sign-function of The Magician in terms of his “pursu[ing] the different series ... travel[ing] along the different levels, and cross[ing] all thresholds; instead of simply displaying phenomena or statements in their vertical or horizontal dimensions, one must form a transversal or mobile diagonal line” (Deleuze, 1988, p. 22).

It is the transversal communication that creates a semiotic “bridge, a transversality” (Guattari, 1995, p. 23) that would be able to reconcile and reconnect binary opposites by establishing a mediating or coordinating relation between them. It is by means of a triadic, semiotic, relation that forms a semiotic bridge “betwixt and between” (Lewis & Kahn, 2010, p. 2) the otherwise irreconcilable dichotomies that “the spiritual and the material [as] two distinct yet indiscernible sides of the same fold” (Goddard, 2001, p. 62) are able to meet in practice. This unorthodox transversal connection brings to the fore what Whitehead referred to as the paradox of the connectedness of things (Whitehead, 1961, p. 228).

Importantly, a semiotic bridge does not simply connect; it *creates* as well: “Transversal communications between different lines scramble the genealogical trees” (Deleuze & Guattari, 1987, p. 10-11), which means that there cannot be a simple reproduction of the same but the creation of the new and different. Indeed, signs always already become other signs! Art and science coalesce as they are indeed supposed to in mathesis. For the science of signs, “there is no other truth than the creation of the New: creativity, emergence” (Deleuze, 1989, pp. 146-147); such is the prerogative of The Magician in the universe perfused with signs.

It is a genuine, triadic, sign as irreducible to a simple dyad that makes transversal communication possible; and only as transversal can communication enable the conferment of novel and shared (signs are Janus-faced entities!) meanings on experience, the value of which in our practical life cannot be overestimated! Because of the amplifying, synthesizing, nature of signs, the meanings expressed in the multitude of Tarot images “hiding” in the unconscious can be articulated, elucidated, interpreted, narrated, and potentially integrated into consciousness.

In one of his books on the analysis of cinematic images, Deleuze (1989) posits mysticism in terms of the sudden actualization of potentialities, that is, an awakening of sense-perception, such as seeing and hearing, by raising them to a new power of enhanced perception, or percept as a future-oriented perception in becoming. Such “a vision and a voice ... would have remained virtual” (Goddard, 2001, p. 54) unless some specific conditions enabling the transversal communication in practice will have been established so as to *actualize the virtual*. The presence of The Magician in nature ensures that the conditions for the actualization can be created in our actual experience. It is the Tarot edusemiotics that creates such a symbolic inter-leveled link, a transaction, so that the images can be read, interpreted, and understood.

The plurality of evolving signs finds its expression in Tarot images that act as symbolic transformers capable of raising the unconscious contents to the level of conscious awareness. As artifacts, the pictures are the products of *technê* from the Greek word for craftsmanship, handicraft, or skill. The ancient Stoics developed the idea that virtue itself is a kind of *technê* or craft of life based on a proper understanding of the workings of the universe. It is, sure enough, the communicative universe (cf. Klyukanov, 2010). The printed artificial pictures as signs represent, or stand for, many real collective human experiences, actual and potential, that are embodied in the array of images representing ancient virtues as the craft of life.

Yet, in order to learn the craft of life we first have to enter the school of life. This is the basis of moral education in terms of Tarot edusemiotics. When embodied in the medium of the pictures, the transpersonal – spiritual or incorporeal – virtual realm acquires body, corporeality. Experience is embodied in the creative and artistic expressive medium of Tarot pictures, and “the connection between a medium and the act of expression is intrinsic. ... On the side of the self, elements that issue from prior experience are stirred into action in fresh desires, impulsions and images. These proceed from the subconscious” (Dewey, 1934/1980, pp. 64-65).

Lewis and Kahn (2010) notice that when habitual dichotomies are under threat or become suspended, such as the categories of us versus them, destruction versus production, or inside versus outside, then “monster appears as an important conceptual category” (p. 2). Monster here is taken as simultaneously the breakdown of boundaries and as the taboo against the breaking of such boundaries of common sense or socio-political realities alike. In Chapter 7 an analogous

CHAPTER 4

conception will be addressed in terms of Julia Kristeva's notion of abject as related to one of the most dramatic images in the Tarot deck, The Tower.

The monstrous is something mystical, but not just illusion; referring to Hardt and Negri (2009), Lewis and Kahn posit the savage form of imagination as a real material force; such as the implicit presence of the Magician in nature that can carry us across the boundaries of space, time, or habitual "existing knowledge and thought" (Hardt & Negri, 2009, p. 99). The action of the Magician is pragmatically real; yet, as a hidden variable (or Arcanum, indeed) it has long been waiting for a proper conceptualization. Being an "indispensable ingredient of reality" (Peirce, CP 5.431), the Magician can "bring into being that which does not yet exist" (Deleuze, 1994a, p. 147) at the level of the actual, yet always already subsists in its virtual form representing the wealth of potential meanings implicated in life, in the concrete experiences of humankind.

From the perspective of the logic of explanation, this image is a symbol of "another kind of causation" (Peirce, CP. 6.59) disregarded by modern science which has "succeeded" in reducing the four Aristotelian causes, including formal and final, to a single efficient causation, while at the same time "retaining his prohibition against that unknown form of causality" (Juarrero, 1999, p. 48), a self-cause. When Peirce asserted that growth, evolution, and complexity represent basic facts in the universe, he also noticed "that there is probably in nature some agency by which the complexity and diversity of things can be increased" (Peirce, CP 6.58).

Mechanical law alone would not explain the magic of diversification. The Magician, number *One*, indeed unity that gives rise to diversity, to *Many*, is not a symbol of absolute identity: for Peirce, infallible mechanical laws are insufficient. "How can the regularity of the world increase, if it has been absolutely perfect all the time?" he asked (CP 1.174). Difference is needed, and such a difference in fact is what makes semiosis functional. It is difference that drives feedbacks and ensures self-organization. Deleuze has ingeniously addressed this concept at the ontological level:

difference is not diversity. Diversity is given, but difference is that by which the given is given. ... Difference is not phenomenon but the noumenon closest to phenomenon ... Every phenomenon refers to an inequality by which it is conditioned ... Everything which happens and everything which appears is correlated with orders of differences: differences of level, temperature, pressure, tension, potential, differences of intensity. (Deleuze, 1994a, p. 222)

In other words, unity or wholeness is achieved not as "a property which it [phenomenon] possesses [but] by a pervasive and internally integrating quality" (Dewey, 1998a, pp. 194-195) symbolized by The Magician icon. The number I is indeed an index of unity. The mind itself is part of complex multileveled nature that displays Peirce's synechism or continuity. The categories of Firstness, Secondness, and Thirdness are the "conceptions of complexity" (Peirce, CP 1.526). Physical properties as Peircean Seconds arise from the act of communication that

involves what Deleuze dubbed *differentiation* (with *t*) when the differences in intensity establish a flow of information while at the same time these differentiations are connected by means of local integrations described as *differenciation* (with *c*).

These subtle integrations, “being like the second part of difference” (Deleuze, 1994a, p. 209) are capable of producing a difference of the second-order. Such a double process of different/ciation, as the Magician’s transversal communication, appears, sure enough, to partake of the magical. As Dewey says,

of all affairs, communication is the most wonderful. When communication occurs, all natural events are subject to reconsideration and revision: they are re-adapted to meet the requirements of conversation, whether it be public discourse or that preliminary discourse termed thinking. (1925/1958, p. 166)

It is the communicative action between the levels as a prerogative of the action of signs, the triadic relational entities that, by virtue of the Peircean interpretant, establish a connection between the apparently disparate levels. Transversal communication between the levels brings life and vitality into the world of supposedly dead matter; the material universe as such can therefore be considered “mindful” (cf. Stapp, 2007). Addressing the “social consequences of the misrepresentations of contemporary scientific knowledge” (Stapp, 2007, p. viii), physicist Henry Stapp posits a mindful universe that consists of psychophysical (not just physical or material) building blocks and in which the transition from potentiality to actuality is indeed possible by means of us, human *participants*.

We remember that it is mystics who traditionally played an embodied or participatory role in the world, versus one of simple detached observation (Semetsky, 2011). “Idea-like qualities” (Stapp, 2007, p. 97) – signs, we may say – are part and parcel of physical reality. Stapp considers reality from the perspective of Whiteheadian “non-anthropocentric ontology” (p. 97); this post-humanist, holistic, approach especially pertinent to Tarot edusemiotics. It is *Anima Mundi*, the Soul of the World – symbolized by Arcanum XXI called The World – that indeed animates it. It is when the Magician intervenes between the heterogeneous levels, lifts up his wand and enables “events [to] turn into objects, things with meaning” (Dewey, 1925/1958, p. 166) that the growth and evolution of signs takes place.

The Magician is a sign of the “internal creative process that makes ideas dynamically effective” (Stapp, 2007, p. 97). The apparently transcendental Magician is thus immanent in Nature. The act of intervention makes the Magician an autocatalytic element, building the mutualist feedback of circular causality and representing “kinetics effective in this moment at each spatial point” (Jantsch, 1980, p. 34). The Magician – performing tricks, creating a momentous “negentropy as semiotic information” (Spinks, 1991, p. 71) in the various acts of his practical “magic” based on creative imagination – in his dual aspect as Trickster *transcodes* the analogue continuum of *One* into the digital particulars of *Many*. Hence follows what Deleuze and Guattari (1987) called their mystical and magical formula expressed as One=Many and that posits unity in plurality. For Deleuze and Guattari

CHAPTER 4

there is rhythm, whenever there is a transcoded passage from one milieu to another, a communications of milieus, coordination between heterogeneous space-times ... Whenever there is transcoding ... there is not a simple addition, but a constitution of a new plane, as of a surplus value. A melodic or rhythmic plane, surplus value of passage or bridging. ... [T]he components as melodies in counterpoint, each of which serves as a motif for another: Nature as music. (Deleuze & Guattari, 1987, pp. 313-314)

Musical tropes assist Deleuze in articulating the dynamics of the process, and the surplus value implies growth, an increase in power and intensity in a dynamic process of creative becomings of a nomadic subject (cf. Semetsky, 2008c) symbolized by the Fool's journey embedded in the Tarot Arcana. The Magician's action "accedes to the infinite movement that frees [thinking] from truth as supposed paradigm and reconquers an immanent power of creation" (Deleuze & Guattari, 1994, p. 140). The sign of rhythm as a cycle of eternal respiration of life is expressed by the mathematical symbol of infinity (the lemniscate), which appears on The Magician icon, and also is repeated in the shape of the hat that Le Bateleur (in the *Tarot de Marseille* deck) wears (Figure 4.2):



Figure 4.2. The image of Le Bateleur.
(Note: this deck is believed to not be under copyright.)

What Deleuze called transcoding as the property of transversal communication cannot be reduced to "a simple addition"; it presupposes growth, but one which is *nonlinear*; not along the same plane but across two different milieus that become connected transversally due to the action of this sign in the world. It is the coordinating, harmonizing function that is exercised by The Magician as the natural principle. The logic of multiplicities, of signs, means that there is no simple addition of information in the form of empirical facts, even if Deleuze used the conjunction *and* (see Chapter 1) to describe the dynamics of the process. The

aforementioned “passage or bridging” is a mediating relation constituting a genuine sign that as such creates a new meaning: it trans-codes or *interprets* potential information, hence necessarily functioning as the interpretant in the Peircean triad, the included Third.

A semiotic process is of *summation* that, while suggesting a simple adding of information, in fact *intensifies* it by means of forming a *logical product* akin to multiplication or forming a power series. We speak of signs in terms of qualitative multiplicities. The semiotic process is bound to indirectly produce meanings as pragmatic effects; that is, “effects that are not a mere dependence upon causes, but the occupation of a domain, the operation of a system of signs” (Deleuze & Guattari, 1983, p. 86). The rhythmic components in counterpoint bring to the fore a holistic sense of unity exemplified in the image of The Magician as Arcanum I.

In the context of Eastern philosophy, Alan Watts comments that the dualist perspective is illusory, “only seeming... The corollary of this realization is that subject and object, oneself and the world are a unity or, to be precise, a ‘nonduality’ since the world ‘unity’ may be taken to exclude diversity” (Watts, 1958, p. 111). Peircean semiosis as the logical process of the action of signs partakes of the Eastern *Tao* as “an integrated, harmonious, and universal process” (Watts, 1958, p. 111). The action of The Magician – he would not be a *magician* otherwise – removes the “sense of the vast gulf between the ego and the world, and one’s subjective, inner life seems no longer to be separate from everything else, from one’s total experience of the stream of nature” (Watts, 1958, p. 111).

The Magician is a symbol for the *ratio* or reason embedded in Nature by virtue of the logic of the included middle foregrounding semiosis. It is Thirdness that enters the process as reason, mediation, coordination, sense of learning, and the evolution of consciousness. Because every sign conveys the general nature of thought, and Thirdness is ultimately a mode of being of intelligence or reason, Nature itself partakes of Peirce’s *quasi-mind* comprising a repository of ideas or significant forms as signs, among which The Magician is number I. The postmodern Magician reconstructs the pre-modern Neoplatonic Oneness by taking *One* out from the supernatural realm and – while still maintaining unity as a semiotic system’s integrity – bringing it down to earth and into the midst of the *Many* diverse, flesh-and-blood, human experiences. The actual experience, full of contingencies, thus provides conditions resulting in structural couplings defined as “a chain of interlocked ... *communicative interactions*” (Varela, 1979, p. 48f) embedded in the silent discourse of signs.

The Magician’s action foregrounds “not the emanation of an ‘I,’ but something that places in immanence the always other or a Non-self. ... I do not encounter myself on the outside. I find the other in me” (Deleuze, 1988, p. 98). The fact of the Magician’s *immanent* intervenience and not supervenience affirms the autopoietic versus allopoietic structure in the system’s parts-whole organization. In the context of Tarot edusemiotics, the unorthodox “purpose” of this sign is to establish rapport between individual mind and the natural world via the depth of spiritual life: *the triadic body-mind-spirit relation is a genuine sign!* The

CHAPTER 4

disengaged body-mind dualism pertains however to what Peirce called a degenerate sign.

The intensity of difference that informs experience is a function of yet another fundamental Deleuzian concept, desire. The desire that enables the Magician to practically perform miracles by means of his creative acts borders on erotic passion to create what is good: as Jim Garrison pointed out, “everyone passionately desires to possess what is good, or at least what they perceive as good and to live a life of ever-expanding meaning and value” (1997, p. 1). Indeed, the wise and intelligent Magician “*knows what is good and spontaneously does it*” (Varela, 1999, p. 4), combining therefore a sensitive perception with *phronesis* or ethical action when “striving to make stability of meaning prevail over the instability of events” (Dewey, 1925/1958, p. 50).

Watts (1958) comments that modern theologians used the Greek words *eros* and *agape* to distinguish between hungering and generous love; *agape* is ascribed solely to God because of the “fallen nature of man...[l]acking divine grace” (p. 117). Importantly, Peirce introduced his concept of evolutionary love, the principle of Agape, as part and parcel of the creative, non-mechanical, growth of signs whenever “spontaneity is set free” (Peirce, CP 6.301). Peirce’s unorthodox developmental teleology exceeds a purposive pursuit of a pre-determinate end. In other words, we need to learn from experience, from life itself, so that we create ever new purposes: developmental teleology relates to the growth of purposes *per se*. Agape partakes of the concept of care in Nel Noddings’ relational ethics; it is driven by the concern of the one-caring for the cared-for in the relation (Noddings, 1984/2003). Agape is embedded in parental, brotherly, or maternal love and care (Noddings, 2010); whilst Eros is a dynamic principle that drives evolution. Peirce’s Agape is a province of grace; it fills us with the feeling of mutual “solidarity – almost identity – with other creatures [when we] begin to understand the meaning of compassion” (Watts, 1958, p. 109), this compassion enabling a genuine Tarot reader to respond to people’s needs by bringing to awareness the meanings implicit in the images (Semetsky, 2011).

For Peirce, *agapism* is a cosmic principle or the law of love operative in the world that evolves due to “the immediate attraction for the idea itself, whose nature is divined before the mind possesses it, by the power of sympathy, that is, by virtue of the continuity of mind” (CP 6.307). This continuity is established due to the presence of The Magician in the world as its natural principle demonstrating the Peircean cosmic law of love. Sympathy, analogy, likeness pervade the semiotic world just like in Hermeticism; to bring sympathy into our culture we have to *learn* the language of signs and to exercise the three Is of intuition, imagination and insight that enrich the mind’s cognitive capacities.

While the preceding Arcanum, The Fool, conveys the imagery of an uncontained Eros literally bordering on the edge of Chaos, the image of The Magician brings order into the semiotic process because Chaos itself is resourceful and is “seen as Creative” (Hoffmeyer & Emmeche, 1991, p. 162). The Magician’s predicament, or sign-function, is to ensure an operational closure as a series of structural couplings that would have corrected and ordered the course of events,

thus creating order out of chaos. The creation itself is a continuous dialogue, a transaction as the essence of triadic signs pervading the universe and symbolically represented by means of the two indices in The Magician icon.

The Magician's right hand holding the wand points upwards, to the skies, and his left hand is pointing to the earth, thereby enacting the Hermetic maxim, *as above so below*. For it is the second verse of Hermes' Emerald Tablet (*Tabula Smaragdina*) that proclaims the ancient formula of analogy or the law of correspondences: *That which is above is like to that which is below and that which is below is like to that which is above, to accomplish the miracles of one thing*. The Magician's is a resonance-like action. The transversal communication enabled by this sign crosses over the dualistic gap between mind and matter, science and magic, process and structure, the world without and the world within, subject and object, human experience and the natural world, therefore establishing a semiotic relation of analogy or likeness equivalent to the Hermetic formula between what Whitehead called the world within experience and the world beyond experience.

The Magician wears red as the color of passion (eros) over white as the color of sincere and serious intentions; his practical skill, *techne*, is to unite the opposites, thereby functioning as the activated Jungian archetype of *coniunctio*; the apparently mystical conjunction of opposites, which becomes possible in the natural world, yet a world exceeding observable physical reality. The Magician/Trickster, in a somewhat Neoplatonic fashion, reconstructs Eros by taking it away from the domain of the philosopher kings and bringing Love into the actual world that "provides the laboratory for the experimentation of 'the good' in things and in thought" (Kevelson, 1999, p. 188).

As the idea implicit in the proto-mental nature, The Magician is "both extensive and enduring" (Dewey, 1925/1958, p. 279), thus defying the Cartesian postulate of non-extended Cogito. Thinking, when being *embodied* in action, extends itself both spatially and temporarily; as Dewey assured, it "runs ahead and foresees outcomes, and thereby avoids having to await the instructions of actual failure and disaster" (Dewey, 1922/1988, p. 133). This foreknowledge of the outcomes, posited by Dewey, may seem to partake of a somewhat magical ability.

Because of the semiotic code-duality (cf. Hoffmeyer & Emmeche, 1991), The Magician can increase the number of degrees of freedom implicit in the space of potentialities. The Magician's autopoietic function is complementary to the spontaneously emerging, and relatively stable, structure as the object of knowledge within the totality of the process in the overall triadic sign-system. The relative stability is a sign of semiosis: a new regime of signs represented in each subsequent picture in a deck is part of the overall dynamics reflected in the evolutionary process.

The Magician's action completes "the intercourse of the live creature with his surroundings" (Dewey, 1934/1980, p. 22). Because of such transversal communicative action, information represented by the potential collection of archetypal meanings, which are as yet dormant in the "*surplus signification*" (Varela, 1999, p. 56) of the field of the collective unconscious, becomes activated. Those meanings are realized in a process of carrying over the past into the present

CHAPTER 4

together with the imaginative anticipation of the future; all three syntheses of time (cf. Williams, 2011) implicit in the collective unconscious (see Chapter 6). Meanings thus find their way into the here-and-now of the living present. The Magician's mode of communication partakes of the Jungian transcendent function that includes active imagination, thus bringing unconscious material to the level of conscious awareness. The act of imagination *per se* establishes a "*resonance* between sensation and sense, cognition and affect" (Lewis & Kahn, 2010, p. 2; italics in original).

The semiotic language this sign "speaks" is "always a form of action" (Dewey, 1925/1958, p. 184) exemplified in what Deleuze called a performative or modulating – that is, always in the making – aspect of language existing as poetic undertaking. For the Magician such an organic form of action is both forward-looking and cooperative, oriented toward the *good*, so that "response to another's act involves contemporaneous response to a thing as entering into the other's behavior, and this upon both sides. ... It constitutes the intelligibility of acts and things. Possession of the capacity to engage in such activity is intelligence" (Dewey, 1925/1958, pp. 179-180). Intelligence encompasses both cognitive and moral dimensions, both critical and clinical. Indeed, as Watts noticed, if "we are to abandon Newtonian mechanics in the physical sphere we must do so in the psychological and moral" (Watts, 1958, p. 118) areas as well.

What becomes a prerequisite for intelligent and ethical activity is a structural coupling which is always "mutual: both organism and environment undergo transformations" (Maturana & Varela, 1992, p. 102) as a necessary condition of signs' information exchange and the creation of meanings. In such "a continuum ... there is no attempt to tell exactly where one begins and the other ends" (Dewey, 1934/1980, p. 227): a genuine sign is a Janus-faced relational entity, indeed. Language itself goes through the process of its own becoming-other and undergoes a series of transformations, giving birth to a new, as if foreign, language that functions on the margins as "*the outside* of language, not outside of it" (Deleuze, 1994b, p. 23): the boundary between the inside and the outside is transgressed thereby forming a fold.

The language of Tarot signs is a true *outsider*, a nomad, a foreigner and a stranger bordering on what Lewis and Kahn (2010) designate as monstrous. For too long it has remained "oppressed, bastard, lower, anarchical...irremediably minor" (Deleuze & Guattari, 1994, pp. 109-110). Still, it is "masterpieces [that] are written in a kind of foreign language" (Deleuze & Parnet, 1987, p. 98). Functioning in its capacity as an edusemiotic tool, the language of Tarot images should be understood in its "widest sense, a sense wider than oral or written speech. ... A tool or machine ... is not simply a ... physical object ... but is also a mode of language. For it *says* something, to those who understand it, about operations in use and their consequences. ... It is composed in a foreign language (Dewey, 1938/1998, Vol. 2, p. 80).

In the most effective mode represented by the language of Tarot signs, the distinction between content and expression becomes blurred, leading to the emergence of a new property: a meaningful, expressive, passionate language as if

the Magician's enunciation. The silent discourse of images becomes seen and heard, literally! It informs our ethical actions as encompassing meanings that come from the soul, from the depth of the psyche and not solely from the Cartesian Cogito capable of merely verbal propositions.

At the ontological level this indicates the Univocity of Being – exemplified in the numeral I corresponding to The Magician – that is, the highest possible affirmation of the semiotic structure. As though referring to a magical craft, Deleuze and Guattari use somewhat alchemical terms to describe the evolution inscribed in the process of transversal communication as the

transformation of substances and a dissolution of forms, a passage to the limits or flight from contours in favor of fluid forces, flows, air, light and matter, such that a body or a word does not end at a precise point. We witness the incorporeal power of that intense matter, the material power of that language. A matter more immediate, more fluid, and more ardent than bodies of words. In continuous variations the relevant distinction is no longer between a form of expression and a form of content but between two inseparable planes in reciprocal presupposition ... Gestures and things, voices and sounds, are caught up in the same "opera," swept away by the same shifting effects of stammering, vibrato, tremolo, and overspilling. (Deleuze & Guattari, 1987, p. 109)

As a marker of in-between-ness Deleuze used his brilliant metaphor of stuttering that exemplifies what Varela called an "apparent paradox of nonlocalization" (Varela, 1999, p. 60). We earlier referred to the fact that one of the philosophical consequences of contemporary physics is the presence of *non-local* (cf. Cushing & McMullin, 1989) or transversal connections in the world – that is, indirect or mediated – not unlike Jung's synchronicity principle.

Educational philosophy should change its focus: it is "not a question of intellectual understanding ... but of intensity, resonance, musical harmony" (Deleuze, 1995, p. 86); such harmony always already present in the semiotically real world founded on analogies, sympathies and relations. The rationale of such philosophy is pragmatic, and the thinking it produces is experimental and experiential, creating what Deleuze called a paradox of the unconscious non-thought or "unthought."

It is the presence of non-thought (or Firstness as a gut-feeling of our abductive guesses) within logical thinking, which manifests in the form of insight, intuition and imagination – the three Is of Tarot edusemiotics – that equips the Magician with his "magical" craft of being able to think the unthinkable and address the possibility of the impossible. The Magician can "see" borders that he is just about to traverse, therefore he is able "to show the imperceptible" (Deleuze, 1995, p. 45); in other words to make the invisible visible as the ultimate task of Hermetic philosophy (Semetsky, 2011) and which can be achieved in our *practice* with the help of Tarot edusemiotics via the knowledge of mathesis and the language of images.

CHAPTER 4

It is when expressed by stuttering – by interrupting the chain of logical propositions with the inclusion of the third category of the interpretant – that the newly created meaning becomes manifest: the intensity of stuttering, “a milieu functioning as the conductor of discourse brings together the quaver, the whisper, the stutter, the tremolo, or the vibrato and imparts upon words the resonance of the affect under consideration” (Deleuze, 1994b, p. 24). The resonance functions as a mode of indirect mediation or transversal communication embedded in the triad of affects, percepts and concepts comprising a genuine sign: “you need all three to *get things moving*” (Deleuze, 1995, p. 165; Deleuze’s italics); such movement inscribed in the process of semiosis.

Deleuze’s a-signifying semiotics partakes of Peirce’s triadic logic. As noticed by Genosko (1998), Deleuze and Guattari’s semiotics present a conceptual mix of Peirce’s logic of relations and Hjelmslev’s linguistics; and binary signification gives way to the inclusion of the third category, an interpretant. The metaphoric stuttering is Deleuze’s barely perceptible difference manifesting in a series of creative poetic modulations, because the subtle variations of the repeated different/citations form a refrain and tend to destabilize language, thus creating “a condition of tensional distribution of energies” (Dewey, 1925/1958, p. 253). Consequently, by having produced a state “of uneasy or unstable equilibrium” (Dewey, 1925/1958, p. 253) – a rupture that allowed the difference to intervene and be repeated – “the transfer from the form of expression to the form of content has been completed” (Deleuze, 1994b, p. 26); this transfer as the function of Peirce’s interpretant creates the objects of knowledge within as if “magical” action.

Pertaining to language in its diagrammatic Thirdness, “content is not a signified nor expression a signifier, rather both are variables in assemblage” (Deleuze & Guattari, 1987, p. 91) structured as Peirce’s triadic, mediated, Janus-faced signs that by necessity express themselves via what Deleuze and Guattari called double articulation. Such double articulation is symbolized by the sign of The Magician with his double-pointed wand. The assemblage of signs is a distributed a-signifying process mediated by the inclusion of interpretants that would have ideally connected signifiers with their signified; signs with their objects.

The language of signs is subtle, “like silence, or like stammering ... something letting language slip through and making itself heard” (Deleuze, 1995, p. 41); still, we can perceive the silent discourse of signs by means of our knowledge of the language of images embodied in Tarot icons! The Magician’s mode of communication is indirect and operates in order “to bring this assemblage of the unconscious to the light of day, to select the whispering voices, to gather the tribes and secret idioms from which I extract something I call my Self (*Moi*)” (Deleuze & Guattari, 1987, p. 84).

Such Self, when extracted from experiential happenings and occurrences as “a serial course of affairs” (Dewey, 1925/1958, p. 232), becomes itself a sign-event – that is, not a substantive but a relational entity – going by the name *Moi*. Indeed, “among and within these occurrences, not outside of them nor underlying them, are those events which are denominated selves” (Dewey, 1925/1958, p. 232). The emergent and multiple selves defy the habitual “feeling of ‘I’ as a true center”

(Varela, 1999, p. 61) because at each and every moment those as yet “selfless” (Varela, 1999, p. 61) selves – ourselves embedded in the silent discourse of semiosis – enact (Varela’s expression) and re-enact the totality of experience. And because “experiential structures ‘motivate’ conceptual understanding and rational thought” (Varela, 1999, p. 16) just like Jungian unconscious archetypes, we as conscious subjects *emerge* in the midst of situational transactions.

The expressionism of an artist in the Magician’s trade complements the constructionism of a craftsman: to reiterate, the action of signs is grounded in the triadic “logic of artistic construction” (Dewey, 1998a, p. 199) pertaining to complex semiotic systems. The word construction has the Latin preposition *cum* that reinforces “the notion of structure, which rests on the Latin for heap, *strues*, and the Greek for bedding or mattress, *stroma*. The semantic field surrounding construction is thus organized around the centrality of support and foundation as well as piecing together of discrete units comprising a heap” (Borradori, 2011, p. 924). The process-ontology of semiosis, however, is grounded in signs forming a relational network.

To reiterate, the word complexity combines the classic Latin preposition *cum* with *plexus*, which is the modern Latin term for network. Signs are multi-*pli*-cities; *pli* being the root for *plicare*, to fold! That is what the Magician does: he unfolds or ex-*pli*-cates the enfolded, or im-*pli*-cated meanings, such “magical” transformation taking place at the limit, and the limit in the extreme case is the line of horizon, or vanishing line, which – despite being a purely symbolic concept derived from projective geometry and Poincaré’s mathematics – becomes *visible* and *accessible* to the Magician’s expanded perception (cf. Merrell, 1998, pp. 115-117). It is due to the Tarot edusemiotics embedded in the action of signs that we understand that our human experience itself functions as a Peircean interpretant of this very process of semiosis, albeit in the necessarily symbolic form; to paraphrase, we all are Magicians!

Because the Magician’s wand “reaches down into nature ... it has breadth ... to an indefinitely elastic extent. It stretches” (Dewey, 1925/1958, p. 1). This stretch, as Thirdness, expands the event-horizon and contributes to overcoming the limitations of the empirical reality available to the senses by fine-tuning perception *per se*: such “stretch constitutes inference” (Dewey, 1925/1958, p. 1). A novel concept created by means of a stretch – effectuated as if by the “magic” wand of the Magician – has no reference outside itself. It is self-referential, just as Peircean genuine triadic signs that appear paradoxical, if not totally magical, in the framework of dyadic, strictly two-valued, logic.

It is at the very moment of creation that a new concept posits itself and its object as though simultaneously, by means of the “stretch” of the Magician’s wand. This is the essence of mathesis that symbols are embedded in nature, in life, in experiences. The concept stops being a logical proposition: “it does not belong to a discursive system and it does not have a reference. The concept *shows* itself” (Deleuze & Guattari, 1994, p. 140; italics mine) literally, in the form of images in front of our eyes, which are embodied in Tarot Arcana that symbolically represent

real events and experiences, the hidden meanings of which become explicated and visible.

We remember that for Peirce, natural laws are evolving. Self-reference is inscribed not in a dyadic but triadic relation: function and structure are related through stuttering as a symbol of fluctuation leading to a different level in the self-organized complex system of signs comprising our life. Situated amidst conflicting experiences, The Magician is a symbol for a “tendency to form a new [habit]” (Dewey, 1925/1958, p. 281); it is his wand that “cuts across some old habit” (p. 281). It was Werner Heisenberg who conceptualized “cut” as a sort of incommensurability between the classical and subatomic levels of description in physics. He acknowledged *Zwiespalt* as the strange contradiction between empirical questions at the level of classical physics, and theoretical constructs such as wave functions in the multidimensional mathematical spaces of the quantum world.

The indeterminacy is where the cut is – despite the fact that, on both sides of the cut, relations remain deterministic and described either by the laws of classical physics or the differential calculus (of probabilities) pertaining to quantum mechanics; it is between the levels, however, where the relation breaks down or becomes cut off. It is The Magician that, as a sign, provides a connection between the levels and represents the element of creativity, novelty and freedom that does not belong in the strictly deterministic world. Functioning as the in-between included middle, the Magician’s action only appears to be mystical but in fact represents the “informationally meaningful, self-organizing coordination dynamics, a web~weaver” (Kelso & Engstrøm, 2006, p. 253), the web in question woven by means of the Magician’s wand that also establishes the above~below relation!

Kelso and Engstrøm posit a new science of coordination dynamics embedded in “the complementary nature” (the title of their 2006 book); they use the symbol “~,” the squiggle (tilde), to indicate the fundamental relation as an unorthodox syntax foregrounding the complex world of which its observable physical manifestation described by Newtonian laws is but a part. They contend that complex Nature (with a capital N) is complementary, that is, what we perceive as dual opposites are in fact bipolar and relate to each other via the relation “~.” *From now on in this book I am going to use this squiggle “~” as an index of transversal connection, a relational symbol for the logic of the included middle.*

For example, when Peirce posited his evolutionary love as Agape, he said that such “God’s love” embraces hatred; hatred however in terms of formal rationalization would be a binary opposite of love. In the framework of the science of coordination dynamics, however, agape~hatred represents a complementary pair embedded in the relational dynamics the symbol for which is “~.” The science of coordination dynamics “provides a vocabulary as well as a rich scientific basis for our *philosophy of complementary pairs*” (Kelso & Engstrøm, 2006, p. 10; italics in original). And so does semiotics, the science of signs!

Signs are bipolar complementary pairs in which the apparent opposites are connected by virtue of the inclusion of the third element, an interpretant or – in the language of coordination dynamics – a squiggle “~,” that is, the very symbol for

transversal communication exercised by The Magician sign from the perspective of Tarot edusemiotics! Such an in-between transition is a “dynamic instability [that] provides a universal decision-making mechanism for switching between and selection of polarized states” (Kelso & Engstrøm, 2006, p. 10), the latter functioning as “‘attractors’ of an underlying dynamical system” (Ibid.) of patterns (cf. Kelso, 1995), of signs.

It is The Magician that crosses “the brain~mind and brain~behavior barriers” (Kelso & Engstrøm, 2006, p. 9). Indeed we can read and interpret all Tarot signs as embodying the archetypal patterns of thoughts, or actions, or feelings alike. Coordination dynamics exhibits *tendencies* as “preferences and dispositions” (Kelso & Engstrøm, 2006, p. 9) comprising the virtual reality between actual stable states; such virtual reality exhibiting a peculiar unity of opposites not unlike the Jungian *Unus Mundus*. It is the important tendency to *couple* or bind together that is exercised by The Magician.

Importantly, “coordination dynamics is offering a strong hint for how awareness of ‘self’ could emerge from self-organization (a term that by definition paradoxically means the organization of patterns without an organizer, *without a self*” (Kelso & Engstrøm, 2006, p. 11; italics in original). The Self as the archetype of wholeness is the emergent property of semiosis, of signs-becoming-other in the evolutionary and learning process culminating in the last Major Arcanum called The World as a sign of the fully individuated Self in harmony with nature.

We can represent science and magic (to which we referred at the outset) as a complementary pair whence a symbol “~” describes their reconciliation: science~magic. The presence of The Magician in Nature is obvious! The circular, non-mechanistic, indirect causality pertaining to self-organized systems is symbolized by the two directions of the upward wand and the downward hand in The Magician icon; it operates reciprocally: *both* bottom-up *and* top-down (cf. Kelso & Engstrøm, 2006, p. 115). The Magician represents a quality that acts as the catalytic agent addressed by Whitehead in his *Process and Reality* and *Modes of Thought*, and which is embedded in the system’s dynamics and capable of eliciting transmutations, that is, the emergence of novelty.

Becoming and creativity are concepts central to Whitehead’s process philosophy; and it is the Magician’s autopoietic and creative action that represents an occasion of experience embedded in the semiotic process of becoming. Cuttings and cross-cuttings establish multiple becomings as “a new threshold, a new direction of the zigzagging line, a new course for the border” (Deleuze, 1995, p. 45) or a new course for action that The Magician silently “shows us” when this picture appears in the spread in its two guises of The Magician or The Trickster.

The Trickster’s work may be a chance, but his alter-ego, The Magician, is already a necessity, and both exist in assemblage as a complementary pair of that which has been traditionally, and within boundaries of formal logic, considered binary opposites. That is, a minute stuttering, a fluctuation or instability – as a difference – leads to order but not because of the action of the law of large numbers as statistical averages. It is the active inner dynamics enabled as though

by the “divine intervention” of the Magician in the world; this picture sometimes appears in the reading as our guardian angel.

The Magician is indeed a juggler; he juggles time and space creating new informational patterns in the fabric of matter together with the “emergence of unexpected and unpredictable combinations” (Dewey, 1925/1958, p. 281). The idea-like Magician is a virtual tendency, just musing and subsisting *in potentia* in the Jungian collective unconscious. Still, as an archetype of the creative artist, poet and prophet, it is capable of generating ever new ideas and new purposes in accord with Peirce’s semiotics and the new science of coordination dynamics alike; every new actualized idea being a manifestation of a newly created possible. The Magician possesses this peculiar “feeling of the direction and end of various lines of behavior [as] the feeling of habits working below direct consciousness” (Dewey, 1922/1988, p. 26) because this sign represents one such organic habit (or tendency) immanent in, or inhabiting, the collective unconscious.

Tarot signs play the role of a Peircean diagram as the included Third. A genuine sign is a “diagrammatic or abstract machine [that] retains the most deterritorialized content and the most deterritorialized expression, in order to conjugate them” (Deleuze & Guattari, 1987, pp. 141). Such is the function of Tarot edusemiotics in general and of The Magician Arcanum in particular. A Tarot layout is a diagram “of relations between forces, a map of destiny, or intensity, which proceeds by...non-localizable relations” (Deleuze, 1988, p. 36) exercised by the Magician’s transversal communication.

Being is *univocal*, but “because the diagrammatic multiplicity can be realized only and the differential of forces integrated only by taking diverging paths” (Deleuze, 1988, p. 38) it necessarily becomes *plurivocal* when, due to immanent difference, it happens to be digitized, articulated and enacted in its actual manifestations via the multiplicity of images. This is the analogue-digital code-duality effectuated by our very actions and the re-organization of experience.

Deleuze stressed the a-personal and collective nature of univocity by introducing his concept of the fourth person singular as the specific language expressing the singularity of the event. For Dewey, too, “language [is] considered as an experienced event” (Dewey, 1925/1958, p. 173). The Magician, as a sign-event, “speaks” in the fourth person singular, the paradoxical subject of which is the plural and rather impersonal “they” of the collective unconscious; collective by definition therefore subject-less, self-less.

The multiplicity of “they” functions “in the form of undetermined infinitive ... It is poetry itself. As it expresses in language all events in one, the infinitive expresses the event of language – language being a unique event which merges now with that which renders it possible” (Deleuze, 1990, p. 185). This is the mode of language irreducible to its alphabetic linear mode (cf. Shlain, 1998). The heightened perception of a poet allows The Magician to prophetically envisage the difference between “what may be and is not” (Dewey, 1998b, p. 225). For The Magician, “the action and its consequence [are] joined in perception” (Dewey, 1934/1980, p. 44). Because “to perceive is to acknowledge unattained possibilities ... to refer the present to consequences” (Dewey, 1925/1958, p. 182), The

Magician is able to creatively – that is, “in an unprecedented response to conditions” (Dewey, 1998b, p. 225) – re-organize the “change in a given direction” (p. 225).

It is creativity that characterizes the process of actualization of the virtual tendencies. The Deleuzian *outside* as an ontological category is an overcoded virtual space that “possesses a full reality by itself ... it is on the basis of its reality that existence is produced” (Deleuze, 1994a, p. 211). However

in order for the virtual to become actual it must *create* its own terms of actualization. The difference between the virtual and the actual is what requires that the process of actualization be a creation The actualization of the virtual ... presents a dynamic multiplicity ... of organization ... Without the blueprint of order, the creative process of organization is always an art. (Hardt, 1993, p. 18)

Importantly, “potentialities must be thought of in terms of consequences of interactions with other things. Hence potentialities cannot be *known* till *after* the interactions have occurred” (Dewey, 1998b, p. 222). But – and this is crucial – for the Magician-chemist, matter is never dead or inert: it is an active and intensive multiplicity capable of self-organization precisely because the sign of The Magician is immanent in nature in the capacity of the “virtual governor” (Juarrero, 1999, p. 125), the function of which is distributed in the transactional field of action. As non-local or distributed, such action is in agreement with Whitehead’s criticism of what he called the fallacy of simple location. The action of this sign is both inscribed in the dynamics of self-organization and can be described, topologically, as a strange attractor functioning as “a rudimentary precursor of final cause” (Juarrero, 1999, p. 127), fractal by its very definition and therefore necessarily vague in its quality as a relational pattern and not a fixed point.

The Magician, albeit unable to know potentialities until his “magical” act is performed – as if willed by his wand – nonetheless always already *knows how* to perform the action, thereby becoming a second-order constraint, or a self-cause, within the newly organized context. The Magician thus *quasi-causes* a qualitative transformation of a problematic, perplexing and baffling situation. As Leonard Cohen sings,

Now, I heard there was a secret chord that David played and it pleased the Lord, but you don't really care for music, do you? Well it goes like this, the fourth the fifth, the minor fall and the major lift, the baffled king composing hallelujah.

The inter-leveled causal relations flow in the mode of “heterarchy” (Juarrero, 1999, p. 130) contra hierarchy, that is, as a “two-way movement between levels: ‘upward’ with the emergence of properties from the constituting elements, and ‘downward’ with the constraints imposed by global coherence on local interactions” (Varela, 1999, p. 61). This two-way movement as a feature of coordination representing the relational dynamics of semiosis is conveyed by the Magician’s double-pointed wand in the picture.

CHAPTER 4

The four semiotic tools on the table in front of the Magician – symbolized by wand, pentacle, cup, and sword – are the signs not of instrumental rationality, but of *phronesis*, practical wisdom. They correspond to the four suits in a Tarot deck and also relate to the four Jungian functions comprising the Magician’s intelligence as feeling, sensing, intuition, and thinking. Or, alternatively, these are the four elements available to the Magician in his alchemical laboratory: fire, earth, water and air, all the elements of nature that he brings together to serve the aim of connecting with Spirit in the world of Matter or, conversely, freeing the human spirit from the constraints and limitations of the material (strictly mechanistic) world. The Magician effectuates the conjunction of opposites by creating a semiotic bridge between the worlds of mind and matter that in fact *a priori* “exist” as a complementary mind~matter pair.

The four elements relate to the “stagings of significance” (Klyukanov, 2010) that fill up the semiotic square, a concept developed by semiotician Algirdas J. Greimas (1983), in the continuously rotating four-fold process in 90-degree transformations that together form a complete 360-degree circle, a unified whole. Igor Klyukanov (2010) describes the evolution in communication as *Up in the Air: Communication as Invocation, Down the Stream: Communication as Conversation, Of This Earth: Communication as Construction, and Through the Fire: Communication as Resignation*. These elemental metaphors pinpoint the subtleties that manifest as communication between the generic Self and the generic Other unfolds. It is by going through the Fire – related to the suit of wands in the Tarot deck – when communication becomes the means of reconciliation between the opposites as the function of the Magician’s wand.

Still, there is one more “staging” dubbed by Klyukanov as *Airy Nothing: Communication as Transformation*. Having exhausted the elements in (physical) nature, communication envelops the “entire universe” (Klyukanov, 2010, p. 149) filled with significant meanings and “the breath of pleroma” (p. 154). It is the fifth, quintessential, element that holds the four physical elements together and makes matter alive and breathing. This is what Aristotle called *De Anima; Anima Mundi*, the Soul of the World. The *animated* connections created by the Magician’s wand are enacted in “a continual rhythm of loss of integration with environment and recovery of union” (Dewey, 1934/1980, p. 15). Sure enough, The Magician’s creative “will is ... not something opposed to consequences or severed from them. It is a *cause* of consequences” (Dewey, 1922/1988, p. 33).

The newly created process~structure (with a squiggle!) or a relatively stable pattern is in fact a decision made, or a direction taken by means of the autocatalytic web built by the Magician’s double-pointed wand, that is, a change described by a novel probability distribution of parts (Many) acting within an overall dynamics of the whole (One) within the complex self-organized, semiotic, system. Importantly, it is actuality that represents “the decision amid ‘potentiality’ ... The real internal constitution of an actual entity constitutes a decision conditioning the creativity which transcends the actuality” (Whitehead, 1978, p. 93).

The Magician’s “magic” wand pointing up is a symbol for such transcendence. To reiterate, systems-theoretical thinking considers a part as always “already a

part-of-a-whole...conditioned by the contingent, although itself a condition of the full determination of the latter” (Dewey, 1925/1958, p. 65). The complex whole is always greater than the sum of its parts; otherwise it would not be complex. The whole is as yet invisible; but it is “what is unseen [that] decides what happens in the seen” (Dewey, 1998b, p. 229) at the level of empirical reality that we can perceive with our regular senses.

The Magician “bring[s] to awareness meanings hitherto unperceived, thereby constituting their ideas [T]o get a new meaning is perforce to be in a new attitude” (Dewey, 1925/1958, p. 316), to acquire a new value! New boundary conditions serve as an expanded container (intensified multiplicity) for the Magician’s erotic, “free, moving and operative ... living spirit” (p. 294). Such is the vital – and not mechanical – organization that acknowledges “the empirical impact ... of the mixture of universality and singularity” (p. 48) in the relation of the whole to its parts. The Magician’s method, *phronesis*, cannot but create the conditions of freedom specified as “efficiency in action ... capacity to change the course of action, to experience novelties” (Dewey, 1922/1988, p. 209).

The autonomy of the individuated Self is never given *a priori*: it requires work to be done and is contingent on the shared meanings that we arrive at in the semiotic process of interpreting Tarot signs. The precursor to “autonomy is that a living system finds its way into the next moment by acting appropriately out of its own resources” (Varela, 1999, p. 11); *such a richness and potential availability of resources to be found within ourselves in the otherwise uncertain world is signified by The Magician*. Agape demonstrates the fullness of being rather than its lack.

Importantly, Noddings (2010) stresses that within the ethics of care in education autonomy is “anchored in a relational ontology, and the self it describes is a relational self ... a growing collection of encounters, actual responses, memories, reflections, evaluations, and acquired responses ... generated, or ... characterized by, some affect” (p.115) as a necessary constituent of the Deleuzian triad of affects, percepts, and concepts. It is the activated archetype of The Magician that transforms us into the selves which are “able to think, reflect, wonder, plan, reassess, feel, and see things with ... clarity” (Noddings, 2010, p. 117) as well as to exercise critical thinking coupled with ethical caring just like the Magician’s creative, “critical and clinical” (Deleuze, 1997; cf. Semetsky, 2010a) action in the world.

One of the commonly perceived as opposites is *I* and *Thou* as terms in the famous relation posited by philosopher Martin Buber who, non-incidentally, was the inspiration for Noddings’ ethical theory. Buber referred to the “wordless depths [when we] experience an undivided unity” (1971, p. 24, p. 24; brackets mine) between two people at the soul level. This unity perceived in experience is transmitted by the *wordless* symbolism of The Magician icon. It is the knowledge of the language of signs that assists us in translating the implicit meanings of Tarot Arcana into words. It is such a unified world comprising the whole environment, both natural and social, that “‘educates’ the human being: it draws out his powers and makes him grasp and penetrate its objections” (Buber, 1971, p. 89).

CHAPTER 4

Buber put the word *educates* in quotation marks to distinguish the mode of the relational, shared, caring educational experience from the old one-sided model based on authority that neglects “experiencing the other side” (Buber, 1971, p. 96). The integrative dynamics is expressed (and I am about to use a squiggle “~” to indicate a complementary pair as a relation) by means of bipolar pairs of self~other, *I~Thou*, consciousness~unconscious. This logic of the included middle symbolized by “~” (tilde) constitutes an element of *inclusion* comprising education, in which the educator “is set in the midst of the service” (Buber, 1971, p. 103). Tarot edusemiotics embodies egalitarian, democratic, inclusive education and should itself be “included” as its legitimate, and not bastard, offspring.

Buber notices that a dialogical relation may continue even when Self and Other are separated in space and time due to “continual potential presence of the one to the other, as an unexpressed intercourse” (1971, p. 97) and comments on the important role of imagining the real, as though by grace, and on the limitations of us, human beings, the creatures, as compared to the creator, God. Still, “each man...can expose himself to the creative Spirit” (Buber, 1971, p. 103). Such intangible spiritual presence becomes tangible when embodied in the edusemiotic process of interpreting Tarot images.

The relation thus extended will also have ultimately included another complementary pair: creature~creator or human~divine. Sure enough, Dewey referred to soul and spirit as genuine realities and noted that

when the organization called soul is free, moving and operative, initial as well as terminal, it is spirit ... Spirit quickens; it is not only alive but it gives life ... Soul is form, spirit informs. It is the moving function of that of which soul is the substance. Perhaps the words soul and spirit are so heavily laden with ... mythology ... that they must be surrendered; it may be impossible to recover for them in science and philosophy the realities designated in idiomatic speech. But the realities are there, by whatever names they be called. (Dewey, 1925/1958, p. 294)

Dewey affirmed the significance as well as “inadequacy of our present psychological knowledge” (Dewey, 1925/1958, p. 238). Too often we forget that our enfolded experience precludes human attitudes and dispositions from being considered as “separate existences. They are always *of, from, toward*, situations and things” (Dewey, 1925/1958, p. 238). They are relational in character, and to secure the continuity of those relations is a prerequisite for post-human education that would have encompassed the spiritual realm. To not only remember but become able to put into practice the fact that *Spirit informs*, remains an educational challenge that can and should be met by Tarot edusemiotics.

To remind the reader, the word therapy derives from the Greek *therapeia* as a form of human service to those in need. The word education is derivative from Latin *educare*, which means to lead out as well as to bring out something that is within. It is Tarot edusemiotics in general and the healing presence of The Magician in particular that can indeed lead us out of the confines of the narrow consciousness constrained by our own outlived habits and can bring out inner

Gnostic, spiritual, knowledge that was always already hiding in the depth of the psyche.

When The Magician picture appears in a Tarot layout during a specific reading, it brings reassurance and a feeling of security, the awareness of order which is just about to emerge from chaos: the help is here, within oneself; the “magical” work has been done, experience gained, and important lessons learned in the school of life. Indeed, and as we noted earlier, citing Dewey, order cannot but be admirable in a world constantly threatened with disorder, and it is The Magician that orders the primordial chaos and makes a decision amidst the sometimes frightening availability of unlimited choices symbolized by the preceding Arcanum, The Fool (Chapter 1). In a reading, The Magician often indicates the presence of the wise teacher, a guidance counselor, or a healer, always a practitioner of the ethics of care (Noddings, 1984/2003) who gains knowledge in practice as the art of continuing learning from experience, from life.

The Magician in us strikes this resonating chord that, when played, brings forth “the tenor of existence, the intensification of life” (Deleuze & Guattari, 1994, p. 74) and the previously unknown creative potential expressed by “the manner in which the existing being is filled with immanence” (Deleuze, 1997, p. 137). Thus the mode of being as *filled* with immanence means becoming necessarily *fulfilled* due to one’s acquired capacity to act freely and *independently* precisely by having learned to experience the connectedness and the reality of mutual *interdependence* as the ethical lesson embodied in the image of The Magician.

Semiosis is always already a process of becoming-other. Within signs-becoming-other-signs there is one that functions as “the key to all other becomings” (Deleuze & Guattari, 1987, p. 277): *becoming-woman*. This concept will be addressed in the next chapter.

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CHAPTER 4

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CHAPTER 5

BECOMING-WOMAN

The process of becoming in which each sign “changes in nature as it expands its connections” (Deleuze & Guattari, 1987, p. 8) is grounded – or, rather, ungrounded because its unorthodox “ground” is difference as addressed in the preceding chapter – in a series of transformations. This sign-dynamics proceeds as a movement away from the isolated individualistic, rational and patriarchal, Ego in its detachment from the body as a separate Cartesian substance and toward what Deleuze calls becoming-woman in terms of acquiring feminine, holistic, consciousness.

Using Deleuzian tropes, semiosis would have encompassed multiple becomings such as becoming-animal, becoming-minor, becoming-world, becoming-child; ultimately embedding all becomings, all affects and signs into the unity with nature in the form of relational multiplicities immanent in life at the very interface of history and myth (cf. Delpech-Ramey, 2010; Semetsky, 2010b) not unlike the Jungian archetypal patterns of the collective unconscious projected in the array of Tarot images.

Becoming-animal is the very first assemblage embedded in the transformational pragmatics associated with post-humanist education and “exopedagogy [defined] as a teaching and learning about the monstrous,” as Lewis and Kahn (2010, p. 38) put it. The monster is a symbol for the demonic alien, the generic Other, an *a priori* excluded foreigner or a stranger; a figure of “radical difference” (Lewis & Kahn, 2010, p. 74). Lewis and Kahn (2010) present the archetypal beast, drawing from Marx’s reading of the ancient Greek myth of Medusa, and notice that

monstrous animality is gendered female, indicating a sense of connection between patriarchy, anthropocentrism, and superstition. Medusa was once a beautiful young virgin who participated in the cult of Athena. Poseidon, who could not resist her beauty, brutally raped Medusa, which led to her ultimate banishment as a monster. If, as Julia Kristeva ... argues, women are the original strangers, then Medusa is the ultimate foreigner. (Lewis & Kahn, 2010, p. 26)

This logic is one of exclusion and “ultimately the defeat of the Goddess [representing a] radical shift from the [archaic] feminine to the masculine, from the values of the caring mother to the ways of the domineering patriarch” (Shlain, 1998, p. 37; brackets mine). Becoming-woman therefore represents a symbolic return of the Goddess who embodies the values of caring, creativity, relatedness as the archetypal “contribution of female experience to moral development” (Noddings, 2010, p. 204). While these qualities are historically feminine, the concept of becoming-woman is *symbolic* and, as any becoming functioning in

CHAPTER 5

accordance with the logic of the included middle, transgresses actual gender differences. The creative writers, for example, “even the most virile, the most phallogratic, such as Lawrence and Miller...in writing...become-women” (Deleuze & Guattari, 1987, p. 276) by virtue of giving symbolic birth to their creations.

In the framework of Tarot edusemiotics such an inherently feminine function is exemplified in the image called The High Priestess, Arcanum II (Figure 5.1) that immediately follows Arcanum I, The Magician, in the deck.



Figure 5.1. The image of The High Priestess.

Deleuze (1990), referring to esoteric languages, brings into the conversation the “grand literal, syllabic, and phonetic synthesis of Court de Gébelin” (p. 140; cf. Bonta, 2010, p. 68). It was in 1781 when French pastor and author Antoine Court de Gébelin introduced his ideas of the Egyptian origins of Tarot as related to the teachings of the sage Hermes Trismegistus. De Gébelin’s nine-volume encyclopedia was called *Primitive World (Le Monde Primitif)* and devoted to the Golden Age of ancient civilization when people were united by one language and one religion. Indeed, as the Biblical account of Genesis (11:1) tells us, once upon a time the whole earth was of one language and of one speech, united by the same understanding of the nature of the universe.

In the 19th century, the French scholar Eliphas Lévi, who was influenced by de Gébelin’s beliefs, uncovered a connection between the 22 images of Tarot Major Arcana and the 22 letters of Hebrew alphabet; even if this connection appears to be insufficiently supported: Sir Michael Dummett (1980) pointed out the “lack in precision of intellectual substance” (1980, p. 115) in Lévi’s work on Tarot up to the point of his even submitting to a “climax of fantasy” (1980, p. 119). It was de Gébelin who associated the image of The High Priestess with the Egyptian Isis, the goddess of the rainbow as a symbolic bridge between heaven and earth, the divine and the human. Isis was depicted as a mythic Wisdom figure.

The High Priestess is a symbol of feminine, relational, consciousness that however went underground in the masculine egocentric world of overt Cartesian rationality. The Priestess's position in the deck is Arcanum II; and it is the second letter in Hebrew alphabet "Beth" that signifies the home or house. That is where the feminine, relational mode of education starts; Nel Noddings (2002) insists that it is the best homes, those providing shelter, protection, and which can foster growth, that can inform and improve larger domains in society: moral education thereby starts at home. The Priestess's symbolic home is a house of potential wisdom that would have been opened with two keys (and the keys are often portrayed in this picture in some decks).

The golden key is Logos and reason; the silver key is intuition and imagination; thus The High Priestess symbolizes holistic wisdom in which the feminine mode of knowing complements essentially masculine rationality. It was Freud who first presented aspects of the unconscious – "what could be called irrationality, intuition, or the sixth sense" (Shlain, 1998, p. 394) – as leading to wisdom that surpasses reason alone.

The Priestess possesses the knowledge of the long-forgotten lost speech that relates to Genesis and describes the true nature of things in the symbolic language similar to that used by Adam before the Fall. The High Priestess represents spirituality and intuition; she is reluctant, however, to let her inner knowledge be known to the world. The world, on its side, is to be ready to receive this information. The action of signs is intrinsically a coordinated, harmonious, action.

Peirce commented on the special "insight of females as well as certain 'telepathic' phenomena... Such faint sensations ought to be fully studied by the psychologist and assiduously cultivated by every man" (Peirce & Jastrow, 1884, in Hacking, 1990, p. 206). The High Priestess depicts the inner secret knowledge, Gnosis, embedded in the network of triadic relations comprising a rhizomatic process-structure of signs. To repeat, rhizome exemplifies a relational model for the dynamic structure of knowledge irreducible to a single stable foundation as a scientific *episteme*. Growth and movement are embedded in the network of traversing lines leading to the creation of novel concepts and meanings. This network is not exactly a map in the form of a copy that would have represented a given territory; rather, it engenders the very territory to which it is supposed to refer by virtue of creating or tracing it in practice.

As a symbol for unlimited growth through the multitude of its own transformations, rhizome is contrasted with a tree, the latter symbolizing linear and sequential reasoning rooted in finite knowledge. The tree metaphor accords with the infamous tree of Porphyry, which is an example of the classificatory system, or a hierarchical structure based on precise definitions that serve as the foundation for rationally justifiable theoretical knowledge. The tree of Porphyry incorporates arborescent reasoning, that is, a type of syllogistic logic based on the method of division – the excluded middle – to form a precise catalogue.

A hierarchical structure precludes the existence of interdependent, *sympathetic* relations between the separate branches of this tree. However a rhizomatic structure represents a network of imperceptible relations in the form of zigzagging

and crisscrossing lines of becoming or lines of flight comprising critical, clinical and creative dimensions that I earlier called the three Cs of the pedagogy of values (Semetsky, 2010a) in contrast to the habitual three Rs of formal schooling confined to standardized testing and measurable objectives. In the exopedagogy of Tarot edusemiotics the three Rs give way to three Is and three Cs.

Thus the current model of education pursued by Western liberal, democratic society does not itself appear liberating. It is Gnosis as intuitive knowledge of the individuating forces of life which is truly democratic. It is democratic – but not because it will subject itself to free debates and discussions. As Deleuze and Guattari (1994) ironically point out, “Rival opinions at the dinner table – is this not the eternal Athens ...? ... This is the Western democratic, popular conception of philosophy as providing pleasant or aggressive dinner conversations at Mr. Rorty’s” (pp. 144-145). In contrast, Gnosis is democratic due to the animating archetypal forces embedded in life, in experience, and effectuating self-education and self-knowledge.

Gnosis symbolizes the power “to affect and be affected” (Deleuze & Guattari, 1987, p. xvi) enabling the process of becoming or the “art of oneself that’s the exact opposite of oneself” (Deleuze, 1995, p. 115) because of the relational dynamics between Self and Other. Affects “are becomings that spill over beyond whoever lives through them (thereby becoming someone else)” (Deleuze, 1995, p. 127); the symbolic notation for the dynamics of becoming-other would be the very squiggle “~” that forms a relation as a complementary self~other pair. The priority of relations pertains to ontological, epistemic and ethical levels. Notably, “as the relation is basic to biological life, the caring relation is basic to moral life” (Noddings, 2010, p. 45). We continuously have “to cope with the emergence of new modes of life – of experiences that demand new modes of expression” (Dewey, 1934/1980, p. 303) in the course of our experiences. The creation of new values and meanings depend on “new percepts and new affects” (Deleuze, 1995, p. 164) comprising experiential becomings.

All Tarot signs, all potential becomings are enveloped or enfolded in one semiotic fabric of rhizomatic relations. Coincidentally, Jung invoked the same fundamental biological metaphor of a rhizome:

The life of a man is a dubious experiment. ... Individually, it is so fleeting ... Life has always seemed to me like a plant that lives on its rhizome. Its true life is invisible, hidden in the rhizome. The part that appears above ground lasts only a single summer. Then it withers away – an ephemeral apparition. ... Yet I have never lost a sense of something that lives and endures underneath the eternal flux. What we see is the blossom, which passes. The rhizome remains. (Jung, 1963, p. 4)

Such life is “a” life of pure immanence (Deleuze, 2001) the meaning of which is posited in terms of the transcendental field. The indefinite article *per se* serves as an index of the transcendental. Multiple encounters with the transcendental field bring forth events and signs that, from the Jungian perspective, constitute the archetypal symbolism of the field of the collective unconscious. Archetypal images

are embodied in the Tarot pictures and laid out, via projection (Semetsky, 2006, 2011), on the “plane of immanent consistence” (Deleuze & Guattari, 1987, p. 88). The functioning of Tarot edusemiotics boils down to the included “third which...disturbs the binarity of the two” (Deleuze & Parnet, 1987, p. 131) planes, that of immanence and transcendence. It is the logic of the included Third, the included middle that foregrounds the functioning of Tarot edusemiotics by establishing a complementary relation between the two planes; with the Tarot sign-system “not so much inserting itself in their opposition as in their complementarity” (Deleuze & Parnet, 1987, p. 131).

We thus become able to “*read*, find, [and] retrieve the structures” (Deleuze, 1968, in Stivale, 1998, p. 270; Deleuze’s italics) of archetypal patterns immanent in the depths of the psyche; we self-transcend when the unconscious becomes available to consciousness within the very process of the signs’ reading and interpretation. We acquire capacity to respond to deep, albeit secret and *unspoken* needs – as per the symbolism of The High Priestess – which is the core of Noddings’ ethics of care in education. This attentive response is a feature of a caring relation which is *natural* (cf. Noddings, 2010) and not supernatural as it may seem in the context of Tarot. The logic of the included middle foregrounding Tarot readings and the interpretation of signs establishes a complementary relation between immanence and transcendence. The semiotic logic applies equally to ontology, epistemology and ethics. In the format of Tarot edusemiotics we can apply it in practice at the level of informal experiential education and cultural pedagogy (Semetsky, 2011).

A Tarot layout presupposes the projection of signs onto a surface, which always involves an ontological loss of dimension or a creative subtraction expressed, as Deleuze would say, in (n-1) dimensions. To give an example, a three-dimensional cube turns into a flat two-dimensional square when projected. It is “what is unseen [that] decides what happens in the seen” (Dewey, 1998, p. 229). For the square in question, this extra third dimension, as if hidden or unseen, in order to become seen or perceived must be indirectly

induced on the basis of what it organizes. It is like in music where the principle of composition is not given in a directly perceptible, audible, relation with what it provides. It is therefore a plane of transcendence, a kind of design, in the mind of man or in the mind of a god, even when it is accorded a maximum of immanence by plunging it into the depth of Nature, or of the Unconscious. (Deleuze & Parnet, 1987, p. 91)

When mapped – from the point of view of the transcendental field; or projected – from the viewpoint of the plane of immanence – onto a pictorial spread, the virtual reality of signs undergoes transformations leading to a loss in dimensions that “convey the projection, on external space, of internal spaces defined by ‘hidden parameters’ and variables or singularities of potential” (Deleuze, 1993, p. 16) in our actual experience. Hidden variables become exposed in our very practice: what was buried in the depth of the psyche – hiding, metaphorically, in the scroll on the High Priestess’s lap in the form of enfolded “ambiguous signs” (Deleuze, 1993, p.

CHAPTER 5

15) – is literally brought to the surface and made available to consciousness, nevertheless remaining deeply profound both conceptually and with respect to its informational content.

This inter-leveled, transversal, communication proceeds by coordination, “harmony and interference” (Williams, 2008, p. 163), reflecting on the confluence between Deleuze’s thought and Hermetic philosophy (cf. Delpech-Ramey, 2010; Semetsky, 2011) whence the invisible is being transformed into visible and the unconscious becomes available to consciousness. We can perceive multiple affective states as the yet verbally unexpressed “‘highs’ or periods of depression” (Deleuze & Guattari, 1987, p. 70) that were hiding at the emotional, what Deleuze called molecular, level deep in the folds of the High Priestess’s scroll.

While not all virtualities may become actualized in the present, they are nevertheless real. Deleuze’s thought relates to medieval ontology that posited virtual as the ideal or transcendental yet not in any way abstract or just possible: it is maximally real, *ens realissimum*, thus reflecting the semiotic reality of signs with which, according to Peirce, the universe is always already perfused. Hence, Tarot signs when “seized *in actu*, liberated from substances that function as their support and vehicle...seem better candidates for a diagrammatic mapping out of becoming” (Boundas, 1994, p. 105) when they become unfolded, Arcanum after Arcanum, during readings.

Mark Patrick Hederman (2003), asserting that we indeed can *read the world* as symbols and signs, emphasizes that the challenging

task of rendering such signs legible and assessable was in the past left to artists and so-called prophets. However at this time we must learn to read such signs for ourselves ... Each one of us has to learn to decipher what is happening to us now in a way that helps us to detect those silent underground symptoms that indicate the inappropriateness of our present postures, and the alternatives, which might hasten our assumptions of a more authentic humanity. (Hederman, 2003, p. 22)

In the prequel to this book (Semetsky, 2011) I have described and analyzed in detail the hermeneutic process of reading, narrating, and interpreting Tarot images in the context of problematic situations and real-life events that happened to real people as my study’s participants. I share Hederman’s emphasis on education, on learning as a path to deciphering “the language of our unconscious telling us what we refuse to tell ourselves during our daylight hours” (Hederman, 2003, p. 23). The more authentic *humanity*, though, always “involves the Other – involves difference” (Deleuze, 1994, p. 23), involves the greater, sociocultural and natural, *post-human*, dimension.

The constellations of images function as “montages capable of relating all the heterogeneous levels that they traverse” (Guattari, 1995, p. 35). The plane of immanence is constructed and literally laid out in the guise of a specific Tarot layout or spread. Tarot edusemiotics therefore performs what Deleuze called

the supreme act of philosophy: not so much to think *the* plane of immanence as to show that it is there, unthought in every plane, and to think it in this way as the outside and inside of thought, as the non-external outside and the non-internal inside – that which cannot be thought and yet must be thought. (Deleuze & Guattari, 1994, pp. 59-60)

Because “immanence is the unconscious itself” (Deleuze, 1988b, p. 29) such an as yet “unthought” or unconscious dimension showcases itself via the included third of the Tarot layout that performs the function of a Peircean interpretant. The “outside” dimension becomes internalized; hence in the process of becoming-other “doubling as the internalization of the outside [becomes] redoubling of the Other. It is ... something that places in immanence the always other... I find the other in me” (Deleuze, 1988a, p. 98) as the fundamental complementary self-other pair comprising a genuine sign.

The theory of signs would remain just a theory, that is, stay meaningless in a pragmatic sense, without the relation in practice between “the sign and the corresponding apprenticeship” (Deleuze, 2000, p. 92) enabled by Tarot edusemiotics as a theory~practice nexus. Due to signs having an “increasingly intimate” (Deleuze, 2000, p. 88) relation with their implicit enfolded meanings that unfold within the very process of their reading and interpretations, “[we] are wrong to believe in truth; there are only interpretations” (Deleuze, 2000, p. 92).

As a whole, Tarot icons comprising a layout of pictures represent “the cartographies of the unconscious [that] would have to become indispensable complements to the current systems of rationality of ... all ... regions of knowledge and human activity” (Guattari, original French, in Bosteels, 1998, p. 155). In semiotic terms, cartography is defined as a mode of graphic communication capable of transmitting information by means of a visual channel. The graphic information may be expressed in a form of a diagram, network and a map, or in a mixed format of a cartogram, that is, a diagram superimposed on a map.

Everything in the world has “its geography, its cartography, its diagram. What’s interesting, even in a person, are the lines that make them up, or they make up, or take, or create ... What we call a ‘map,’ or sometimes a ‘diagram’ is a set of various interacting lines ... (thus the lines on a hand are a map)” (Deleuze, 1995, p. 33). If the lines in the palm of a hand form a map, so do Tarot images assembled in a layout as a network of relations. It is such a “topological and specifically cartographic” (Bosteels, 1998, p. 146) mode of being that serves as “an unconscious psychic mechanism that engenders the perceived in consciousness” (Deleuze, 1993, p. 95).

It is by virtue of Tarot edusemiotics that “the map does not reproduce an unconscious closed in upon itself; it constructs the unconscious” (Deleuze & Guattari, 1987, p. 12) in an at once creative (as inventing new concepts and creating meanings and values), critical (self-reflective), and clinical (therapeutic and healing) manner. The reproduction of an exact copy would be reduced to the logic of the excluded middle; the logic of the included middle, however, is always

creative and constructive; as such it foregrounds what I earlier called the creative logic of education (Semetsky, 2008).

The topology of pictures, that is, the specific positions of each of them in a particular layout and their proximity to each other allows for their interpretation in diverse contexts. Together they form a system of signs and, in the process of Tarot readings, they are used in a way analogous to medical communication (cf. Sebeok, 1991). The apprenticeship in signs (cf. Bogue & Semetsky, 2010) provides us not only with a symbolic diagnosis but prognosis as well in terms of evaluating and outlining the rhizomatic structure created by images that comprise a particular layout. It is topology that is a precondition for meaning-making. For Deleuze, “typology begins with topology. ... We have the truths that we deserve depending on the place we are carrying our existence to, the hour we watch over and the element that we frequent” (Deleuze, 1983, p. 110), that is, on the specific context of each singular event.

Even if Merrell (1995) commented, with regret, that “there is no ‘picture, no ‘picture’ that we can ‘see’ from some imperious outside vantage point” (p. 32), it is due to the logic of the included middle that we acquire a novel point of view, new perspective. This specific vantage point appears to border on a point of view as if from nowhere but in fact it is embedded in signs *immanent* to this very “nowhere” that represents the “exotic geography” (Deleuze, 1990, p. 129) of the virtual. The “nowhere” is symbolized by the “nothingness” embodied in the image of The Fool (Chapter 1) that, nevertheless, also indicates the infinite potential of choices; zero and infinity also comprise an unorthodox complementary pair.

We thus become able to unfold the Deleuzian inside *of* the outside and can thereby enter the flow of semiosis, of which we are but another sign, from within. In a very much Anti-Oedipal, Deleuzian, sense, defying a Freudian reduction of the unconscious to its narrow personal dimension, Jung commented that Freud “was blind toward the paradox and ambiguity of the contents of the unconscious, and did not know that everything which arises out of the unconscious has ... an inside and an outside” (Jung, 1963, p. 153). The outside is not opposed to the inside in the manner of Cartesian dualism; they are related, enfolded into each other:

The outside is not a fixed limit but a moving matter animated by peristaltic movements, folds and foldings that together make up an inside: they are not something other than the outside but precisely the inside *of* the outside ... The inside is an operation of the outside: ... an inside ... is ... the fold of the outside. (Deleuze, 1988a, pp. 96-97)

Dewey emphasized that a specific activity “of the human being is participative [in] a situation in which two parties share ... To understand is to participate together ... partaking in a common, inclusive undertaking. The heart of language is ... communication, the establishment of co-operation in activity” (Dewey, 1925/1958, p. 147). However the ultimate, transversal, communication between the heterogeneous levels (human and post-human; immanent and transcendent; inside and outside), while retaining the participative quality of semiotic communication,

demands that language exceeds solely verbal signs (as the prerogative of the merely conscious mind) and embodies subtle affective expressions of the unconscious and yet unthought of.

The act of interpretation enriched with insight, intuition and imagination as the necessary three Is without which the educational semiotics of Tarot signs would be incomplete, brings forth, as John Deely (1999) would say, objectification upon signification; and the Tarot layout not only becomes seen from some infamous outside vantage point but is being recognized as a genuine sign when we enter the process of semiosis in its very middle: “[O]ne never commences; one never has a *tabula rasa*; one slips in, enters in the middle, one takes up or lays down rhythms” (Deleuze, 1988b, p. 123) embedded in the folds of experience. The fold as the very inside of the outside is symbolic of the reconciling relation expressed in the science of coordination dynamics (Kelso & Engström, 2006) by the squiggle “~” pertaining to the complementary inside~outside pair.

It is only through relations, through Janus-faced signs, that we acquire the real, practical, “capacity to enter into a world of shared significance” (Varela, Thompson, & Rosch, 1991, p. 207) as the world of common meanings and values, in which habitual dualisms give way to the reconciling and integrating, cooperative, relation enabled by semiosis as the action of signs founded on the logic of the included middle. Private and public also become connected via relation “~,” transversally, thus forming a complementary pair. It is the presence of the transversal link (as addressed in Chapter 4), which crosses and traverses the perceived dualistic opposites, that is a distinguishing feature of Deleuze’s philosophy of transcendental empiricism, which is, however, far removed from its reductive British counterpart. *Tarot edusemiotics employs this method in practice.*

As Deleuze (2001) says, “there is something wild and powerful in this transcendental empiricism ... the passage from one [sign] to the other as becoming” (p. 25; brackets mine). This quality of passage as becoming is the function of the logic of the included middle, the included Third. Transcendental empiricism purports to discover conditions that exist prior to our actual commonsensical experience. The objects of experience first present themselves at the affective level as virtual tendencies, which are nonetheless no less real than any actual existence. They provide a reason for the actual, while the actual *per se* becomes constructed through the double process of different/ciation of the “initially undifferentiated [transcendental] field” (Deleuze, 1993, p. 10; brackets mine).

The repeated different/ciations as multiple becoming-other form the basis of transcendental empiricism. The different/ciation is akin to unfoldment because a presupposed self-conscious “intentionality of being is surpassed by the fold of Being, Being as fold” (Deleuze, 1988a, p. 110). The ontological position of “Being as Fold” relates to the icon of The High Priestess. The High Priestess holds the scroll in which the deep Gnostic knowledge is enfolded. The scroll needs to be unfolded, indeed, if we are to “explore the labyrinth of ... the unconscious” (Hederman, 2003, p. 21).

In the process of Tarot edusemiotics, “we go from fold to fold” (Deleuze, 1993, p. 17) unfolding the deep structures of signs implicit in the collective unconscious. It is the unconscious “affects [that] traverse [the folds] like arrows or ... like the beam of light that draws a hidden universe out of the shadow ... Art thinks no less than philosophy, but it thinks through affects and percepts” (Deleuze & Guattari, 1994, p. 66). Our thinking embedded in the art of interpretation as the hermeneutics of Tarot (Semetsky, 2011) partakes of imagination and includes abductive inference as Peircean Firstness; or what Lewis and Kahn refer to as *thinking feeling* (2010, p. 2).

To get to the depth of the unconscious in the process of Tarot readings we apply in practice Deleuze’s method of transcendental empiricism, which “seems to be patterned after Bergson’s intuition” (Boundas, 1996, p. 87). Plato’s *Republic* tells the story of prisoners living in illusion among the shadows on the walls of the cave while remaining unaware of the bright light produced by the sun as the metaphor for real knowledge. Tarot edusemiotics parallels the prisoner’s journey towards the sun, to which he is drawn by his love for light, for wisdom hidden in the High Priestess’s scroll. The High Priestess embodies such intuitive, secret, esoteric or Gnostic, knowledge.

It is in the process of Tarot edusemiotics that Henry Bergson’s *duration* becomes *spatialized* and finds its expression in discrete signs represented by individual pictures. As “space itself endures” (Boundas, 1996, p. 95), we become able to literally see the immanent universe of signs in the array of pictures representing sign-events woven into “a continuous signifying fabric” (Merrell, 1992, p. 190) of semiosis embodied in the layout of images. The notion of space brings to the fore the topological nuance inherent in the affective, unconscious, dimension: becomings happen in the uncertain, yet highly specific, space between multiplicities, between signs, whose mode of existence is a multitude of differential relations.

The in-between (non)-place acts as a gap, or differentiator, allowing the ontological difference (as per Chapter 4) to intervene and become repeated. This gap has to be filled with the Peircean Third in the mode of interpretation of signs and meaning-making. The presence of such a zone of indiscernible, blurred and non-local relations (symbolized by “~”) that comprise the complementary nature (Kelso & Engstrøm, 2006) of the universe perfused with signs transforms the educational philosophy grounded in Tarot edusemiotics into an open set of pragmatic tools, psychological interventions and artistic creations.

The invisible reality of the archetypes projects itself synchronistically on the material plane in the form of this or that Tarot layout, which is “neither one nor two...it is the in-between” (Deleuze & Guattari, 1987, p. 293) in accord with the included middle of the immanent~transcendent “quality of conjoined opposites” (Jung, CW 8, 189). The process of signs-becoming-other-signs serves as “the prototype of an immanent relation” (Goodchild, 1996, p. 38) that the squiggle “~” indicates. Tarot edusemiotics is reminiscent of Deleuze’s cinematic metaphors of movement-image and time-image when the Tarot “map ... merges with its object [and] the object itself is movement” (Deleuze, 1997, p. 61). This “infinite

movement that frees [thinking] from truth as supposed paradigm and reconquers an immanent power of creation” (Deleuze & Guattari, 1994, p. 140) is semiosis, the action of signs.

The cartography of the unconscious is represented by the layout of Tarot images that as such functions as the included third, the relation “~,” a genuine bipolar sign, one pole of which is “located” on the plane of immanence and another on the transcendental field. The transversal link is being created in practice, in human experience. The role of Tarot educational semiotics is essentially “to bring something to life, to free life from where it’s trapped, to trace lines of flight” (Deleuze, 1995, p. 141), which are the lines of becoming and along “which we read the future and which themselves prophesize” (Deleuze, 1990, p. 160).

During readings, when the pictures appear in certain positions in a particular spread that signify all three aspects of time simultaneously, *en bloc*, human perceptions acquire the possibility of going through the “subdivided and elongated ‘past-future’” (Deleuze, 1990, p. 77) that collapses into the living present, “which alone exists” (Ibid.). In fact, the present, here-and-now quality of a singular reading itself plays the role of the squiggle “~” that forms a complementary past-future pair. We form a semiotic relation as a conjunction *and* in our very practice, in experience that therefore becomes genuinely learning and transformative. Tarot edusemiotics “presents a way of moving from ‘either-or’ to ‘and’ by going beyond the limitations of logical discourse or commonsense. ... The experience of ‘andness’ is central to psychological change” (Samuels, 1985, p. 59) and to the transformation of habits as a necessary condition for human development and learning.

The unfolding of the evolutionary process of semiosis, which is both developmental and learning, is strongly nonlinear: not the Freudian stratified royal road but the smooth, as Deleuze would call it, space of the less-traveled detours and zigzagging, “rough and uncommonly devious footpaths” (Jung, CW 8, 210), the lines of flight of fools, vagabonds, and nomads. The method of transcendental empiricism enables the reading of signs and symbols that appear as archetypal images in dreams, or in myths, or during active imagination, or in Tarot symbolism. Because “symbols act as *transformers*, their function being to convert libido from a ‘lower’ into a ‘higher’ form” (Jung, CW 5, 344), their apprehension contributes to individuation as becoming-other.

Individuation cannot proceed without a means to both express and transform oneself; Deleuze and Guattari (1987) refer to *metamorphosis* with regard to Jung’s theory of the transformation of the libido as spiritual energy irreducible to Freud’s limited definition of the libido as sex drive. This potential availability of spiritual energy is embodied in The High Priestess icon. The play of affects may reach “a point of excess and unloosening” (Deleuze & Guattari, 1987, p. 134). At this critical turning point there are two options: a subject must “either annihilate itself in a black hole or change planes. Destratify, open up to a new function, a diagrammatic function” (Deleuze & Guattari, 1987, p. 134). This new diagrammatic function is performed by Tarot edusemiotics that creates the included Third, a diagram as a transversal link, along which the subject of the

reading becomes able to change planes, to enrich their experience with the spiritual dimension “located” at a different plane than solely material existence.

An annihilation, on the other hand, can occur when needs, emphasized by Noddings (2010), which haven’t been expressed and responded to in a caring relation, thus doomed to remain unsatisfied and unfulfilled, tend to sink deep into the unconscious and stay at the affective level of unspoken emotions. The “concrete conditions of ... caring” (Noddings, 2010, p. 187) have not been created, and the occasion of caring (cf. Watson, 1985, 2004) embedded in Tarot edusemiotics was not afforded an opportunity to take place. Noddings explains that the occasions of caring constitute the moments when nurse and patient, or teacher and student, meet and must decide what to do with the moment, what to share, which needs to express, or whether to remain silent.

Such a caring encounter “needs to be a guiding spirit of what we do in education” (Noddings, 1991, p. 168) in terms of fostering growth in those who are being cared for. Noddings’ ethics of care describes the one-caring (or a genuine reader, in the context of Tarot edusemiotics) as being engrossed in, that is, receptively attentive to, the needs expressed in an encounter with the cared-for (a person seeking a Tarot reading, in the present context). Importantly, the needs expressed via Tarot signs are nonverbal, *silent*; yet pictures may speak louder than many thousands of words.

The deep Gnostic knowledge expresses itself not in the language of propositions belonging to the Cartesian Cogito, but in the pictorial “poetic and mythic language” (Martin, 2006, p. 37) rooted in Hermetic and Neoplatonic philosophies and Christian mysticism. Even if Deleuze was skeptical about ever finding a unique formula applicable to esoteric (nonverbal) languages, he affirmed that such a language would have been formed on the surface with its own model and reality. Such is the language of the legible images of Tarots which, when combined in a layout, interfere as the included “third” (Deleuze & Parnet, 1987, p. 131), a Peircean interpretant.

Tarot edusemiotics “acts as a relay” (Deleuze, 2003, p. 111) that, by definition, would allow us to “switch” from the language of images to verbal expressions; to interpret or translate the silent yet expressive pictorial language into spoken words. Tarot signs display the as-yet-imperceptible affects by laying down a (visible) map of the (invisible but intelligible) territory via creating a mediatory link, a Deleuzian conjunction *and* that belongs to the family of “non-localizable connections” (Deleuze & Guattari, 1994, p. 83) between what are customarily considered the dualistic opposites of sensible and intelligible, matter and mind. The connections are non-local – synchronistic or transversal – because they relate to each other via the included Third symbolized by squiggle “~” and physically represented by the layout of Tarot pictures.

To reiterate, meanings, concepts and values are not given but depend on signs entering “into the surface organization which ensures the resonance of two series” (Deleuze, 1990, p. 104), ultimately converging on a paradoxical differentiator, a Janus-faced sign that circulates in both series, hence becoming “both word and object at once” (Deleuze, 1990, p. 51). Meaning is identified with the evolution of

signs, embedded in a Peircean triad so that “Essence is...the third term [which] complicates the sign and the meaning; it measures in each case their relation...the degree of their unity” (Deleuze, 2000, p. 90). Ontology is essentially relational and not substantial as modern Western philosophy had it all along.

It is the “*unconscious of thought* [that is] just as profound as *the unknown of the body*” (Deleuze, 1988b, p. 19; Deleuze’s italics). The quality of profundity is significant and indeed relates Deleuze’s philosophy to Jung’s depth, or archetypal, psychology (cf. Kerslake, 2007; Semetsky, 2002). Referring to psychophysical parallelism, Deleuze asserts that there must be a threshold that brings thought to the body. At the ontological level, the same parallel relation exists between the virtual and the actual – both real – the connection between which would require passing through a threshold, that is, creating a transversal link.

The presence of the third, transversal, element reflects on the concept of the curvature of space-time: any curved space possesses curvature because of the outside, extra, dimension to curve through. Physical laws of motion become subsumed by the geometrical laws of surfaces. The Euclidean space on the flat surface with its never-intersecting parallel lines should be understood as but a special case of Riemannian space, which “presents itself as an amorphous collection of pieces that are juxtaposed but not attached to each other” (Deleuze & Guattari, 1987, p. 485): they are on different planes or levels.

Sure enough, if parallel planes do intersect, then curvature is present. Respectively, curved space-time presupposes the existence of the field regardless of the name by which we call it: transcendental field or the field of the collective unconscious or the Akashic field of information (cf. Laszlo, 1991, 1995, 2004/2007). It is the Tarot edusemiotics that allows us to actually *see* “an interiorization of the outside” (Deleuze, 1988a, p. 98) not solely in our mind as an abstract concept, but with our eyes as a concrete material object, a layout of pictures.

Just so as to become visible, the outside would have been re-redoubled, different/ciated again and again; in a way transcended, albeit in the apparently irrational mode of spreading the pictures in this or that layout. The term *transcend* here means *bringing down to earth*, or making concrete what was abstract, thus overcoming in this process the dualism between immanence and transcendence. The Deleuzian plane of immanence in the form of a Tarot layout “does not immediately take effects with concepts...and its layout resorts to measures that are not very respectable ... or reasonable” (Deleuze & Guattari, 1994, p. 41): it is pre-rational and aconceptual, ultimately enabling “the conquest of the unconscious” (Deleuze, 1988b, p. 29) when its structure becomes visible in the complex process of the constructive-expressive synthesis.

The layout of the plane of immanence “belongs to the order of dreams, of pathological processes, esoteric experiences, drunkenness, and excess. We head for the horizon, on the plane of immanence, and we return with bloodshot eyes, yet they are the eyes of the mind” (Deleuze & Guattari, 1994, p. 41). Tarot edusemiotics performs the role of an interpretant in a Peircean genuine triad within the self-referential relation between “the semiotic machine, the referred object and

the enunciative subject” (Guattari, original French, in Bosteels, 1998, p. 167). Still, the “enunciative subject” is, strictly speaking, nonverbal, pre-individuated, and whose, as Deleuze said, “*unconscious of thought*” – yet unthought of at the level of consciousness – is still deeply enfolded in the scrolls portrayed in The High Priestess icon.

Arcanum II is a symbol of female intuition and spiritual life representing the long-awaited “return of the Goddess” (cf. Whitmont, 1984). The High Priestess is a symbolic Sophia (Σοφία is the Greek word for wisdom) or Shekhinah (in Jewish mythology): it is Wisdom which is “written” in the scroll on her lap. Plato, following his teacher Socrates and the older tradition of the school of Pythagoras, presented philosophy as *philo-sophia*, literally translated as the love of/for Wisdom. In his *Republic* the leaders of the proposed utopia were to be true lovers of Wisdom. This nuance is often overlooked in educational philosophy which focuses on perceived hierarchy and an undue elevation of philosopher kings by Plato.

In Plato’s *Protagoras*, Wisdom is presented as one of the four cardinal virtues. When Socrates contended that he knows nothing, this self-knowledge left him free to receive true Wisdom as a spontaneous insight or inspiration; Socrates was a genuine teacher practicing the three Is that have since disappeared in the framework of contemporary Western education. Philo, a philosopher in Alexandria, asserted that Wisdom functions through Logos or the Word used later in the Gospel of John: *in the beginning was the Word*. This creative symbol, the Word, should not be understood literally as verbal or linguistic! As Shlain remarks, “In the beginning was the image” (1998, p. 432). Historically, however, the “rise and fall of images, women’s rights, and the sacred feminine have moved contrapuntally with the rise and fall of alphabet literacy” (Ibid.).

When the Fool meets the High Priestess in the journey of learning his symbolic lessons in the school of life, she is the one who will have unfolded her scroll to reveal to the Fool the secrets of Gnostic knowledge lost in scientific (read: overly masculine) rationality. Sophia is a principle equally important for Hellenistic philosophy and religion, for Platonism and Gnosticism, as well as for Orthodox Christianity and Christian mysticism. In the Hebrew Bible, Wisdom/Sophia is personified in the Proverbs (8: 22-31). Jung associated Wisdom with the Hebrew *Chochma* as one of the Sephirot in the rhizomatic structure of the Kabbalistic Tree of Life. The Tree is a symbol of the divine (or abstract) descending into our human (concrete) world. It is Tarot edusemiotics that creates a complementary *divine-human* pair enriching the material world with its spiritual dimension.

Eastern Orthodoxy understands Wisdom as Divine Logos; and this belief is often expressed through Russian and Greek icons. For Russian philosopher Sergei Bulgakov, Sophia operates as the feminine aspect of God in concert with the three masculine principles of the Trinity. Gnostics held that Sophia was the Bride (syzygy) of Christ. In the text *Pistis Sophia*, Christ’s mission is to bring Sophia back into fullness (Pleroma) via spiritual, pneumatic knowledge (*pneuma* is Spirit in Greek) as Gnosis so that humankind knows the fullness of the spiritual world in contrast to the physical world that we know by our rather limited physical senses.

In Gnosticism, the Gospel story of Jesus is symbolic rather than historical: it is a drama of the redemption of true Wisdom through the Logos.

Sophia resides in all of us as the remnants of holy or divine sparks; hence personal and social revitalization is possible via the Tarot symbolic language (Semetsky, 2011) that embodies these sparks (cf. Wexler, 1996, 2000, 2008). The principle of Wisdom was considered by medieval alchemists to be identical with the Holy Spirit. Tarot edusemiotics, by transforming the invisible knowledge signified by The High Priestess into the visible, thereby fulfills the ultimate aim of perennial philosophy, hence overcoming *in practice* the persistent problem referred to by Noddings as “the silence of God” (Noddings, 1993, p. 19).

In the image of The High Priestess, the Fool in his symbolic school of life becomes accompanied by the archetypal Kore, a Virgin, a maiden that “as the daughter of the Great Earth Mother...is connected to the bounty of the Self and is the agent of the soul’s fulfillment” (Hopcke, 1992, p. 111). The archetype of the Great Mother is represented by the next Arcanum III, called The Empress (Figure 5.2) who can teach the Fool a lesson of healing with her abundance of feelings and the ability to care and give love while always unconditionally understanding her children.



Figure 5.2. The image of The Empress.

Wolfgang Pauli, in his letters to Jung (Meier, 2001) addresses the Mother archetype as corresponding to the instinctive and unconscious idea of the human relationship. Noddings (2002) emphasizes the necessity to *learn* to care, adding that individual “*moral* virtues arise from the relational perspective. ... Recognizing that the self is a relation, we find it hard to distinguish self-interest and other-interest” (p. 213). The Empress’s love partakes of a “trans-dimensional force [as] love for the uncanny otherness” (Lewis & Kahn, 2010, pp. 84-85). The Empress is

CHAPTER 5

associated with Binah on the Tree of Life, which is translated as *understanding* and symbolically means Mother of the world.

Binah is the place in which the Tree of Life has its roots: it is the creation enabled by the archetypal Mother that embodies eternal feminine qualities. Jung, addressing aspects of the feminine, stated that women’s psychology is grounded in the principle of Eros as relatedness, the great binder, while from ancient times the ruling masculine principle has been Logos. The image of The Empress is the epitome of maternal instinct (Noddings, 2010). As Noddings points out,

We do not know how to classify holding, preserving, staying with, conserving, and fostering – clusters of ill-defined activities central to mothering, nursing, and the best teaching. We need a whole new way of talking about activities – ways of being in the world – that are inherently relational and deeply embedded in female experience. (Noddings, 2010, p. 177)

While The Empress embodies the activities listed by Noddings as central to mothering, the whole new, feminine, way of “talking about” those is provided by the semiotic language of Tarot images! Noddings points out “the necessity to think ahead and act with care” (Noddings, 2010, p. 27); both requirements – thinking ahead and caring – fulfilled in practice by Tarot edusemiotics.

The principle of Logos as objective rationality (that is, still detached from wisdom) is exemplified in the image that directly follows The Empress: The Emperor, Arcanum IV, often the embodiment of the Freudian Superego or the symbolic Law of the Father (Figure 5.3).



Figure 5.3. The image of The Emperor.

Noddings comments that traditionally ethics elevated reasoning above feeling. Reasoning here of course is taken in its usual logical mode as a direct line from

premise to conclusion. It is the union of God with his beloved Shekhinah or the union of Logos with Sophia that produces the alchemical marriage of the opposites, such as feeling and reasoning, as the *Hierosgamos*, the sought-after *coincidentia oppositorum*, which is achieved in Tarot edusemiotics via the included third of interpretation grounded in the specific syntax represented by the squiggle, “~.” It is only semiotic reasoning as encompassing Peircean Firstness and Thirdness that, by virtue of the self-referential relation, can return feeling to reason and combine both in Intelligence or Intellect, the *Nous*.

Intuition, or noesis as an operation of the *Nous*, represents the very depth of human knowledge partaking, as such, of divine science, of mathesis. It is “the genesis of intuition in intelligence” (Deleuze, 1991, p. 111) that, as the prerogative of the High Priestess, triggers Tarot readings aiming “to bring into being that which does not yet exist” (Deleuze, 1994, p. 147). Such creative emergence of novelty is enabled by the logic of the included middle. Dewey (1934/1980) pointed to the “superpropositional” (p. 85) logic embedded in artistic acts; such as, in this context, the creative art of Tarot hermeneutic. As for Deleuze, he specifically emphasized an “extra-propositional or subrepresentative” (Deleuze, 1994, p. 192) quality of learning:

Learning to swim or learning a foreign language means composing the singular points of one’s own body or one’s own language with those of another shape or element, which tears us apart but also propels us into a hitherto unknown and unheard-of world of problems. To what are we dedicated if not to those problems which demand the very transformation of our body and our language? In short, representation and knowledge are modelled entirely upon propositions of consciousness which designate cases of solution, but those propositions by themselves give a completely inaccurate notion of the instance which engenders them as cases, and which they resolve or conclude. By contrast, the Idea and ‘learning’ express that extra-propositional or subrepresentative problematic instance: the presentation of the unconscious, not the representation of consciousness. (Deleuze, 1994, p. 192)

It is this type of learning that takes place in the process of Tarot edusemiotics, counter to any direct instruction or transmitting some pre-existing facts from a generic teacher to a generic student. We learn from our experiences embodied in signs, symbols, and images, thereby becoming able to transform ourselves. Learning is “infinite [and] of a different nature to knowledge” (Deleuze, 1994, p. 192) but that of the nature of the creative process as a method of invention: what is this new concept and new meaning that would rhizomatically connect the experiential dots, which appear disparate and lacking sense? What are these new values that we acquire in experience, in life, when we become able to self-reflectively reevaluate this very experience and, in a Deweyan sense, can creatively re-organize it in a novel direction?

Infinite learning is not reduced to lifelong professional training but represents a process of self-education that, alongside ethical caring, “requires the analysis of the

CHAPTER 5

situation, persons involved, needs, values, and resources available” (Noddings, 2010, p. 119). These are all signs determining human experience: events, situations, significant people, needs, desires, hopes and anxieties, present values and past disappointments, together with the affective spectrum of feelings and emotions are symbolically represented in the constellation of pictures.

Tarot edusemiotics as a whole partakes of The Empress as the archetypal caring Mother who always confirms the potential best in her children. The concept of confirmation is central to Noddings’ ethics of care and manifests in the ability to envisage the best possible motives belonging to another’s acts. Therefore it can only be performed under the conditions of the relation established between Self and Other, thereby defying the long-standing attitude that identifies moral agents with their acts and by implication holds them solely responsible for their actions. Initially belonging to Martin Buber, who emphasized its ontological sense, the idea of confirmation refers to an act of affirming and encouraging the very best in somebody’s actions even if such a better Self is present only potentially.

Calling for new forms of spirituality, Noddings (2010) contends that it “will be a day of genuine liberation when women insist upon an apology from the religious authority that has...oppressed them” (p. 245). As pertaining to Tarot edusemiotics, the symbol for authority – or for any oppressive partisan politics, for that matter – is the masculine counterpart to The High Priestess: The Hierophant (Figure 5.4), Arcanum V, also called the Pope in some decks. It is a symbol of law and order, establishment, fundamentalism and dogma of any kind.



Figure 5.4. The image of The Hierophant.

Noddings advocates for critical lessons and developing critical thinking; she notices that “schools do a poor job in developing students’ capacity for ... the ... critical thinking ... that challenges their own socialization” (2010, p. 243). I contend that if introduced in formal schooling, Tarot edusemiotics will achieve

precisely that. The transversal communication created by the interpretation of Tarot images forms a self-reflective “echo chamber, a feedback loop” (Deleuze, 1995, p. 139) as a feature of triadic semiotics so as to critically and self-reflectively examine our habitual beliefs and assumptions.

When traversing old boundaries, a “spark can flash ... to make us see and think what was lying in the shadow around the words, things we were hardly aware existed” (Deleuze, 1995, p. 141). This spark may very well be the divine spark (cf. Wexler, 1996). The spark, as a counterpart to the shadow, breaks the initial symmetry and triggers the emergence of information, which was out of conscious awareness until it found its expression in the new pictorial language. Symmetry breaking (cf. Williams, 2011) is an example of Deleuze’s creative stuttering (addressed in Chapter 4) and is always a road to new information; a blank page has more symmetry but one with a map has more information!

Those signs that hide in the shadow of the unconscious around the words may have been hitherto imperceptible; yet at the affective level we could sense the silent discourse of the whispering and stuttering, different, voices (cf. Gilligan, 1982/1993) expressing themselves through “passive and active affects in the context of the individuated assemblage ... These are not phantasies or subjective reveries” (Deleuze & Guattari, 1987, pp. 257-258). These are the expressive instances of signs that awake in us a feeling of “something passing through you” (Deleuze, 1995, p. 141). The virtual signs “speak up” in the language of images and find a means of expression and their own voice via “the possibility and necessity of flattening all of the multiplicities [that is, signs] on a single plane of consistency or exteriority regardless of their number of dimensions” (Deleuze & Guattari, 1987, p. 9) thereby becoming actual.

The unconscious contents are being exteriorized or projected into the pictures, and the many emotional problems with which people may be overwhelmed become literally *taken out of their minds*! This is the healing aspect of Tarot edusemiotics, complemented with its pedagogical aspect, when by looking into/at themselves people are given an opportunity of symbolically becoming-other, of starting to learn from their experiences comprising the affects, thoughts, and feelings embodied in the images that represent real problematic situations. Even though people may be barely aware of the nuances of those problems or unable to articulate their questions, the unconscious problems are *immanent*, even if latent and dormant, and are subject to de- and re-territorialization in the process of self-education as the realization of meanings.

Tarot brings into being the Imaginal (cf. Romanyshyn, 2007) in-between world of semiotic reality embedded with signs, the archetypal meanings of which are to be discerned via the string of interpretants. Knowledge of the paradoxical Tarot semiotic code, at once analogue and digital, is imperative; and its usage is akin to using a legend in order to map a territory. Merrell (1996) pointed out that because of the incorporeal nature of “a naked sign-event ... the best we can do is to survey the sign-events on the stage before our consciousness, the stage we are on as both actors and participants, and hope for the best” (p. 271). *Well, we can do better!*

Even if it is difficult to “control the forces of the outside” (St. Pierre, 1997, p. 367) – they are possessive and we may remain unconscious of their action – it is the Tarot edusemiotics through which we can achieve self-control as one of the “technologies of the self that people use to create themselves as the ethical subjects of their actions” (St. Pierre, 1997, p. 365). Noddings asserts that care ethics considers autonomy “as a state of limited, appropriate, and at least minimally satisfying control...anchored in a relational ontology” (Noddings, 2010, p. 115). A relational ontology makes total freedom impossible; ditto total determinism; instead these are bipolar complementary categories connected via relation “~.” What we become able to control with the help of Tarot is ourselves: our Selves.

The Tarot layout is a sign standing for the greater, semiotic or virtual, reality. As the included middle between the world without and the world within, the inside and the outside, it is being unfolded, picture by picture in front of our very eyes not unlike “the pieces of Japanese paper flower in the water” (Deleuze, 2000, p. 90) and represents both opposites in the relation, which is “holding them in complication” (Ibid.). By being transversal to both self and other, both inside and outside, the Tarot sign (as the relation “~”) “is installing [itself] transversally to the [different] levels ... material, cognitive, affective and social. ... It is this abstract machine that will or will not give these levels ... existence” (Guattari, 1995, p. 35); such an abstract or virtual machine embodied in the actual concrete medium of the images.

The configuration of the transcendental field contains certain universals (cf. DeLanda, 2002) – what Peirce called generals – capable of generating meanings because any abstract machine is bound to operate “within concrete assemblages” (Deleuze & Guattari, 1987, p. 510). Still, incorporeality appears to be maintained: “abstract, singular and creative, here and now, real yet inconcrete, actual yet noneffected ... – abstract machines know nothing of form and substance” (Deleuze & Guattari, 1987, p. 511). This is true – unless the possibility to acquire form, to achieve corporeality, is provided in practice by Tarot edusemiotics!

The embodiment of the *transcendental* field allows it to merge with its own “object” that, despite always being *immanent* in perception, would remain disembodied or virtual and, as such, beyond actual recognition in the absence of the hermeneutic process of reading and interpreting the images laid down as the Tarot system of signs. The self-referential relation “~,” in accord with the logic of the included middle, is thus established as a complementary pair of *virtual~actual* (ontologically) as well as of *unconscious~conscious* (epistemically).

To repeat, the Tarot cartographic map serves as a pragmatic tool to “*read, find, [and] retrieve the structures*” (Deleuze, 1968, in Stivale, 1998, p. 270; Deleuze’s italics) enfolded in the signs. Cartography as a mode of diagrammatic thinking creates a visual notation for the always already *ens realissimum*, even if virtual, Ideas laid down on the plane of immanence therefore making the invisible visible. It is because of the desire for Gnosis as the “compulsion to think which passes through all sorts of bifurcations, spreading from the nerves and ... communicated to the soul in order to arrive at thought” (Deleuze, 1994, p. 147) that we can read

and understand the deep meanings of signs, symbols, and symptoms that lay down the dynamical structure of experience.

It is through this desire and compassion that an authentic Tarot reader (Semetsky, 2011) can intuit, understand, and narrate the subtle symbolic meanings (*corpus subtile*) constituting “the fragments of ideal future [and] past events, which render the problem solvable” (Deleuze, 1994, p. 190; also Kerslake, 2007, p. 109) by tapping “into the virtual and immanent processes” (Ansell-Pearson, 1997, p. 4) of multiple becomings implicated in Tarot images. Prior to readings, human subjectivity is pre-personal and a-conceptual and comprises “the fractured I of a dissolved Cogito” (Deleuze, 1994, p. 194). These fractured pieces are to be made whole by integrating the unconscious into consciousness that conjugate along the lines of becoming within Tarot edusemiotics.

An authentic Tarot reader pursues different series, travels along different levels and crosses thresholds of the barely liminal, hence bringing to awareness the unthought, unconscious, dimension via the self-referential relation represented by “*a power to affect itself, an affect of self on self*” (Deleuze, 1988a, p. 101) traced through the Tarot edusemiotics. The unfolding of non-thought in the process of individuation brings forth an element of creativity and presents “life as a work of art” (Deleuze, 1995, p. 94). This true life, vitalistic and enduring, even if invisible and immanent, is *neutral* (Deleuze, 2001), that is, beyond good and evil or any of the binary opposites of modern discourse.

Coincidentally, Wolfgang Pauli, Jung’s collaborator on the concept of synchronicity, envisaged the gradual discovery of a *neutral* language (in Meier, 2001) that functions symbolically to describe an invisible, potential reality, which is inferable indirectly through its visible effects. Tarot symbolism, in its mediating (indirect) function, is the interpretant of the archetypes’ psychic reality and indeed crosses over the psychophysical dualism, this fulfilling Pauli’s hope. Responding to Pauli, Jung pointed out the “materialization of a potentially available reality, an actualization of the *mundus potentialis*” (in Meier, 2001, p. 83), that becomes a matter of (empirical) fact and that we indeed witness in the process of Tarot edusemiotics.

In *Atom and Archetype: The Pauli/Jung Letters 1932-1958* (Meier, 2001), Pauli’s letter to Jung in which he wrote about such a neutral language is designated as 56P (pp. 81-83), and Jung’s letter as 57J. In Pauli’s 1948 essay called *Modern Examples of Background Physics* (first published in Meier, 2001, pp. 179-196), he commented on the doubling of the psyche (not unlike Deleuze’s and Foucault’s conceptualizations) akin to human birth as a division of the initial unity. Time-wise, the doubling of the time-series is represented by time designated as *Aion* and *Chronos*, with the instance of *Kairos* in-between.

At the time Pauli remained agnostic on “whether the ‘series’ is thought of in temporal terms or as a simultaneous juxtaposition” (in Meier, 2001, p. 187). He referred to the idea of the transmutation of souls wherein the timeless reality of Jungian archetypes is being repeatedly interrupted by the temporal sequence of physical/biological lives and real human experiences. It is by means of Tarot

CHAPTER 5

edusemiotics that Pauli's guess is indeed confirmed: our real human experience is structured by signs woven in semiosis.

This neutral, universal, language of signs – the High Priestess's silent discourse – refers to a “singular life [as] a *life of pure immanence*, neutral, beyond good and evil” (Deleuze, 1997, p. xiv). Yet it is the immersion of human experience into the stream of semiosis – our very participation in the world – that assigns a particular *value* to an otherwise neutral life. For Deleuze, things are always wrapped up in Nature; as for Ideas – they are often so enveloped or enfolded “in the soul that we can't always unfold or develop them” (Deleuze, 1993, p. 49) – unless experience itself becomes saturated with affective, almost numinous, conditions for their unfolding. The collective unconscious is presently (see Chapter 7) facing Aurora, the Morning Star of Arcanum XVII (Figure 5.5).



Figure 5.5. The image of The Star.

As the first feminine figure in the deck, stripped of her clothes like outlived habits, The Star is a symbol for Hope, for the dawn of the New Age that implies a “critical reversal” (Deleuze, 1983, p. 1) of values:

The problem of critique is that of the value of values, of the evaluation from which their value arises, thus the problem of their *creation*. ... [W]e always have the beliefs, feelings and thoughts that we deserve given our way of being and our style of life. ... This is the crucial point; *high* and *low*, *noble* and *base*, are not values but represent the differential element from which the value of values themselves arise. (Deleuze, 1983, p. 1)

Noddings (2010) comments that care ethics is “sceptical about identifying virtues in the abstract and attempting to inculcate them directly. Virtues develop in ways of life...in situational practices” (p. 245). The revaluation of values becomes

possible when we use Tarot hermeneutic as precisely such situational practice. *We just have to learn and understand the High Priestess's silent discourse: the language of Tarot signs!* Ethics partakes of ontology and relates to a mode of existence, rather than being confined to norms as a pre-existing set of values into which human nature is supposed to fit perfectly. It is revaluations, and not prescribed values, that characterize our ways of being in the world, our modes of existence.

The unfolding of a “cosmic egg” (Deleuze & Guattari, 1987, p. 182), from The Fool to The World as the culmination of the Fool’s spiritual journey, proceeds through zigzagging and choked passages because the Fool’s road to individuation is always “subject ... to the interference ... of the autonomy and numinosity of archetypal processes” (Jung, 1963, p. 353) representing the forces of the outside, whose silent discourse becomes perceived in the Tarot cartograms. The cosmic “egg always designates intensive [semiotic] reality [and] is ... a becoming” (Deleuze & Guattari, 1987, p. 182; brackets mine) related to *Logos spermatikos* as the generative principle in the universe.

It becomes our ethical responsibility to go beyond taboos (cf. Hederman, 2003), to liberate joys and ward off powerlessness, to accomplish Leibniz’s unfinished project of mathesis and to be finally rewarded with “establishing the bond of a profound complicity between nature and mind” (Deleuze, 1994, p. 165) by means of us-all-becoming-woman and learning to read and understand the bastard language of signs. Yet, unless nature and culture together enter into the surface organization that alone can provide the resonance of two series and form a complementary nature~culture pair, we are likely to remain deaf to the warning signs of our experiences. It is easy to miss them: their discourse is silent. As Deleuze prophetically asks, “What is it which tells us that, on a line of flight, we will not rediscover everything we were fleeing? ... How can one avoid the line of flight’s becoming identical with a pure and simple movement of self-destruction” (Deleuze & Parnet, 1987, p. 38). Destratify or annihilate!

The destratifying, liberating capacity of mathesis as the science of life, of human nature *per se*, lies in the embodiment of the fundamental elements in nature as symbols and signs so that they impart a power to act for the sake of life itself. This power is not at all Nietzsche’s will to power: “there are other names for it. For example, ‘grace’” (Deleuze & Parnet, 1987, p. 91). It is “becoming-woman that produces the universal girl” (Deleuze & Guattari, 1987, p. 276), the Virgin, symbolized by The High Priestess, who nonetheless can give a symbolic birth – that is, *actualize the virtual* – to new meanings, new understanding, new values, new modes of existence.

The silent voice of images “belongs” to self-becoming-other-becoming-Self. Jung singled out this strange “colloquy” and, referring to the voice of the other, has said:

You need not be insane to hear [this] voice. On the contrary, it is the simplest and most natural thing imaginable. ... The discussion is ... carried on as in any other conversation. You can describe it as mere “associating” ... or as a

“mediation” ... The conflict between [the ego and the other] may give rise to truth and meaning: ... a real colloquy becomes possible when the ego acknowledges the existence of a partner to the discussion. (Jung, CW 9, 236-237)

Strangeness is a positive feature of the archetypes: contemporary research considers their dynamics analogous to strange or chaotic attractors that set forth the appearance of recognizable patterns (Van Eenwyk, 1997) – or folds – and considers them to be conceptually closer to “Mandelbrot’s fractals than to Platonic solids” (Briggs & Peat, 1990, p. 110). The archetypal patterns embodied in the Tarot images are signs that can extract “an existential ‘motif’...which installs itself like an ‘attractor’ within a sensible and significant chaos” (Guattari, 1995, p. 17) of the collective unconscious. Analogously, in the context of psychological research, Eiser (1994) assigns to an attitude the status of attractor positioned or projected in phase-space, and posits the presence of “‘affective’ dimensionality [in terms] of fractal [and] the almost mystical Mandelbrot set” (pp. 173-176).

In the self-other complementary relation, the self emerges via the cartography that maps out signs acting in “the space between preindividual singularities and the full-fledged subject” (Boundas, 1994, p. 114). The process of Tarot readings is a creative art, and creativity is what characterizes the process of actualization of signs-events along the transversal connection that reaches out into the very “Nature [which] is contingent, excessive, and mystical essentially” (Deleuze, 1994, p. 57). Such complementary nature (Kelso & Engström, 2006) exceeds sensible or visible reality reduced to its physical description in terms of classical mechanics.

The line of becoming is real; it is in fact always out there, in the world, “only we don’t see it, because it’s the least perceptible of things” (Deleuze, 1995, p. 45). As Merrell (1996) pointed out, there is always “becoming, but never arriving” (p. 21); still it is by means of Tarot edusemiotics that we promptly arrive at a stopover, even if temporary, in the regime of signs. This stopover, the snapshot of semiosis, functions as an operational closure of the semiotic system open at large. Deleuzian percepts and affects are “plotted” by means of specific positions in the typical spread, and the virtual realm becomes actually seen, not unlike the “two-dimensional Cartesian grid, with all necessary lines and their intersects” (Merrell, 1996, p. 273) positioned on the flat surface.

In its static format such a grid as a deceptively striated space represents a relational network comprising the individual pictures. It is our plotting events on the surface that contributes to “setting out a plane of immanence, tracing out a field... And a plane of immanence has to be constructed, immanence is constructivism, any given multiplicity is like one area of the plane” (Deleuze, 1995, p. 146). This radical statement corresponds nicely with the Tarot images taking up such areas. Sure enough, “when you invoke something transcendent you arrest movement ... This is what it’s like on the plane of immanence: multiplicities fill it, singularities connect with one another, processes or becomings unfold, intensities rise and fall” (Deleuze, 1995, p. 147).

Something transcendent thus is always already presupposed, and as such it is semiotically real: it is a sign, which always “carries a trace of its previous incarnations” (Merrell, 1995, p. 69). Despite how vague what was always presupposed might be, it constitutes unorthodox *memory* as Tarot’s diachronic dimension that can be defined as “the formation of future thoughts as well as transmission and comparison of past thought” (Deely, 1990, p. 108). Thus Peirce’s assertion about the generality of reasonable predictions finds its confirmation in Tarot edusemiotics when a strange thing begins to happen (Deely, 1999) as incorporeal events, not existing but hitherto subsisting, acquire material existence in front of our very eyes in the body of Gnostic knowledge encoded in Tarot images.

The late Vatican cardinal Hans Urs von Balthasar, in his Afterword to the monumental volume *Meditations on the Tarot: A Journey into Christian Hermeticism*, which is believed to be authored by Russian philosopher and lawyer Valentin Tomberg (published as Anonymous, 2002), related Tarot to “the veiled presentiments of the Logos” (2002, p. 659) that can be unveiled; hence ultimately revealed to us. The function of the veil is the same as of the scroll on the High Priestess’s lap; the Goddess Isis was portrayed as veiled. Isis’s veil concealed deep Hermetic knowledge, Gnosis.

Contemporary physicist Henry Stapp would have agreed because of the interplay of signs acting “both to veil the form of fundamental reality and to unveil the form of empirical reality. However if causal anomalies actually do appear, then the veil has apparently been pushed aside; we have been offered a glimpse of the deeper reality” (Stapp, 1993, p. 181) even if, according to the Hermetic tradition, no mortal ever dared to lift Isis’s veil; in other words, to unfold the High Priestess’s scroll. This deeper reality is the semiotic reality of signs that finds its empirical means of expression in the silent discourse of Tarot images.

The Tarot signs embody “levels of sensation ... like arrests or snapshots of motion, which would recompose the movement synthetically in all its continuity” (Deleuze, 2003, p. 35). So a static layout does not contradict a dynamic evolutionary process of Peircean semiosis as the action of signs; just the opposite, it “brings nature and culture together in its net” (Deleuze & Guattari, 1987, p. 236) by virtue of itself being the universal language that symbolically displays the true nature of “things” in the world as signs. The relational nature~culture network (as a complementary pair!) is the very condition of knowing-by-analogy, or likeness, preeminent in spiritual teachings with regard to essential kinship and Oneness with the world: to repeat, mystics as well as creative artists or true philosophers play an intensive, participatory role in the world instead of remaining detached self-conscious observers.

By reading and interpreting the layout of Tarot images we acquire the opportunity to ask “which of [the rhizomatic lines] are dead-ended or blocked, which cross voids ... and most importantly the line of steepest gradient, how it draws in the rest, towards what destination” (Deleuze & Parnet, 1987, p. 120). These are all value-laden, bordering on clinical, revaluations of experience as complementary to critical thinking. Kerslake (2007, p. 4) suggests we suspend the

clinical dimension but contends that it is not always possible to separate it from the critical. *It should not be, indeed.*

The sign of The High Priestess is always already implicated as a healer, a wise clinician of the individual and collective consciousness, of culture and society as a whole. Filled with spiritual love, the High Priestess is the epitome of becoming-woman which is “the key to all other becomings” (Deleuze & Guattari, 1987, p. 277) that potentially empowers all of us with the creative, destratifying, function. Any object of experience contains potentialities as virtual or implicit meanings, even if they are not yet actualized or made explicit. “Creation through the Word” (Faivre, 1995, p. 98) becomes our human creativity through Image, through the language of Tarot signs. The necessity for all of us to become-woman by learning the High Priestess’s language of signs acquires a greater, spiritual and political, significance.

In opposition to their apparently illogical and monstrous status, as Lewis and Kahn (2010) would call assemblages of signs, which defy habitual dichotomies within the orthodox subject position of the liberal humanist tradition, rational thought is usually “privileged as a ‘hero’ capable of ‘taming’ or ‘killing’ the irrational beast using the tools of reason” (Lewis & Kahn, 2010, p. 5). The reason in question is however reduced to its dyadic logical form that ignores the included middle of interpretation. A triadic, semiotic, relation always represents a threat, a fear of “the uncanny return of the other [as] a site of great ambiguity, a paradoxical location that speaks to the limits of enlightenment reason” (Lewis & Kahn, 2006, p. 62).

Importantly, as Noddings (2002) emphasizes, it is always multiple others, “thought of as ‘non-I’ that actually produce the ‘I’ through encounter. Every object encountered holds the possibility of affecting the self” (p. 163). The ultimate encounter represents the return of the alien other, of the Goddess who has been exiled, or ignored, or feared, or banished; therefore marking “the beginning of the end of patriarchy ... and the triumph of the image over written words” (Shlain, 1998, p. 406). Reading, “speaking” and understanding the language of images, the Goddess’s original language that Shlain (1998) contrasted with the linear alphabet, leads us to learning, to the integration of the unconscious and hence to the intensification of human consciousness with the ultimate goal of achieving *Integral* consciousness; the concept to be addressed in the next chapter.

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BECOMING-WOMAN

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TOWARDS INTEGRAL CONSCIOUSNESS

Nel Noddings (1993), consistently arguing for introducing matters of religious and secular ethics in the classroom – “belief or unbelief” alike – insisted that education should aim for an intelligent approach to existential, metaphysical and spiritual questions and, as such, would allow us to make a connection to the spiritual realm. She refers to naturalistic ethics, which attempts to demonstrate that “the results of behaving in a certain pattern are objectively better than results obtained by other patterns of behavior” (Noddings, 1993, p. 121). Still, morality is considered a fundamentally subjective enterprise, such a stance implying that there is no foundation for moral knowledge.

The arguments presented so far in this book, however, have laid down an unorthodox, virtual, but still a foundation, for moral knowledge. This semiotic foundation is uncertain; rather than being a stable structure it is a dynamic process-structure that we lay down anew every time we want to ask ourselves the question of how one should live. Let me correct myself here. The classical question of ethics regarding how one should live needs to be paraphrased in the framework of edusemiotics. According to Deleuze-Spinoza we cannot know what a body (both physical and mental, both corporeal and incorporeal) can do.

When a theoretical problem of being is replaced by a practical, radically-empirical, approach to becoming – as indeed it is in the context of Tarot edusemiotics – the normative question pertaining to “good life,” how one should live, informed by the logic of identities, shifts its focus. Norms are replaced by the creative “experimentation on ourselves [as] our single chance for all the combinations which inhabit us” (Deleuze & Parnet, 1987, p. 11); these combinations literally laid down in the form of sensible patterns of Tarot images grounded in the logic of multiplicities, of signs.

It is the logic of multiplicities versus identities that provides us with practical clues of what we might become. As Janus-faced, signs are irreducible to the level of the actual, which is “inhabited” solely by perceptible identities (cf. May & Semetsky, 2008) but partake of the virtual, of the imperceptible, of the unthought and the unconscious. Still, what is “unthought [is] not external to thought” (Deleuze, 1988a, p. 97) but is enfolded into “a broken chain of affects” (Deleuze & Guattari, 1987, p. 9), feelings and emotions reflected in the Tarot Arcana that as such can be unfolded and brought to consciousness.

Swiss polymath Jean Gebser argued that human consciousness undergoes various phases of intensification towards greater degrees of transparency, ultimately achieving the state of Integral consciousness when what is latent and opaque becomes manifest and fully transparent. According to Gebser, consciousness evolves from its Archaic structure to Magic, Mythic and then to

Mental structures respectively. The word Archaic, describing the initial structure of consciousness, has the same root as the word Arcana; the structure of consciousness starts from the ever-present origin, as Gebser (1991) asserts. Indeed the word Arcana is derived from the Greek *arce*, the meaning of which is origin.

In the context of Tarot edusemiotics, the symbol for such ever-present origin – the primordial state of consciousness – is of course the very first image, The Fool (Chapter 1), which has the corresponding numeral zero and is as such *ever-present* in each of the subsequently numbered images of Major Arcana as a series of humankind’s unfolding consciousness. It is a truism to say that $1+0=1$; $2+0=2$, or $21+0=21$. Zero as the ever-present origin is always present irrespectively of the unfolding state of consciousness being symbolized by The Magician, Arcanum I, or by the last Arcanum, The World, number XXI, and irrespectively of whether our consciousness perceives it as such. Still, perceived or not, the ever-present origin always “places its imprint on the whole” (Gebser, 1991, p. 271).

Tarot semiotics is representative of the Archaic structure in the tradition of Hermetic philosophy together with its subsequent leap into the Magic structure of the Renaissance as the cultural revival of much earlier philosophical thoughts of Gnosticism and Neoplatonism. The evolution of consciousness can be further traced through Mythic structure. The archetypal field of the collective unconscious encompasses universal human experiences reflected in worldwide myths and folklore. Myths abound with implicit meanings in need of explication. The Mythic structure, for Gebser, is informed by insight and imagination reaching into the realm of symbols and dreams and expressed through the ages by poets, madmen, mystics and romantic lovers.

Archetypal structures are ever-present irrespectively of the wishes of the conscious mind as well as being over and above biological determinism. The unconscious or “psychic energy is a very fastidious thing which insists on fulfilment of its own conditions” (Jung, CW 7, 76). The constellations of the archetypes produce diverse archetypal images that manifest overtly in the form of particular behavioral patterns that are symbolically represented in Tarot images. Gebser reminds us that mythic bards like Homer are represented as being blind; their task was *not to observe* the visible world with the organ of sight, the eye, but to use insight, “a sight turned inward to contemplate the inner images of the soul” (Gebser, 1991, p. 271). We can once again reflect on the significance of the Old French Tarots that we referred to in Chapter 1, in which The Fool is pictured as blindfolded: he does not need the eye to perceive inner images but can instead rely on the three Is – insight, intuition and imagination – which are pertinent to his informal symbolic school of life.

The field of the unconscious, in accord with Gebser’s conceptualizations, should be understood as the maximally undifferentiated and opaque structure of consciousness and not as the psychological unconscious *per se*. The evolution of consciousness is represented as a story of the journey of individuation towards the ultimate archetype of wholeness and integration, the Self, by means of using the symbolic language of Tarot images. According to the Gnostic Gospel of Philip, the

truths of Gnostic knowledge must be transformed into poetic and mythic language so that we become able to understand them (Martin, 2006, p. 37):

Truth didn't come into the world naked
But in types and images. Truth is received only
That way. There is rebirth and its image,
They must be reborn through image.

It may appear that the Mental or rational structure that, according to Gebser, follows a Mythic one, is absent in the Tarot modality, which is habitually considered irrational and illogical. It is necessary, however, to abandon the idea that it is common sense solely that ought to be our guide. Common sense is a technical term that in philosophy refers to identity that arises when the faculties, posited by Kant, agree with one another *a priori*. Yet it is real-life situations, events and experiences which inflict on us “an impact that precedes all definite recognition of what it is about” (Dewey, 1934/1980, p. 145) in contrast to regular common sense.

We must disrupt our common sense with real-life moral problems that do not yield immediate answers as their univocal solutions but invite a free flow of thought in a critical and self-reflective manner within experience perfused with signs. It is through the Tarot edusemiotics that, after “getting stuck in a blind alley or in some impossible situation” (Jung, CW 9i, 82), we can achieve “illumination of higher consciousness, by means of which the initial situation is overcome” (Jung, CW 9i, 82), that is, this situation becomes “convert[ed] ... from the obscure into the clear and luminous” (Dewey, 1934/1980, p. 266). Tarot images embody “the background of organized meanings” (Dewey, 1934/1980, p. 266) that become explicated during the hermeneutic process of the signs’ reading and interpretation.

It is obvious that it is impossible to explain the functioning of Tarot edusemiotics in strictly causal terms as a prerogative of rational consciousness, which is representative of Mental structure; and especially because the preceding Mythic structure is characterized by Jungian synchronicity as an acausal connective principle in a strict opposition to the model of direct causality as per the scientific method representing the prevailing methodology of the Mental structure. Such a presumed absence of the preceding structure would make it problematic to claim the integration of that which is absent into a subsequent structure of consciousness, which Gebser called Integral.

To reiterate, since the times of Aristotle, the *philosopheme* of the Mental structure continues to be informed by the logic of identity, the logic of the excluded middle, *tertium non datur* (cf. Gebser, 1991, p. 257), which is permeated by abstraction of a concept from an image or symbol, thus eliminating any bipolar possibility. So, it appears that if we are currently stuck in the strictly rational mentality that subscribes to the traditional logic of the excluded middle, but are also haunted by the outlived modes of Archaic, Magical and Mythic structures of consciousness that pertains to Tarot, then we arguably perceive Tarot as parochial and doomed to extinction: its structure, its mode of thought, may easily appear to be what Gebser dubbed deficient.

But what is the meaning of deficiency in this case? Perhaps we are so blinded by “imposing our own myopic architecture” (Hederman, 2003, p. 22) onto reality that we are unable to perceive in Tarot both the ever-present origin and its unorthodox logic – *arational*, as Gebser would call it? Gebser is adamant that we do have a tendency to fall victim to our own limitations of comprehension and perception (1991, p. 267). We remember that it is a bipolar structure that pertains to a Peircean triadic sign, in which two poles, a sign and its object, are mediated by the included third of an interpretant; they are connected via a triadic relation symbolized, in the context of the science of coordination dynamics (Kelso & Engström, 2006), by the squiggle “~.” So a sign and an object do form a complementary pair instead of remaining separate binary opposites perceived as such within the limited perspective of rational Mental structure.

What Gebser called the arational (but *not* irrational) structure is in fact a semiotic structure underlying the science of signs as grounded in the triadic logic of relations, yet the methodology of which cannot be the same as the objective method of positivist science with its separation of the observer and observed. Humanity has long lacked a specific methodology to enable the Gebserian (and Deleuzian) intensification of consciousness, versus the simple addition of progressively accumulated verifiable, observable, empirical facts as data. Yet as Sohail Inayatullah, a scholar of *futures studies* in education, notices, there should be multiple deeper interpretations exceeding the “views of reality for which only empirical data exists” (2002, p. 3). He encourages a reflective approach, problematizing the nature of the current *episteme* as the very foundation for knowledge (Inayatullah, 2006).

From this perspective, Tarot edusemiotics presents itself as a method for the intensification of consciousness and representing this efficient structure that would eventually lead towards what Gebser called integrality. The condition to be fulfilled, however, as regards humanity’s current Mental structure, is that we must further intensify our very “mentality.” Despite the fact that the Archaic, Magic and Mythic structures have been progressively integrated, we as finite human beings still appear to be buried in the present-day, deficient Mental structure defined by narrow rationality and the logic of the excluded middle; and continue to experience our lives according to the unidirectional arrow of linear, chronological, time.

A significant characteristic of the would-be Integral structure of consciousness is what Gebser posited as the *supercession* of time; and indeed such a four-dimensional view of reality becomes open to consciousness in the process of Tarot edusemiotics. Space endures – and time presents itself as a fourth dimension in addition to the three dimensions of space. Together they form a block of space-time. Einstein’s theory of relativity had an impact on Gebser as well as on further developments in contemporary science. With a Tarot spread in front of our eyes we achieve an expanded perception of time and space that accordingly become “released from their human coordinates” (Deleuze, 1986, p. 122), which capture space merely in its three dimensions and time as chronological, linear and characterized by its unidirectional arrow.

Philosophical time, however, captures the past and future dimensions at once, as if timelessly, by means of contraction that forms a synthesis of time in the living present (cf. Williams, 2011). The future, as well as the past, is the present of philosophical time; past, present and future events coexist and appear in the layout as though “frozen in their locations in space and time” (Kennedy, 2003, p. 53). The subject of the reading in the here-and-now coexists with itself later: “me-now” is simultaneous with “me-tomorrow,” according to the so-called *triangle argument* derived from Einstein’s relativity theory:

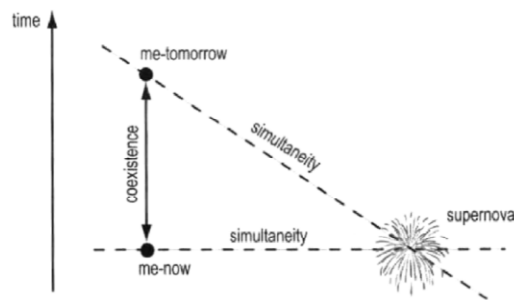


Figure 6.1. The Triangle Argument.

(Reproduced with permission from Kennedy, 2003, p. 63, Fig. 5.3)

The dotted lines indicate simultaneity, simultaneity implies coexistence, and the coexistence relation is indicated by a two-headed arrow – not unlike the Magician’s double-pointed wand (Chapter 4) or any genuine Janus-faced sign for that matter – that establishes an “extreme contiguity” (Deleuze & Guattari, 1994, p. 173) between the Hermetic worlds of *above* and *below* as well as between the time dimensions of *before* and *after*, thus overcoming the perceived dualisms.

For Deleuze and Guattari (1987), “*Becoming is an antimemory*” (p. 294). Is such an antimemory a memory of the future? The enigmatic notion of antimemory relates to a particular synthesis of time as the *future anterior* embedded in the dynamic process of semiosis that becomes projected in the static Tarot layout. This expression, memory of the future, is not an oxymoron: the block-universe ontology implies tenseless co-existence of the past, present and future. The static layout as a “frozen” slice of the dynamic process of semiosis does not contradict such ontology. Embodying a self-reflective triadic structure, the layout demonstrates one’s rather paradoxical “future memory” (Peirce, CP 7.591).

The triangle shown in Figure 6.1 has the same structure as Peirce’s triadic sign (see Chapter 2). As a genuine sign, a Tarot layout evokes the present state of consciousness in which both past and possible future events are projected. By its definition in psychology, “the projective hypothesis holds that an individual supplies structure to unstructured stimuli in a manner consistent with the individual’s own unique pattern of conscious and unconscious needs, fears, desires,

impulses, conflicts, and ways of perceiving and responding” (Cohen, Swerdlik, & Smith, 1992, p. 441). Psychologically, a projective technique that externalizes one’s inner reality in some material medium is a means for organizing a person’s unique experience as inseparable from their life-world. Ontologically, projection implies a specific synthesis of time: the memory of the future.

A sign-event is “already past and yet in the future, always the day before and the day after” (Deleuze, 1990, p. 77). In the framework of Tarot edusemiotics, time is paradoxically atemporal, tenseless and, as pertaining to its functioning in a Tarot layout, is essentially expressed in what Erich Jantsch called the fine-structured format that unites positions combining past, present and future like on a hypothetical temporal map displaying in the here-and-now (present) the dynamics of what was before (past) and what will have been after (future). A genuine sign – that is, a sign irreducible to a simple dyad – can not only create “in the mind of a person an equivalent sign [but] a more developed sign” (Peirce, CP 2.228) because of a theoretically unlimited chain of interpretants that produce novel meanings; evolutionary semiosis presupposes signs’ growth and development. We learn from signs, thus we ourselves become more developed signs.

By means of Tarot edusemiotics the subtle meanings of “the signs of the times [that] should be read from a deeper level beneath themselves and within ourselves” (Hederman, 2003, p. 216) become available to human consciousness. A merely dyadic relation would not lead to the creation of meanings; to repeat, a sign, “in order to fulfill its office, to actualize its potency, must be compelled by its object” (Peirce, CP 5.554), as if striving to abductively leap from the unconscious into being integrated into consciousness. In this respect, Tarot signs posit that which had already been presupposed (cf. Deely, 2001). The triangle argument may appear as utterly fantastical if not for us realizing that it is structurally isomorphic with Peirce’s genuine triadic sign.

What Gebser posited as significant parameters of Integral consciousness – namely, *arationality*, *aperspectivity*, and a sufficient degree of *diaphaneity*, due to which latent memories can manifest themselves as transparent images – are indeed the distinguishing features of Tarot edusemiotics; vice versa, it is Tarot edusemiotics that affords a full, holistic, integration of the structures of consciousness. From the Gebserian, aperspectival and paradoxical, viewpoint, the presence of the future is implied: me-now in the present co-exists with me-tomorrow in the future because “[P]resentation is ‘more’ than a tie to the past; it is also an incorporation of the future” (Gebser, 1991, p. 271). Such an *aperspectival* composition – the view as if from nowhere, as we said earlier, but in fact from within the very depth of the psyche – makes transparent that what was only latent, namely memories of the past and memories of the future as present at once.

Gebser speaks of *praeligio* as a commitment to emergent, future-oriented, transparency through a simultaneous “recollection” that brings forward *aletheia* (truth) as unhiddenness, exercising in this process a sort of alchemical marriage between the opposites as their mystical conjunction through the unification, or integration, of consciousness. The hidden or virtual becomes transparent and actual. Gebser presents the transparency of the “aperspectival world” (1991, p. 23),

illustrating it by reference to one of Picasso's works as a visual example of integrality or wholeness. Why? Because in this work of art it is time *per se* that demonstrates itself as *integrated*.

When we look at Picasso's 1926 "Drawing," says Gebser, we perceive at a glance the whole man; not one side but all sides simultaneously. "All various aspects are present at once" (Gebser, 1991, p. 24), and not only has space become transparent but time also is integrated and *concretized* as a fourth dimension of space, which means that the whole is rendered visible. The missing element, time, is expressed via intensity – called by Gebser the quintessence of time. Such "making present" (Gebser, 1991, p. 25) is evident in this Picasso's drawing because all implicit temporal structures have been explicated, hence actualized and made perceptible or visible.

As pertaining to Tarot edusemiotics, these temporal structures include not only the latent past but also the latent future as a dynamic "temporic portrait" (Gebser, 1991, p. 27) of the fusion of the time and the psyche by means of "wrestling" (p. 29) such latent time from oblivion via its specific structure and means of expression: time is rendered visible in the present! In the here-and-now of each Tarot reading we find what Gebser calls an unconscious presence of the future, as expressed by the Hindi word *Kal* which means yesterday as well as tomorrow (Gebser, 1991, p. 158, n. 18). The same concept is expressed diagrammatically via the triangle argument in [Figure 6.1](#).

According to Gebser, this is a Magic component. Yet it can become fully integrated in the context of "superwakeful transparency," that is, in a diaphanous state, within which "not only what is past but...also what is yet to come could be present" (Gebser, 1991, p. 129). Gebser (1991, p. 92) notices that St. Augustine was the first to perceive the relation of psyche, or soul, to time, to the realm of memory or *Memoria* (to which we referred in Chapter 3) as full of treasures represented by images. Sure, a part of the teaching of Hermes Trismegistus referenced the method of "interiorizing" the world of *mens*, giving rise, as such, to the art of memory (Yates, 1966). In Hermetic philosophy, with its principle *as above so below*, the human mind is a mirror-reflection of the divine mens equipped with its full creative potential.

For Gebser, such double, bipolar unification is expressed in the winged god Eros as the very symbol of soul that "knows" both poles at once, at the point when a term can turn into its very opposite: invisible into visible, inner into outer. The mirror image relates to the myth of Narcissus as the symbol for anticipated self-reference, self-reflection, self-knowledge or Gnosis, the ultimate "expression of the awakening of consciousness" (Gebser, 1991, p. 227) when the latent or the unconscious is integrated into consciousness and becomes transparent or, using Gebser's term, diaphanous.

Gebser points out that the dissolution of the mirror aspect – in the form of bringing together of above and below, of the unconscious and consciousness – is a step towards concretion and integration by means of the intensification of consciousness. In the context of semiotics and the science of coordination dynamics, such is the role of a genuine relation expressed by tilde, "~." So it is the

logic of the included middle, the prerogative of the science of signs as the ground for Tarot edusemiotics that leads to the practical integration of the dualistic opposites perceived as such by strictly rational consciousness representing the Mental structure.

In the Tarot layout the apparent polarities of above and below, of the unconscious and consciousness, of before and after are being brought together in the ultimate contraction (cf. Williams, 2011). Tarot functions as a symbolic bridge establishing a co-present semiotic relation between me-now and me-tomorrow, thus symbolically embodying Hermes, the mythical deity of communication, the gods' messenger. His message is to awake in us this true soul that, like the Winged Eros, will have had knowledge of both terms in the triadic semiotic relation, partaking as such of the human and the divine at once. It is into this included middle that the consciousness of both terms – the human and the divine – is projected, thereby implying their coexistence in our perception and experience.

Referring to time, Gebser speaks about the statue of veiled Kronos as a symbol relating to the Greek word for time, *Chronos*. Linear chronological time can be contrasted with what the ancients called *Aion*, the universal time of co-existence irreducible to measurable linear time, the latter “belonging” to the merely deficient mentality. However in its efficient mode, universal time can be present to consciousness in the specific moment of *Kairos*, when time becomes captured and seized, while uniting both poles, *Chronos* and *Aion*, at once.

This is what Wolfgang Pauli meant when he spoke about two time-series that can come together in one integrated experience: the moment of *Kairos*, the revealed true meaning, in a way. Such apparent “revelation” is informed by insight, intuition and imagination as the three Is of Tarot educational semiotics characterized by what Noddings and Shore (1984) designate as paradoxical, involuntary, “receptivity” (p. 74). In such an affective, intuitive, mode of reception “I let the object act upon me, seize me, direct my fleeting thoughts as I scan the structures with which I may, in turn, act upon the object” (Noddings & Shore, 1984, p. 74). Significantly, Noddings and Shore comment that such receptivity will have had a “religious aspect” (1984, p. 75).

An example of integration is observed in what Gebser refers to as primal words that encompass two meanings (that would be usually represented by either-or dualistic opposition) in their intrinsically harmonious kinship, when they are brought together, at once. In fact each Tarot image, in its functioning in the mode of Jungian archetypes, is a symbolic primal word (even if extra-linguistic), a Janus-faced sign; each archetype, according to Jung, has both light and dark aspects, like The Magician and his “other side” represented by Trickster. While The Magician's actions are wise and ethical, Trickster as his alter-ego might very well coerce humans into playing his games and performing his tricks.

Even the archetypal Mother who is taking care of her children and, in response to their needs, surely providing home and shelter in the image of The Empress can project its opposite, wicked and dark side – chthonic, as Jung would say. Lewis and Kahn (2010) notice the limitations and even danger of the *a priori* conception of home as a “safe” or ‘comforting’ retreat where the human subject can find privacy

and repose with other like-minded friends and family against the noise of the rabble outside” (2010, p. 13). Interiority in this case is posited as a binary opposite to exteriority without recognizing the complementary relation between the two terms. As Deleuze pointed out, we “are never separable from the world: the interior is only a selected exterior, the exterior, a projected interior” (Deleuze, 1988b, p. 125). Lewis and Kahn conceptualize a monstrous home as a location already including “an uncanny confrontation with its repressed excess ... that undermines notion of private/public dichotomy [and represents] an alternative spatial topology” (2010, p. 13).

Still, the adjective monstrous may be misleading: the paradoxical line of flight created by becoming-other along the symbolic conjunction *and* represented by the squiggle “~” and made possible in the regime of signs established by Tarot edusemiotics, appears foreign or even monstrous only to the narrow rationality of Gebser’s Mental structure. However, this mechanistic rationality still prevails today, and we continue to live within such a long-outlived structure. So Lewis and Kahn may very well be right, and what can be perceived as enchanted is still considered as monstrous by mainstream liberal discourse in educational philosophy that has been deprived of the three Is of semiotic pedagogy or exopedagogy alike: intuition, insight, and “savage imagination” (Lewis & Kahn, 2010, p. 144) that defy the taboos of “oppressive forms of domination” (Ibid.).

Contrary to Cartesian dualism characterizing rational Mental structure, Gebser speaks of correspondences or polarity when a relatively stable structure is indeed maintained by virtue of the included middle as a momentarily unifying *tertium* (1991, p. 86). In polarity (anti-duality), every pole is complementary to another one as “a completion of the whole” (p. 85). Gebser’s untimely insights are indeed reminiscent of the science of coordination dynamics (Kelso & Engström, 2006). Gebser, however, considered polarity to be a feature of Mythical – un-perspectival, irrational and non-scientific – structure; what in my prequel (Semetsky, 2011) I addressed from the perspective of esoteric tradition and Hermetic philosophy.

But the science of signs or edusemiotics blends or integrates Mythic and Mental structures within such intensified experience as the hermeneutic process of reading and interpreting Tarot images. Ditto the new science of coordination dynamics (Kelso & Engström, 2006) that posits bipolar pairs embedded in the relational – or complementary – Nature. In other words, Tarot edusemiotics blurs the dualistic distinction between science and myth and combines both in one complementary science~myth – or *art~science* – pair; and the cutting-edge science of coordination dynamics partakes of the “esoteric” Hermetic philosophy that postulated the existence of relations, analogies and correspondences.

The logic of the included middle foregrounding Tarot edusemiotics does integrate the Mythic aspect with the Mental, art with science, therefore overcoming a deficient mode of the one-sided narrow rationality. Intensity is achieved by the affective conditions embedded in the hermeneutics of Tarot (Semetsky, 2011) that enrich the cognitive act of interpretation with insight, intuition and imagination; those three Is that make Tarot readings a learning experience, a teachable moment, in the words of philosopher of education Jim Garrison; and whenever the “object of

intuition seems to be both given and taken, offered and accepted, in one process” (Noddings & Shore, 1984, p. 77)! It is then that we become able “to discern and form objects” (Noddings & Shore, 1984, p. 78) of knowledge as deep inner Gnosis.

As Gebser points out, it was the *perspectival* composition of creative *art* that allowed human consciousness to integrate space; and not only space but time as well, whenever time is taken as the fourth dimension of space. Tarot edusemiotics demonstrates that time can be integrated into consciousness also by means of the *aperspectival* composition of *science*. This science is *arational* (using Gebser’s term) and equally creative; it also foregrounds the “creative logic of education” (Semetsky, 2008a). This science is semiotics as the science of signs devoted to the creation of concepts, meanings and values in practice, in experience. This science cannot be posited as a dual opposite to art. Signs represent at once “cognitive and imaginative entities” (Noddings & Shore, 1984, p. 78). Speaking of the likes of Mozart and Gauss, Noddings and Shore invite us “to take seriously the claims of creative persons who hear music, are seized by mathematics... see angels in stones” (1984, p. 78) – or, we add, can read and perceive deep meanings embodied in the Tarot Arcana!

Still, Gebser’s *aperspectival* perception may seem to be unavailable to us finite human beings unless we can position ourselves somewhere on the Supernova (as per the triangle argument in [Figure 6.1](#)) outside our human reach. But it becomes available to us when our consciousness is intensified up to the point of understanding the Tarot symbolism that expresses itself in the neutral language envisaged by Pauli, the language of signs, which as such is free of subject-object dualism! Tarot edusemiotics is fully compatible with the new unifying paradigm of the science of coordination dynamics (Kelso & Engstrøm, 2006). We remember that the essence of Peircean Thirdness is indeed coordination.

The drama of Narcissus’ myth is no more: it is new science that enables the dissolution of the mirror aspect envisaged by Gebser and therefore lays down the *arational* (but *not* irrational or illogical) foundation for deep Gnostic knowledge. Importantly, the evolution of consciousness reaches “the point of organizing a sense of self~other” (Kelso & Engstrøm, 2006, p. 253) as a complementary pair especially significant for our relations with others in the interpersonal and socio-political contexts. Dewey (1925/1958) pointed out the necessity of coordinated participation in life situations. In this respect the generic Other stops being a polar opposite that the isolated Self habitually perceives in fear and trembling as bordering on monstrous.

Fear and trembling can be transposed into an intensified, spiritual or numinous, experience. The awakening of soul and spirit leads to the integration of the Other. Gebser comments on *participation mystique* in the form of numinous experiences and “the awakening awareness of a soul” (Gebser, 1991, p. 193) in the Mythic structure of consciousness. My point, however, is that under the conditions of the logic of the included middle embodied in Tarot edusemiotics, it is the Mental structure *per se* that undergoes transformation from deficient to efficient (mutation, as Gebser would say), hence becoming capable of further integrality and crossing the boundaries between Mythos and Logos.

We do learn in/from/by experience, and our “intuitive mode ... is intellectually oriented” (Noddings & Shore, 1984, p. 80). The Hermetic worldview acknowledges transmutation. This alchemical concept should be understood metaphorically. It describes not a magical transformation of base matter in the form of metal like lead into “noble” gold, but human spiritual development that involves a whole person including their psyche and indeed employs reasoning by analogy. It is the soul-based process of Jungian individuation of the Self as the integration of the unconscious aspects. The process of gradual transformation is inscribed in the archetypal journey through the Tarot Arcana as a symbolic school of life.

The union of opposites and the integration of the Other is not just a myth, as it seemed to be for Gebser. Mythos and Logos coalesce. Thanks to Tarot edusemiotics we stop being detached observers but, in this transmutation toward the Integral structure of consciousness, we become what physicists John Wheeler and Henry Stapp called a *participating observer*. This expression appears to be a contradiction in terms in the framework of dualistic philosophy that maintains a separation of *res cogitans* from *res extensa*, of spiritual from material, of observer from what is observed. Referring to integrality as *tertium*, Gebser (1991, p. 406) speaks of this in-between, intermediary relation as genuinely true, even if indeterminate!

Kelso and Engstrøm (2006) notice that despite nature being described by quantum laws that indeed allow complementarity rather than contradiction between two seemingly mutually exclusive descriptions, our everyday practical experience habitually chooses between one true or right description versus another false or wrong, hence ignoring the “shades of grey” (Kelso & Engstrøm, 2006, p. xi) between them. Grounded in self-organization (that we addressed in this book as the very dynamics of semiosis pertaining to the action of sign in nature, culture and the human mind), Kelso’s original research (1995) has proved the existence of such dynamic patterns at the level of both brain and behavior. This was a point of departure for Kelso and Engstrøm in their “fascination with what seemed at first a somewhat esoteric connection between philosophy and the science of coordination” (Kelso & Engstrøm, 2006, p. xiii).

Kelso coined “the Principle of the In-Between” as the new scientific (and *not* mystical) principle back in 1998 at the symposium on developmental science in Stockholm. Further repudiation of the either-or mentality followed and culminated in the authors’ 2006 title *The Complementary Nature*, which brought

a novel scientific grounding to age-old questions that all of us ask: Which is more fundamental, nature or nurture, body or mind, whole or part, individual or collective? ... [A] great deal of the core essence of such dichotomized aspects seems to be located ... in what Aristotle called the “excluded middle” ... *The Complementary Nature* introduces a new meaning and application of the tilde or “squiggle” character ~, as in yin~yang, body~mind, individual~collective... Unlike the hyphen, the squiggle does not represent a simple concatenation of words, but ... indicates the inextricable

CHAPTER 6

complementarity relation between them. (Kelso & Engstrøm, 2006, pp. xiv-xv)

Among the complementary pairs in which the terms are related, or coordinated, are the following: cause~effect, *res cogitans~res extensa*, rationalism~empiricism, science~art, organism~environment, immanence~transcendence, body~mind, nature~nurture, being~becoming, certainty~uncertainty, consciousness~unconscious, spiritual~material, and so on, to ultimately include the dynamic relation “~” between the human and the divine which can therefore function as *interdependent coordinated poles*, in contrast to being irreconcilable and independent, dualistic, opposites.

The relation “~” is, as Deleuze would say, *external* to its terms; such included Third is what ensures “communications of milieus, coordination between heterogeneous space-times” (Deleuze & Guattari, 1987, pp. 313-314). Kelso and Engstrøm comment on shamanism as a precursor to Taoism and Confucianism in Chinese philosophy, in which the “principle of yin~yang [is] an icon symbolizing the fundamental conflict of opposites in nature” (2006, p. 20) and point out that what is “needed today is a tenable, comprehensible way to reconcile polarized and conflicting mind-sets” (2006, p. xvi). It is Tarot edusemiotics that becomes such a tenable and comprehensible means for reconciliation, for achieving Integral consciousness.

Among the governing principles of the Hermetic worldview was one of concordance, what in contemporary discourse we may call tolerance. This particular value, tolerance, cannot be reduced to just tolerating the generic Other; rather it is Tarot edusemiotics that forms a field of shared meanings and shared values in the reciprocal caring relation grounded in the logic of inclusion at the social level so that the terms in the relation indeed become reconciled and integrated. The theory~practice nexus of Tarot demonstrates that the science of signs as Peirce’s *philosophical* project is grounded in the cutting-edge *empirical* science of coordination dynamics.

Gebser’s ever-present origin, as symbolized by The Fool Arcanum, is also a symbol of the ever-present numinous and unbounded Spirit, an undifferentiated arch-primal word as Logos, the immaterial breath of God, out of which the material Universe was created. In the Tarot deck the last Arcanum XXI, as a symbolic culmination of the Fool’s journey, is called The World (Figure 6.2) or The Universe in some decks.

Zero (as corresponding to The Fool) is equivalent to the Void (symbolized by the abyss in the picture, as we stated in Chapter 1) that, in the Hebrew tradition, is the state from which the world was created. The tangible medium of Tarot in the succession of images through which the intangible Spirit (The Fool) is always shining through represents what Gebser called “concretion [as] the coalescence of the spiritual with our consciousness” (1991, p. 542). Respectively, Noddings (1993) points out that the process of ethical decision-making embedded in relational ontology, rather than founded on a predetermined rule for action, demands concretization rather than abstraction.



Figure 6.2. The image of The World.

The imagery of The World reflects Gebser's symbolism for the Integral structure: its sign is sphere – the curved space being symbolized by the oval garland; its essence is diaphaneity or transparency, and its properties are what Gebser called presentiating and rendering whole. The World is a symbol for the authentic individuated Self as the Fool's eventual transmutation in his archetypal journey and the unification of the Self (The World) with Spirit (The Fool): this is the process of individuation when we become whole persons, integrated personalities. Such is the aim of the holistic education symbolized by Tarot edusemiotics: the integration of all habitual binary opposites, including the integration of spirit (The Fool) and matter (The World) in one complementary matter~spirit pair. This is also the ultimate lesson to be learned by humanity as a whole in the course of its evolution toward Gebser's Integral consciousness.

The Universe (The World) is, according to John Dewey, the "name for the totality of conditions with which the self is connected" (Dewey, 1934/1980, p. 407). As Dewey emphasized:

the unification of the self through the ceaseless flux of what it does, suffers and achieves, cannot be attained in terms of itself. The self is always directed toward something beyond itself and so its own unification depends upon the idea of the integration of the shifting scenes of the world into that imaginative totality we call the Universe. (Dewey, 1934/1980, p. 407)

In the deck called The Whimsical Tarot, which was specifically designed for children and the young at heart, the pictures are drawn by the artist Mary Hanson-Roberts and are based on children's classical fairy tales and fables. The image of The Fool presents a playful character stretching her hand to catch a butterfly, itself a symbol of spirit, in the skies while not noticing the cliff nearby (Figure 6.3).

CHAPTER 6

Well, the school of life lies ahead, full of learning experiences embodied in the sequence of images.



*Figure 6.3. The Fool from The Whimsical Tarot.
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The image of The World in The Whimsical Tarot as shown in [Figure 6.4](#) portrays a figure within a sphere, indeed, that may be considered a symbol of Gebser's Integral consciousness.



Figure 6.4. The image of The World from The Whimsical Tarot.

A young girl is surrounded by several symbols: two red dancing shoes, a book, a heart, and a garland; together they carry the message of a performing or creative art in symphony with intellectual knowledge. For Russian philosopher Valentin Tomberg, who is believed to have authored the “magisterial work” (Faivre, 1994, p. 98) devoted to meditations on the Tarot Major Arcana (published as Anonymous, 2002), the image of The World conveys the metaphysics of the universe, akin to rhythmic movement and dance: it is world as created in a series of creative acts, not unlike the account of Genesis. The dancing female figure relates to the Dionysian mysteries, to joy and fulfillment, to soul or Anima, which is now fully integrated in the otherwise solely rational, Apollonian, world. The Integral consciousness envelops an Apollo~Dionysus complementary pair.

As Nel Noddings (1993) remarks in her book *Educating for Intelligent Belief or Unbelief*, dance sure is a soul-restorer. She calls for including moral and spiritual questions in the curriculum, as their deep exploration would contribute to an enhanced capacity for students to make intelligent connections to the spiritual realm and to be educated in Gnosis while becoming able to better understand the deeper meanings of our everyday experiences. It is Tarot edusemiotics, if and when introduced in the curriculum that would enable such a connection. Noddings (1993) addresses the nature of God and many gods; the possibility of spiritual progress and the danger of religious intolerance; human desire to experience a sense of belonging; feminism and the politics of religion; immortality, salvation, and humanistic aspirations; religion in connection to mathematics and sciences; human dependence on God and secular ethics.

Noddings reminds us of Dewey’s view on democracy as inclusive of common faith and truth, which is to be understood as an encounter of God in people in their actions and experiences. In his *Experience and Nature*, Dewey (1925/1958) noticed that to call somebody spiritual never meant to invoke some mysterious and non-natural entity outside of the real world. For Dewey, to be a spiritual person meant to possess qualities of rich, sensitive and, importantly, coordinated participation in the many situations of life. Soul and spirit are not to be considered as belonging exclusively to a mythic realm; just the opposite – they are embedded in real human experiences. This quote from Dewey deserves to be repeated:

When the organization called soul is free, moving and operative, initial as well as terminal, it is spirit ... Spirit quickens; it is not only alive but it gives life ... Soul is form, spirit informs. It is the moving function of that of which soul is the substance. Perhaps the words soul and spirit are so heavily laden with ... mythology ... that they must be surrendered; it may be impossible to recover for them in science and philosophy the realities designated in idiomatic speech. But the realities are there, by whatever name they be called. (Dewey, 1925/1958, p. 294)

The reality that embodies soul and spirit is the semiotic reality of signs partaking as such of both poles, material and spiritual. Spirit informs, it “resides” in the informational, in-between, field. For Dewey, the idea of God represented the active, creative relation between the ideal and the actual. The human desire to unite

the two – hence to overcome the long-standing dualist perspective – belongs to what Dewey considered a spiritual act; and it is this spiritual act that becomes embodied in the Tarot edusemiotics in the reality of our material, practical, experiential world.

It is a specific contribution of Dewey’s philosophy to education that an important aspect of learning is to be found in an expanded experience (which is made possible by the mode of intensified consciousness) and that the development of practical life as moral amounts to our progressive capacity to intelligently evaluate and reconstruct this experience. Learning from experience is equivalent to becoming able to understand multiple reciprocal connections:

To “learn from experience” is to make a backward and forward connection between what we do to things and what we enjoy and suffer from things in consequence. Under such conditions, doing becomes a trying; an experiment with the world ...; the undergoing becomes instruction – discovery of the connection of things. (Dewey, 1916/1924, p. 164)

Peirce defined intelligence, or consciousness, as scientific if it could use signs and be “capable of learning by experience” (Peirce, CP 2.227). As educational psychologist and semiotician Don Cunningham points out, it is “logic [that] is the key to understanding reality” (Cunningham, 2007, p. 2). This logic is the logic of the included middle as the basis of the semiotic reality, the reality of signs that not only inform but ultimately transform us. As noted by Fetzer (1991) in the context of cognitive science, “the most striking feature of Peirce’s theory of signs is that it suggests a corresponding theory of mind, according to which *minds* are sign-using (or ‘semiotic’) systems” (1991, p. 65).

Using and applying Tarot edusemiotics in practice allows us to connect many of the experiential dots, including that “what is to be hereafter” (Peirce, CP 5.316). This practice defies the unidirectional arrow of time, which appears to be a permanent feature of our experience. By virtue of “plunging ... into the depth of Nature, or of the Unconscious” (Deleuze & Parnet, 1987, p. 91) we become able to perceive the structures of knowledge in the depth of the psyche; and our practical experience itself functions as the included third in the formation of those very structures. The archetypal patterns are being *formed*; as such they implicitly *inform* the creative imagination of the artists designing this or that Tarot deck. As an educational tool, Tarot edusemiotics can in turn *trans-form* us because experience is never merely private or confined to a personal Cogito.

For Dewey, the world of mind is to be considered a meaningful coordinated pattern (cf. Kelso & Engström, 2006) that emerges in the relational or transactional dynamics. Intelligence arises within a system of dynamic tensions (differences, for Deleuze) that function as signs providing us with clues to practically evaluate and reconstruct a particular experience, to enrich it with meaning and value. In this framework, values and meanings are not reduced to subjective feelings but reside in the whole experiential world. They are signs, indeed, with which the world is perfused, according to Peirce.

The start of experiential nomadic education (Semetsky, 2008b) is motivated not only by empirical facts but by experiencing the world of values that make us strive for certain, even if implicit, goals. These goals and purposes, reciprocally, do shape our experience and contribute to the realization of new values and meanings as well as purposes per se. Human experience therefore has both a logical and biological character; it is semiotic to its core, and values cannot be simply represented by a fixed set to be transmitted to students in the instructional mode of direct inculcation: they will have to be experienced!

Significantly, this experience is to be shared by both teachers and students. As Noddings (2002) contends, the aim of moral education is to contribute to the continuous education of both students and teachers, who would thus act as “melodies in counterpoint, each of which serves as a motif for another” (Deleuze & Guattari, 1987, p. 314). Educational semiotics, Tarot edusemiotics notwithstanding, is irreducible to “‘instruction’ or any prescriptions for ‘best practice.’ Critique of the current system and its practices is inevitable when an alternative is proposed” (Cunningham, 2007, p. 6). Patterns of experience, both actual and potential, are represented by signs that function as dynamic moving forces, “whether perceived or presented in imagination” (Dewey, 1916/1924, pp. 152-153).

The nuance “in imagination” is significant as it expands the boundaries of experience over and above what is immediately given to senses. As Lewis and Kahn (2010) comment, it is imagination that can take us out of the confines of the *five-sense prison* of the empirical, measurable, world. Imagination expands the world only narrowly realized in cognitive thought; it carries an affective, feeling-tone, quality. Importantly, imagination exceeds faith which, as Dewey posited, appears to be based on the truth of the propositions solely by virtue of their supernatural author.

The process of learning from experience is natural, and not supernatural; the patterns of real experiences reflected in Tarot images, when amplified by reading, interpretation and the integration into consciousness, contribute to human growth because, to repeat:

What [a person] gets and gives as a human being, a being with desires, emotions and ideas, is ... a widening and deepening of conscious life – a more intense, disciplined, and expanding realization of meanings ... And education is not a mere means to such a life. Education is such a life. (Dewey, 1916/1924, p. 417)

The images of the Major Arcana from The Fool to The World represent such a progressive “widening and deepening of conscious life”; the evolution of consciousness towards its Integral structure as an “eventual function” (Dewey, 1925/1958, p. 308) of our learning in the school of life. When critical self-reflection produces an examined versus unexamined (read: lacking meaning) life, then authentic experiences reach their critical mass: the Fool has to symbolically stop so as to reflect back on them, to reflect on himself. It is at this threshold of the

“midlife” cycle of the Jungian individuation process that the Fool meets his teacher symbolized by the image of The Hermit (Figure 6.5).

The Hermit embodies the Jungian archetype of the Wise Old Man who puts into practice the ancient “Know Thyself” principle. The Hermit’s lantern symbolizes this inward search for the deep Gnostic knowledge and the ethics of authenticity (cf. Taylor, 1991).

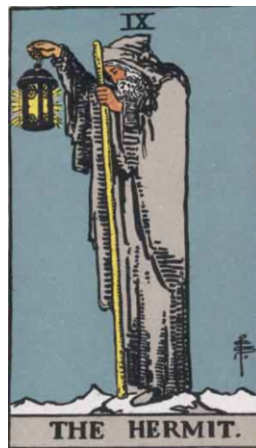


Figure 6.5. *The Image of The Hermit.*

The Tarot images embody “an endless series of representations ... The interpretant is ... but another representation to which the torch of truth is handed along; and as representation it has its interpretant again. Lo, another infinite series” (Peirce, CP 1.339). The intermediate interpretant in the image of The Hermit, nonetheless, carries a “torch of truth” for the Fool; the Fool who becomes wiser and more resilient in each subsequent representation will have to go through more experiences: as Dewey asserted, education always consists in more education.

As the dynamic patterns (cf. Kelso & Engström, 2006) of thoughts, affects, emotions, feelings and behaviors, the images embody the very values implicit in collective experiences that transcend times, places, language barriers, disparate beliefs and cultures. In the context of feminist moral philosophy, Noddings pointed to such common global human experiences as birth, marriage, motherhood, death, or separation, even while denying moral universals as predestined rules for our actions. These experiential events are fundamental; thus they can be considered to have universal meanings for humankind, even when they are happening in different places across the globe, or in different periods in history. These common human experiences are embodied in the Tarot images. Each pictorial story constitutes an educational and learning experience because once we realize the deep meanings embodied in the sequence of pictures we can step on the road toward self-understanding, personal development, and, ultimately, spiritual rebirth.

In the Tarot deck, the idea of Rebirth is signified by the image of The Sun, as shown in Figure 6.6 with its image of a happy child basking in the sunshine, the psychic energy of a child enriched by the solar energy of the world of nature and welcomed by the kingdom of Spirit.



Figure 6.6. The image of The Sun.

Not all images are joyful; some reflect the different nuances of what St. John of the Cross called the dark night of the soul, accompanied by feelings of confusion or helplessness in the absence of spiritual guidance. The journey through the images becomes even more important in cases of emotional insecurity experienced by the potential Self who is searching for meanings. It is when the meanings are integrated via tapping into what Dewey called an imaginative projection of the spiritual realm – even if it appears to be merely ideal in character – that we can consciously realize the semiotic reality of signs that was hitherto unconsciously felt at the affective level.

Tarot edusemiotics comprises the journey through Tarot images that symbolically “give shape and expression to what would otherwise be untold” (Witherell & Noddings, 1991, p. x). The pictorial “stories lives tell” (Witherell & Noddings, 1991) bind together disparate events and experiences in the midst of which we can enact our moral education. As Radest (2000) comments, “Moral experience is a puzzle and moral education is its stumbling interpreter” (p. 11). Indeed, the relation “~” established by means of the Tarot layout as the symbolic representation of moral experience needs interpretation, which is triggered by Peirce’s abduction that, in its stumbling or stuttering manner, interrupts linear dyadic logic and is symbolized by The Fool Arcanum; the Fool is portrayed as if “stumbling” at the edge of the abyss (Chapter 1).

Tarot psychology is archetypal or transpersonal. In his book *Educating Psyche: Emotion, Imagination and the Unconscious in Learning*, educational psychologist

Bernie Neville (2005) comments that “archetypal psychology can find its images in ... religious systems, or in ... the Tarot” (p. 127). Each picture in the deck carries a strong humanistic aspect by virtue of the persistent drive to grow, develop, differentiate, and ultimately to integrate all experience, to become the individuated Self in the due process of signs-becoming-other within the flow of semiosis. The process of semiosis is theoretically unlimited; life can always present new challenges.

Under novel and unexpected circumstances, the Fool will have to start again, as if from nothing (Zero), stepping anew on the road toward discovery of existential meanings by learning his experiential lessons so as to ultimately resolve that which would otherwise have remained an “inescapably tense relationship between inner and outer perspectives” (Radford, 2006, p. 393). In the context of children’s spiritual education, Radford challenges the dualist approach to “inner and outer realities... in favour of an understanding in which we see ourselves as part of the social and natural” (Radford, 2006, p. 385), greater, world. This perspective takes our minds out of the confines of the Cartesian Cogito and extends experience towards its spiritual dimension that, being part of our mentality, nonetheless originates relationally and “publicly in shared experiences, feelings and thoughts” (Radford, 2006, p. 392).

Indeed, the unfolding dynamics of experience takes our consciousness out of the confines of the private mind and puts it in the public world where – in the self-referential manner without which there won’t be any sign-relation at all – it originally resides even if only in its latent, virtual, form. Gebser refers to Novalis’s conception of *inner outer world* when the world opens itself to us, to our souls. In other words, with the help of Tarot edusemiotics the meaning of Mental structure changes; it becomes *efficient* in its transmutation into Integral structure. It shifts its predominant position, its perspective and point of view, the very limitations of which were making it deficient in the first place.

The point of view is no longer located in egocentric consciousness; as integrated in the World, the Ego is transformed into the Self, the archetype of wholeness that as such becomes paradoxically self-less, free of Ego! Noddings and Shore (1984) emphasize that in the intuitive modes of perception “we experience both increased subjectivity (intense affect) and reduced subjectness” (1984, p. 79) characterized by diminished egocentrism. It cannot be otherwise if self and other are indeed coordinated via relation and become what Kelso and Engström designate as a complementary self–other pair. They are united by virtue of the included middle of Tarot. The efficiency of our new mentality is achieved in its very Integrality that supersedes the preceding Mental, strictly rational yet deficient, structure.

The evolution of consciousness is a lifelong process: the Self is never given *a priori* in the form of a Cartesian subject; it is the search for meanings embedded in experience that leads to human development. The subject or Self becomes, as Noddings points out, constituted, rather than being an *a priori* constituting subject forever separated from the world of objects. It is this constituted, maximally integrated, self-transcending personality that becomes equipped with a sense of identity, the Self, when all unconscious, both actual and potential, meanings are

realized, hence integrated into consciousness. As an educational tool, Tarot edusemiotics does lead to achieving Gebser's Integral consciousness.

Gebser speaks of *systasis* and *synairesis* to characterize the uniqueness of the Integral structure of consciousness. The mediation by means of images construes the included Third (*tertium*) due to which "the gulf between existence and essence" (Dewey, 1925/1958, p. 167) becomes bridged. Arcanum, by definition, holds a secret: its latent meaning. Latency, for Gebser, is the demonstrable presence of the future. In agreement with Gebser's project, it is the very process of human experience and the immanent unfoldment of consciousness through the Major Arcana from The Fool to The World that is not just integral but, importantly, is itself "integrating" (Gebser, 1991, p. 310) so that we become able to perceive all temporal elements as a whole; and this is what Gebser called *systasis*.

It is at this stage that our whole perception of the nature of reality indeed changes; and this is what Gebser called *synairesis*, understood as perceiving *aperspectivally* (1991, p. 312). The principle of integration, for Gebser, is *achronon* as the achievement of time-freedom (Gebser, 1991, p. 385). And the method to achieve it – what Mythic consciousness would have called the immortality of the soul (cf. Semetsky, 2011) – is Tarot edusemiotics. The non-dimensionality, Zero, of the origin symbolized by The Fool Arcanum, its "archaic pre-timeliness and therefore pre-spatiality [is] transformed into space-time freedom if they are realized and integrated by us and thereby enter our consciousness from mere pre-consciousness" (Gebser, 1991, p. 383).

This freedom comes with a qualification, however: the culmination of the journey (symbolized by The World) taught our Fool the ethical lesson of accepting responsibility in the world and for the world. Freedom entails responsibility; as Noddings put it, freedom itself becomes achievement! It is our participation in the world – that is, taking responsibility for others, both human and non-human – which is fundamental to the ethics of care and should become an indispensable part of moral and spiritual education grounded in Tarot edusemiotics. Care theorists turn upside down the abstractions of moral philosophy, insisting that universal experiences are grounded in concrete human conditions described as "the commonalities of birth, death, physical and emotional needs, and the longing to be cared for. This last – whether it is manifested as a need for love, physical care, respect or mere recognition – is the fundamental starting point for the ethics of care" (Noddings, 1998, p. 188) in education.

The process of the constitution of the Self and discovering one's authenticity is the existential function of Tarot edusemiotics. It relates to the problematic of identity – self-creation, or creation of the Self – because it is when new meanings are created and become available to consciousness that "the old self is put off and the new self...is forming" (Dewey, 1925/1958, p. 245). The existential function as such complements the educational function; both are grounded in the holistic dimension of experience, the scope of which expands to incorporate the spiritual domain. Human consciousness becomes Integral, and it is such an expanded and intensified mode of consciousness that can perceive "affairs remote in space and in time" (Dewey, 1925/1958, p. 279) and achieve deep inner knowledge as Gnosis.

As Crawford and Rossiter (2006) point out in their study devoted to the exploration of young people's reasons for living, "meaning and identity are the same psychological reality looked at from different perspectives. From the viewpoint of meaning, it is an explanation of individual intentionality. From the viewpoint of identity, it is the individual's distinctive self-understanding and self-expression" (p. 33). They notice the link between the search for meaning, the search for personal identity, and for spirituality. They specifically point out the diversity in aspects of pedagogy if and when education is oriented towards wisdom. Helping students "to look on their experience of education with a greater sense of its value" (Crawford & Rossiter, 2006, p. 321) is a noble task; but it should be performed by teachers equipped with at least an equal if not greater sense of value and meaning of their own professional practice and their own personal development.

It is due to Tarot edusemiotics that we can achieve a better understanding of both ourselves and others by realizing in practice the dynamics embedded in such a complementary self-other pair, and also of what may seem to be irresolvable moral dilemmas. The realization of a particular "disturbed and perplexed situation" (Dewey, 1933/1998, p. 139) subsequently leads to choosing a right course of action and a better informed, intelligent, decision-making ability (Semetsky, 2011). The different voice of Tarot signs brings forth the subtleties of Carol Gilligan's pioneering work, which challenged old assumptions about human moral development. Gilligan (1982/1993) contrasted the feminine relational way of moral thinking with Kolberg's model of fixed stages. In the preceding Chapter 5 we referred to the image of The High Priestess as the embodiment of the feminine way of knowing.

In The Whimsical Tarot for children, The High Priestess is portrayed as a fairy godmother – a character that assists Cinderella in the famous tale told in different languages to children across the globe! The fairy godmother has her roots in the figures of the Fates of Greek and Roman mythology; the same idea is also seen in another tale for children, Sleeping Beauty, where they decree her fate and are associated with spinning (Figure 6.7.).

The pictures tell us multiple stories about complex experiences, and the list is endless because real-life experience always presents new contexts and encounters that call for new evaluations, new meanings, and more education in practice, especially considering that each layout combines the images in a new constellation, each time reflecting novel circumstances and presenting the perplexity of an unexpected problematic situation that requires a creative practical solution. As Deleuze and Guattari (1987) put it, "life reconstitutes its stakes, confronts new obstacles, invents new paces, switches adversaries" (p. 500).

The problem of finding a metaphysical cure for the human predicament so as to revisit our conceptions of spirituality through education has been articulated by Jack Priestley (2008). The question of the meaning and purpose of life is of equal importance to children and adults alike. Citing Schumacher, Priestley (2008) insists on bringing metaphysics into the discourse on children's spirituality and education.



Figure 6.7. The image of The High Priestess from The Whimsical Tarot.

Through the Tarot images, a symbolic connection is established between the metaphysical or ideal (using Dewey's term) realm of the Spirit and the patterns of real experience. The metaphysical realm thus becomes embodied in our actual experiential reality, in our practical life.

I am reminded of Herman Hesse's masterpiece *Magister Ludi*, also known as the *Glass Bead Game* (cf. Brier, 2008, p. 441), which is a mode of playing with the total contents and values of the whole of culture, not unlike the organist playing pipes on the organ. However the range of this magisterial "organ" spreads over the entire intellectual cosmos, thus being capable of reproducing, at least in theory, the full intellectual content of the universe. The game is played with "ideas" like musical notes in a fugue, and partakes of a new symbolic language that can simultaneously represent the structure immanent to the ideas it expresses, as well as having its own means of symbolic, albeit hieroglyphic, expression.

The principles of this language appear to be the same as elaborated here in the context of Tarot edusemiotics: the ideas are signs. The major effort of the Glass Bead Game is to reconcile the opposites expressed by Hesse as Yin and Yang, heaven and earth, art and science, or science and religion. Hesse's magisterial game, I contend, finds its practical implementation in Tarot edusemiotics. The principle of the mystical *coincidentia oppositorum* is grounded in the reality of signs, in the logic of the included middle, and the realist ontology that understands cosmos in terms of a virtual reality comprising multiple levels of existence.

It is important to repeat that "in order for the virtual to become actual it must create its own terms of actualization. The difference between the virtual and the actual is what requires that the process of actualization be a creation ... Without the blueprint of order, the creative process of organization is always an art" (Hardt, 1993, p. 18), and we exercise such a creative art in the process of reading and interpreting Tarot signs. Jim Garrison, addressing the problematic involved in the

CHAPTER 6

“ever creative curriculum” (Garrison, 2000, p. 117), describes such a curriculum as a transformative and participatory process that continuously embodies new emergent meanings and values. Traditionally, that is within the boundaries of rigid logic and formal thinking, those new meanings have been considered “inaccessible to sense” (Dewey, 1934/1980, p. 32).

In the context of Tarot edusemiotics, it is the school of life, praxis, that itself presents us with its ever-creative curriculum, not unlike the method of *currere* (cf. Pinar, 1975, 2004). With regard to formal education, conditions enabling the possibility of accessing the otherwise inaccessible may still be realized in practice if and when Tarot is used as an educational aid and a tool for self-education and self-formation. Sure enough, Crawford and Rossiter (2006) notice that the purpose of moral and spiritual education is not simply to “inject” such a dimension into curriculum: “other strategies need to be employed” (p. 320). Tarot edusemiotics can become such an alternative strategy even if this meant restructuring schools and transforming them into what Nel Noddings has long advocated as centers for care.

By using Tarot as a pedagogical method, we acquire a better ability for self-reflection, self~other knowledge, and a sense of value and meaning of our personal experiences that nonetheless always “involves the Other” (Deleuze, 1994, p. 23). Tarot images, symbols and signs do bring to our awareness many initially unperceived meanings, thereby contributing to our spiritual development and Integral consciousness based on the integration of, and learning from, both actual and potential experiences.

It is the Tarot signs that “bring down to earth” what is usually considered “disembodied” Spirit, and which thus becomes immersed into the very flesh-and-blood of our real human experiences. This should provide us with reassurance in answering Jim Garrison’s disturbing question, “Dare we teach children to create ethereal things?” (Garrison, 2000, p. 117), especially keeping in mind that, as productive of real effects, these things are truly “knowable if not known” (Dewey, 1934/1980, p. 269). Something that was only potential and disembodied – like Spirit that, as Dewey insisted, informs even if by itself lacking material form – can become actualized in a singular experience in our real life; hence known to us via its physical realization and embodiment in the sequence of Tarot images.

Still, asks Garrison of children, “can we stop them?” (Garrison, 2000, p. 117). But of course we can, and shame on us educators if we do! Too often we forget that the “more an organism learns...the more it has to learn in order to keep itself going” (Dewey, 1925/1958, p. 281). Too often we as educators assume the position that Dewey (1925/1958) ironically dubbed the supreme dignity of adulthood, therefore betraying the very continuity of the growth process while at the same time trying to “foster growth” in our students. But for them to learn, shouldn’t we too?

The traditional curriculum rarely provides any conditions for discussing “genuinely controversial issues” (Noddings, 2006, p. 1) that would contribute, even if potentially, to the possibility of connecting with the Other by understanding the plurality of different perspectives and viewpoints, up to the point of becoming

engrossed in these experiences. This kind of affective understanding constitutes learning as a practical experiment with the world and ourselves; the experimentation on ourselves, in Deleuze's words. We tend to forget that education is inseparable from organic life, and a spiritual dimension embedded in experience precludes human attitudes and dispositions from being considered as "separate existences. They are always of, from, toward, situations and things" (Dewey, 1925/1958, p. 238; Dewey's italics), that is, they are relational in character.

Noddings (1993), addressing questions of children's belief or unbelief in God, stresses that they should be subjects of intelligent inquiry. Dewey insisted that what he called a religious phase of experience is totally separate from anything supernatural and should indeed be emancipated from a "'religion' as a noun substantive" (Dewey, 1934/1980, p. 404) as well as from any submission or "the servile obedience rendered to an arbitrary power by frightened men" (Dewey, 1934/1980, p. 403). He acknowledged the significance as well as "inadequacy of our present psychological knowledge" (Dewey, 1925/1958, p. 238), and the deep exploration of Tarot psychology and its unorthodox language of expression that provides us with a real-life interpretive practice should not be ignored.

However, even as Dewey was adamant that "there is...no succession of studies in the...school curriculum [and] [t]he progress is not in the succession of studies, but in the development of new attitudes towards, and new interests in, experience" (Dewey, 1897/2000, p. 97), academic progress still continues to be measured by the successions in studies (and this is so far the only progress acknowledged in formal educational settings). To bring into the school curriculum its missing values, or spiritual, dimension remains a challenge. Learning the Tarot symbolic language should enable us to construct a bridge between the material and spiritual worlds that will enhance people's capacity to make informed and intelligent connections to the realm of Spirit.

If, as for Noddings and Dewey alike, it is Spirit that can inform us, then securing the continuity of our relation to Spirit in practice is a prerequisite for holistic, integrative, and inclusive education. Still, prior to introducing Tarot edusemiotics into the curriculum, we will have to address the crucial problematic of teacher preparation. Noddings (2006) points to questions that appear to border on psychoanalysis: we need to ask not only what we believe but why we believe it; not only what do I feel, but also why. Not only what am I doing (although we rarely ask even this question!) but why. And even, what am I saying? And, again, why? Importantly, the context in which those questions should be asked is more than the private world of the mind, it is social and cultural. Self-understanding involves a critical examination of how external and internal forces affect our lives, thus necessarily involves our understanding of the Other.

In the expanded transpersonal context provided by Tarot edusemiotics that includes a spiritual dimension of experience, self-reflection necessarily means looking at the self in connection to other selves as positioned in the social, cultural and natural environment and for the purpose of exploring mutual affects and interactions. To use every opportunity to complement existing educational aids in the area of moral and spiritual education so as to put into practice the fact that

CHAPTER 6

Spirit is a moving force and a source of information (cf. Dewey, 1925/1958) is not only an educational task of considerable challenge but also our ethical responsibility.

A valuable aid for spiritual education is indeed available to us in the guise of beautiful images telling us a story – even if in a “voice” that is different, thus in need of being translated and interpreted so as to be understood – that could have equally happened to every one of us, locally or globally. Reading and interpreting these pictorial stories constitutes a practical art that can and should contribute to an enhanced capacity for people to connect with Spirit in the reality of our material world as well as to discover in practice the deeper meanings of our individual and collective experiences, which serve as our existential and moral lessons.

Still, the language of signs is akin to silent discourse (Chapter 5); it is easy to miss its “sounds” and messages. According to a Jewish myth (cf. Schwartz, 2004), Shekhinah, the bride of God, his feminine counterpart embodied in the image of The High Priestess in the Tarot deck (as addressed in the preceding chapter), dwells here, in this terrestrial world, below, while desperately wanting to reconnect with her beloved, above, in the celestial world. As medieval philosophers would say, the wisdom of the father lies in the lap of the mother. That is, Shekhinah represents God’s immanence in this world, despite God being a hypothetical transcendent entity. However, as this book has demonstrated, immanence~transcendence is indeed a complementary pair.

While in rabbinic literature the term Shekhinah is used primarily as a synonym for God’s presence in this world, some Kabbalistic sources point to mythic separation from God: the divine as present in, but yet hidden from, the human. Shekhinah is God’s (at the celestial level) self-reflection (at the terrestrial level) because it is wisdom (the keyword for The High Priestess), which necessarily is a pre-condition for self-reflection. Yet, being separated from her beloved – living in exile, according to myth – Shekhinah is often sad and depressed, and sometimes appears to us at this plane of manifestation in the twilight zone between night and morning in the guise of the Holy Ghost or the Holy Spirit as symbolically portrayed in the picture of the Minor Arcana called Nine of Swords (see [Figure 6.8](#)).

The voice of The High Priestess needs to be heard, her language needs to be learned. Her presence needs to be recognized and we must be able to establish a dialogue with her. But still we remain unaware of her implicit presence and cannot wake up. We are forced therefore to let her go; the *feminine* mode of thought and expression thus slips back into the collective unconscious. As a consequence, we let go of wisdom, the search for which was the task undertaken by Socrates in his effort to prepare educators as philosophers, or lovers of wisdom, lovers of Sophia/Shekhinah.

Mark Patrick Hederman (2003) points out that it is the language of emotion that represents one of the areas where “education and trained sensibility are in short supply” (p. 86). The symbolic system that could greatly enhance the area of education and the whole of human experience remains out of bounds (cf. Lewis &



Figure 6.8. The image of Nine of Swords.

Kahn, 2010). Yet this system of Tarot signs has been in existence for centuries (Dummett, 1980; Semetsky, 2011) and “each one of us should be given at least the rudiments of one of the most elusive and important symbolic systems if we are even to begin to understand human relationships” (Hederman, 2003, p. 87).

We tend to safeguard ourselves in our quest for certainty in the complex, uncertain, often hazardous and “aleatory world” (Dewey, 1925/1958, p. 41) by habitually invoking “the ubiquity of cause and effect” (ibid., p. 44) of mechanistic science. According to the Whorf hypothesis, it is the language we learn that shapes our reality. If

a culture’s words describe a reality that is causal, linear and mechanistic, then its members will accord more respect to the masculine left side of the corpus callosum, a mind-set that manifests in patriarchy. If, however, the features of a major new discovery force a people to employ the imagery of the right brain, the feminine values and status will be buoyed as a result. (Shlain, 1998, pp. 385-386)

We keep ignoring this mode of intuitive feminine understanding and the path to inner Gnosis that could become available to us, should we exercise self-reflective thinking as “wide awake” (Dewey, 1991, p. 57), and as such would (re)educate us in feminine values, practices, and spirituality. Such persistent ignorance may lead to disastrous consequences of archetypal scope at the social, cultural, and political levels, some of which will be addressed in the next chapter.

CHAPTER 6

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CHAPTER 6

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CHAPTER 7

AN ETHICS OF INTEGRATION

Dewey noticed, insightfully, that if “education ... is identical with the operation of living a life which is fruitful and ... significant, the ... ultimate value which can be set up is just the process of living itself” (Dewey, 1916/1924, p. 248). Still, more often than not, and ignoring the wealth of the Deweyan legacy, education proceeds in its reductive mode, focusing on the same technical measurable objectives, even if under several different guises depending on times and political context. As Noddings (2006) notices, the neglect of real-life topics that would have called forth critical and reflective thinking pervades the present system of education. Teachers and students alike are not given an opportunity to intelligently reflect on their own thought processes and work habits.

For Noddings, critical thinking refers not only to the assessment of formal logical arguments but also to matters of moral and social importance, including personal decision making, professional conduct, and the range of beliefs. Because our decision-making is embedded in life, in experience, real events should become central topics for education. This reflective way of thinking and knowing was precisely the mode that in antiquity defined true pedagogy as opposed to mere sophistry. The evaluation and re-evaluation of experience enables self-education and self-knowledge through putting into practice the “Know Thyself” principle; even if from time to time we might remind ourselves that it was precisely the quest for meaning and re-evaluation of experience, namely an examined versus unexamined life, that in the long run cost Socrates his life.

The crisis in education that appeared to have started with Socrates still continues today. Lynda Stone, addressing “crisis of the educated subject” (Stone, 2004) used insights from French cultural theorist, psychoanalyst and semiotician Julia Kristeva to inform current debates in educational philosophy, especially with regard to the fixed identity of the subject as a product of education in contrast to the transient subject in process posited by Kristeva.

Kristeva’s method of *semanalysis* is particularly informative for Tarot edusemiotics. *Semanalysis* is a hybrid term coined by Kristeva back in 1969 (even if rarely used afterwards) that combines semiotics with psychoanalysis and focuses on unconscious drives and affects. A central concept in *semanalysis* is the text (see Chapter 3), which however is to be understood as not only verbal or linguistic, but in a much broader sense as a trans-linguistic apparatus. The crucial feature of text is that it is not reducible to just representing or literally meaning the real. For Kristeva, the textual (or rather, intertextual) signification derives from the text’s ability to transform reality by capturing it at the moment of its non-closure.

Etymologically, the position of “analysis” in *semanalysis* points to decomposition or dissolution of the sign and the text alike, which leads, through

the process of work, to the empirical discovery in practice of some deep and hidden dimensions of meaning. Such signifying practice, reading, and interpretation constitute textual productivity. This concept focuses on the dynamical character of the process of generative activity – productivity – rather than on some final actual product. This activity is understood as a process or work, however without any references to Marx’s social exchange. The concept of work is posited to be analogous to what, for example, Freud used to call dream-work.

According to Kristeva, “Freud revealed production itself to be a *process* not of exchange (or use) or meaning (value) but of ... permutation, which provides the very model for production. Freud therefore opens up the problematics of *work as a particular semiotic system*” (Kristeva in Nöth, 1995, p. 323; italics in original). In her famous work *Revolution in Poetic Language*, Kristeva (1984) further develops the psychoanalytic significance of semanalysis by specifically differentiating between two dimensions, the semiotic and the symbolic. She relates the semiotic to Freud’s primary process that expresses itself pre-linguistically, at the level of drives and instincts. The nonverbal semiotic dimension precedes the symbolic one (which Kristeva equates with linguistic); the two finding themselves related to each other dialectically. Following the example of Freud’s psychoanalytic “psychologic,” Kristeva posits a dialectical logic as a foundation for the signifying practice. Hegelian dialectics with its logical operation of negation and the synthesis of opposites becomes the basis of any symbolic activity.

In the Jungian (and not Freudian) framework, and as regards the semiotic, pre-verbal, level outside of conscious awareness, the action of signs is such that, in their function as Jung’s powerful autonomous archetypes, they can often possess the psyche in the guise of the unconscious Shadow. Jung saw how powerfully the Shadow worked behind the scenes, implicitly affecting the psyche and often explicitly influencing people to behave in a compulsive manner bordering on pathological. Among the Tarot Major Arcana, the Shadow archetype corresponds to the image of The Devil, Arcanum XV (Semetsky, 2011). This archetype is the dark precursor (cf. Deleuze, 1994) for two subsequent Arcana in the deck, The Tower and The Star (Figure 7.1).



Figure 7.1. The images of The Devil, The Tower, and The Star.

In the guise of the Shadow, The Devil can easily possess one's psyche and, importantly, the Shadow can often become projected onto others, and one may very well attribute to significant others those qualities that one is tempted to deny in oneself. The concept of the Shadow describes a cluster of impulses, complexes, shameful and unacknowledged desires, self-indulgences and being a slave to one's own primitive instincts. Such patterns of behavior as sexual compulsion, poor impulse control, low frustration tolerance, greed or fear are common in real life. It may be a superficial complex of superiority when in fact deep inside one feels rather inferior.

In the picture, the two naked figures chained to the Devil's throne in the underworld appear to have lost the ability of clear judgement and seem helpless and powerless. The Devil represents abuse and bondage, sexual submissiveness or material dependency, and may indicate, very much in Nietzschean sense, the ultimate slave morality in the relationship between oppressors and oppressed, even if the interplay of forces involved in this interaction persists at the unconscious level only and remains outside one's conscious awareness.

The Devil's heavy chains represent our self-destructive tendencies and weaknesses, bondage and fear. In interpersonal relationships, The Devil (when this picture appears in the layout) can reflect upon co-dependency issues. It may be a deeply ingrained fear of breaking free, similar to battered women continuing to stay in abusive relationships, overwhelmed by submissiveness or sexual/economic dependency. For the Tarot reader, several questions immediately arise: what is it that holds the subject of the reading in bondage? How to overcome the fear of becoming one's individuated Self? How to get rid of those chains? Is there any particular path to emancipation?

At the collective level, the Shadow encompasses those outside the "norm" of the established order and social system, such as "criminals, psychotics, misfits, scapegoats" (Samuels, 1985, p. 66). It is not only that these shadowy figures appear to stand outside culture; importantly, culture itself often fails to assimilate its own Shadow. The image of The Devil represents a moment of psychological denial and the implementation of scapegoat policy by the dominant culture or nation, while in the meantime projecting onto some generic Other one's own inferior and shadowy qualities.

The scapegoat psychology is associated with what Jungian psychologist Erich Neumann (1969), reflecting on the aftermath of the Second World War, called *old* ethics, and it is precisely the ethical attitude that is central with regard to the Shadow archetype. While Ego-consciousness focuses on indubitable and unequivocal moral principles, these very principles crumble under the "*compensatory significance of the shadow* in the light of ethical responsibility" (Jung, 1949 in Neumann, 1969, p. 12; italics in original). The neglect of this responsibility tends to precipitate multiple evil consequences in the world.

While old ethics is the ethics of illusory perfection and absolute Good that necessarily leads to the appearance of its binary opposite, absolute Evil, the new ethics is oriented to recognizing and integrating our own dark side. The old ethics is "partial" (Neumann, 1969, p. 74), belonging solely to the self-conscious Ego; the

CHAPTER 7

new ethics is devoted to the integration of the Shadow; thus it is holistic and is a mode of existence of the individuated Self. The integrated Self emerges only when the opposites exist as a harmonious whole and neither side is suppressed or eliminated.

Hederman (2003) points out that the Apocalypse describes the Devil as Satan who passes judgement on us standing next to the throne of God, yet his other name is Lucifer, he who brings the light in order to illuminate the darkness. In this allegory “the evil that is the shadow side of everything that is bright and good remains hidden” (Hederman, 2003, p. 176) or invisible and needs to be made visible to consciousness by the integration of its own opposite. Noddings (1989), pointing out that the “integration is essential” (p. 75), refers to the Shadow as a set of qualities present in human experiences even as an individual, or “a group, institution, nation, or culture” (p. 75), are likely to remain unaware of its functioning.

It is Tarot edusemiotics that can make visible the perpetual presence of the Shadow hiding in the unconscious; respectively, such implicit presence becomes recognized when brought to awareness via the Tarot signs. It is this recognition as the integration of the unconscious that leads to the creation of the Integral mode of consciousness addressed in the preceding chapter. If denied and left unacknowledged, the Shadow may very well fall deeper and deeper in the unconscious where it will continue to crystallize. Eventually, the absence of freedom, lack of hope, and total powerlessness as depicted by the imagery of the Shadow-Devil will reach their critical mass and start acting from within the psyche, trying to break out of the confines of the unconscious.

The Shadow rules one-sidedly unless integrated into the whole personality. In the absence of integration it may create a sealed aggressive world denying freedom and hope to its own other, suppressed, side until – in the inevitable process of becoming-other – the Shadow will start acting out spontaneously and will continue to propagate towards the destructive climax. The image that immediately follows The Devil Arcanum in the Tarot deck, The Tower, represents this upcoming climax.

It is only when a set of relations becomes totally unbearable for the psyche, infusing it with fears and phobias as specific “qualities” projected by the image of The Devil, then the next symbol, The Tower, comes forward. Or, conversely, when the affect produced by The Tower crosses over the boundary between the Symbolic and the Real, then the breaking down of the current *status quo* becomes unavoidable. The image of The Tower is one of the most dramatic, powerful and horrifying pictures; in some decks its name is the House of Destruction.

The picture portrays two human figures apparently being thrown out of the tower struck by lightning. It is a fall, but not a free fall; it is a violent ejection. The figures’ mouths are gaping in horror, but the lump in their throats stops any sound from coming out. Their eyes look and see nothing. They are cast far into the deep. Will they still be alive when they reach the ground — or will their hearts be ruptured before landing? And, if they remain alive, will their minds endure? Or,

rather, under the almost unbearable lightness of the fall, will their psyches break down?

The Tower stands erect; it is its crown that has been knocked down by the blazing flames caused by lightning. The Tower is hermetically sealed; the figures have imprisoned themselves in their own creation, the rigid, phallic, either mental or physical, symbolic structure crisscrossed by the chains carried forth by the preceding image of The Devil as a symbol of lack of power. The only way out is through the agency of a threatening, violent breaking force that necessarily brings along a traumatic experience.

The symbolism of The Tower image partakes of what Julia Kristeva called abjection. Notably, Stone singled out three components gleaming from Kristeva's opus: abjection, semiotic and love; all three comprising "the 'structure' of the subject in process" (Stone, 2004, p. 108). The dictionary definitions of abjection include the condition of being servile, wretched, or contemptible. As an adjective, abject experiences represent something utterly hopeless, miserable, humiliating, or wretched, contemptible, shamelessly servile, slavish and cast aside.

Kristeva describes abjection as "one of those violent, dark revolts of being, directed against a threat that seems to emanate from an exorbitant outside or inside, ejected beyond the scope of the possible, the tolerable, the thinkable" (Kristeva, 1982, p. 1). According to Kristeva, the dynamic of abjection, marked by continual aggression and destruction, has been slowly spreading from the times of paganism through the whole of Western culture to date.

In the imagery of The Tower, the figures are in the midst of a crisis; they are "beset by abjection" (Kristeva, 1982, p. 1) when literally portrayed between the two opposites of the symbolic sky and symbolic ground. Lightning pierces the sky above, and the ground below is ruined by earthquake. Or there is no ground at all: some decks portray a tempestuous sea. The violent fall from the tower, the feeling of catastrophe amidst thunder and lightning, brings two figures to the "border of...condition as a living being" (Kristeva, 1982, p. 3) barely withstanding the effect of a rapid and shocking change.

The falling bodies approach the limits of human endurance; they seem in their suffering to exist in the midst of the fragile boundary between life and death because in this fall "death [is] infecting life" (Kristeva, 1982, p. 4). The fall appears to be infinite and may feel like eternity, signified by two figures caught up in a state of perpetual suspension, indeed within "the utmost of abjection" (Kristeva, 1982, p. 4). The mood of this image is permeated with fear and uncertainty, confirming Kristeva's assertion that "abjection is above all ambiguity" (1982, p. 9). The sense of "perpetual danger" (Kristeva, 1982, p. 9) and the unconscious anticipation of a shock, when the figures who exist as "the twisted braid of affects and thoughts" (1982, p. 1) will eventually hit the ground, makes their existence unbearable.

Kristeva, describing abjection, uses the infinitive "to fall," *cadere* in French, hence cadaver, the corpse, finding a vocabulary that appears dramatically close to the imagery of The Tower: "My body extricates itself, as being alive, from that border. Such wastes drop so that I might live, until, from loss to loss, nothing

CHAPTER 7

remains in me and my entire body falls beyond the limit – *cadere*, cadaver. ... ‘I’ is expelled” (Kristeva, 1982, pp. 3-4). The corpse serves as a primary example, traumatically reminding us of our own finitude, fragility and materiality; but according to Kristeva, so does Auschwitz, which became a symbol of a real, particularly destructive, violent and immoral event.

The corpse indicates the breakdown of the distinction between subject and object, that is, a loss of the crucial factor in establishing self-identity; it therefore exemplifies the concept of abjection. This part of one’s self that is “I” is so desperate and feels overwhelmed to such an extent that it becomes greater than its own stable subjectivity: an autonomous heavy body “which is dissociated, shattered into painful territories, parts larger than the whole” (Kristeva, 1998, p. 152). Kristeva imagines a child trying to clean himself after vomiting so as to construct “his own territory, edged by abject” (Kristeva, 1982, p. 5). It is an attempt to release the hold of the symbolic devilish chains by a violent breaking away as if guided by the logic of rejection, embedded in bodily structure. But because this body is the only and immediate life-world known by the “I,” the very act of the fall or separation leads to the *subject* becoming a jettisoned *object* in this process. That’s why Kristeva says, “it is no longer ‘I’ who expel, [but] ‘I’ is expelled” (1982, p. 4).

An a-signifying rupture is produced between subject and object, and it is in this rupture that a Peircean *interpretant* in the form of Tarot edusemiotics is to be inserted in accord with the logic of the included middle. The included Third establishes the Deleuzian conjunction *and* as a reconciling relation symbolized, in the framework of the science of coordination dynamics, by the squiggle “~” and embodied in the layout of Tarot pictures that are being read and interpreted. Only a triadic relation, as the prerogative of the logic of the included middle, can make sense for abject experiences that inevitably produce shock to thought (cf. Deleuze, 1989) and destroy habitual patterns of thinking. Yet such a

shock is the very form of communication of movement in images ... the shock has an effect on the spirit, it forces it to think, and to think the Whole. The Whole can only be thought, because it is the indirect representation of time which follows from movement. It does not follow like a logical effect, analytically, but synthetically as the dynamic effect of images ... it is not a sum but a ‘product,’ a unity of a higher order ... The whole is the concept. (Deleuze, 1989, pp. 157-158)

The “dynamic effect of images” thus consists in their creating holistic (Whole) or Integral consciousness that achieves new conceptual understanding in the form of novel meanings for experiences projected in the images. This is synthetic logic, “synthetic consciousness [that implies a] sense of learning” (Peirce, CP 1.377) peculiar to edusemiotics.

Kristeva says that we experience abjection as a spontaneous reaction that may manifest in the form of unspeakable horror, often expressed at a physical level as uncontrollable vomiting, when faced with a breakdown in meaning caused by the generic loss of a habitual distinction. Yet the breakdown of old meaning is

necessary if a new one is to be created! When the distinction – it being either between subject and object, or self and other, or life and death, or any habitual opposites for that matter – is destroyed, then the abjection takes its place because the Peircean habit, in the form of an implicit governing law that we have unconsciously created in our life, is breaking down.

This confrontation with the unconscious produces shocks in the form of the symbolic Tower and abject experiences that bring to the surface “the recognition of an alien ‘other’ in oneself” (Jung, CW 13, 481). The alien Other appears to forever remain foreign, strange, bordering on what Lewis and Kahn (2010) designate as “monstrous contaminant that undermines notions of [habitual] dichotomy” (p. 13) between what, in the framework of the logic of the excluded middle, would forever remain in the comfort zone of its own side of the border. Abjection is *uncanny* because of its very in-between-ness: neither subject nor object, but *abject*; the terrifying in-distinction that breaks down the logical categories and dichotomies of rational thinking. Any abject experience is unthinkable, and The Tower Arcanum is terrifying because it embodies abjection.

Still, while abjection tries to preserve what existed at the archaic level of a pre-objectal relationship, as Kristeva puts it, this tendency calls forth extreme violence as a condition of a body becoming separated from another body so as to *become*. The semiotics of this violent force is inscribed in the image of sudden lightning; its effect is pre-symbolic (semiotic): it proceeds unconsciously and “draws me toward the place where [old] meaning collapses” (Kristeva, 1982, p. 2; brackets mine). This force becomes a sign of “the breaking down of a world that has erased its borders” (Kristeva, 1982, p. 4).

Signification, according to Kristeva, always functions as a fluctuation between stability and instability, or a static quality and the negation of a stasis. Symbolic lightning from above, by breaking the order of things and thus negating the stasis of one’s identity within the existing order, simultaneously illuminates the way to the new order and new identity, albeit through abjection, an abject becoming an ambiguous sign, a deject, “a tireless ... stray” (Kristeva 1982, p. 8) as the very subject in process situated in space specified as “essentially divisible, foldable and catastrophic” (Ibid.). It “never stops demarcating the universe. [It] has a sense of danger, of the loss that the pseudo-object attracting him represents for him” (Ibid.).

The Tower image is an embodiment of ambivalence and contradiction: a hidden pain that desperately wants to be relieved, an implicit attempt to connect because of the approaching separation, the reality of powerlessness and the false pretense of omnipotence. Jung used the notion of contradiction with regard to the meaning of the tower that, at a symbolic level, he identified with the Tower of Babel (Jung, 1963), that is, a symbol of false omnipotence and mistaken certainty, *a priori* condemned to destruction during the most powerful and confusing instance of the contradiction that signifies the division “of territories, languages, works” (Kristeva, 1982, p. 8).

Jung pointed out that it is the excess of pride and passion that “raises a man not only above himself, but also above the bounds of his mortality and earthliness, and by the very act of raising him, it destroys him. This ‘rising above himself’ is

CHAPTER 7

expressed mythologically in the building of the heaven-high tower of Babel that brought confusion to mankind” (Jung, CW 5, 171). The Tower is portrayed in this manner in some decks, like in the image below from *The Lovers’ Tarot* (Figure 7.2) that incorporates elements of the famous masterpiece by Pieter Bruegel the Elder.



Figure 7.2. The image of The Tower from The Lovers’ Tarot by Jane Lyle. Illustration Copyright © Oliver Burston 1982. The pack is published by Connections (January 2000) in the UK and St. Martin’s Press in the US.

Because of abjection, the Ego, according to Kristeva, undergoes extreme humiliation and the loss of any defenses: it is driven to “a downfall that carries [it] along into the invisible and unnamable ... Never is the ambivalence of drive more fearsome than in this beginning of otherness” (Kristeva, 1997, p. 188); still this downfall is the necessary precursor for becoming-other! Speaking of contradiction, Kristeva stressed that its very conditions were “always to be understood as heterogeneity ... when the loss of unity, the anchor of the process cuts in [and] the subject in process discovers itself as separated” (1998, p. 149).

The Tower Arcanum is a signifier for such sudden separation, the interruption to the *status quo* in the state of affairs, it being either individual, or interpersonal, or collective and social; or a natural disaster such as earthquake or tsunami. The loss of identity, experienced in abjection, prevents the figures in the picture from being able to envisage or recognize the moment of lightning. It comes as a shock indeed.

The lightning strikes nevertheless, even if the upcoming event stays out of the subject's conscious awareness: it is "the impossible [that] constitutes [the subject's] very being" (Kristeva, 1982, p. 5; brackets mine) and "a brutish suffering that 'I' puts up with" (Kristeva, 1982, p. 2).

Nel Noddings, addressing the problem of suffering in an abusive situation – and we remember that abuse and bondage are symbolically represented by the image of The Devil preceding The Tower Arcanum in the deck – has pointed out that

A large part of human suffering derives from separation and helplessness and the fear of those states. ... When we set aside propositions about God, sin and science, we find at the bottom of each suffering event pain that cries for relief, a threat of separation that triggers an increased need for connection, and a dread of helplessness that begs for empowerment. (Noddings, 1989, pp. 128-129)

The unconscious projected into the images represents such a cry for help – even if expressed, metaphorically, in the silent discourse of the language of signs – within the unavoidable and painful process of subject-becoming-abject. The language of images, as the yet verbally unexpressed contents of the unconscious, "cries out" (Deleuze, 1995, p. 148) in affects, feelings and unspoken emotions; and as such guides the creation of concepts and meanings for these traumatic affective states, events, and experiences. New understanding, however, is produced "not through any external determinism but through a becoming that carries the problems themselves along with it" (Deleuze, 1995, p. 149).

Each Arcanum is a sign of the Fool's *becoming-other* in the experiential journey towards individuation and learning his lessons in the school of life. Lightning in The Tower picture may be identified with a sudden and totally overpowering change in one's psychic state – the intensification of consciousness, in Gebserian terms, as we said in the preceding chapter. "A flash of lightning ... is discharged like thunder," says Kristeva, as though herself narrating the image of The Tower, and "the time of abjection is double: a time of oblivion and thunder, of veiled infinity and the moment when revelation bursts forth" (Kristeva, 1982, p. 9).

In psychoanalytic terms, The Tower picture, when appearing in a particular reading as a symbol for real-life events, may be considered to be an index of abreaction, taking the form of catharsis; a kind of revelation as a dramatic and forceful replay of unconscious material in consciousness when one's "fortified castle begins to see its walls crumble" (Kristeva, 1982, p. 48)! However, the enforced evacuation, breaking all defenses, does free one from being incarcerated in the symbolic tower of one's own making, whether a psychological, ideological, cultural, political, educational, or any other stagnant system of outlived habits, beliefs and values.

The Tower image represents a semiotic structure that is sealed yet open: it is "an oxymoronic structure ... an open/enclosure" (Casey, 1997, p. 325) like any genuine sign which appears to *close* on itself yet is always *open* to further interpretation and meaning-making because of the paradoxical logic of the included middle inscribed in semiosis. The Tower's symbolic meaning is any

unforeseen cataclysmic event, which suddenly brings people down to earth by disturbing the existing norm and order of things, while simultaneously providing a set of conditions for the new order by striking across the narrow boundaries of individual and collective consciousness and hence expanding and intensifying it.

The change, via abjection, in the level of awareness, represents dialectics that constitutes the double process of negation and affirmation embedded in the construction of identity of the subject in process: signs-becoming-other; self-becoming-other. Negation is characterized by a temporary interruption in the periodic dynamic process, within which a pause appears, as claimed by Kristeva, in a form of a surplus of negativity, which would ultimately destroy the balance of opposites. That is why “the deject is in short a *stray*. ... And the more he strays, the more he is saved” (Kristeva, 1982, p. 8), that is, the constitution of subjectivity takes place via negation, ultimately contributing to the organization of reality at a new level.

Thus, the breakdown in existing order simultaneously creates conditions for the potential production of a new order – in accord with evolutionary semiosis embedded within the signs’ triadic process~structures. The dialectical process exists in its semiotic, quasi-objective reality even before becoming an object of recognition when presented in the form of the iconic sign. The function of Tarot edusemiotics thus becomes to amplify the unconscious contents so as to ultimately permit the “recognition of the want on which any being, meaning, language or desire is founded” (Kristeva, 1982, p. 5).

Nel Noddings pays particular attention to “basic needs, wants and interests” (2010a, p. 180) and stresses that “*Caring precedes the identification of needs*” (p. 181; Noddings’ italics). The maternal attitude of care provides the “assurance of response [that] characterizes natural caring. A particular need may or may not be met, but it will receive a sympathetic hearing” (Noddings, 2010a, p. 181). Reading and interpreting Tarot images provides such a response, which is urgently needed, especially if and when reality presents us with abject experiences. Symbolically, these experiences are embodied in a layout displaying such powerful and traumatic images as The Devil or The Tower that, as such, establish the “climate for the identification of needs [including] great needs for safety and self-respect” (Noddings, 2010a, pp. 181-183) which, even if nonverbal, will have been implicated in the silent discourse of images.

Kristeva, acknowledging the presence of the gap existing between her analysands’ verbal expressions and the nonverbal affects perceived by the analyst, points to the loss of meaning in contemporary life due to dissociation between affects and language: the words become meaningless because the psyche is empty. But in the context of Tarot edusemiotics such dissonance can be overcome. The unconscious contents projected in the Tarot imagery indicate that the psyche is never really empty, even if unconscious of itself: its contents are constituted by nonverbal signs that, despite their existing prior to articulating and narrating the images, are semiotically real and informationally active. They contain implicit, yet functional and potentially meaningful, information (see next Chapter 8) because of

their affective capacity to produce real effects at the level of actual human experiences in accord with Peirce's pragmatic maxim.

The pragmatics of interpreting Tarot images in terms of semanalysis is to carry the signs over to the level of conscious awareness, to articulate them as readable, legible symbols so as to bridge the said gap by returning the meaning to its edusemiotic carrier. Kristeva emphasized "the working of imagination [in] the experience of the want" (1982, p. 5); that is, the realm which is virtual, non-visible and "logically preliminary to being and object" (Kristeva, 1982, p. 5). She considered the affective world to be enigmatic for being irreducible to the verbal mode of expression. All affects exist only through signs that stand for the

psychic representations of energy displacements ... [whose] exact status ... remains, in the present state of psychoanalytic and semiological theories, very vague. No conceptual framework in the relevant sciences ... has proven adequate to account for this apparently very rudimentary representation, presign and prelanguage. (Kristeva, 1997, p. 192)

Tarot edusemiotics, however, provides a specific conceptual framework in the form of the science of coordination dynamics. It enables the shift of the subject-position from the abstract to concrete: pictures function in the capacity of "a modality of significance" (Kristeva, 1997, p. 193) for affects, moods and thoughts, which represent "inscriptions [or] energy disruptions ... [that] become the communicable imprints of affective reality, perceptible to the reader" (1997, p. 193).

Kristeva borrows the notion of the *excluded* from Mary Douglas, thereby affording abjection a greater, social dimension in terms of ritualistic prohibition based on binary coding, and resulting in separation and segregation of gender, class, race, age, language, or culture. In the Tarot feminist interpretation (Gearhart & Rennie, 1981) The Tower image signifies radical intervention, revolution and the overthrowing of false consciousness, violent social conflict and change, destruction of the old order on a grand scale, and release from imprisonment in the patriarchal structure during the very process of its demolition.

Any semiotic system, as part of the typology of cultures, needs certain means for its identification within a field of communicative and social relations. Culture itself could be seen as a set of texts inscribed in collective memory (cf. Lotman, 1990), and texts, to repeat, need not be reduced to a solely linguistic form. The semiotic dimension, by definition, is grounded in "distinctive mark, trace, index, precursory sign... imprint" (Kristeva, 1984, p. 25). It is not incidental that *typos* as a composite of Jungian archetypes means imprint, stamp or pattern; something that, even if non-representational by itself, still leaves its mark (*a sign of*) as an observable effect at the level of individual or collective behaviors or the whole of culture alike.

Regarding real significant, indeed abject, events in human culture, The Tower picture has an uncanny resemblance with the image of the destroyed Twin Towers on 9/11.



Figure 7.3. The Twin Towers on 9/11.
(Photo courtesy of FEMA)

The start of the 21st century was marked (“signed”) by cultural conflicts, clash of values, and catastrophe that, sure enough, represents the dynamics of abjection. The Age of Abjection, as I call it, is permeated with the confrontation with the Law of the Father when humankind risks not only symbolic castration but also the destruction and loss of its whole being. Jean Baudrillard (2002), in his analysis of the spirit of terrorism, talks about the shift of the struggle into the symbolic sphere where an initial event, “as quite a good illustration of chaos theory” (2002, p. 23), becomes subjected to unforeseeable consequences.

Such a singular event, like the destruction of 9/11, propagates unpredictably, causing a chain of effects “not just in the direct economic, political, financial slump in the whole of the system – and the resulting moral and psychological downturn – but the slump in the value-system” (Baudrillard, 2002, pp. 31-32) as a whole. The collapse of the Twin Towers represents the fact that “the whole system has reached a critical mass which makes it vulnerable to any aggression” (Baudrillard, 2002, p. 33) and which can propagate and amplify itself in the sequence of subsequent events such as the Iraq and Afghanistan wars.

Importantly, in the context of education and as recently as 2006, at the very start of Noddings’ book *Critical Lessons: What Our Schools Should Teach*, she says that when the United States invaded Iraq in 2003, many public school teachers were forbidden to discuss the war in their classrooms, thus missing an opportunity to exercise critical thinking in regard to this and related controversial real-life events, even as such a restriction on free discussion appears to be simply outrageous in a liberal democracy.

The ruthless destruction of the symbolic Panopticon that was founded on the meticulous organization of space generates chaos out of the former order: the abjection in this case loses its phobic quality, becoming not only the power of *horror*, as Kristeva (1982) says in her famous essay on abjection, but the power of

terror. It turns instead into the unleashed rage of violence against violence when the long-repressed emotions and implicit feelings deprived of expression explode and “spill out from their ... container” (Casey, 1997, p. 323). No longer projected inward, the released darkness becomes directed into the outer space. It is “abjection [that] allows us to move beyond the Law of the Father” (Bogue & Cornie-Pope, 1996, p. 10) as a symbol for the set of existing norms and enforced laws embodied in the image of The Emperor (Chapter 5).

The resulting counterpart, however, is that “victims of the abject are its fascinated victims” (Kristeva, 1982, p. 9). The revolt *against* may turn into revolt *for*: ambiguity may lead to the appropriation of the Other, that “Other who precedes and possesses me, and through such possession causes me to be” (Kristeva, 1982, p. 10). Fascination? *Jouissance*? Yes, but one that borders on violent passion. The joy is highly problematic indeed: it is only *jouissance* for as long as the power is distributed properly. The joy of destruction when over-determined may easily contribute to erecting yet another Tower or replacing one symbolic order with another. Baudrillard (2002) calls it a state of total control, a terror that is now based on law-and-order measures, and points out that not only terrorism itself is blind but so were the actual towers as “no longer opening to the outside world, but subject to artificial conditioning” (p. 43): air conditioning, or mental conditioning alike; similar to the image of The Tower that was sealed at the top when suddenly struck by lightning. Any problematic situation in real life that requires our learning as meaning-making is of the nature of experience that necessarily forms “an intrinsic genesis, not an extrinsic conditioning” (Deleuze, 1994, p. 154).

It is so inscribed in the genealogy of space that any tower attracts lightning and is destined, sooner or later, to be blasted by a thunderbolt. The subject, if *not* in process, is spaced-out and, respectively, is out of place both symbolically and literally: “the space of the subject collapses in on itself and the subject without psychic space is prey to aggressive drives and paranoid projections of the kind exhibited in misogyny, nationalism, racism and war” (Kirkby, 1998, p. 111).

While modernity equated the notion of space with nothingness and emptiness, Tarot edusemiotics presents space as saturated with events, topologies and maps. The space in The Tower picture is marked by thunder and lightning, universal signs of the wrath of gods. This symbolism indicates a swift and painful alteration at the level of collective consciousness, when it observes the aftermath of the destruction of its self-erected unstable structure. The ultimate destruction, a body turned into a lifeless skeleton, is seen in another poignant and maximally real image in the aftermath of 9/11 (Figure 7.4).

Still, the breakdown in existing order simultaneously creates conditions for the potential production of a new order. Thus the image of The Tower is a sign not only of a breakdown but also breakthrough, when the darkness embodied in the preceding image of the Shadow-Devil is illuminated and made conscious. I wholeheartedly agree with Mark Patrick Hederman (2003) who warns of a danger to ourselves and others if we choose to remain unconscious of the Shadow. If



*Figure 7.4. The destroyed towers after 9/11.
(US Navy photo by Journalist 1st Class Preston Keres.)*

history and culture have taught us anything, it is that in the 20th century The Devil fully manifested as

a hell on earth and that this hell was a human creation. It was a hell of cruelty and mayhem resulting from the incapacity of powerful people to decipher their unconscious motivation ... [E]ach of us has to discover and explore the labyrinth of the dark, the unconscious ... Its language is incomprehensible, even inaudible to most. But, no matter how difficult it is to decipher, such work must be undertaken. We must recognize that most of our past, whether personal or historical, took place underground, in silent rivers, ancient springs, blind pools, dark sewers. While the task of making them accessible to our consciousness is difficult, it is nonetheless imperative. Even more so at the beginning of a new century when we hope to outline some plausible tracks into a better future. We have to read the signs of the times. (Hederman, 2003, p. 21)

The signs of the times may come from the earth, such as volcanoes or earthquakes, or from water such as tsunamis, or from the air such as the attack on 9/11, or from fire when drought causes famine; in all cases, the results for human life are disastrous. Still, human lives can be saved because it is all four elements of nature – air, water, earth and fire – corresponding to the four suits in a deck as the four tools on the Magician’s table – swords, cups, pentacles, and wands – which serve as the communicable signs, the imprints of affective semiotic reality that should inadvertently become “perceptible to the reader” (Kristeva, 1997, p. 193) in the process of Tarot edusemiotics.

Tarot readings operate at a level analogous to semanalysis: the interpretation of the pictorial text leads to the subjects’ identifying themselves with the implicit meaning inscribed in the symbolism of The Tower and, accordingly, becoming

able to recognize their own shifting identity-in-process as abject. When functioning in the capacity of the abjective self, the subject becomes animated by (so to speak) abjecting the abject in accord with the dialectics of negating the negation. As Kristeva (1998) points out, “such an identification facilitates control, on the part of the subject, a certain knowledge of the process, a certain relative arrest of its movement, all of which are the conditions for its renewal and are factors which prevent it from deteriorating into a pure void” (p. 149), *ground zero*.

One’s sealed world was initially created due to the presence of the primary, unconscious, and narcissistic desire to imprison oneself in the symbolic Tower. The image of expulsion from the Tower seems to be “the logical mode of this permanent aggressivity, and the possibility of its being positioned and thus renewed. Though destructive, a ‘death drive,’ expulsion is also the mechanism of relaunching, of tension, of life” (Kristeva, 1998, p. 144), that is, the sign’s function doubles to play a creative role in the construction of collective subjectivity and the transformation of reality.

Thus, although the interpretation of the pictorial text when indeed “revelation bursts forth” (Kristeva, 1982, p. 9) seems by itself to be a violent act, in the sense of its shattering one’s set of privileged beliefs, such violence “rejects the effects of delay” (Kristeva, 1998, p. 153) and hence – rather than breaking the subject – contributes to making the subject anew, to re-making it! Significantly, the individuation of the Self (Semetsky, 2011) depends on “the harshest exercise in depersonalization” (Deleuze, 1995, p. 6) as its own opposite.

It is for this reason that the image of The Tower indicates also a breakthrough, a transformation. Tarot edusemiotics embodies the signs of life, in accordance with mathesis, the science of life, of human nature; the images are *vital* signs almost literally. They produce healing effects because they create new meanings and values, ultimately bringing forward “the reward of that ... transformation” (Dewey, 1934/1980, p. 22). Breakdown or breakthrough, in either case The Tower Arcanum is a sign of the abruptly terminated current psycho-social state or a break-up in a set of values privileged by a given culture.

The signs do communicate with us via the line of flight created by transversal connection symbolized by the squiggle “~” as the included middle of interpretation. The Tarot signs express significant events that encode, in the symbolic form, real behavioral and cultural patterns indexed by these very signs. To decode these semiotic messages through the vibrant language of the unconscious embodied in the imagery of Tarot is not a utopian dream for the future but the reality of the present because the language of images is already available and needs to be learned and understood!

Sure enough, the future can still be skewed because prevailing ideologies or grand meta-narratives are still here and remain the means “of imposing our own myopic architecture, of obliterating the splendour of what might have been: the future perfect” (Hederman, 2003, p. 22). The least we can do is to have hope for a better future. But, in accord with the semiotic function of signs as embodying all three dimensions of time simultaneously, the better future already exists even if as *future anterior*!

Significantly, the polyvalence of the image that follows The Tower in a deck, The Star (Figure 7.5) connotes the field of meanings which include healing, renewal, hope, inspiration, creativity, and the realization of our spiritual dreams therefore semiotically transmitting the message that no destruction is final. In fact, this image is sometimes called *The Star of Hope*.



Figure 7.5. The image of The Star.

Tarot edusemiotics demonstrates that, in accord with Kristeva's semanalysis, the destructive moment is embedded within a generative constructive process, which represents at once a symbolic and real construction of collective subjectivity within the double process of negation and identification. Therefore the very same moment is a marker of not solely abjection but of *hope*, this metaphysical concept elucidated recently by a number of critical theorists, including Kristeva (2002), who called such a transformative change a *joyful revolt*.

Lynda Stone, commenting on *crisis* as a central concept in Kristeva's work and relating it to the crisis in education, recognizes the ambiguity of meanings ascribed to this concept: "she [Kristeva] asks: '[Is] this crisis a suffering, is it a pathology? Or is it a creation, a renewal?'" (Stone, 2004, p. 105). Kristeva (1982) points to the possibility of "rebirth with and against abjection" (p. 31). In the context of the Tarot edusemiotics, new hope, creation, rejuvenation and renewal are symbolized by the image of The Star, Arcanum XVII, that in a Tarot deck immediately follows the catharsis of abjection represented by the image of The Tower.

The semiotic significance of the Tarot images is justified by their functioning as a site of the subject in process who is a sign-becoming-other; and who "instead of sounding himself as to his 'being' ... does so concerning his place: 'Where am I?' instead of 'Who am I?'" For the space that engrosses the deject, the excluded, is

never *one*, nor *homogeneous*, nor *totalizable*, but essentially divisible, foldable and catastrophic” (Kristeva, 1982, p. 8; italics in original).

This ambiguous space is called “a strange place ... a *chora*, a receptacle” (Kristeva, 1982, p. 14): a subject in process already being constituted by desires and “drives, which are ‘energy’ charges as well as ‘psychical’ marks” (Kristeva, 1984, p. 25) creating an enfolded field of forces in action that need to be unfolded in Tarot edusemiotics. A term borrowed from Plato, *chora*’s original meaning is a connective link between realms of the intelligible and the sensible, implying a quality of transition or passage, a bridge – albeit invisible and in itself formless – between the two. *Chora* is thereby the included third that can be symbolized by tilde “~.” *Chora* is a site saturated by forces, itself a vital and “moving force” (Casey, 1997, p. 324).

Kristeva, acknowledging the dynamic and even organizing character of *chora* as “formed by the drives and their states in a motility that is as full of movement as it is regulated” (Kristeva, 1984, p. 25), stresses its provisional and non-expressive quality within the limitations of verbal discourse. In the mode of pictorial edusemiotics, however, *chora* becomes effectively expressive as the discursive boundaries expand to incorporate the nonverbal, extra-linguistic mode of the paradoxical “semiotic articulation” (Kristeva, 1998, p. 142) in the language of Tarot signs and images. In The Tower picture, a space occupied by the subject in process is unstable and ambivalent: the archaic *divided self*, by virtue of its very (dis)placement, is represented by “a multiplicity of ex-pulsions” (Kristeva, 1998, p. 134), the primary function of which is self-destruction or the death drive.

Still, it is an *amorphous* space, the rhythmicity of which resonates with the pulsations of labor when giving birth: ultimately, therefore, *chora* fulfills its generative and creative purpose, as represented by the figure of the naked woman in The Star picture. Structureless, *chora* can be designated solely by its function which is explicitly *feminine*: to engender, to provide caring conditions – or rather, in its relational economy, to be *the* condition, *the* symbolic home – for regeneration, rebirth, and the genesis of new forms. And it is in the image of The Star that the feminine (cf. Noddings, 2010a) language of Tarot edusemiotics finds its full, free of encumbrance, voice.

The Fool had to travel long enough in search of the multiple sources of the Self (cf. Taylor, 1989) and had to undergo traumatic experiences to the point of becoming abject in the image of The Tower, before he finds renewed hope in the image of The Star as the new symbolic home replacing *The House of Destruction* (The Tower). The symbolic home as represented by The Star is expanded to the whole of nature; significantly, we begin to feel “at home in the Universe” (Kauffman, 1996) when participating in self-organized process of semiosis.

For Noddings (2002), it is an attitude of attentive love in the home that induces a corresponding responsiveness, which can serve as a foundation for social policy. Respectively, any corrective practice that does more harm than the behavior it is aimed at correcting should be abandoned, at home or at the level of larger society, culture wars notwithstanding. Noddings is adamant that social policy should be informed by the home; home meaning an *ideal* place that maintains the “relations

of care and trust” (Noddings, 2002, p. 123), full of experiences that should theoretically shape “the developing relational self” (Ibid.) who in turn would be capable of further creating caring relations.

The subject in process embodied in the Tarot edusemiotics “is a relation. It is constructed in encounters with other selves and with objects and events in the world. It has attributes and it has a substantial continuity” (Noddings, 2002, p. 117). Its attributes are symbolically (not literally) represented in Tarot images and its continuity can be traced through the metaphorical process of the Fool’s journey towards the ideal, individuated Self, a symbol of wholeness and being fully integrated with the generic Other at the level of culture or nature alike.

Following Noddings’ call for exploring more fully how the *relational self* develops and how “to achieve self-understanding and to extend the span of control over our lives” (Noddings, 2002, p. 119), we have been tracing the illusive signifier of self-becoming-other through a number of Tarot images, while at the same time learning the expressive, pictorial, language of signs. By now we understand the message that The Tower of Destruction which preceded The Star was a temporary stage in forward-directed evolution and intensification of consciousness in the process of human development as genuinely relational selves.

We have learned the moral lesson embedded in The Tower. The presence of The Star in a Tarot deck, as a natural progression from The Tower, is a symbolic message that the Tower itself is a precursor to the renewal and creation of new psychic space aligned with Nature. The image of The Star conveys our oneness with Nature – the wholeness of the symbolic conjunction – symbolized by the naked woman pouring waters. As the first figure in the sequence of the Major Arcana without any clothes on and, significantly, feminine, The Star is a symbol of being finally stripped of the one-sided “left-brain” (cf. Shlain, 1998) outlived values and solely masculine ideologies.

The vessels in the picture are red, this color representing full flesh-and-blood humanity in unity with spiritual essence as water, color blue. The Star embodies the meaning of hope, healing, inspiration and the forthcoming New, post-human (cf. Lewis & Kahn, 2010) Aquarian age that should have replaced the Age of Abjection. The Star of Hope illuminates the real possibility for new understanding, new Integral consciousness. In the current global climate, permeated by diverse beliefs, clashing values and cultural conflicts, when different ideologies compete with each other, leading to destruction on the scale of The Tower, the universal value of Hope is paramount.

We don’t have to bring about a revolution, as Neumann (1969) called it, in the societal value system but rather to align ourselves with the process of evolution – the flow of semiosis – and transform the potentiality into our very reality by virtue of the lived-through meanings contained in the Tarot symbolism. Non-incidentally, Hederman (2003) comments that “the response to the destruction and the ... replacement of the World Trade Centre ... requires that these be infused by the feminine principle” (p. 236); and such a feminine principle embodied in The Star Arcanum is a natural progression from The Tower with its attributes of abjection and violence.

Indeed, abjection and violence abound in contemporary culture where beliefs and values are continuously clashing do function as precursors to what has been designated as new philosophies for change (Zournazi, 2002). A revolt, due to its own dialectics and the logic of becoming-other, can potentially produce hope, love and wholeness as a positive resolution of a catastrophic, negative, event. As Stone (2004) reminds us quoting from Kristeva, “we are subjects in process, ceaselessly losing our identity, destabilized by fluctuations on our relations to the other. Interpretation...is itself a revolt” (p. 104). Indeed, the hermeneutic interpretation of Tarot images (Semetsky, 2011) not only produces a revolt in terms of deconstruction of habitual subjectivity with its old set of privileged yet presently dysfunctional beliefs, but also results in the construction of new subjectivity equipped with newly intensified Integral consciousness (Chapter 6) by virtue of creating new meanings and values.

In her interview with Australian journalist Mary Zournazi, Kristeva (2002) presents hope as a transformative, humanistic, and even religious idea. Pointing to the destruction of psychic space in the current ideological climate when abject experiences go beyond “borders, positions [and] rules” (Kristeva, 1982, p. 4), Kristeva says that our hope for a positive and joyful revolt, that is, a transformation in our critical thinking to the point of inventing new ways of living, is embedded in the economy of care. Care, as a type of psychoanalytic cure, is “a concern for others, and a consideration for their ‘ill-being’” (Kristeva, 2002, p. 66), thus bringing well-being into a productive dialogue with ill-being for the purpose of the integration of the Other.

Sure enough, the ethics of care is a must for educators, as Noddings prophetically told us back in 1984 in her book *Caring*, devoted to an alternative, feminine, approach to ethics and moral education. Tarot edusemiotics provides us not only with care and hope but establishes the very integration, without which this very hope may remain futile. The loss of hope produces powerlessness, due to which we often succumb to resignation as if chained to the Devil’s throne in the underworld. This state of consciousness is feeding terror symbolized by The Tower as directly following The Devil in the deck.

It was precisely on September 11, 2001 after the collapse of the Twin Towers that Kristeva remarkably redefined her idea of revolt as an event enabling one to move into a space of hope. The very “logic of symbolic change” (Kristeva, 2002, p. 75) presupposes the “necessity of the symbolic deconstruction, the symbolic renewal, which comes from creation – psychic creation, aesthetic creation, rebirth of the individual” (p. 76). Kristeva (2002) called it a process of re-evaluation of the psyche that constitutes the renewal of the self, which embodies events represented by “symbolic mutations” (p. 76). Among the latter abject experiences she lists the fall of the Berlin Wall, the drama of the Russian *Kursk*, and the planes hitting the World Trade Center.

Those real-life events provide experiential conditions for change and transformation, therefore functioning in the mode of Noddings’ (2006) critical lessons, even while being outside the walls of a formal classroom, but especially when brought in so as to constitute educational subject-matter. And the deep

symbolic meanings of these events become elucidated via the pictorial medium of Tarot edusemiotics. It is the singular real-life experience embedded in a pictorial text, the critical and ethical evaluation of which provides those “other means, symbolic or imaginary” (Kristeva, 1997, p. 391) that serve as an example of the unorthodox mode of cultural pedagogy (Semetsky, 2011) and self-education embedded in Tarot images.

Tarot edusemiotics presents us with a novel pedagogy of such values as care, hope and integration, and one that challenges our deep-seated comfort zones, habits and beliefs. In the context of the teaching profession, it is under the conditions of the critical and self-reflective method of Tarot edusemiotics that we become able to practice Jungian self-education therefore recognizing the shadowy places hiding deep in the psyche where our old habits of thinking and acting reside. Importantly, we can achieve integrity and become our own authentic selves only by means of becoming-other as ensured by Tarot edusemiotics.

The UNESCO report of the *Commission internationale sur l'éducation pour le vingt et unième siècle*, chaired by Jacques Delors (Delors, 1996), has identified learning with the treasure within. It strongly emphasized four pillars of a new kind of education: learning to know, learning to do, learning to live together with others, and learning to be. The call for such a comprehensive art of learning is crucial. This type of education invites the development of a relational attitude in practice. In this way not only do the boundaries between disciplines become moot but so do the boundaries between facts and values.

To live together with others does not mean simply tolerating the generic Other's differences but learning to transcend these differences towards creating a common ground and a set of shared meanings, beliefs, and values. To step into this field of shared meanings is possible through the semiotic bridge created by Tarot symbolism that embodies a “surplus value of passage or bridging” (Deleuze & Guattari, 1987, p. 313) due to itself being the included middle. Situated in the symbolic space of the same sign, teachers and students would have naturally acted as “components [of] melodies in counterpoint, each of which serves as a motif for another” (Deleuze & Guattari, 1987, p. 314).

Dewey asserted that what is needed in education is a genuine faith in the existence of moral principles, that do not remain merely disembodied ghosts in a Cartesian machine but are capable of being effectively applied in practice, establishing a relation between what appear to be irreconcilable opposites: between universals and particulars, between knowledge and action, between self and other. By embodying these principles symbolized by the Arcana and expressed in the language of images, Tarot edusemiotics establishes such a relation not as a theoretical claim or political slogan, but in our very practice, in experience, in life.

Dewey persistently struggled for the development of active value-judgements based on the meaning of experience in practice rather than passively accepting the given facts, and indicated that the practical development of value-judgements is “in spite of, [and] not because of” (Dewey, 1959, p. 55) traditional methods of instruction, which emphasize simple learning. By discovering the meanings of experiences, including abject ones, via Tarot edusemiotics we become able to

continuously train our sense of value-judgement and thereby fulfill what Dewey posited as the ultimate aim of moral education.

For Dewey, the task that we should accomplish in experience – what we have to learn, to extract from this very experience as its meaning – is the ability to sort out different and often inconsistent facts upon their “scale of worth” (Dewey, 1959, p. 55), thus ourselves becoming able to grade them by assigning them certain values. When expressed in the Tarot pictorial language, knowledge becomes integrated with the ethical dimension derived from real-life experiences, and our actions in the world thereby cross over the divide between facts and values and connect them by means of yet another complementary facts-values pair.

The logic of the included middle embedded in Tarot edusemiotics overcomes “a process-product, objective-subjective split” (Doll, 1993, p. 13) and defies the absolute dichotomy between such binary opposites of modern discourse as objective reality and subjective experience, facts and fantasy, profane and sacred, private and public. Transcending the dualistic split by means of the included Third of a Peircean interpretant gives an actual body to what would otherwise have remained a disembodied ghost lurking somewhere (or rather nowhere) in the private Cartesian Cogito, forever split from the public, sociocultural and natural, world.

Real-life events, when evaluated, interpreted, and reflected upon, acquire extra-textual productivity, which is extremely important as a means of/for unorthodox cultural education and the edusemiotic pedagogy of hope in terms of our learning from experiences and participating in the process of self-education embedded in the language of images. Abject experiences, such as the destruction of the Twin Towers on 9/11, the Iraq and Afghanistan wars, and other geopolitical events of similar scope, should become unorthodox lessons to be critically examined and learned from as signs of the times.

Recently, Noddings (2010b) emphasized the application of her earlier care theory for constructing an expanded global approach to ethics and moral education. Noticing that the reference point for moral education is traditionally located within the norms of local or religious communities, Noddings acknowledged the rapidly changing world and the inadequacy of the traditional parochial approach. In this age of globalization, care theory becomes a powerful resource that allows us to approach the world via relations and caring; to repeat, in the framework of care theory and edusemiotics alike, it is the relation (and not an individual agent) that is ontologically and ethically basic.

As the chapters in this book have demonstrated, we can use Tarot edusemiotics for the deep analysis of real events in human culture. By applying the semiotic approach in practice, Tarot contributes to further developing a sense of moral interdependence so important to the ethics of care that “rejects the notion of a truly autonomous moral agent. ... As teachers, we are as dependent on our students as they are on us” (Noddings, 1998, p. 196). And it is Tarot edusemiotics that provides a connective link and forms a complementary self-other pair not only as a theoretical construct but as embodied in practice.

Positing the important and timely question of how an ethic of care can be applied globally, Noddings argues that even nations and other large institutions can work under a care-driven conception of justice where it is caring-about that serves the function of being the motivational foundation for justice. It is worth mentioning that the Major Arcanum called Justice (Figure 7.6) relates to the Greek virgin goddess Aestraea who presided over the harmonious, peaceful and prosperous, even if mythical, Golden Age. Significantly, the figure of Justice is feminine.



Figure 7.6. The image of Justice.

Noddings' attention to the unifying global level is never at the expense of local differences: her recommendation is to look at the entire web of care and see how various problems impinge on and affect the lives of individual people. This recommendation can be fulfilled by using Tarot edusemiotics. The main aim of moral education in this context is to bring up people to successfully engage in caring relations both inside and outside formal educational settings. Tarot edusemiotics embodies those four necessary pillars posited by Noddings as supporting this model of education in the context of personal, political and cultural domains, namely: modeling, dialogue, practice, and confirmation.

We can confirm the potential best in other people or other nations without relying on absolute criteria as prescribed norms. Ethics is never given a priori in terms of some moral code of behavior or how well our own values might fit some higher moral ideal. Instead values and meanings are created in experience by reading and interpreting cultural and psychological texts embedded in Tarot pictures. Genuine learning presupposes an encounter with the unknown, and one always "has to invent new concepts for unknown lands" (Deleuze, 1995, p. 103), for novel experiences.

Tarot edusemiotics teaches us that life itself is educative: it is a long experiential process requiring wisdom in a Spinozian sense, that is, wisdom as practical and ethical, and in this process overcoming the limitations of narrow egocentric knowledge. Within real-life global experiences, reading and interpreting diverse cultural texts as a self-reflective way to understand actual events is equivalent to constructing and learning symbolic lessons embedded in the continuous process of our experiential growth, both intellectual and ethical.

It is due to Tarot edusemiotics that human experience can be “taken out” of the confines of the individual Cogito of the Cartesian subject and aligned with the greater sociocultural dimension that always involves others – people, events, nations, cultures. The integration of the archetypal Other is paramount for understanding and further reevaluating such an expanded experience. That is what I call the ethics of integration as a further development of the ethics of care in the context of Tarot edusemiotics.

The problem of teacher preparation becomes crucial. How can teachers be prepared to conduct lessons based not only on real-life events, that is lessons functioning in both critical and clinical modes, but also lessons embodying the ethics of integration derived from the knowledge of Tarot symbolism as related to the school of life and the science of life as mathesis? Teacher preparation courses should indeed emphasize relations and connections, and not only to other disciplines but also, and more importantly, to the common problems of humanity so as to create meanings for those problems, to make sense out of them.

However, even if classical ethical theories are included in teacher preparation courses (and often they are not included at all), the adequacy of those theories becomes doubtful in a contemporary global context permeated by apparent conflicts of values. The continuing debate regarding the methods of ethics appears unending: “since Socrates [philosophers] have sought ... criteria for distinguishing between right and wrong and between good and evil” (Baron, Pettit, & Slote, 1997, p. 1). What is common to all approaches, however, is that they are framed by the reasoning of an independent moral agent that presents ethical categories in the form of dualistic opposites.

The ethics of integration informed by Tarot edusemiotics conveys the message that the diversity, multiplicity and complexity of experiential situations make it impossible to lay down strict theoretical rules as indubitable moral yardsticks. The ethics of integration overcomes the dualistic split inherent in simple “moral algebra” with its traditional binary division into “good” versus “evil” or “right” versus “wrong.” It enables us to move beyond good and evil and towards the integration of those dualistic opposites that are still deeply ingrained in individual and cultural consciousness. In this respect, an apparently evil event, such as the destruction of the Twin Towers on 9/11, when re-evaluated critically, clinically, and creatively for the purpose of learning from this abject experience, might itself become a teachable moment and serve a positive learning function in educational and pedagogic terms.

Learning from the signs embedded in Tarot edusemiotics is founded on discovering the meanings of experiences and establishing some previously

CHAPTER 7

unthinkable and seemingly impossible connections in our practice. In this framework, a particular abject event embedded in a singular experience may provide a unique and creative opportunity for our understanding of its significance and meaning, thus confirming the potential best within the overall integrative dynamics of becoming-other. Indeed, becoming-other, as the Fool's prerogative in both symbolic and literal terms, is by all means a condition of possibility even when encountering abject experiences.

Deleuze (1983), in his contrasting "the" philosophical method with the Greek *paideia*, commented that culture usually experiences violence that serves as a force for the formation of our thinking and referred to Plato's famous metaphor of the Cave where the prisoner was forced to start thinking. Genuine philosophy and, by implication, genuine caring and integrating education must always act critically and ahead of time, transcending the present and capturing at once what was before and what is ahead. Because new values "that are yet to come" (Deleuze & Guattari, 1987, p. 5) are created in experiential practice, Tarot edusemiotics centers on the future-oriented "untimely" dimension of philosophical thought, a pressing issue in current educational research, theory and practice (cf. Gidley & Inayatullah, 2002; Inayatullah, Milojevic, & Bussey, 2005; Peters & Freeman-Moir, 2006; Semetsky, 2006).

It is Tarot edusemiotics that combines the before and after in a single complementary past~future pair, as well as highlighting the present experience (see Chapter 6). The metaphysics of time in the Tarot spread reflects a four-dimensional view, in which past, present and future events co-exist. Physicist David Bohm has posited all possible events as enfolded in a timeless implicate order. In the actual world they unfold into explicate order, thereby creating time in our physical three-dimensional reality. Referring to the experience of dreams, Bohm said:

When people dream of accidents correctly and do not take the plane and ship, it is not the actual future that they were seeing. It was merely something in the present which is implicate and moving toward making this future. In fact the future they saw differed from the actual future because they altered it. Therefore I think it's more plausible to say that, if these phenomena exist, there's an anticipation of the future in the implicate order in the present. As they used to say, coming events cast their shadows in the present. Their shadows are being cast deep in the implicate order. (Bohm in Hederman, 2003, pp. 43-44)

Tarot edusemiotics empowers us with making sense out of the chaotic flux of experiences as we learn from and within those experiences, which are being unfolded in front of our very eyes, thereby creating order out of chaos (Chapter 1). A genuine Tarot reader "would have to analyze the conditions of creation as factors of always singular moments" (Deleuze & Guattari, 1994, p. 12); such a singular moment representing "a unique event which merges now with that which renders it possible" (Deleuze, 1995, p. 185) due to the self-referential process~structure of signs-events.

The affirmation of experiences, even *abject* experiences, means to invent new forms of life: “to unburden: not to load life with the weight of higher values, but *to create* new values which are those of life, which make life light and active” (Deleuze, 1983, p. 185; Deleuze’s italics). An active and affective way of reading and interpreting Tarot images is always “reading with love” (Deleuze, 1995, p. 9): it is the affective dimension in the depth of the psyche that produces multiple becomings. The images “were conceived deep in the guts of human experience, at the most profound level of the human psyche. It is to this level in ourselves that they will speak” (Nichols, 1980, p. 5), along a continuous process of individuation comprising intellectual, moral and spiritual education that enables humankind to make decisions and choose ethical actions in unity and harmony with the Jungian *Unus Mundus*, that is, the one, integrated, world.

The present-becoming – the included third symbolized by “~” due to which the integration becomes possible – is extremely significant precisely because it would make education untimely, that is, over and above the limitations of chronological time. To reiterate, it is our current “experimentation on ourselves [that] is our only identity, our single chance for all the combinations which inhabit us” (Deleuze & Parnet, 1987, p. 11). For experience to become genuinely educational, lessons should focus on topics connected to real life and should acknowledge abject events as important learning experiences; this school of life presented to us in its symbolic form in Tarot images and pictures.

It was Nietzsche who exposed the paradoxical power of the negative, defining the point of conversion of the negative as transmutation, akin to Kristeva’s joyful revolt. Under the “subtle ... reinterpretation” (Deleuze, 1983, p. 157) of the Hegelian contradiction and its resolution as the negation of the negation, it is sorrow that produces its opposite, joy, within the creative dynamics of becoming-other. Movements, trajectories, flows and fluxes permeate the smooth nomadic space of the subject in process. Educational researcher Elizabeth St. Pierre refers to Bachelard’s notion of felicitous space as seized upon by the imagination; she points out that this space cannot be absent or present but is both at once.

Indeed, such integrative space includes the Imaginal in-between world inhabited by signs that behave in accord with the inclusive logic of both-and versus dualistic either-or. It constitutes “an affirmative, joyous space, perhaps the most thrilling of all the fields in which we work” (St. Pierre, 1997, p. 371). A transformative and joyful educational experience cannot but be situated in such a space devoted to discovering in practice novel concepts and meanings for experience; this transmutation of values is what makes the cultural pedagogy of hope and the ethics of integration created by Tarot edusemiotics both possible and necessary. Teachers should be exposed to the fundamentals of this model of pedagogy and ethics both at pre-service level and in the form of professional development so as to incorporate it in their classrooms.

It is clear that classical ethical theories based on dualities that supposedly can never be reconciled have become quite inadequate in the global culture of the 21st century. Unless we want to find ourselves amidst the ruins of yet another Tower, symbolic or real, the ethics of integration needs to be put into practice. The focus

of such an integrative educational process grounded in Tarot edusemiotics consists not only in the knowledge of facts but in the self-reflective reevaluation of experience that blends the creation of meanings into conceptual understanding.

Very much in the spirit of Tarot's ethics of integration, Noddings has stated that well-educated teachers should help students in understanding that knowledge cannot be adequately described as a set of easily retrievable answers to unambiguously stated questions. Instead, much real knowledge consists of developing capacities to figure things out, to be unafraid to inquire, to experiment in practice and connect with others, confirming the best in our actual and potential relationships.

Real-life experiences symbolized in the image of The Devil or of The Tower do produce a shock to thought because they break down "the sedentary structures of representation" (Deleuze, 1994, p. 37) as habits of the mind. They demonstrate objective uncertainty, a bifurcation point, which cannot be reduced to the cognitive doubt of the Cartesian subject who achieves personal certainty by means of clear and distinct ideas in the form of an *a priori* "I think." Ideas are unconscious and are being brought to awareness indirectly via mediation by images. We learn from experience by transcending this experience in our empirical practice.

It is easy, under the circumstances, to remain a docile body within a dominant moral order ruled by dogmatic philosophy based on "universality, method, question and answer, judgment, ... a court of reason, a pure 'right' of thought ... The exercise of thought ... conforms to ... the dominant meanings and to the requirements of the established order" (Deleuze & Parnet, 1987, p. 13). We earlier addressed the key meanings of such moral order as embodied in the images of The Emperor or The Hierophant in the Tarot deck. But it is the singularity of abject experience that produces the very conditions for creative becoming because "a creator who isn't grabbed around the throat by a set of impossibilities is no creator" (Deleuze, 1995, p. 133).

The experiences that produce shock to thought are conducive to learning and ethical education. We learn from the folds of experience (Semetsky, 2010) by reevaluating it through unfolding the Tarot signs, Arcanum after Arcanum, in the medium of Tarot edusemiotics. It is real life saturated with affects *amplified* via their symbolic representations that functions as an informal cultural pedagogy and enables us to put into practice the ethics of integration that leads to "intensification of life" (Deleuze & Guattari, 1994, p. 74). The process of becoming-other is inseparable from the evolution of consciousness as the practice through which individuals can be transformed and both personal and collective consciousness intensified and expanded (Gidley, 2009; Peters & Freeman-Moir, 2006; cf. Semetsky, 2009).

It is through becoming-other that our Selves can become genuinely autonomous in the last image in the deck called The World (Chapter 6). Significantly, the numeral corresponding to this Major Arcanum is XXI, as if a sign that it is precisely now, in the 21st century, when the language of Tarot symbolism will help us repair the confusion of tongues that has haunted us since the Tower of Babel. Our present century is itself symbolic of this forthcoming transformation towards

new understanding and becoming fully individuated Selves, capable of living in harmony with others and taking ethical responsibility for the social and natural world we inhabit.

In order to *trans-form* ourselves and the world in which we live, we should be able to first enter the semiotic field that can *in-form* us. This information field is the subject of the next chapter.

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CHAPTER 7

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AN ETHICS OF INTEGRATION

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SIGNS AND INFORMATION

The lost common language symbolized by the Tower of Babel, addressed in the preceding chapter in terms of the results of miscommunication and human folly, is not just a myth or art form. This chapter constructs a naturalistic framework for Tarot edusemiotics. There is a continuing debate in contemporary cognitive science about the so-called Mentalese language as a system of primitive extra-linguistic signs which are hardwired in humans and which serve as tools for understanding, meaning making and creating new complex concepts. The semiotic, pre-verbal level precedes the symbolic or linguistic one. Signs function as reliable clues – albeit always in need of further meanings – for understanding ourselves and others. This language is posited as capable of processing information at a pre-verbal, pre-expressive level.

The combinatorial semantics of this Mentalese appears to have found an unorthodox expression in the semiotic system of Tarot images, which serve as keys to the proto-mental information “contained” in a typical layout, such as The Celtic Cross (Figure 8.1) used in my empirical studies, summarized in the prequel to this book (Semetsky, 2011).

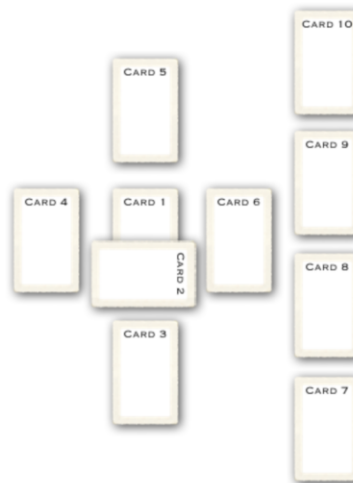


Figure 8.1. The Celtic Cross spread.

The denotations and connotations of each position in the spread have been addressed in detail, in the context of Tarot hermeneutic, for each individual

participant in my study as related to their situations (Semetsky, 2011). Philosopher Jerry Fodor postulated his Language of Thought Hypothesis (LOTH) as primarily addressing propositional attitudes, that is, verbal expressions where attitudes are expressed by verbs such as to believe, desire, hope, intend, think, etc. When we narrate the imagery of Tarot Arcana and translate the pictorial language of signs into verbal expressions, we express propositional attitudes on the basis of the layout's positions that embody such common semantic categories as beliefs, hopes, and desires.

It is pictorial semiotics that represents the symbolic universe of affects, thoughts, and actions embodied in Tarot images as their physical implementations. To remind the reader, in the context of the theory of content determination for mental representations, contemporary cognitive science refers to a propositional attitude as being of a somewhat archetypal nature: "we do not *use* our propositional attitudes. Rather, they themselves involve a 'use' of, or an attitude toward, a content" (Von Eckardt, 1996, p. 165) especially if we understand that their psychological ground, in accord with Peirce's semiotics, is our very habits.

Contrary to the centrality of Cartesian subject, this inversion implies a subjectless, bordering on possessive and forceful, nature of the unconscious mental states which function as our blind habits. Due to the mediating function of interpretation as the included Third, the latent, unconscious, contents of the mind are rendered conscious, and the signs which are brought to the level of awareness, that is, intensified and amplified to the point of their possible integration into consciousness, are capable of creating a momentous feedback in the psychodynamic processes of the subject of a reading. This self-organizing dynamics produces "a change in the subject's mental life which, in turn, changes his or her disposition to act ... in ways dependent *on the content of representation*" (Von Eckardt, 1996, pp. 283-284).

The pictures that appear in each position acquire specific meanings-in-context that have been analyzed in detail in the prequel to this book in the context of real-life problematic situations. The participants in my research consented to have made their Tarot readings public for educational purposes. Our subconscious and as yet unarticulated beliefs, hopes, fears, aspirations, desires, or doubts, of which we may be unaware at the subjective level, do have an objective compositional structure which is laid down in front of our eyes in the form of the Tarot layout.

Suffice it to say that, for example, a picture (or a constellation of pictures) in the 9th position in [Figure 8.1](#) would indeed embody the aforementioned fears and hopes that, when narrated and interpreted – that is, brought to the level of cognitive awareness – express the propositional attitudes of the hypothetical Language of Thought. Or rather, Tarot images embody the *Language of Non-Thought* which refers to the pre-conceptual, affective and subconscious contents of the mind at the level of so-called subdoxastic aboutness (cf. Davies, 1995/2001).

While Davies' (1995) starting point is attitude aboutness, or intentionality, and Dummett (1991) reversed the order by explaining intentionality in terms of linguistic aboutness, Peirce's semiotic and retroductive (abductive) approach makes the debate over such order a moot point. Depending on which particular

picture will “fall out” into a specific position, an expert reader can interpret or “read” signs in accordance with their specific semantic context; decoding in this process also the unorthodox grammar or syntax of Tarot edusemiotics based on the logic of the included middle constituting the core of semiotic analysis.

The three dimensions of time are all present in the here-and-now of the layout; symbolically expressed in the positions of the pictures. Sure enough, they are presented simultaneously in agreement with the triangle argument (as addressed in Chapter 6), thereby representing “philosophical time [as] a grandiose time of coexistence that does not exclude the before and after but superimposes them in a stratigraphic order” (Deleuze & Guattari, 1994, p. 59) in the format of a Tarot layout as an example of striated versus smooth space. The smooth, undifferentiated, space becomes striated when it is projected onto a flat surface: while all becomings take place in the smooth space, progress can only be “made up and in striated space” (Deleuze & Guattari, 1987, p. 481) in our familiar physical, sensible, world.

For example, in the layout displayed in [Figure 8.1](#), positions 5, 6 and 10 represent some likely future events, while positions 3 and 4 have the overtones of the past. We can literally *see* the past-present-and-potential-future coexisting in one and the same layout of pictures, enabling us to anticipate what may appear ahead because the present state of the semiotic system contains “not only the experience of past evolution, but also the experience of anticipated future [that] vibrates in the present” (Jantsch, 1980, p. 232).

Semiotics as the science of signs creates a framework that demystifies and even naturalizes that side of Tarot which is customarily considered as either belonging to totally occult science or staying merely at the level of cultural game (cf. Dummett, 1980). Accordingly, we can defy the persistent philosophical pessimism expressed by Wittgenstein. In the introduction to his *Tractatus*, Wittgenstein (1921/2001) insisted that what we cannot talk about we must pass over in silence.

The realm that escapes verbal expression was relegated by Wittgenstein to the realm of the mystical even as in Proposition 6. 522 he acknowledged that things that could not be put into words can still make themselves manifest. I do not want to argue with Wittgenstein. He was a genius. But it is the medium of Tarot edusemiotics that demonstrates that *we can express something that appears essentially inexpressible* by means of moving away from the limitations of the prevailing “linguistic turn” towards what I want to call the “semiotic turn” in philosophy of education.

To repeat, according to Peirce, philosophy as semiotics acquires the status of proto-science: John Deely (2001) stresses that Peirce’s theory of signs is rooted in science and not in mysticism. Analogously, Fodor’s (1975) LOT Hypothesis rests on a naturalistic approach to philosophy as proto-science that presents cognition as computation over compositional mental representations. This means that thoughts are represented in the Mentalese language, allowing for complex concepts to be created by combining and re-combining primitive signs.

The organization of Tarot images is such a system of signs, the combination of which constitutes the *extra-linguistic* characters of the hypothetical Mentalese as

nonverbal and pre-conceptual. The information encoded in the array of pictures may very well be structured in accord with combinatorial semantics as posited by Fodor, hence it can be potentially decoded. To reiterate, a genuine sign “points beyond itself to a meaning that is ... still beyond our grasp, and cannot be adequately expressed in the familiar words of our language” (Jung in Nöth, 1995, p. 119) but needs a symbolic medium for its expression. Signs do have a proto-mental character because semiosis crosses over the psychophysical dualism.

Contemporary cosmology (Lloyd, 2006) assigns to the natural world the status of a giant quantum computer that processes information in quantum bits called qubits. Hence follows the motto “it from bit” or, better to say, “it from qubit” which means that the observable universe arises out of *information*. Information (as envisioned by physicist David Bohm) is complementary to both matter and energy. According to MIT professor Seth Lloyd, it is on the basis of this information that the universe computes its own dynamical evolution, whilst *actualizing potential reality* as the computation proceeds. Ditto for the evolution of the human mind and the whole of culture: mind and intelligence are evolving. Intelligence is an eventual outcome of the evolutionary and learning, semiotic, process.

The computational approach needs a bit (no pun intended) of qualification. At the cutting edge of philosophy of mind and cognitive science, computers are understood as dynamical systems that indeed manipulate “bits,” but these units of information are not strictly reducible to what in physics would be called particles. They are moments in the flow represented – importantly – by analogue, and not solely digital, information. Lloyd (2006), stressing that universal quantum computation proceeds in a dual (analogue-digital) mode, specifies the structure of the computational space in terms of a circuit diagram representing both logical gates (the places where qubits interact thus exchanging/transforming information) and, importantly, causal connections represented by the connecting “wires” or paths along which the information flows.

Therefore these moments in the flow of semiosis can be defined as discrete “bits” only within a certain context, that is, taken as already parts-of-the-whole (cf. Rockwell, 2007) quite in accord with Peirce’s and Dewey’s philosophical conceptions. It is Tarot edusemiotics that enables an expanded epistemic access to the semiosphere – using Lotman’s (1990) and Hoffmeyer’s (1993) term – in practice, in our real experience. Kelso and Engström (2006), in the context of the science of coordination dynamics, point to some important nuances: while the laws of coordination, like physical laws in general, are matter-independent, they are nonetheless function- and context-dependent; they govern and therefore make relatively predictable “*the flow of functional information*” (2006, p. 100; italics in original).

This means that by *practically* stepping into the flow of semiosis, of which we are *theoretically* a constituent part anyway, we – by virtue of Tarot edusemiotics – become able to exercise a degree of predictability within a specific context, which is exhibited in [Figure 8.1](#). Tarot Arcana can be related to the infamous universals of communication that however exceed their linguistic representations: they are

extra- or trans-linguistic and “located” at the level of semiotic, pre-conscious and nonverbal, signs. The messages encoded in those signs express themselves by “speaking” in Mentalese code.

When decoded – that is, made available to consciousness – these symbolic messages become a powerful motivational force to facilitate our actions across emotional, cognitive, and/or behavioral levels, and thus accomplish important cognitive and ethical objectives, especially considering that we live at a time of global uncertainty, religious misunderstandings, and political bifurcations, when the problematic of shared meanings and mutual understanding is of paramount importance and we want to prevent a repetition of disasters like 9/11 addressed in the preceding chapter. Unless the eternal alienation between Self and Other is overcome and integrated into consciousness, gaps and breakdowns in communication will persist.

Chapter 7 demonstrated how the habitually perceived radical alterity of the generic Other precludes any meaningful communication, as per the image of The Tower in the deck. Mutual decision-making (as grounded in shared meanings and common understanding) appears equally impossible because verbal language as the sole means of intentional communication bypasses the field of the collective unconscious “containing” the archetypal meanings and values shared by humankind. It is Tarot edusemiotics that traverses language barriers; its symbolism reflects the range of universal experiences.

According to Nobel Prize winner Herbert A. Simon, “a symbol is simply the pattern, made of any substance whatsoever that is used to denote, or point to, some other symbol, or object or relation between objects. The thing it points to is called its meaning” (Simon, 1995, p. 31), and the ability to decode Tarot symbolism so as to “compute” the images’ deeper meanings is the authentic reader’s prerogative in the process of Tarot edusemiotics. As Simon explains, “computers were originally invented to process patterns denoting numbers, but they are not limited to that use. The patterns stored in them can denote numbers, or words, or lizards, or thunderstorms, or the idea of justice. If you open a computer and look inside, you will not find numbers (or bits, for that matter); you will find patterns of electromagnetism” (Simon, 1995, p. 3).

In our search for Mentalese we may indeed wish to “open” the human mind and probe inside it, but we won’t find anything in this intangible medium. We will, however, discover these patterns in their projected format of tangible pictures that embody powerful symbolic meanings. From the perspective of the projective hypothesis that in its various guises plays an important role in psychological testing and assessment (cf. Abt & Bellak, 1959; Semetsky, 2006, 2011), the constellation of Tarot pictures presents itself as an intensified scope of space and time accessible to observations (cf. Jantsch, 1980); because of projection, the invisible realm of the collective unconscious (the realm of the intelligible, in Plato’s philosophy) is spatialized and rendered visible (the realm of the sensible).

To repeat, in contemporary cosmology the suppression of many dimensions (which happens for example when a three-dimensional object is projected on a two-dimensional surface, not unlike cinema projection) is called compactification.

Lloyd (2006) points out that most of the information in the world is invisible. Energy is needed to process the invisible information and make it relatively visible at the level of observable, material, reality that can be perceived by regular senses. Matter, energy and information are interrelated in a self-referential, triadic, relation that is structurally isomorphic with Peirce's genuine sign. It cannot be otherwise in a universe perfused with signs where, in defiance of Cartesian dualism, subject and object reciprocally presuppose each other and are connected by the included middle, forming a complementary subject~object pair.

The material medium of the Tarot pictures is an interpretant for the information with which the universe is perfused. Information is sign-like. It is because of their self-reference that signs become other: it is a feature of self-reference that makes a semiotic, complex and multileveled system self-transcending or evolving. It is structural self-reference that generates a string of initially meaningless signs that nonetheless acquire meanings when interpreted. Because of self-reference the subject of the Tarot reading becomes capable of self-transcendence, in other words, of genuine learning: one becomes aware of their own dynamical evolution by means of forming one's "own world of symbolic representation of reality" (Jantsch, 1980, p. 161) embodied in the array of pictures.

Self-transcendence has been identified by Erich Jantsch with "the creative overcoming of the status quo" (Jantsch, 1980, p. 91); in other words, becoming-other via evaluating "the options in further evolution" (Jantsch, 1980, p. 232) when the Tarot images are being read and interpreted. Pictures, worth more than thousands of words, can be used to make implicit or explicit inference to derive a meaning for the image. Especially if they denote the idea of justice (as Simon pointed out) – and it is precisely this idea of Justice that happens to be Major Arcanum XI, or Strength – Arcanum VIII, or Temperance – Arcanum XIV, and so on, in the sequence of Major Arcana in the Tarot deck.

Simon described such an inference in terms of the recognition of features that give an experienced person some reliable cues of how to interpret it. He suggested that specific "recognition capabilities account for experts' abilities to respond to many situations 'intuitively' ... [and not] to hypothesize additional mechanisms to explain intuition or insight" (Simon, 1995, p. 35). Simon's approach is *psychological*, focused on intuition. *Logically*, however, the hypothetical "mechanism" would be equivalent to Peircean reasoning from abduction which has the power "of guessing right" (Peirce, CP 6.530) even while being pre-conscious and not rationally controllable. Abduction is embedded in the creative logic of discovery; it jump-starts the reading and enables the process of learning and self-education.

Addressing intuitive capacity, Noddings and Shore (1984) list four specific features to roughly distinguish intuition from the analytic, or conceptual, activity of the mind. Significantly, the relation between the two remains complementary as "it is impossible to isolate the two meticulously and discretely" (Noddings & Shore, 1984, p. 69). Developing one's intuition is a challenge for a Tarot reader, and the information from the collective unconscious, outside the personal Cogito,

intensifies the individual consciousness, contributing to its organization at a new level of complexity.

In Tarot edusemiotics, intuition functions in accordance with its literal meaning, that is learning from within (*in-tuit*), from the very depth of the psyche, in the form of “communication ... across the ... levels of perception” (Jantsch, 1975, p. 145). Access to knowledge thus “is available within ourselves” (Jantsch, 1975, p. 146) as much as without. Intuition represents a communication of a particular type: “This is the very fast-acting neural communication ... In this way, symbolic expression becomes possible, first in the form of self-representation ... and later as a symbolic reconstruction of the external reality and its active design” (Jantsch, 1980, p. 14).

Active design presupposes a creative process. In other words, the Tarot layout in front of our eyes literally represents “laying down the worlds, rather than mirroring” (Varela, 1992, p. 255) by means of re-enacting behavioral, emotional, and cognitive patterns as signs of individual and collective experiences embedded in the images. Noddings notices how Poincare, in his discussions of mathematical creativity, affirmed the role of special sensitivity leading to an intuitive ability to “bring [new concepts and meanings] into consciousness” (Noddings & Shore, 1984, p. 66; brackets mine). Among the four aspects characterizing the intuitive mode is an almost immediate contact with the object when the subject becomes affected or seized by the object. I earlier referred to this moment as *Kairos*.

It is the irresistible quest for meanings that becomes realized precisely in such a sudden awakening of the inner eye, which is capable of “creating a picture in our mind” (Noddings & Shore, 1984, p. 81). Because of this intuitive, inner, knowledge as Gnosis we can relate the picture in front of our eyes to the picture in our mind; this analogy or correspondence as the feature of the logic of the included middle is what enables a genuine Tarot reader to narrate the images thereby expressing their meaning.

Unfortunately, little is being done in the field of education to develop the intuitive abilities of students and teachers alike. More often than not education is equated with formal schooling, thus marginalizing the realm of human development. As for adult education, under the slogan of lifelong learning it has been transformed into “frightful continual training ... continual monitoring of worker-schoolkids or bureaucrat-students. They try to present it as a reform of the school system, but it’s really its dismantling” (Deleuze, 1995, p. 175). In the same way that corporations have replaced factories, the abstract concept of lifelong learning is replacing the problematic of human development.

By turning exams into continuous assessment, education itself is “turning ... into a business” (Deleuze, 1995, p. 179). In this manner, new forms of schooling become the means to provide a continuous stream of human capital for the knowledge economy. If and when human capital replaces humans then individuals are doomed to being replaced by “dividuals,” a market statistic, part of a sample, an item in a data bank. Proper individuation as a process of subject-formation, however, is at the core of Tarot edusemiotics and is what human moral development as a process of lifelong learning from experience is all about (Semetsky, 2011).

Tarot edusemiotics, which involves a practical “deciphering” of the information embedded in Tarot signs, is based on an authentic reader’s ability for pattern-recognition to translate the information from its silent form to a spoken word. As Ervin Laszlo pointed out, when the “patterns are perceived in a process, there is the possibility of extrapolation. Whatever the nature of the pattern, it provides a handle for grasping something about the way it will unfold in the future” (Laszlo, 1991, p. 50). Still, Laszlo does stop short of calling this vision a prediction, saying that the “nonequilibrium crystal ball does not foretell what will, only what is likely, to happen” (Laszlo, 1991, p. 50).

In other words, what can be predicted is the likelihood of an event to occur (that is, unorthodox determinism in terms of the identity of probabilities), therefore creating new momentary boundary conditions for an otherwise open-ended process that appears to be, in the words of curriculum theorist Bill Doll (1993), “determined but unpredictable” (p. 72). The acquired expertise and knowledge of the pictorial language “spoken” by Tarot pictures, together with the reader’s desire for Gnosis and her love for wisdom (that is, being an authentic *philosopher* of education!) coupled with a caring attitude, necessarily increases the “likelihood” of prediction. Therefore these qualities are crucial for “cracking” the Tarot semiotic code and understanding those implicit psychodynamic processes that long for interpretation and meaning-making.

In the process of Tarot edusemiotics, the subject becomes in-formed and can literally change their perspective or point of view in practice, that is, become able to trans-form herself, that is, become-other. Hence, the subject can become an object for herself, *a self-referential object of her own signs in the guise of the layout of Tarot images* that play the role of the squiggle “~” in the complementary pairs formed by the inclusion of Peirce’s third category of interpretant: subject~object, past~future, body~mind, private~public, etc. The mediative function of the logic of the included Third prevents the two from collapsing into a simple dyad and blocking the very act of creative interpretation representing the art~science of Tarot edusemiotics!

Philosopher Daniel Dennett (1997) refers to memosphere; a concept that appears remarkably similar to semiosphere. Apparently unaware of Yuri Lotman’s earlier approach to the semiotics of culture, Dennett presents the memosphere within the naturalistic framework for ethics and human experience, with regard to the function of memes as complex ideas or habitual patterns that replicate themselves as they pass on via culture and communication in human actions and history, hence enabling evolution and cultural growth. In a manner analogous to the relatively autonomous Jungian archetypes, memes are considered by Dennett to be potentially immortal entities that literally enter into human minds while functioning quite independently of one’s conscious will or volitional choices.

Incidentally or not, the theory of memes sometimes invites the same skepticism as, historically, archetypes or the Tarot to the point of taking a “meme theory ... not much more valuable than any astrological or otherwise esoteric interpretation of the meaning of the universe and its inhabitants” (Heschl, 2002 in Popp, 2007, p. 62). In fact, memes often circumvent our explicit choices, quite in accord with

Jung's notion that archetypes can easily possess an individual or collective (cultural) psyche. Because of the archetypal nature of memes, bordering on possessive and forceful, they may "spread ... within a group ... without individuals making explicit, reflective value judgments" (Popp, 2007, p. 62). Becoming conscious of the unconscious action of memes constitutes the process called *managing memes*.

As a result of the interplay of nature and culture, codification (a presupposed rule, law, etc.) is evolving and subject to dual modes, analogue and digital. It is the physical implementation of the archetypes in the Tarot pictures that supplies *actual* body to the otherwise *virtual* or abstract "meme machine." The notion of machine is significant! Gilles Deleuze considered the unconscious to be "a productive machine ... at once social and desiring" (Deleuze, 1995, p. 144) and not at all the mechanical reproduction of the same. The unconscious as a sign, a relational multiplicity, spills over the boundaries of the personal, Freudian, unconscious and partakes of public – social, political, cultural, natural – existence. The process of individuation and self-formation as the goal of self-education is challenging and creative; still it ultimately enables "the conquest of the unconscious" (Deleuze, 1988, p. 29) embedded in the Tarot edusemiotics.

Tarot signs function as what in today's parlance would be called a machine *meta-language*, describing the evolutionary process of habits-taking (in Peircean terms) and using memes as canonical codes (cf. Markoš, 2004). What the logic of signs, the logic of the included middle, registers is a "profound complicity between nature and mind" (Deleuze, 1994, p. 165) at the level of our experiences, in practice; human mind and (supposedly) impersonal nature also form a complementary pair connected via the squiggle "~."

To learn from experience, as we said earlier, citing Dewey, means making meaningful connections! Experiential learning is not a matter of carrying into action some *a priori* representation – say, by passing on the act of swimming from forming a representation of a teacher's movements – an example used, non-incidentally, by both Dewey and Deleuze; yet originally belonging to Leibniz. Rather, learning is a matter of indexing multiple conjunctions *and*, that is, applying the logic of the included middle in practice. An example of such practical, relational, logic would be such real-life activities as surfing, windsurfing and hang-gliding that require one to enter into a natural wave, as if establishing a relation, a shared field or indeed profound complicity along the "creative line of flight" (Deleuze & Parnet, 1987, p. 10) that forms a complementary body~mind pair. Learning takes place when

a body combines some of its own distinctive points with those of a wave, it espouses the principle of a repetition which is no longer that of the Same but involves the Other – involves difference, from one wave and one gesture to another, and carries that difference through the repetitive space thereby constituted. To learn is indeed to constitute this space of an encounter with signs, in which distinctive points renew themselves in each other, and repetition takes shape while disguising itself. (Deleuze, 1994, p. 23)

CHAPTER 8

It is not the possibilities of our consciousness but the multiple and varying potentialities of the unconscious that continuously create novel relations in our real experience. They embody the problematic instances embedded in the archetypal patterns of our spontaneous bodily actions. In our experiential encounters such problems appear at first only as subliminal or subconscious (as yet imperceptible or micro-perceptible) elements: signs. Learning happens when a body actualizes its virtual potentialities, thus creating new assemblages.

It is in the real-life experiential singularity within an encounter with actual waves where the virtual essence as the very Idea of swimming subsists and potentially allows us to comprehend its meaning in the very practice of swimming. Experience is thus paramount for learning, for creating novel meanings embedded in a specific pedagogy of the concept that “would have to analyze the conditions of creation as factors of always singular moments” (Deleuze & Guattari, 1994, p. 12). The relevance to education is clear: “If the three ages of the concept are the encyclopedia, pedagogy, and commercial professional training, only the second can safeguard us from falling from the heights of the first into the disaster of the third” (Deleuze & Guattari, 1994, p. 12).

It is the practical pedagogy of concept-creation – the creation of novel meanings enabled by Tarot edusemiotics – that teaches us to feel, to know, to learn and to reevaluate experience, hence re-organize it in a Deweyan sense. To reiterate, Tarot edusemiotics is future-oriented and

always speaks of values that are to come. ... [T]he artist and philosopher do not conjure things out of thin air, even if their conceptions and productions appear as utterly fantastical. Their compositions are only possible because they are able to connect, to tap into the virtual and immanent processes of machinic becoming One can only seek to show the power, the affectivity, the ... alienated character of thought, which means being true to thought and untrue to oneself One ... is drawn to the land of the always near-future. (Ansell-Pearson, 1997, p. 4)

Tapping into the informational, albeit invisible or virtual, field of multiple becomings or signs comprising the flow of semiosis means they can be actualized or decoded in practice; signs-becoming-other. As noticed by Markoš (2004) with regard to the semiosphere, it is a specific meta-language that ensures the relative identity of codes when it performs the function of transmitting a message. Even if step-by-step computational rules cannot be articulated fully in a human language prior to the very moment of interpretation and narrating images, still, as dynamical patterns, memes showcase themselves at the level of human actions and behaviors.

Memes make us act unconsciously; but never mind, they still lead us to learning whenever we can enter their virtual, yet *a priori* informational, field because their “[p]roblematic structure is part of objects themselves, allowing them to be grasped as signs, just as the questioning or problematizing instance is a part of knowledge allowing its positivity and its specificity to be grasped in the act of *learning*” (Deleuze, 1994, p. 64).

This information, as a constituent part of knowledge, is just potential or virtual, however it becomes actual whenever “it can give form to the ... energy” (Bohm & Hiley, 1993, p. 36), to actions, to experiences. Invisible information, in the pragmatic sense, “produces effects, and these can be perceived” (Laszlo, 2004/2007, p. 73) in the visible form of Tarot images that reflect real behavioral and thought patterns collected by humankind in the course of its existence and accumulated in the informational field of the collective unconscious. The unconscious, projected in the layout, assists learning. In the example of swimming, to learn to swim is

to conjugate the distinctive points of our bodies with the singular points of the objective Idea in order to form a problematic field. This conjugation determines for us a threshold of consciousness at which our real acts are adjusted to our perceptions of the real relations, thereby providing a solution to the problem. Moreover, problematic Ideas are precisely the ultimate elements of nature and the subliminal objects of little perceptions. As a result, “learning” always takes place in and through the unconscious, thereby establishing the bond of a profound complicity between nature and mind. (Deleuze, 1994, p. 165)

Memes do manage and re-enact themselves in such a way that this enactment may well be called an “intelligent but unthinking behavior” (Dennett, 1996, p. 154); unthinking here means remaining out of conscious awareness. Still, such objective intelligence (objective psyche, for Jung, or the *Nous*) is always already preserved in the form of unseen and invisible, yet potentially active and meaningful, information. Tarot edusemiotics enables us to exercise “an unconscious psychic mechanism that engenders the perceived in consciousness” (Deleuze, 1993, p. 95) when invisible information is made visible in accord with the major postulate of Hermetic philosophy (Semetsky, 2011).

It is the unconscious that “gives spontaneity and freshness; [but] consciousness, conviction and control” (Dewey, 1991a, p. 217). As Dewey reminded us, the ultimate task of education consists in nurturing a particular “type of mind competent to maintain an economical balance of the unconscious and the conscious” (Dewey, 1991a, pp. 215-216). It is this task that becomes fully realized in Tarot edusemiotics, and that is what the infamous knowledge economy of contemporary education should indeed focus on (see next Chapter 9).

According to Lloyd (2006), natural laws “preserve information as it is transformed” (p. 78). The process of managing memes at the conscious level becomes possible under the condition of transforming the invisible information into visible when we become capable of decoding the pictorial language reflecting the Mentalese characters and comprising the unfolding text embodied in the array of images (see Chapter 3). Peirce acknowledged that “mental signs are of mixed nature; the symbol-parts of them are called concepts ... A symbol, once in being, spreads among people. In use and in experience its meaning grows” (Peirce, CP 2.302).

CHAPTER 8

Symbols – being the units of mathesis, of the science of life itself – appear to spread just like memes and affect our thinking and actions just like archetypes; whatever the name, they are signs-becoming-other-signs in our very experience. With the help of Tarot edusemiotics we learn from experience and by experience due to signs’ at once integral and integrating character (Chapter 6) when the unconscious-is-being-made-conscious. The usage of all signs that can be available to us in experience is especially important; and signs can be visible or sensible as well as invisible but still intelligible.

With the help of imagination, insight, and intuition – the three Is of informal education realized in Tarot edusemiotics – we articulate the pictorial text, constructing in this process an imaginative narrative for the past-present-and-future experiences. Sure enough, the boundary line separating the unseen invisible information from the visible is quite subjective and depends on our own ignorance versus knowledge: Lloyd (2006) is adamant that entropy, as the invisible information permeating the universe, is also the measure of ignorance.

The task of making the unconscious conscious, or making the invisible present, is accomplished by our understanding the language of signs, that is, us ourselves becoming parts-of-the-whole, hence capable of anticipating some parts of the whole as encoded in the structure of that *meta-machine* which is the Tarot edusemiotic system. As Peirce said,

The Universe... is necessarily a great work of art, a great poem – for every fine argument is a poem and symphony – just as every true poem is a sound argument. But let us compare it rather with a painting – with an impressionistic seashore piece – then every Quality in a Premise is one of the elementary colored particles of the Painting... The total effect is beyond our ken: but we can appreciate in some measure the resultant Quality of parts of the whole. (Peirce, CP 5.119)

To make the total effect “our ken” we will indeed have to learn how to read and understand the language of signs with which the Universe as a whole expresses itself. A Tarot reading creates a momentary instability between the subject of the reading and their current level of self-knowledge (or rather, ignorance, as Lloyd would say). It is during this moment that “novelty breaks in, the law of large numbers is rendered invalid and the fluctuations of consciousness prepare the decisions for the next autopoietic structure” (Jantsch, 1980, p. 308).

Information, albeit preserved, is being redistributed, contributing to a new “construct,” having appeared at a higher level of organization: its meaning. In this sense, active and creative interpretation, with the help of insight, intuition and imagination, as the included middle between oneself and the world, creates self~other or organism~environment complementary pairs in a way that exceeds just a passive adaptation to one’s environment.

In semiotic terms, evolution should be understood as a reciprocal *co*-evolution which is only natural because in the computational universe (as posited by Lloyd) biology must be complementary to physics. Hermetic philosophy’s premise that the world is *alive* and grounded in analogical relations does not sound so esoteric

anymore: *bios* means life. But we have to also acknowledge that there is yet another word which means life, *zoe*. As noticed by Hederman (2003), *zoe* is “life that vivifies; [*bios*] is life as inherited. *Bios* passes horizontally from generation to generation. *Zoe* is life from above, vertical connection” (p. 160).

We rarely notice this vertical movement in our everyday life, staying in the grip of biological life only, on the horizontal plane. A leap of imagination is needed; and the ability to read signs, to perceive analogies, correspondences, and relations because the acts by which *zoe* manifests itself are “the most imperceptible, they are acts which can be only contained in a life” (Deleuze & Parnet, 1987, p. 3); the indefinite article “a,” as mentioned earlier, indicating life as pure immanence (Deleuze, 2001).

Rene Thom, a founder of catastrophe theory in mathematics, notices that the stability of biological forms demands their having a dynamically physical character, that is, they depend on constraints imposed at the physical level. In this way, “the organic release of evolution allows the appearance of forms, more refined, more subtle, more global ... and ... charged with meaning” (Thom, 1985, p. 280). These forms, as signs permeating the universe, would be located at a global symbolic (semiospheric? memospheric?) level. Thus we cannot avoid accepting the mediation of biology and physics by culture and human experience.

As John Deely has argued, human experience *per se* is an interpretive structure: “in the heart of semiotics is the realization that the whole of human experience, without exception, is an interpretive structure mediated and sustained by signs” (Deely, 1990, p. 5). This interpretive structure is embodied in Tarot edusemiotics: the multiplicity of human experiences is symbolically expressed via the pictorial language of Tarot images. The process of reading and interpretation – the observer observing herself in a self-referential manner – is a feature of genuine learning!

Robert Rosen, a father of mathematical biology, talked about the whole universe as seemingly embodying a semantic dimension, akin to natural language. Yet, while focusing on biology and “life itself” (Rosen, 1991), he remained agnostic on the problem of effective calculability unless we take it for granted that Nature itself (with its laws of physics!) “speaks” a language of sorts. Indeed, for Dewey, nature does speak such a language (see Chapter 1). Rosen quoted from Martin Davis’s earlier book (which preceded Seth Lloyd’s research by nearly half a century) titled *Computability and Unsolvability* (1958; New York: McGraw-Hill): “For how can we ever exclude the possibility of being presented someday (perhaps by some extraterrestrial visitors), with a (perhaps extremely complex) device or ‘oracle’ that ‘computes’ a noncomputable function? (p. 11)” (Rosen, 1991, p. 204).

This question becomes moot in the framework of Tarot edusemiotics: such an “oracle” exists, and this book demonstrates that it does compute, within certain limits and contexts, the (otherwise) incomputable. To repeat, as stated by Dennett (1997), computational structures are self-referential, that is, capable of self-understanding. Self-reference or self-transcendence – the observer observing oneself – is necessary for self-understanding, for learning, and can be achieved only by means of triadic semiotics and diagrammatic reasoning.

The included third is created by the Tarot layout functioning as a Peircean diagram or “an icon of relations ... Indices are also ... used” (Peirce, CP 4.418). The Tarot diagram is a complex sign – perfect, in Peirce’s words – encompassing all three categories of icons, indices and symbols; its iconic character however prevails as representing a network of meaningful relations. For Peirce, it is diagrammatic reasoning that permits the formation of hypostatic abstractions, which enhance our experience as steps representing genuine learning.

A sign formed by the genuine triad that reciprocally unites matter, energy and information in the universe is self-referential; hence it functions as a quantum computer that computes its own dynamical evolution on the basis of its giant cosmic memory. The universe is indeed perfused with signs, as Peirce said, and can therefore be expressed as a sign having the following triadic structure (Figure 8.2), to which information is germane:

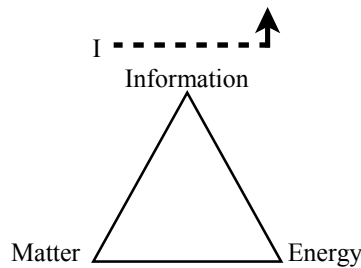


Figure 8.2. The universe as a triadic sign.

The dotted line designates the unfolding information arising from the flow of Peircean interpretants functioning in accord with the logic of the included middle. Lloyd (2006) points out that the basic material elements of the universe such as “Earth, air, fire, and water ... are all made of energy, but the different forms they take are determined by information. To do anything requires energy. To specify what is done requires information. Energy and information are by nature (no pun intended) intertwined” (p. 44, parentheses in original); and this “intertwined” relation, *a genuine sign*, is shown in Figure 8.2. The universe is indeed perfused with information!

The coordinating, triadic, relation is ubiquitous and brings to the fore yet another complementary pair, that of novelty~confirmation, as a bipolar relation that should be kept in balance at the level of human experiences (Figure 8.3).

Tarot edusemiotics is concerned with organizing potential information into actual, represented by meaningful knowledge, and necessarily implies mediation established via the included third of an interpretant. A triadic relation is established whenever “old and new jump together like sparks when poles are adjusted” (Dewey, 1934/1980, p. 266). Such “adjustment” is a trope indicating a continuous fluctuation between novelty and confirmation when information becomes pragmatic and functional, that is, qualitatively useful.

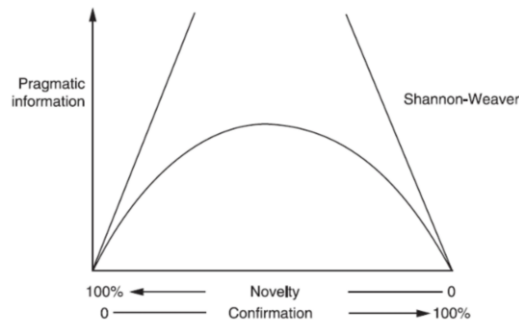


Figure 8.3. A complementary novelty~confirmation pair.
(Reproduced from Figure 3 in Jantsch, 1981, p. 96)

Total confirmation negates genuine learning as conducive to new knowledge; however complete novelty implies ending up in total chaos. As noted by Jantsch (1981) “there won’t be any pragmatic information content in either extreme” (p. 98). The relation of reconciliation expressed in terms of tilde “~” and creating an open-ended – adjustable or coordinated – system presupposes harmony and balance: a semiotic system would transform novelty into confirmation just as much as it creates novelty.

Novelty, as a change in a system’s behavior, is described in nonlinear mathematics as a phase transition. This ubiquitous state is far from equilibrium; it provides an initial impulse to the unfolding dynamics. Semiosis presupposes the initial condition of “uneasy or unstable equilibrium” (Dewey, 1925/1958, p. 253) symbolized by the Fool standing at the edge of the abyss (see Chapter 1).

This relational dynamics establishes coordination that may be defined as “the dialogue between the present construct and the problems of the environment that determines the emerging, next stage” (Doll, 1993, p. 72). Bill Doll, in the context of post-formal curriculum theory, addresses it as shifting from a strictly causal to transformative because any self-organized, semiotic, system (such as, in the context of this book, Tarot edusemiotics) necessarily opens itself to “challenges, perturbations, disruptions [that are] the *sine qua non* of the transformative process” (Doll, 1993, p. 14).

We have to be particularly careful in our search for the “golden mean” or balance produced by the reconciling relation symbolized by the squiggle “~.” It is the capacity of a system to maintain itself complemented by a capacity to modify itself that leads to self-reference and the system’s sustainability. A system is capable of sustaining itself by virtue of learning and keeping balance between its “both conservative and expansionary aspects” (Horn & Wilburn, 2005, p. 752).

Pragmatic information – the very meaning of experience – is an outcome of coupling, of interaction. There is no room for information, meaning or value in Newtonian mechanics (at the level of Peircean Seconds), however it is information

indeed that is “central to quantum mechanics” (Kelso & Engstrøm, 2006, p. 104) as well as to biology, both permeated by “coexisting dynamic tendencies” (Ibid.).

Metaphorically, a needed quantum of action is exercised by the Fool’s spontaneous jump into the abyss. A sign, for Peirce, is not a genuine sign unless it is interpreted; the same logic applies to quantum nature: “a photon is not a photon until it is measured” (Kelso & Engstrøm, 2006, p. 101) or detected. As Kelso and Engstrøm point out, “one can split an atom, but one cannot split a bit. Quantum mechanics implies that... measurement *creates information*” (p. 101; italics in original). The act of measurement is akin to the act of interpretation embedded into Peirce’s semiosis.

In fact, quantum entities are structured just like Peircean triadic signs and function on the basis of the logic of the included middle, representing as such “the metaphysics of reason” (Nicolaidis, 2001). The world must be perfused with reason implicated in the collective unconscious. A triadic process~structure defies the binary either-or logic and the third term T necessarily provides a semiotic bridge, the relation “~” between the dyad of A and not-A (that would otherwise remain two binary opposites) as per [Figure 8.4](#).

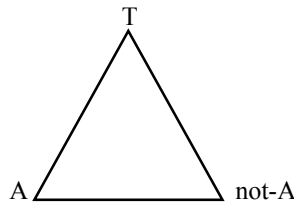


Figure 8.4. A genuine triadic relation describing a quantum entity.

The non-A (as the generic Other) is thus *not opposed* to A (to the generic Self as it would be in the framework of the logic of the excluded middle); they both constitute a coordinated or balanced complementary pair in a relation: $A \sim \text{not-A}$.

Positing his concept of holomovement, David Bohm emphasized that in it there is no direct causal connection except for the *relations* between events that are being interwoven into the whole by the interconnecting network of quanta. Semiosis is this interconnected network, and quanta partake of Peircean signs full of implicit information that continuously change its mode of expression, fluctuating between bipolar opposites. It is precisely the coordination dynamics grounded in the logic of the included middle that “champions the concept of functional information, and shows that it arises as a consequence of a coupled, self-organized dynamical system living in the metastable regime where only tendencies ... coexist” (Kelso & Engstrøm, 2006, p. 104).

The notion of the universe perfused with signs, on the basis of which Tarot edusemiotics is conceptualized and practiced, becomes even clearer: signs are virtual tendencies that undergo actualization and acquire meanings in the process

of their very interpretation. Tarot edusemiotics embodies such a self-organized system of potential tendencies (signs) that produces functional, meaningful, information while this very information simultaneously “stabilizes coordination” (Kelso & Engstrøm, 2006, p. 167), that is, it *fixes meaning* within a certain context even if only temporarily.

A Tarot layout represents functional information that “binds coordinating elements [a sign and its object, according to a Peircean triad] in a meaningful fashion” (Kelso & Engstrøm, 2006, p. 108; brackets mine). It is this coordination that produces meaning for experience. This means that a sacramental and mystical, Neoplatonic, equation One=Many demonstrates itself as a meaningful *relation* in the framework of the science of coordination dynamics advocated by Kelso and Engstrøm (2006). This formula becomes expressed in the form of as yet another complementary pair, unity~diversity; one and many are related.

What we customarily perceive as science versus mysticism also constitutes a complementary relation. What dualistic thinking considers mystical is the presence of self-reference or self-cause, traditionally looked at as mysterious and defying explanation from the perspective of the logic of the excluded middle of positivist thinking. Moshe Idel, contemporary scholar of mysticism and messianism, refers to the mystery involved in self-knowledge as leading to the confluence of cause and effect, that is, an appearance of a mystical *self-cause* (that we have, in fact, already partially demystified in Chapter 4) in the noblest forms of human action as the product of mystical union (*coincidentia oppositorum*) between the human and the divine:

in the profundities of human thought there is no one more profound and more excellent than it... and it alone unites human thought with the divine... to the extent of the human capability and according to human nature. And it is known that human thought is the cause of his wisdom, and his wisdom is the cause of his understanding, and his understanding is the cause of his mercy, and his mercy is the cause of his reverence of his Creator. (Idel, 1988, p. 147)

The problematic of such circular self-reference has been considered an unsolvable philosophical problem because of equating rationality with the method of classical science solely, with its direct mechanistic causality. So self-reference was deemed irrational, hence thoroughly mystical. Yet, it is coordination dynamics that reconciles the otherwise “irreconcilable” opposites of the human and the divine by virtue of the relation “~”; thus taking away the flavor of mysticism and combining both in one post-human or transpersonal, relational, entity, a genuine sign, a complementary human~divine pair!

Lou Kauffman (2010) provides an example that unites *one* with *many*: the Möbius band (the fold, in Deleuze’s parlance: ontologically, Being is Fold) which appears to be a paradoxical structure if not for understanding that it is the perspective of an observer and context, which produce an apparent paradox. As Kelso and Engstrøm state, “context-dependent coordination dynamics ... is *complementary* to the ‘universal’ context-independent ‘first principles’ of physics that aim to unify nature. Nature cannot be understood without both” (2006, p. 100).

Unity and diversity form a complementary pair and so do universals and particulars; as noticed by Dewey, it is “the mixture of universality and singularity” (1925/1958, p. 48) that produces an empirical impact at the level of practice, of actual experience.

Significantly, Kelso and Engstrøm indicate the *non-linguistic* origins of intentional action. Our very sentience is an emergent property implied by the informational field of signs and is not rule-based, that is, it cannot be founded on merely propositional thought and logocentrism. In a universe perfused with signs information (and computation as the evolution of information, of signs) is everywhere: it is all there is! Laszlo (2004/2007) refers to the experiences of the *Apollo* astronaut Edgar Mitchell who pointed out that information “is present everywhere ... and has been present since the beginning” (Laszlo, 2004/2007, p. 67).

A complex universe filled with information must “speak” in signs, in Janus-faced relations, must express itself in a dual mode of matter and energy as two poles connected by the same intrinsically informational field. Indeed, as physicist and cosmologist John Archibald Wheeler stated, all physical things are information-theoretic originally. Laszlo (2004/2007) uses “in-formation” rather than “information” to emphasize that it connects and links “things (particles, atoms, molecules, organisms, ecologies ... as well as the mind and consciousness associated with some of those things) regardless of how far they are from each other and how much time has passed since connections were created between them” (pp. 68-69)!

Because energy must be conveyed by some medium, it cannot act in a physical vacuum; rather it acts within a so-called quantum vacuum (mentioned in Chapter 1) permeated by quantum, relational, entities (see [Figure 8.4](#)) as genuine signs comprising the informational field; quantum entities are, strictly speaking, virtual; they are only tendencies. Gilles Deleuze was a genius indeed in his conceptualizing the ontology of the virtual. The signs’ “nonlocality respects neither time nor space” (Laszlo, 2004/2007, p. 29); yet it is precisely because they are non-local that we can encounter them in our actual experience in the visible and sensible, empirical, world, not unlike a confluence of mental and physical events due to Jung and Pauli’s synchronicity principle.

This “view implies that ... inner and outer ... interpersonal and intrapsychic can be seen to be [a] seamless field of references” (Samuels, 1985, p. 266) that unite in a holistic manner the otherwise binary opposites of mind and matter, the knower and the known. At the cultural level, signs are memes, and as a semiotic system, the symbolic level of memes or archetypes encoded in the proto-Mentalese language of Tarot images creates a semiotic bridge between the worlds of mind and matter by establishing a sort of interobjective (using Bruno Latour’s term) relation.

The invisible information, entropy, is a measure of ignorance, and by making the invisible visible it may seem that entropy would decrease but in fact the total amount of information is preserved – it is just redistributed because of the shifting boundary between (the classical) observer and the observed when the interpretation of symbols – the included third of the Peircean interpretant – brings forth the

evolution of consciousness. The expanded boundary means the intensification of consciousness up to achieving what Gebser called integrality (addressed in Chapter 6).

To reiterate, a genuine sign comprises a triad of “the observer, the observing, and the observed” (Dewey, 1991b, p. 97). The Tarot symbolic language, which, like any language in general, is represented by a structured system whose role is to pair expressions (functioning as public aspects, e.g. physical marks) and messages (private aspects: thoughts and concepts), that is, to have the means for mapping between them (cf. Jackendoff, 2001), performs the function of the semiotic interpretant that conforms to the self-referential logic as semiotics, that is, the logic of the included third, the included middle.

The proverbial relationship between map and territory avoids the trap of an *a priori* representation and the temptation of deconstruction; instead it is embedded in a self-referential semiotic process during which “the map...merges with its object, when the object itself is movement [and] the trajectory merges not only with the subjectivity of those who travel through a milieu, but also with the subjectivity of milieu itself, insofar as it is reflected in those who travel through it” (Deleuze, 1997, p. 61) – there is a reciprocal co-evolution, indeed.

The parts of the universe that function as a quantum computer are *entangled* (as parts-of-the-whole), and it is this entanglement that allows for the genesis of information despite the perceived “spookiness” of the old action-at-a-distance. This presupposed action across a distance is in fact a non-local, synchronistic, connection, which is indicative of the relational dynamics of semiosis. The flow of semiosis appears to be “composed of ...cycles, and cycles of such cycles” (Whitehead, 1929/1997, p. 268) creating a rhythmic movement. Rhythm is a manifestation of correspondences, of analogies, of relations – of symphony, as Peirce said – all representing the dynamics of coordination as we have demonstrated in Chapter 4.

It is due to coordination, to the relational dynamics that a new meaning emerges in the process of Tarot readings because of “a transcoded passage from one milieu to another, a communications of milieus, coordination between heterogeneous space-times ... Whenever there is transcoding, ... there is ...a constitution of a new plane, as of a surplus value” (Deleuze & Guattari, 1987, pp. 313-314). The images render themselves interpretable – they are transcoded – so that meanings, at the level of their expression in verbal language, appear as if created anew.

This apparent creation *ex nihilo* is not an occult or mystical feature: Lloyd explicitly emphasizes that “*quantum mechanics, unlike classical mechanics, can create information out of nothing*” (Lloyd, 2006, p. 118, italics in original). Recall The Fool Arcanum that opened this book. The Fool appears to signify nothing; still this sign is capable of creating information as if from nothingness. The zero numbering is extremely significant because in the computational, self-referential and self-organized universe, permeated by the rhythmic movements of signs, information can be created out of a state with *zero entropy*.

In philosophical terms, it is akin to the old and seemingly unsolved problem of being as first known, *ens primum cognitum* (to be further addressed in Chapter 10

in the context of Peirce's abduction). This is a state of total freedom bordering on chaos and unbounded, even if invisible, information. Still, the *potential* for information-processing is at its maximum (signified by Zero), and the Fool will start on his experiential journey of discovery, computing himself anew by means of being translated into other signs – hence creating new meanings – and evolving towards ever higher levels of complexity.

Nothing here contradicts the laws of physics. It is just that the invisible information “lives” in the substrate of the implicate order, posited by David Bohm, and amidst the interplay of signs in their analogue or continuous (and not yet digital or discrete) form. Contrary to the old mechanistic paradigm, the computational universe gives rise to the possible forms of (explicate) order due to its “innate information-processing power” (Lloyd, 2006, p. 169) and because of the structural dynamics of the earlier-mentioned logic gates whose action “determines what happens during the computation” (2006, p. 174).

Wolfgang Pauli's dream of a neutral language acquires empirical reality: as Lloyd (2006) tells us, neutrons are capable of “saying” both “yes” and “no” simultaneously; they indeed appear to participate in the yes~no triadic relation, in accord with the science of coordination dynamics. The Fool, by virtue of the “quantum leap” into the abyss, does perform a quantum of action and thus begins the evolutionary, semiotic, process during which he learns and evolves towards the states exemplified by other images.

At the practical level, we say that we step into the life-world of experiences and, via the string of interpretants, we begin to understand the meanings of this and subsequent experiences: we learn by creating this very meaning! We become wiser and our consciousness intensifies and expands to accommodate and realize that which has presented itself as just invisible information, just a subtle sign, which – unless amplified by the interpretive process~structure of Tarot edusemiotics and realized at the level of practice – may stay in the unconscious forever at the vague level of both “yes” and “no” at once!

Citing Lloyd again, “There is nothing wrong with beginning from nothing. For example, the positive numbers begin from zero (the ‘empty thing’)” (2006, p. 45). I have earlier illustrated the Fool's journey in terms of the construction of logic from an empty set. According to G. Spencer-Brown's *Laws of Form* (1979), logic is constructed in a series that repeat or replicate themselves on the basis of an initial act of making a distinction. Therefore information, which is always preserved even in its otherwise imperceptible, potential or virtual form, becomes visible and useful.

Each subsequent image reflects a particular pattern of thought, mood, affect etc. Each pattern, as we demonstrated earlier, may be represented by a set with a certain number of elements that reiterate, hence self-organize or generate themselves (cf. Merrell, 1997, p. 173). The evolution of signs has a direction and, as we established in the preceding chapter, is presently oriented towards The Star, The Star of Hope. In the current social climate when different memes, in Dennett's words, *compete* with each other at the global level and have led to destructions of The Tower scope, the universal value of Hope is paramount.

By stepping into the informational field of our own evolution represented by Tarot signs we become able to anticipate possible consequences of our very actions. It is Tarot edusemiotics that, due to its logic of the included middle, provides the means which enable the necessary self-reflection so that we can begin to learn “how to do the right thing at the right time” (Rockwell, 2007, p. 166) by choosing our ethical actions in harmony with the universe; not “going against the flow” of semiosis but acting in accord with the natural coordination dynamics.

The non-dual, complementary approach to self~other relations presupposes what physicist and mathematician Sir Roger Penrose, non-incidentally, has defined in terms of a “contact with some sort of Platonic world” (Penrose, Shimony, Cartwright, & Hawking, 1997, p. 125). Because the Platonic world is inhabited by mathematical truths, but also due to the “common feeling that these mathematical constructions are products of our mentality” (p. 96), the mysterious dependence of the natural world on strict mathematical laws and the tri-relative relationship can be inscribed in the following – notably *triadic* – diagram:

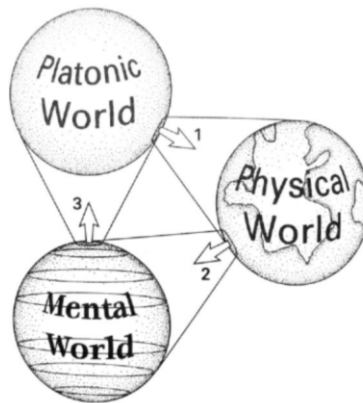


Figure 8.5. Three Worlds and three mysteries.
(Reproduced with permission from Penrose et al., 1997, p. 96).

The core of Penrose’s argument is that the physical world may be considered a projection of the Platonic world, and the world of mind arises from part of the physical world, thus enabling one in this process to insightfully grasp and thus understand some part of the Platonic world. The relations stop being mysterious, however, if we consider Penrose’s diagram structured in a manner similar to the Peircean triadic self-referential sign.

In the language of the science of coordination dynamics, a Peircean triad would be represented by a complementary sign~object pair, in which an interpretant is designated by the symbol of reconciliation “~.” This squiggle serves as a novel syntax to make the two opposite poles one bipolar *couple*, a Janus-faced sign! As a genuine sign, Penrose’s triad has to function reciprocally, in accord with the logic

of the included middle, that as such enables our insight into the Platonic world; hence grasping Ideas “populating” this world intuitively or insightfully (or, from the logical standpoint, by means of implicit abductive inference) versus following the logic of explicit computational rules articulated in a propositional language.

The laws are expressed by a “part of the Platonic world which encompasses our physical world” (Penrose, et al., 1997, p. 97) that – by projecting itself onto the physical level, that is, *compactified* hence *rendering itself visible* in the three-dimensional physical world – becomes “accessible by our mentality” (1997, p. 97): we grasp the Ideas that, by definition, “inhabit” the Platonic, archetypal, world. Or are they those very memes that by replication lay themselves down in the deep structures of the cultural unconscious?

In the framework of Dennett’s theory of memes, it is the totality of culture that “influences the development of mind” (Popp, 2007, p. 62). What inhabits the Platonic world is not only the True but also the Good and the Beautiful that may appear to be “non-computable elements – for example, judgement, common sense, insight, aesthetic sensibility, compassion, morality” (Penrose et al., 1997, p. 125); that is, all the attributes of the psyche encoded in Tarot Arcana.

Signs necessarily mediate between the world (physical world) and the intellect (mental world). Their participation in the evolutionary logic of the included middle enables the dynamic process of *computing the apparently incomputable*, leading to the anticipation of some future occurrences by means of Tarot edusemiotics. The concept of the computational universe as filled with information, with signs, supports the argument. An unorthodox quantum computation proceeds subconsciously and pre-personally: the rules are not being followed explicitly, but implicitly, at the level of the virtual abstract machine that finds its realization when embodied in the semiotics of pictures – in the language of images.

It is Peircean abduction that punctuates our conscious and rule-based, propositional, thinking; still it is an inference, a mode of reasoning that itself creates an “irreducibly triadic” (Deely, 2001, p. 614) relation between experience and cognition. The abductive understanding “comes to us as a flash. It is an act of insight” (Peirce, CP 5.181). The rules of *projective geometry* implicit in Penrose’s diagram establish a one-to-one correspondence (or mapping), like in a perspectival composition towards a vanishing point, implying isomorphism between the archetypal ideas of the Platonic world and a dyad of the mental world *together* with the physical.

We can conceptualize Penrose’s triangle in terms of such a perspectival composition, but with a shifting frame of reference. When a “vanishing” point shifts into the mental world this leads to isomorphism between a generic mental representation and the other two worlds: the world of Ideas together with the world of our actions. In fact the very quality of this point being “vanishing” makes the composition *a-perspectival*, which, according to Gebser (addressed in Chapter 6), is indeed such a distinguishing feature of intensified, Integral, consciousness that we achieve in the process of Tarot edusemiotics by virtue of reading/interpreting signs and learning from experiences.

This learning is not the accumulation of empirical facts, but should become the core of contemporary moral education as the creation of meanings and providing experience with value! A direct inculcation of values toward character building is not good enough, as Nel Noddings continuously tells us. Ethical responsibility lies in the transformation or “modification of character and the selection of the course of action which would make this possibility a reality” (Dewey, 1932/1998, p. 351). Choosing a specific and ethical course of action under the circumstances becomes possible by learning moral lessons in the school of life, whose unorthodox “curriculum” is embedded in Tarot images.

It is the naturalistic approach to ethics that supports our learning from experience, due to which we can evolve toward doing “the right thing at the right time” (Rockwell, 2007, p. 166). To repeat, *ethics recapitulates ontology*, and our actions should be harmonious, that is, coordinated with the natural world. The natural world, however, is perfused with signs and is not reducible to physical “things.” Analyzing Penrose’s diagram leads us to understanding that the level of moral ideas as potential meanings and values must exceed (verbal) references because it encompasses our thinking (mental world) as *coupled* with our doing (physical world, the world of action).

Our knowledge of Tarot language – or the machine code of the pre-conceptual Mentalese – makes moral meanings computable, to a degree, as it allows us to decode them into words (verbal signs) describing dynamic patterns of thoughts, affects, desires, beliefs and behaviors. The Language of (Non-)Thought by necessity exceeds its linguistic representations, and Jacques Lacan was correct when he said that the unconscious too is structured as a language. The language in question is the language of signs that establishes an unorthodox transversal communication along the memetic (not mimetic but semiotic) channels of information. And the ontological existence of the level at which such a symbolic language is “located” is implied by Penrose’s triad.

If we literally step out of our Cartesian minds, forever separated from the world, and connect in practice with the world of our actions, our bodies – as we indeed become able to do during Tarot readings – then we assume a position that I call radical objectivity, which is analogous to the implications of the triangle argument that has been addressed earlier and in which the imaginary “supernova” is conceptually equivalent to the above-mentioned vanishing point in a perspectival composition.

It is the triadic, anti-dualistic, structure that ensures integrality. The past-present-future co-exists, and the “fine-structure of time” (Jantsch, 1980, p. 232) is in fact tenseless by virtue of being embedded in the same triadic, semiotic, structure (see [Figure 8.6](#)).

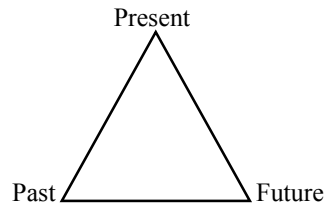


Figure 8.6. *The fine-structure of time.*

The fact that a typical layout of images (Figure 8.1) combines all three aspects of time simultaneously, thus enabling us to forecast and backcast, stops being mysterious. The layout reflects on the possibility of anticipating the future by evaluating “the options in further evolution” (Jantsch, 1980, p. 232) in the overall dynamics of the Tarot edusemiotic system. The unorthodox Tarot epistemology is future-oriented and forward-looking. Tarot extends the mind beyond its private borders and expands our consciousness to encompass the invisible-made-visible information.

Tarot edusemiotics changes our understanding of nature. We agree with Dewey that “nature signifies nothing less than the whole complex of the results of the interaction of man, with his memories and hopes, understanding and desire, with that world to which one-sided philosophy confines ‘nature’” (Dewey, 1934/1980, p. 152). The natural world presents itself as what philosopher of mind David Chalmers, referring to Peirce’s pansychism, dubbed a strangely beautiful world.

The beauty of this world consists in the fact that, over and above a simple physical and mental dyad, there is a triad as per Penrose’s diagram, ensuring the very interaction or coupling of the physical and mental worlds via mapping and mediation through the world of ideas, or memes, or archetypes, or signs, whose physical implementation is realized in Tarot images which embody our memories, hopes, and desires, comprising the meanings of actual and potential experiences.

Signs are patterns of coordinated, interpretive activity constituting “embodied cognition” (Kelso & Engström, 2006, p. 89). This theoretical concept expresses itself empirically at the level of practice via Tarot edusemiotics as a relation, a genuine sign. As a coordinated activity, it embodies the very symbol of reconciliation, “~” (tilde), and as such is always already “informationally based” (Kelso & Engström, 2006, p. 9). For a cognitive (computational) structure to fulfill its function it must be self-referential: a semiotic triangle must operationally close on itself while leaving itself open to further evolution and further interpretation towards still more intensified consciousness.

Such homology has been present in the Hermetic multileveled worldview that posited the difference in various levels as specified by the frequency or *intensity* of self-expression of a particular level: matter is transformed into energy that is transformed into information and vice versa. Once again we are reminded of Peirce’s triadic semiotics: matter (Second) is effete mind (First), and the mind

(First) has to be entrenched in habits (Thirds) so as to congeal into matter (Second) with “habits becoming physical laws” (Peirce, CP 6.25).

The evolutionary process of semiosis is characterized by a general law ultimately defined as the “tendency of all things to take habits” (Peirce, CP 6.101). This tendency is “self-generative” (Peirce, CP 1.409), and a genuine sign is ultimately self-referential. According to Peirce’s pragmatic maxim, information generates effects – new patterns of thoughts, feelings, actions; it can break old habits and create new ones. By virtue of its effects or practical bearings, information is real, objective; and is a precondition for meaningful communication and the conferment of shared meanings on experience.

It is mind “hidebound with habits” (Peirce, 1955, p. 351), which became fixed and rigid, that is usually called matter. To transform our rigid habits and to intensify our consciousness towards integrality is the task of education posited and enabled by Tarot edusemiotics. An intensified and expanded consciousness, in which the unconscious has been fully integrated, can transcend the limits of space and time and perceive it simultaneously by having achieved time-freedom, in Gebser’s words. The fragmented aspects of past, present, and future of the lower, most dense level of the whole spectrum of orders, are becoming unitary at the highest, most subtle and rarefied level, reaching out as such to the ultimate *Unus Mundus* as the one, *post-human*, world in which the opposites are reconciled.

Language, verbal or nonverbal alike, is a type of functional information: it can change the coordination patterns. Functional or meaningful information is the very interaction expressed in the relation “~” used by the system “to coordinate itself” (Kelso & Engström, 2006, p. 101), to self-organize; and a prime example of functional information is Tarot edusemiotics. To repeat, as stated by Dennett (1997), computational structures are necessarily self-referential, thus capable of self-understanding.

This is the ultimate value of Tarot edusemiotics: by means of self-reference and critical self-reflection we can achieve new understanding and even anticipation, thus consciously computing our own evolution as participating members of a computational universe. We achieve new degrees of freedom (including time-freedom; see Chapter 6) as if truly becoming-Magicians (Chapter 4) in the re-enchanted world filled with information and meanings. Freedom itself evolves (cf. Dennett, 2003).

In the context of a computational and evolving universe, archetypal ideas always have implicit content and meaning in the form of Lloyd’s invisible information which becomes visible due to the mediating, interpretive and anticipative function of Tarot readings. Every sign can always be further interpreted, the whole structure each time opening itself to potentially new meanings. In surprising agreement with Plato’s old theory of knowledge, so often considered irrelevant (see Chapter 10), this informational content is always present, even if potentially, virtually, or unconsciously.

Instead of being perpetual zombies behaving in the manner of automatons (what Peirce would call degenerate signs), the logic of which is reduced to the dyadic relations between the world of ideas and the physical world of blind and

unconscious action, we can become capable of learning and evaluating our own evolution in the process of creative co-evolution. And what do we create? We create ourselves and our life-world just like the quantum universe as a whole (Lloyd, 2006) computes its own evolution: it self-organizes (cf. Jantsch, 1980).

Peirce's semiosis is grounded in evolutionary philosophy, but *not* merely due to its reliance on the Darwinian principle of natural selection. It is the greater realizations of meanings due to the chain of interpretants involved in a continuous semiotic communication that is a feature of organic evolution: "the man-sign acquires information and comes to mean more than he did before" (Peirce, 1955, p. 249). Tarot edusemiotics, which may appear to be obscure and mystical, is in fact an illuminating event, an existential practice demonstrating the experiential and experimental art of perceiving (seeing) the otherwise imperceptible (invisible); of expressing what appears inexpressible.

The movement from the observable to the invisible and mystical, but, importantly, potentially knowable and meaningful, takes place in a direction contrary to direct perception, from the actual to the virtual. Sure enough, as Deleuze and Guattari (1994) state, "From virtuals we descend to actual states of affairs, and from states of affairs we ascend to virtuals, without being able to isolate one from the other" (p. 160). Reading and interpreting Tarot signs, as the subtle messages embedded in images and symbols, is achieved by the awakening of perceptions: raising them to a new power.

This is a future-oriented perception towards a virtual object (appearing for the present moment imperceptible) within the very dynamics of becoming-other or becoming-actual when both movements meet each other and the ascending/descending lines cross by virtue of the transversal communication established by Tarot edusemiotics. It is in these critical experiential junctures that "the body plunges into the virtual or spiritual depths which exceed it" (Goddard, 2001, p. 57). An excess of meanings, which may be lying dormant *in potentia*, actualizes itself in a singular transformative, quasi-mystical, experience.

Traditionally such experience is taken to be ecstatic, but not necessarily. Tarot edusemiotics leads to the discovery of the spiritual depth within oneself as enstasy. Gnostic knowledge is inner knowledge; self-knowledge. This state is complementary to ecstasy or rapture beyond oneself: the way to *paradise* as a symbol of the most fundamental layer uniting the human soul and cosmos can be found by means of either experience. Sure enough, the point of the unification of experience is not only virtual but also "is not without similarities to the One-Whole of the Platonists" (Deleuze, 1991, p. 93).

Once again, we are reminded of the necessity of a caring, ethical attitude with respect to the information that becomes available as a result of readings and implies, by being a motivational force behind the transformation of habits, a possibility of producing new modes of action in the social world. The interpenetration of epistemology, ontology, and psychology by default leads to ethical connotations. A caring attitude (cf. Noddings, 1984/2003) and gentle action (Peat, 1992) become a must: human actions qualified as gentle require an extraordinary quality of mind and perception based on love, respect and care.

This type of action becomes especially important now, in our age of global conflicts, incommensurable values and the resulting breakdowns in communication followed up by the continual alienation between Self and Other. We can overcome this alienation by creating transversal communication as the reconciling connection embodied in the Tarot layout that establishes a complementary, even if precarious, self~other relation.

Importantly – and despite the fact that the phenomenon of Tarot readings supports the idea of extreme innatism (on this I agree with Fodor) – the extension of Mentalese to the universal, public, level of proto-mentality demonstrates that it can and should be learned (that is, on this point I disagree with Fodor who insisted that we cannot learn it). It can be learned via its mediation by physical marks – Tarot images. The symbolic level of the semiosphere (memosphere) presents itself to us in the form of visible information encoded in the Tarot pictures that embody the otherwise hidden and invisible yet meaningful structures of collective experiences. The implications for moral and spiritual education are profound.

Attention to alternative regimes of signs, among which the Tarot pictorial language is paradigmatic, becomes imperative, and Leibniz's unfinished project of mathesis must be completed. As Deleuze (2007) comments, "the key notion of mathesis – not at all mystical – is that individuality never separates itself from the universal... Mathesis is...knowledge of life" (pp. 146-147). Mathesis is indeed a "ubiquitous science of life" (Kelso & Engström, 2006, p. 76); and life is permeated with "functional information" (Kelso & Engström, 2006, p. 98) that finds its expression in Tarot signs. Tarot edusemiotics establishes a psychophysical unity, thereby confirming what Peirce said more than a century ago: "The old dualistic notion of mind and matter, so prominent in Cartesianism, as two radically different kinds of substance, will hardly find defenders today" (Peirce, CP 6.24).

Well, this was rather optimistic of Peirce! Dualistic thinking as a persistent and rigid habit still very much prevails in education, guiding teaching, research and policy making. The language of signs, symbols and images has been lost in the scientific pursuits of the modern epoch, during which we have "successfully" forgotten that once upon a time the whole Earth was of one language and of one speech, and the people were one (Genesis 11:1). To recollect this language is presently our ethical responsibility. The next chapter will address the educational policy implications of such an ethos.

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CHAPTER 8

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EXPLORING EDUCATIONAL FUTURES

The comprehensive educational policy agenda of the 21st century (Simons, Olssen, & Peters, 2009) calls for “critical *attitude* or *ethos* [as] a way of relating to the present” (p. vii, italics in original) while also glimpsing the future in terms of constructing “edutopias” (Peters & Freeman-Moir, 2006). Edutopias belong to the emerging field of Educational Futures that focuses on creating new coordinates for theory and practice and explores the questions of globalization and the knowledge economy, employing such methods of *futures studies* as scenario planning, strategic foresight, imaginative narratives and new utopian thinking (cf. Milojevic, 2005, 2006; Inayatullah, Milojevic, & Bussey, 2005; Slaughter, 2004; Gidley, 2009; Gidley & Inayatullah, 2002).

In the framework of *futures studies*, the predominately neoliberal discourse in education is to be enriched with new utopian visions exceeding solely critical thought but including alternative epistemologies that encompass an ethical or values dimension as a healing or clinical one (cf. May & Semetsky, 2008; Semetsky, 2009a, 2010f, 2010b), not unlike therapeutic change or transformation. Tarot edusemiotics not only combines both “critical and clinical” (Deleuze, 1997) aspects but also adds to them a third, creative, dimension by virtue of the emergence of novel meanings and values in practical experience. Still, in the context of educational policy making, any new knowledge is often viewed “as both a new problem and panacea for our times” (Robertson, 2009, p. 235).

I agree. The problematic of knowledge, and specifically new knowledge (see next Chapter 10), is addressed in this book in terms of the action of signs in nature, culture and the human mind pertaining to pragmatic, functional information. Knowledge, in other words, is the outcome of critical, clinical and creative inquiry. Still, the logic of inquiry (cf. Dewey, 1938) embedded in the process of semiosis is noticeably missing in the discourse on knowledge economy or educational policy even if the pragmatic use of ideas, on which knowledge-based economy relies, has been acknowledged by such organizations as The World Bank (Robertson, 2009).

Tarot edusemiotics is not only an epitome of semiotic inquiry but also is capable of providing the “emancipatory potential implied in the formulation, ‘knowledge for development,’ [individual or collective alike, which however] is emptied out leaving little more than instrumental knowledge” (Robertson, 2009, p. 252; brackets mine) prevalent in neoliberal discourse. It is semiosis that intrinsically – and not just instrumentally – determines the possibilities for creating new modes of knowledge and human existence while itself opening new opportunities for human development and transformative education (Semetsky, 2009c, 2011).

At the level of organizations, the urgency of “re-reading” (Simons et al., 2009, p. vii) current approaches to educational policy is paramount to “reveal underlying

CHAPTER 9

forms of rationality, identify unspoken interests, focus on unintended consequences, point out the contradictions, or map the field of contingencies” (p. viii). Taking into consideration semiotics and semiosis enables us to anticipate their “effects ... on social relations of power, and...how semiosis figures within the strategies pursued by groups or social agents to change societies in particular directions” (Fairclough, 2005, in Simons et al., 2009, pp. 62-63).

Still, the emphasis on agency is a deeply ingrained habit of the contemporary mind that either ignores or underestimates the value of relations and the nature of the self-other complementary pair, which should become a unit of analysis in the knowledge economy *proper*, as informed by the science of coordination dynamics and semiotics. Tarot edusemiotics, which takes a relation and not an individual agent as its point of departure, must urgently take its place in the knowledge economy of the 21st century.

The relational structure of the unorthodox language of Tarot images embedded in “the complementary nature” (Kelso & Engström, 2006) partakes of what Fritjof Capra (1997) dubbed ecoliteracy that refers primarily to the dynamics between organism and environment and not to the sole organism, human agency notwithstanding. Milojevic (2005) urges taking into consideration an ecological perspective in the context of educational futures. Ecoliteracy in education has its origin in Capra’s ongoing efforts to foster ecological awareness through formal and informal education. To become ecoliterate means to understand the organizational principles of *natural* ecological communities and subsequently to be able to structure *human* communities in accord with those principles, especially as regards learning communities both within and without formal school settings.

Capra is adamant that many societal problems represent different facets of one single *crisis of perception* that derives from the fact that most people in our society, and especially our political and corporate leaders, subscribe to the concepts of an outdated worldview represented by a perception of reality inadequate for dealing with an interconnected world. Semiotics is a systems science, and systems science, as Capra reminds us, implies a shift from metric quantities to qualities; that is, to what Deleuze dubbed qualitative multiplicities as the patterns of relations. These patterns of relations – or signs – perfuse, in Peirce’s language, the interconnected world and, as this book has demonstrated, are symbolically represented in the medium of Tarot edusemiotics. Multiplicities are irreducible to identities; genuine signs are embodied in triadic, a-signifying, relations irreducible to a simple dyad based on the logic of the excluded middle (cf. Semetsky, 2002, 2006b, 2007, 2009b).

The word ecology derives from the Greek *oikos* which means household in the broadest sense and represents the field of study of the relationships connecting all members of the household in the context of the whole human community embedded in the natural world. Questions of educational leadership and the particular nature of knowledge as well as innovative epistemic methodologies to inform/develop ecoliteracy thus become crucial (Semetsky, 2010a).

Significantly, Burke (2006) promotes “a sense of connectivity, a relationship” (p. 15) as a precondition for the wider, transpersonal, practice of leadership. In

Chapter 6 I have referred to Inayatullah (2002) with regard to multiple deeper interpretations that exceed the “views of reality for which only empirical data exists” (p. 3) and encourage a reflective approach problematizing the nature of the current *episteme* (Inayatullah, 2006). Such a transpersonal approach is provided by Tarot edusemiotics, which is oriented to the understanding, via the hermeneutic or interpretive process (Semetsky, 2011; cf. Semetsky, 2005, 2009c, 2010e), of the deep meanings of experience embodied in inner Gnosis versus accumulating external facts.

According to Capra, ecology should become a guideline for creating learning communities as first and foremost sustainable and, secondly, for promoting educational reform on the basis of ecoliteracy as a framework for this transformation. To think in terms of ecoliteracy means to apply the principles of relationships, connectedness, and context. This kind of approach derives from the science of self-organization and systems thinking, which considers every living system as a network. This approach has been elaborated in detail in this book in the context of Tarot edusemiotics as a system of signs constituting a network of relations.

Such an approach is also visible in the innovative principles of transdisciplinary knowledge and education (Nicolescu, 2002a, 2002b, 2005, 2009; Semetsky, 2009d). The idea *per se* is not new: as this book have demonstrated, the philosophical concept of a network in its different guises has been in existence since Hermeticism to convey the idea of interrelated, interconnected, and interdependent phenomena, from mystics to Neoplatonism to Peirce’s semiotics, Dewey’s theory of inquiry, and Deleuze’s poststructuralist turn. Still, it continues to sound foreign to positivist science, with its linear causality and the separation between subject and object, as well as being alien to Cartesian dualist philosophy with its strict divide between two substances, *res extensa* and *res cogitans*.

As for ethics, it is Nel Noddings’ (1984/2003, 2002) theory of care and the new ethics of integration elucidated in Chapter 7 of this book (cf. Semetsky, 2010d, 2011) that posit relation as a fundamental point of departure. Serving as an *a priori* unit of analysis, relation defies the privileged subject position allotted to an independent autonomous moral or epistemic agent. Relation is ontologically basic and should inform ethics; as I have been arguing, ethics recapitulates ontology (cf. also Semetsky, 2010c).

It is a relation that establishes an interconnection between the mind and the world; this connection allowing us to conceive of the human mind as extended (cf. Anthony, 2008; Clark & Chalmers, 1998) versus being confined within “the infamous ‘Cartesian Circle’” (Burke, 2006, p. 16) of narrow rationalist reasoning as the intrinsic property of the Cogito “without any experience of the way of the world” (Ibid.). A semiotic approach to the structure of knowledge leads to reciprocity between ethics and reason, knowledge and action. As John Deely (2001) summarizes, logic – specifically, triadic *logic* as semiotics – is an *ethics* of thinking and is inseparable from human conduct, that is, *ethics* as the *logic* of our actions in the world. Tarot edusemiotics entails an ethical dimension as pertaining to both our thinking and acting. Peirce’s semiotics as the ground for interpreting

Tarot images presents logic not as the logicians' whim but as a *ratio* embedded in human *praxis* and the natural world alike: the whole universe is perfused with signs connected in one coherent whole, a rhizomatic network of relations.

The pragmatic maxim of ascertaining the meanings of ideas does not separate knowledge from practical action: this unity of knowledge and action, in fact, contributes to pragmatism's unorthodox treatment of moral psychology and ethical judgement. The prerogative of thinking as a method of resolving real-life moral dilemmas is taken away from the Cogito, the supposedly *a priori* conscious, knowing and speaking subject, and is being put back in the very bodily interaction with the natural world, the interaction enriching a purely cognitive process with an affective dimension acknowledged by both Dewey and Deleuze (Semetsky, 2006a).

Such affective thought transcends the boundaries of the conscious Cartesian subject; and the affective, libidinal economy of the unconscious is an important factor that influences human learning. It is important to repeat that the task of education, according to Dewey, consists in nurturing a particular "type of mind competent to maintain an economical balance of the unconscious and the conscious" (Dewey, 1991, pp. 215-216) that should include, besides intellectual seriousness, an element of free play as well. It is the unconscious that "gives spontaneity and freshness" (p. 217) to our experiences. Again we are reminded of the Fool's organic spontaneity (see Chapter 1) and the signs' growth and becoming-other when learning from experiences and integrating the unconscious into consciousness.

The unconscious dimension is brought to consciousness in the course of the readings and interpretation comprising the hermeneutics of Tarot (Semetsky, 2011). However, behavioral and social sciences, including the discipline of education, are still being modeled on a limited and narrow view of the natural sciences, ignoring the concept of a multileveled network of the interconnectedness between people and events. The reductionist paradigm and the fragmentation of knowledge appear to remain in full vogue. But systems science is founded on the concept of the web of life (also the title of one of Capra's books). The web, or a network, conveys the idea of the interwovenness (Capra, 1997) of all phenomena.

As addressed in the preceding chapters, the defining characteristic of a network is the presence of feedback loops, or reciprocity as a mutualist or circular causality that breaks the linearity of the direct mechanistic cause-effect connection; we remember, such is the function of The Magician as an active natural principle in the world (see Chapter 4). Living networks are based on rhythmic cycles, in which an initial cause propagates around the links of the loop, so that each element has an effect on the next one until the last effect is being fed back in a circular manner into what appears to be the first cause.

Capra uses a lucid example from biology to illustrate his arguments: if an unusually warm summer results in increased growth of algae in a lake, then some species of fish feeding on these algae may flourish and breed more. But the result is an increase in their numbers so that they begin to deplete the algae, that is, their own source of life, tending to die out due to lack of food. As the fish population

drops, the algae will recover and expand again, thus cyclically regulating the balance in the fish-algae ecological community. Because of feedbacks, the whole ecosystem of fish-algae can self-regulate and self-organize.

The concept of self-organization is crucial for networks. It is a self-organizing process that enables any community, taken as a system, to learn, and specifically to learn from errors, or deviations, because they travel along and necessarily return back to inform the community as a whole. Such is a community's learning capacity, constituting, in Capra's words, its very *intelligence*. As regards the level of specifically human communities, the connecting links that provide the necessary feedback in social networks are enabled by a network of conversations (cf. Luhmann, 1995) that serve as a means of increasing ecological awareness.

As elaborated in this book, however, the concept of a conversation does not have to be limited to verbal exchange (cf. Varela, 1979, 1999). It encompasses semiotic categories of communication much broader than the directly spoken word, and which represent various regimes of signs functioning in the mode of the symbolic, indirect discourse. Such indirect or mediated discourse is enabled by the logic of the included middle comprising a complementary structure-function pair; to reiterate, the squiggle “~” indicates relational syntax as the logic of the included middle that aims for reconciliation of binary opposites.

Non-incidentally, Kelso and Engström bring Capra's arguments into the conversation with regard to the basic interdependence of *polar* terms, versus the dualistic opposition that makes the terms independent of each other. In order to bring them together we have to establish a transversal connection in practice – as we indeed do by means of educational semiotics and the interpretation of images in a specific Tarot layout.

The explanatory paradigm for the organizational principles of ecoliteracy, contrary to a mechanistic one, is the science of coordination dynamics symbolized by the squiggle “~” as the intervening tension, error, or Deleuzian difference. Say there is a disagreement or a tension within a system which destabilizes it momentarily. Sure enough, a living system may encounter instabilities, at which its structure breaks down. However the phenomenon of spontaneous emergence of order from what appears to be total chaos – symbolized by the abyss in The Fool Arcanum explored in Chapter 1 – is a feature that enables the creation of new structures and new forms of behavior, thus sustaining the life of the system as a whole. In Chapter 7 the images of The Tower and The Star were presented as symbolic of contemporary events that embody what can be called a complementary chaos-order pair.

It is necessary to realize that coordination dynamics traverses the boundaries of egocentric, anthropocentric, discourse; the relational nature of signs embedded in semiosis connects humans with the greater, natural and cultural, ecological world. The post-human, non-anthropocentric but transpersonal, approach demands that “the nature of thought itself must change if it is to be posthumanist” (Wolfe, 2010, p. xvi). Being ecoliterate means to become aware of the governing dynamics of such an evolutionary, at once developmental and learning, self-organizing process embedded in networks founded on feedback loops. Tarot edusemiotics strengthens

the value of ecoliteracy by applying this awareness in practice, in our very experience.

It is on the basis of the emergence of novelty that development, learning, and the future evolution of a system take place. Because of feedback loops that enable self-reference and self-reflection a system tends to become creative of its own novel modes of existence. A semiotic network is an autopoietic system, as we said earlier, which is devoted to self-making or making of The Self in the process of Jungian individuation and becoming-other. The novel modes therefore may emerge at some critical – as Capra would say, *turning* – points in the dynamic process of the system’s evolution and learning. These turning points or bifurcations are represented by Tarot Arcana being combined in a specific constellation in a layout during readings (Semetsky, 2011).

To reiterate, it is the tension or a moment of instability that triggers interaction as the transfer (or, in technical terms, dissipation; (see, e.g., Prigogine, 1980; Allen, 1981) of matter, energy or information alike (Chapter 8) and enables the import of negative entropy into a system as a measure of information. We remember from Chapter 8 that entropy is also a measure of ignorance (Lloyd, 2006). Ervin Laszlo (1972) pointed out that there is nothing supernatural about this self-organizing process toward states of higher negative entropy, because “the decrease of entropy within an open system is always offset by the increase of entropy in its surroundings” (Laszlo, 1972, p. 44), maintaining a positive net change of entropy in every open system-environment complex.

A self-referential relation is what establishes meaningful correlations between/across the heterogeneous levels constituting an expanded system that accommodates multiple levels of reality. A complementary self~other pair is a genuine sign in which the included middle is represented by the layout of Tarot images (Figure 9.1) to be read and interpreted; it plays the role of a Peircean interpretant, the Third.

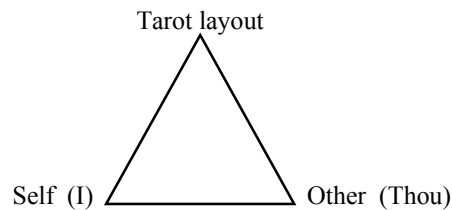


Figure 9.1. A triadic relation formed in Tarot edusemiotics.

The symbols I and Thou in Figure 9.1 expand the range of meanings for the self~other complementary pair to incorporate a greater, spiritual, dimension represented by Martin Buber’s sacramental I-Thou relation, which was the inspiration behind Noddings’ ethics of care in education. Tarot edusemiotics is a prime example of a genuinely ecoliterate semiotic system, of which we are a participating part not only in theory but in practice as well, when the relational

self~other dynamics is being unfolded in front of our very eyes. The “ecological niche” can therefore be expanded to also encompass dialogic communication between I and Thou at the spiritual level.

The late Cardinal Hans Urs von Balthasar (in Anonymous, 2002) referred to Buber’s modern transposition of Jewish spiritual tradition and emphasized the certainty provided by Tarot symbolism with regard to “the depth of existence [where] there is an interrelationship between all things by way of analogy” (von Balthasar, 2002, p. 663); such analogy or sympathy ensured by the ubiquitous relation “~” in-between I and Thou and embodied in the Tarot layout. As Erich Neumann (1959) comments, “in a creative transformation of a total personality, a modified relation to the *thou* and the world indicates a new relation to the unconscious and the self” (p. 166; italics in original).

It is at the very intersection of the different levels of reality, including the spiritual as embedded in the network of signs, that the ultimate I~Thou relation as much between men and God as “between man and man” (Buber, 1971), is formed (and I am using a squiggle here to emphasize the triadicity of the I~Thou relation). Accordingly, Burke (2006) refers to Laszlo’s (2006) book *Science and the Reenchantment of the Cosmos* which posits physical reality and spiritual reality as two facets of one coherent whole; we may say as a complementary matter~spirit pair rather than two irreconcilable opposites.

However, the possibility of such a connection between the human and the divine, that is, knowing oneself and God as *One* in accordance with the Hermetic tradition and Neoplatonic philosophy (science notwithstanding) is often considered “beyond the limit of all human understanding” (Kearney, 2001, p. 104) and relegated to the mystical realm (see next Chapter 10). The arguments so far constructed in this book refute the impossibility of understanding this relation! We have demonstrated that Tarot edusemiotics is aligned with Deleuze’s larger ontology that expands the limits of our understanding and perception and posits Being in terms of two enfolded levels of reality: virtual and actual.

The virtual is not identical with the actual; the relation between them is complicated (or enfolded, *le pli* meaning the fold in French). Systems science pertains to complex multiple levels of reality, such as actual and virtual or material and spiritual. A complementary virtual~actual pair can be constructed, in which the relation “~” is performed by the interplay of signs that find their symbolic representation in Tarot edusemiotics. The realm of the virtual exceeds the possible. Possible can be realized, and the real thing exists in the image and likeness of the possible thing. But the virtual is already real – even without yet being an actual thing but being just a potential tendency!

Both levels are equally real: “the virtual is not opposed to the real; it possesses a full reality by itself. The process it undergoes is...actualization” (Deleuze, 1994, p. 211), taking place in our practical experience when we read and interpret Tarot signs, symbols, and images. What plays the role of a squiggle “~” is affect (Deleuze’s becoming) immanent to experience. It is affective forces permeating Peirce’s cosmic evolutionary love that enable, as Peirce stressed, the *divination* of genius due to the continuity between the human and the divine! It is the presence of

affect, or desire, or love that connects the levels of reality along the line of becoming by traversing the difference between the virtual and the actual and transcending the reductive mode of purely analytic thinking in which affect has no place.

When something in the experiential “world forces us to think” (Deleuze, 1994, p. 139) we are presented with perplexity, an impossible situation. Such uncanny event “is an object not of recognition but a fundamental ‘encounter’ [which is] grasped in a range of affective tones: wonder, love, hatred, suffering” (Ibid.). These affects – love, suffering, joy, sadness, hatred – become visible (Semetsky, 2011) when embodied in the Tarot Arcana that convey real-life feelings and emotions pertaining to people who find themselves in this or that problematic situation.

We can construct yet another semiotic triangle as a sign of genuine knowledge irreducible to prior recognition but encompassing a Deleuzian triad of affects, percepts and concepts (see [Figure 9.2](#)).

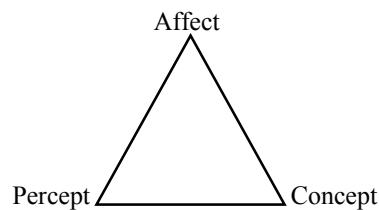


Figure 9.2. A triadic relation between affects, percepts and concepts.

Affective, non-philosophical (non-analytic) understanding transcends what is usually given to sense-perceptions in ordinary experience: Deleuze’s empirical method is radically transcendental, hence embedded in the self-referential process, and the triadic sign is indeed self-transcending. That is how the relation I~Thou functions. In the framework of Buber’s philosophy, a Tarot reader “fails the recipient [of Gnostic knowledge] when he presents [it] to him with a gesture of interference ... Interference divides the soul in his care into an obedient part and a rebellious part. But a hidden influence proceeding from his integrity has an integrating force” (Buber, 1971, p. 90), such integrality addressed in Chapter 6.

Tarot edusemiotics performs at once integral and integrating functions, as we pointed out in the context of Gebser’s approach to consciousness. The process of readings and the interpretation of images lead to the discovery in practice of what one was meant to be all along: the individuated, authentic, integrated Self. Yet, a symbolic school of life is necessary as a venue for learning from one’s real experiences and for integrating them into consciousness.

As a science of human nature, Tarot edusemiotics embraces mathesis or the universal science of life as “intensive science” (DeLanda, 2002); and the language of images is a language describing human nature, not unlike the language of mathematical physics that describes natural laws. Mathematical form cannot be taken away from natural laws; laws are semiotic models and not just “mere

expressions of linguistic truths” (DeLanda, 2002, p. 217). The ultimate knowledge obtained in the school of life is made possible by unified science that differs from the positivist paradigm.

Gilles Deleuze was always interested in esoteric themes related to the Neoplatonic tradition of deep inner Gnosis that was to be rediscovered and re-deployed in 19th-century Europe. Incidentally, Deleuze’s 1946 publication called *Mathesis, Science, and Philosophy* (cf. Delpech-Ramey, 2010; Semetsky & Delpech-Ramey, 2011) appeared as a Preface to the re-issue of the French translation of Johann Malfatti de Montereggi’s work titled *Mathesis, or Studies on the Anarchy and Hierarchy of Knowledge*. Malfatti was a 19th-century Italian doctor who practiced medical science in the tradition of natural philosophy grounded not in a technical proficiency but in experimental practice embodied in lived experience of deep knowledge leading to healing through the sympathetic patterns of vibration.

The relational patterns produce what Deleuze would later call maps or diagrams having the same function as Tarot images, in the context of this book. The therapeutic or healing effects of Tarot hermeneutics were addressed in detail in the prequel to this book (Semetsky, 2011). The idea of *mathesis universalis* (addressed in earlier chapters) as a universal science that would establish a long sought-after unity of knowledge has been historically viewed as at once occult and politically subversive, going against scientific norms or religious dogmas alike.

Deleuze (1994) referred to mathesis in connection with an “esoteric” usage of calculus, claiming that *mathesis universalis* corresponds to his theory of Ideas as the differentials of thought. The ideas are often enveloped so deep “in the soul that we can’t always unfold or develop them” (Deleuze, 1993, p. 49) by means of our cognitive tools alone. They need to be unfolded and differentiated in the double movement between the multiple – actual and virtual – levels of reality when the unconscious becomes available to consciousness.

Deleuze presents us with reversed Platonism. The two levels comprising a complementary actual~virtual pair are related not mimetically, even if as some imperfect copy, but semiotically; they are different, and it cannot be otherwise because the virtual is posited just as a tendency, therefore *no-thing*. Recall the numeral Zero as the apparent no-thing-ness assigned to The Fool Arcanum (Chapter 1). Virtual tendencies as potentialities or *no-things* become actualized, as though created *ex nihilo* and embodied in the actual *things*, in the guise of new objects of knowledge, new meanings.

The nuance is significant and needs to be emphasized again: “From virtuals we descend to actual states of affairs, and from states of affairs we ascend to virtuals, without being able to isolate one from the other” (Deleuze & Guattari, 1994, p. 160). The dialogic communication between the levels created by the edusemiotics of Tarot images confers shared meanings on experience, which thereby acquires a deeper, spiritual and numinous, significance because of the included third of the Peircean interpretant.

Deleuze does not locate mathesis in the narrow enclave of some initiated elite; as pointed out earlier in this book, mathesis is egalitarian and democratic, situated

in the midst of experiential conditions, and “to believe that mathesis is merely a mystical lore inaccessible and superhuman, would be a complete mistake ... mathesis deploys itself at the level of life, of living man. ... Essentially mathesis would be the exact description of human nature” (Deleuze, 2007, p. 143).

It is in the reality of our human experiences that the transversal connection as *tertium*, the necessary condition for “the famous mystical principle of *coincidentia oppositorum*, beyond the limit of all human understanding” (Kearney, 2001, p. 104), is established when we lay down the pictures and begin the process of reading and interpreting the signs of our experiences so as to discern their meanings and *Sens*. To reiterate, the mystical principle of the conjunction of opposites is akin to the self-referential relation symbolized by squiggle “~” as a prerogative of the science of coordination dynamics; as such it is *not* beyond human understanding – it is just that the explanatory paradigm should be expanded beyond positivism, and human consciousness needs to be intensified beyond narrow rationality.

Both tasks are achieved by virtue of Tarot edusemiotics. The boundaries of our knowledge are stretched, and mysticism indeed becomes naturalized! It is the affective conditions embedded in the real experience of Tarot edusemiotics, when the desire for Gnosis becomes intensified to the limit that can unfold the implicit meanings (of which we are still unconscious) by reaching into the depth of the soul, because this deep inner “knowledge is known only where it is folded” (Deleuze, 1993, p. 49).

The maximum intensity of experience expresses itself as a self-referential “*power to affect itself*” (Deleuze, 1988, p. 101, Deleuze’s italics) in a relation that reaches into the depth of the psyche, achieving Gnosis and re-enacting the ancient “Know Thyself” principle as a prerogative for self-education. A genuine triadic sign is “not representative but affective. ... It is defined by a list of passive and active affects in the context of the individuated assemblage it is part of” (Deleuze & Guattari, 1987, p. 257). As encompassing an affective dimension, Gnostic knowledge is experimental and experiential and represents our learning from multiple experiences embodied in Tarot images. This mode of learning derives from the practical explication of implicate signs, not unlike the involuntary memories awakened by Marcel Proust’s famous *madeleine* (cf. Bogue & Semetsky, 2010). Tarot images are the sources of potential meanings in accord with the logic of sense (Deleuze, 1990) as triadic semiotics.

Tarot edusemiotics brings forth the neutral, immanent, life expressed in the neutral language envisaged by Wolfgang Pauli. This is “an impersonal and yet singular life that disengages a pure event freed from the accidents of the inner and outer life, that is from the subjectivity and objectivity of what happens” (Deleuze, 1997, p. xiv). Subject and object, private and public do form complementary pairs. We experience this impersonal life as *becoming*, which may appear as yet imperceptible unless perception itself vitally increases in power: it is being intensified. This intensified consciousness is enabled by Tarot edusemiotics as the real-life practical implementation of Deleuze’s method of transcendental empiricism. What Deleuze calls percept is a future-oriented perception in

becoming that, in Dewey's words, would have enabled "contact [that] remains tangential because it does not fuse with qualities of senses that go below the surface" (Dewey, 1934/1980, p. 21). Yet at the level of percept, it is indeed on the surface formed by the layout of Tarot images that such a "contact" with the unconscious takes place.

Through organic resonances enacted by transversal communication embodied in Tarot edusemiotics, we can achieve the ultimate "unity of sense and impulse, of brain and eye and ear" (Dewey, 1934/1980, pp. 22-23), hence crossing over the psychophysical dualism. The semiotic process "is established between the parts of each system and between one system and another, which crosses them all, stirs them all up together and subjects them all to the condition which prevents them all from being absolutely closed" (Deleuze, 1986, p. 59). An open system is an ecological system, and it is such openness that ensures "a growing progressive self-disclosure of nature itself" (Dewey, 1925/1958, p. x).

The path to Gnosis via the Tarot images involves paradoxical non-philosophical understanding – not analytic but synthetic – because the creation of novel meanings and concepts is enabled by "think[ing] through affects and percepts" (Deleuze, 1994, p. 66). This thinking is not narrow rationality grounded in the logic of the excluded middle, but encompasses developed intuition and abduction as a specific mode of inference. The path to Gnosis necessarily involves both "intuition and the certainty of possessing a method permitting access to such [deep, inner] knowledge" (Faivre, 1994, p. 19), such a method represented by Tarot edusemiotics.

Deleuze (1991) agrees with Henry Bergson that the human mind is primarily intuition, and rationalization is only secondary (cf. Semetsky & Delpech-Ramey, 2011). Contrary to authority figures in society who reinforce a particular contraction representing this very society, Bergson relegates to mystics a particular, even if potential, ability to creatively "expand" (versus "contract") the boundaries of human awareness and consciousness in order to enter into communication with other levels of duration (*La durée*) as states in which the energies of the virtual whole can be differentiated and given new expressive forms.

In this respect, the current Western educational system can be qualified as a kind of hyper-contraction, and even frozen; it habitually ignores intuitive or integrative approaches such as the path to Gnosis, which is laid down by its symbolic representation in the Tarot semiotic system. The realm of lifelong human development and learning devoted to the knowledge of this very life as mathesis is not addressed; or it is presented in its reductive form as lifelong professional training that plainly aims to increase the flow of human capital into the knowledge economy.

Contrary to the current *episteme*, Gnosis would be achieved by participation, by a "mutual solidarity" (Deleuze & Guattari, 1987, p. 45) between subjects and objects, because "neither of them can be identified otherwise" (Ibid.). Gnosis is produced in the midst of the relation symbolized by the squiggle "~" that connects two "inseparable planes in reciprocal presupposition" (Deleuze & Guattari, 1987, p. 109) when the "subjective" world of mind comes in contact with the "objective"

world of matter in their mutual integration at the deeper, *soul*, level, thus – and it is important to repeat this – “establishing the bond of a profound complicity between nature and mind” (Deleuze, 1994, p. 165) as *Unus Mundus*.

Ultimately, such Gnostic knowledge, created first as just a singular experiment on ourselves, becomes a constituent part of nomadic education (Semetsky, 2006a, 2008; May & Semetsky, 2008). A nomadic place is always intense because nomads’ existence is inseparable from the region or space they occupy: together they create a rhizomatic network of interdependent relations. The smooth space occupied by nomads is an open-ended relational process~structure, in contrast to a striated closed space ordered by rigid schemata and point-to-point linear connections. The classical episteme of metric systems, technical objectives and precise measurements and classifications gives way to an experimental and experiential “field ... wedded to nonmetric, acentered, rhizomatic multiplicities” (Deleuze & Guattari, 1987, p. 381); these qualitative multiplicities (versus quantitative, metric, units) are relations or signs embedded in Tarot edusemiotics that literally and practically, and not just philosophically or metaphorically, lay out the path to Gnosis.

Nomadic education proceeds along the lines of becoming when the path to Gnosis produces “a shared deterritorialization” (Deleuze & Guattari, 1987, p. 293) illustrated by the famous example of wasp and orchid: “the wasp...becomes a liberated piece of the orchid’s reproductive system, ... the orchid ... becomes the object of an orgasm in the wasp, also liberated from its own reproduction” (Ibid.). Two series, two planes – of the wasp and the orchid – are non-locally and transversally connected via the line of flight that runs perpendicular to both planes, and by virtue of being orthogonal to both represents “the absolute speed of movement” (Deleuze & Guattari, 1987, p. 293).

Such a limit-experience in real life appears to be achieved only by mystics, shamans, magicians, or sorcerers (Semetsky, 2009d; Delpech-Ramey, 2010; Semetsky & Delpech-Ramey, 2011). Shlain (1998) refers to “sorcery/science” (p. 362) alongside “image/word” (p. 1) as those binary opposites that represent, at their core, two different languages and modes of thought pertaining to masculine and feminine values, and notices that all spiritual traditions can transcend “feelings of alienation and reconnect (*religare*) with ‘the source’” (p. 363). Etymologically, the word religion indicates a link backwards to the origin, not unlike the self-referential relation constituting a genuine sign as a bipolar complementary pair. As Niels Bohr, who in fact was the first to coin the term complementarity, pointed out, extremes of materialism and mysticism alike must be avoided by balancing analysis and synthesis.

Importantly, Shlain notices “a massive injection of a left brain-enhancing method of communication [and] a logarithmic rise in alphabet literacy rates” (1998, p. 363) as coinciding historically with “the torture, mutilation, and incineration of untold number of women during the European witch craze” (pp. 363-364). These women were “wise women” (p. 365) as epitomized in the image of The High Priestess in the Tarot Major Arcana (Chapter 5). Von Balthasar referred to the concept of the world by woman-mystic Saint Hildegard of Bingen

and commented that Shekhinah, a figure in Jewish mystical tradition, was celebrated even by some cardinals. Non-incidentally, Lewis and Kahn (2010) bring the figure of Hildegard of Bingen into their discourse on post-humanist pedagogy as a “cry for solidarity” (p. xiv).

Science eventually expressed its own creed as a binary opposite to religion – but creed nonetheless. Rationalistic science did not welcome women either; Francis Bacon used “metaphors derived from the witch hunt torture chamber to describe how scientists should force nature to relinquish her secrets” (Shlain, 1998, pp. 376-377). It is the new science of coordination dynamics and the science of signs (semiotics) that can establish the feminine bond between Nature and ourselves by enabling us to become “nature’s interpreter[s]” (Peirce, CP 7.54) rather than its masters or conquerors.

By learning the Tarot symbolic language we can become “thinking being[s] [who] can...act on the basis of the absent and the future” (Dewey, 1991, p. 14). This expanded and intensified perception evaluates not only the present but also “the remote, the absent, the obscure” (Dewey, 1991, p. 224) as dimensions of the future that make available alternative options of acting in the social world. Indeed, constructing imaginative narratives in the hermeneutic process of reading and interpreting Tarot signs partakes of the methodologies of *futures studies* that include in its interdisciplinary program such methods as scenario planning, anticipatory decision making, forecasting, backcasting, and strategic foresight for shaping alternative futures; together with an analysis of signs and symbols “articulating” transformations and changes. Incidentally, the field of *futures studies* employs the term “wild card” for an event of apparently low probability but very high impact (cf. Semetsky, 2010e, 2011).

The cultivation of self-reflective thinking through the practice of Tarot edusemiotics is akin to the ability by which “man...develops and arranges artificial signs to remind him in advance of consequences, and of ways of securing and avoiding them” (Dewey, 1991, p. 15): our thinking expands and consciousness intensifies. We become able to

perceive that certain given facts are probable signs of a future rain, and will take steps in the light of this anticipated future. To plant seeds, to cultivate the soil, to harvest grain, are intentional acts, possible only to a being who has learned to subordinate the immediately felt elements of an experience to those values which these hint at and prophesy. (Dewey, 1991, p. 15)

There is nothing mystical in Dewey’s words. He asserted that “nature speaks a language which may be interpreted. To a being who thinks, things are records of their past, as fossils tell of the prior history of the earth, and are prophetic of their future” (Dewey, 1991, p. 15). It is only the Cartesian consciousness that is impoverished by its very logic, which excludes interpretants and interpretations by virtue of which the future can be brought into the present.

We habitually use the word mystical to refer to the participatory dynamics embedded in the network of signs forming an interdependent holistic fabric with the world, thus overcoming the dualistic split between subject and object that has

been haunting us since the time of Descartes. Sure enough, we can get rid of this haunting presence by the liberating capacity of mathesis, the science of life, which is the embodiment of the fundamental fabric of nature in symbols and signs such as the Tarot ideographic images. To learn the language of Tarot signs is liberating: an alternative politics (cf. Delpech-Ramey, 2010) can bring new creative “magic” into a presently disenchanting world long disengaged from the self-reflective – critical, clinical and creative – ethos. Such politics would be devoted to the creation of new meanings and new “modes of existence” (Deleuze, 1986, p. 114) as well as new communication systems (cf. Peters, 2009). *Such a new system of communication is already available to us in the form of Tarot edusemiotics.*

The overall aim should become the creation of “the open society” (Peters, 2009, p. 303) as the transformation of knowledge economy. Contrary to the method of direct instruction that continues to stifle and striate contemporary pedagogy, Gnosis “leaps from one soul to another ... And from soul to soul it traces the design of an open society, a society of creators” (Deleuze, 1991, p. 111). A society of creators is an integrative society: because the path to Gnosis crosses over or traverses the supposedly dual opposites, Gnosis is an integrative way of knowing; *at once an intellectual (mind), spiritual (soul) and practical (body) activity* combining all three in the form of genuine, triadic, signs embodied in the language of Tarot images.

It is the relative closure or coupling within the network that leads to the emergence of shared meanings, beliefs, and values in practice. The system, or community, self-organizes; it can sustain itself by virtue of its very networking. This constitutes an imperative akin to the one beautifully expressed by Noddings in the context of ethical education, namely to always “open opportunities – never to close them” (Noddings, 1993, p. 13). The nomadic space opened up by Tarot edusemiotics provides emancipatory potential to those closeted mystics, magicians, and sorcerers who, by virtue of wandering in the smooth spaces of multiplicities or signs (and not confined to striated spaces) become capable of *making a difference* in practice.

Deleuze, describing difference, stressed that it must be functionally differing: as “the in-itself of difference” (Deleuze, 1994, p. 119) it assures a passage from one singularity to another along lines of flight, such as the line of flight produced by acceleration as a derivative of velocity. Or as a derivative of acceleration which in physics is called a “jerk” (see Chapter 10). The movement of signs embedded in semiosis “jerks” and entails syncopation (cf. Merrell, 1995) in the regime of signs: the transfer from one level to another.

It is such a “jerk” that can really speed things up in an unprecedented progression. In this sense, it is capable of transcending “spatial locations and temporal successions” (Deleuze, 1994, p. 83). The re-discovery of mathesis that went underground by the 19th century, when the advances of positivist science took over, is necessary for such a transformation; and to know and understand the symbolic language in which Gnosis expresses itself in the form of deep, even if initially hidden, meanings thus becomes imperative!

Unlike the factual data obtained by “the” scientific method that appears to inform the currently privileged model of pedagogy oriented mainly to factual knowledge and grounded in educational theory “informed” by strictly evidence-based research and policy,

the symbol is the identity, the *encounter* of the sensible object and the object of thought. The sensible object is called symbol, and the object of thought, losing all scientific signification, is a hieroglyph or a cipher. In their identity they form a concept. ... [T]he mysterious character of mathesis is not directed against the profane in an exclusive, mystical sense, but simply indicates the necessity of grasping the concept in a minimum of time, and that physical incarnations take place in the smallest possible space – unity within diversity, general life within particular life. ... If *vocation* defines itself through the creation of a sensible object as the result of a knowledge, then mathesis...is the vocation of vocations, since it transforms knowledge itself into a sensible object. Thus we shall see mathesis insists upon the correspondences between material and spiritual creation. (Deleuze, 2007, p. 151)

It is connecting the different and seemingly incommensurable planes or levels in real practical life – such as material and spiritual – that can make a difference! The task indeed appears esoteric – still, there is method in madness, the method of Tarot edusemiotics informed by mathesis as a genuine science of life even if it exceeds the reductive scientific method. The latter is an *a priori* dualistic enterprise, grounded in the binary opposites of subjects and objects and employing the principle of non-contradiction and the logic of the excluded middle. Incidentally, the symbol for true *vocation* – emphasized by Deleuze above – in the Tarot deck is the Major Arcanum XX called Judgement (Figure 9.3).



Figure 9.3. The image of Judgement.

Mathesis, as *the vocation of vocations* in its ability to transform knowledge itself into a sensible, visible object, is fully accomplished by the method of Tarot

edusemiotics: knowledge is transformed into a sensible object in the form of pictures and images; yet as Janus-faced signs they partake of the intelligible, invisible, realm of Ideas, thus completing the semiotic triangle and integrating the unconscious into consciousness. It is in this sense that Deleuze uses the word “identity” above; ultimately a sign, as Peirce asserted, becomes a sign of itself.

The image of Judgement conveys the meaning of resurrection when the sound of a trumpet from the higher plane of intensified, integral, consciousness becomes heard (perceived by senses) in our experiential reality. Symbolically, this sound may be imperceptible and functioning as pure “Firstness...a dream out of which *ens reale*, the category of Secondness, inevitably at times awakens a sleeper” (Deely, 2001, p. 661), which means that the experiential conditions in our actual world will have to be created so that the metaphorical sound becomes perceptible, becomes a fact of life.

The sound of the trumpet leads to the *soul's* spiritual awakening, but also to the *body's* symbolic reincarnation into new experiences. That is, we are becoming free to act in a new way in our actual practice, thereby *making a difference* in real life, thus getting closer to becoming our authentic Selves in the image of the subsequent Arcanum XXI, The World, the last picture in the deck, which was addressed earlier in this book (Chapter 6).

Noddings (1993) describes a symbolic meaning of resurrection in the context of liberation theology. As a form of religious humanism and critical theory of transformative, spiritual, education that gives the affirmative “yes” to life (as true mathesis indeed does), the symbol of resurrection urges “human beings to take responsibility, to act, [and] to transform” (Noddings, 1993, p. 129). This transformation partakes of symbolic death – such as the death of old beliefs, habits, and values embodied in the image of Arcanum XIII, called Death. The Death image, however, is liberating because it is symbolic of the beginning of new *life* and, eventually, the new Self ultimately realized in The World.

The World is the symbol for the individuated Self inseparable from its life-world; the holistic intelligence of the Self derives not from the quantitative facts that “objectively” describe the surrounding world but from the Self meaningfully participating in the World. The meaning of this Arcanum relates to Jung’s ultimate archetype of the Self; and the Self is informed by the evolving meanings of its very experience-in-the-world by virtue of interdependent relations forming an ecological network. The individuated Self is ecoliterate, indeed.

The image of The World can also be related to what liberation theology refers to as the New Jerusalem, a symbol of a harmonious, peaceful world, humanity’s futuristic goal. As I said earlier, this goal may very well be within reach: the number of this Arcanum is XXI that, significantly, corresponds to our present 21st century in the grand scheme of things and collective experiences. Tarot edusemiotics connects us with the enviroing world as immanent participants and not alien intruders.

Practitioners of mathesis as future educators in Gnosis will employ the knowledge of the Tarot symbolic language to transform life, to transform education. Paradoxically, in its function as the included middle, the language of

Tarot images itself functions as the set of transformations to which our experience is immanent. What appears mysterious and paradoxical (but only in the framework of classical science that takes the principle of non-contradiction as its basis) is that symbolic knowledge is coextensive with life: *knowledge and the method of its attainment coalesce* (cf. Semetsky, 2011).

The potential human ability to raise “each faculty to the level of its transcendent exercise [and] to give birth to that second power which grasps that which can only be sensed” (Deleuze, 1994, p. 165) becomes our actuality if we apply mathesis in practice and learn to read and understand the language of Tarot signs. This model of education grounded in the ethics of integration should itself become a *vocation* oriented towards human development and bringing up individuated and caring human beings who can take up the universal conditions of human existence in a manner that is transformative both of themselves and also of those very conditions.

It is in practice, in our lived experience, that the transformational pragmatics embedded in Tarot edusemiotics is enacted. Ramey (2012) refers to experimental practice of this kind as a spiritual ordeal that not only transforms oneself – making one a unique, singular, individual – but, most importantly, ultimately elicits changes and transformations at the level of social institutions, such as schools, universities and the educational system as a whole (Semetsky & Delpech-Ramey, 2011). Evolution in thinking is impossible without spiritual ordeal as learning from experience; philosophy by necessity becomes a mode of spiritual practice, a mode of experiential learning and a path to self-knowledge.

To reiterate, Peirce spoke of Agape as the concept of evolutionary love permeating the cosmos itself. Agape, for Peirce, can spread among participants in creative evolution; Peirce’s synechism calls for “recognizing germs of loveliness [even] in the hateful” (Peirce, CP 6.289); somewhat confirming the potential best in the Other, as Buber and Noddings would say. Peirce considered a genius to be one who acts agapeistically individually; and, as capable of Agape, this individual is a creative individual. This singular individual as a future-oriented educational leader would put into practice the creative “magic of the artist” (Dewey, 1934/1980, p. 118) and would be particularly attuned to the enviroing world, participating in it and forming with it one organic whole.

It is the creative *artist* as also a *scientist* – a practitioner of mathesis in its resurrected form partaking of the cutting-edge science of coordination dynamics, considering that both can be defined in terms of the “ubiquitous science of life” (Kelso & Engström, 2006, p. 76) – who can read, interpret and ultimately transform one’s very experience; to bring future into the present. This transformation is a genuine metamorphosis (cf. Deleuze & Guattari, 1987) of the human libido as spiritual energy irreducible to the limited Freudian definition of the libido as being a sex drive. We have to individuate by choosing a path to Gnosis in our nomadic travels; only as such can our lives proceed along the dynamic lines of genuine becomings and not remain at the level of forever static being. Yet because individuation is a function of semiosis as a science of relations, the individuated Self is ultimately an integrated, complementary self-other pair, and not an individual agent. I cannot emphasize this point enough!

CHAPTER 9

Mathesis is not an isolated quest for initiation but the artistic creation of novel concepts and putting in practice new understanding that make it possible to forge new social institutions and new types of organizations in the sociocultural world, exceeding the private confines of Cartesian Cogito. To “integrate sympathies” (Deleuze, 2003, p. 21) as relations and to re-create the new spiritual, feminine and maternal (Noddings, 2010) values should become a significant part of educational policy.

Deleuze was explicitly interested in mathesis as a potential energizing force for a specific political project as the formation of new social institutions. This formation – as transformation – is not meant to proceed by means of a revolutionary overthrowing of the current establishment, but by developing sympathies and actualizing relations which are still hidden in “the depths of Nature, or of the Unconscious” (Deleuze & Parnet, 1987, p. 92), that is, by practicing the ethics of care and the ethics of integration enabled by Tarot edusemiotics. By combining the art of hermeneutic interpretation with the science of signs, Tarot edusemiotics forms a complementary art~science pair – mathesis indeed.

Deleuze and Guattari designate the people of politics who can create real changes as a *people to come*. As would-be leaders and policymakers, these people are themselves produced by virtue of experimentation, of becoming. They belong to “an oppressed, bastard, lower, anarchical, nomadic, irremediably minor race. [These people] have resistance in common – their resistance to death, to servitude, to the intolerable, to shame, and to the present” (Deleuze & Guattari, 1994, pp. 109-110). Resistance to the present means becoming aware of the future. The people yet to come will appear only via creative forms of becoming, among which educating Gnosis and practicing mathesis – both embodied in Tarot edusemiotics – should become exemplary!

The facilitation of creativity and emergence calls for a particular, and necessarily paradoxical, type of educational leadership which, albeit selfless, demands the presence of a unique individual whose task is human service through spiritual ordeal and whose presence de-/reterritorializes the hierarchically designed structure typical of formal education. Educational leaders must themselves be educated in the science of life – that is, in mathesis, semiosis, and the edusemiotics of Tarot as the practical method for, and a craft of, *living such a life*. The role of the leader as creative thinker becomes one of the physician of culture (invoked yet by Nietzsche) as an inventor of new immanent modes of existence crucial for the future of education.

Deleuze’s vision of human solidarity gives us important clues of how to put it into practice. People to come in education will be genuine nomads who can create magic in our real life, cross the limits of the present and tap into the future. The knowledge of the Tarot symbolic language will be a prerequisite because these prospective leaders must, as Dewey said, “act on the basis of the absent and the future ... To a being who thinks, things are records of their past, as fossils tell of the prior history of the earth, and are prophetic of their future” (Dewey, 1991, pp. 14-15). To educate in Gnosis and mathesis is the ethical responsibility of the

people to come. These leaders will be genuinely ecoliterate and, by means of Tarot edusemiotics, will be able to put into practice the three Is of holistic education, namely insight, intuition and imagination (as designated in the Prologue).

Dewey (1959) actively criticized the school system as succumbing to a narrowly utilitarian approach, according to which the educational aim is restricted to the confinement of students to the habitual three Rs and all the formal disconnected disciplines associated with them. The call for interdisciplinary and transdisciplinary education has been recently put forward by physicist and philosopher Basarab Nicolescu, whose book *Manifesto of Transdisciplinarity* (2002b) advocates overcoming the split between sciences and humanities. Non-incidentally, the late Francisco Varela was a founding member of Nicolescu's Center for Transdisciplinary Research.

Nicolescu (2002b, 2005, 2009) posits the necessity of transdisciplinary education in the modern context of increased specialization and fragmentation of knowledge. He points out that the term transdisciplinarity was first coined by Jean Piaget in 1970 as something between and across the disciplinary divide. Noddings (2010) noticed the effects produced by evolutionary studies. They not only affect the shift of

emphasis from the individual to social units [across disciplines] but history is moving well beyond the "great man" as a center of interest. Jean Piaget noted that such thinking should change: "The great man who...seems to be launching some new line of thought is simply a point of intersection or synthesis of ideas which have been elaborated by a continuous process of cooperation, and ... represents a response to underlying needs which arise outside himself. (Noddings, 2010, p. 38)

This is true, and it is in the urgent response to the unconscious dynamics of the underlying *needs* arising in the present context of the 21st century that Tarot edusemiotics is finally acquiring its full voice. An attention to cooperation and needs is ubiquitous to the science of life. In the framework of coordination dynamics, we can create a complementary science~humanities pair, in which the squiggle "~" conveys the meaning of the transversal connection; hence "transdisciplinarity."

Transdisciplinary knowledge belongs to what Nicolescu specifies as *in vivo* knowledge that surpasses scientific knowledge of the external world as independent from the subject. Bound to the internal world of human subjectivity, it necessarily includes a system of values and meanings exceeding objective facts alone. Yet, transdisciplinary knowledge does not reject science; what it rejects is scientism. It is based on the new scientific foundations so that disciplinary and transdisciplinary knowledge also relate to each other in a complementary manner.

Disciplinary knowledge, what Nicolescu calls *in vitro*, is based on the classical logic of the excluded middle that induces a separation between subjects and objects and reduces the meaning of knowledge to knowing merely the "objective" facts of the external world. The new transdisciplinary *in vivo* knowledge, however, is founded on the logic of the included middle that connects subject and object so that

they correspond to each other. They are in a triadic versus dyadic relation; they are in correspondence or conversation that establishes a semiotic network as a properly ecoliterate structure for knowledge.

To reiterate, the general form pertaining to the logic of the included middle is a triadic relation connecting two apparent binary opposites of Self and Other, by means of the in-between relation symbolized by “~” (tilde), so that they are coupled as two poles in one complementary self~other pair, as per [Figure 9.4](#).

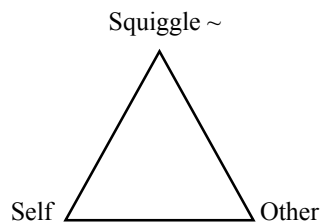


Figure 9.4. The logic of the included middle.

This triadic structure is a principal characteristic “of all signs used by a ‘scientific’ intelligence, that is to say, by an intelligence capable of learning by experience” (Peirce, CP 2.227). The infamous “scientific observer,” or many “observes” would be “located” precisely at this included middle “~” connecting Self and Other. The presupposed observers thus become the very participants in the relational dynamics of semiosis. Signs are patterns of coordinated interpretive activity; as Deleuze and Guattari (1987) pointed out, the “only way to get outside the dualisms is to be-between, to pass between” (p. 276).

The relation “~” remains external to its terms: Self and Other do sustain each other by virtue of the mediation enabled by triadic logic. This is especially important in the context of ecoliteracy. We can contrast the above *triad* with a *dyad* represented by a direct line from the Self to the Other as unmediated by the would-be inclusion of the third category symbolized by “~.” Such a dualistic Self and Other do not sustain but instead oppose each other because of the excluded middle, as per [Figure 9.5](#).

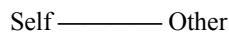


Figure 9.5. The logic of the excluded middle.

The triadic, semiotic, relation forms a self-referential feedback loop connecting subject and object, cause and effect, self and other; in short all those supposedly binary opposites that are reconciled in the science of coordination dynamics (Kelso & Engström, 2006), which functions precisely like the science of signs, semiotics. Epistemologically, therefore, transdisciplinary knowledge is based on logic where terms form a complementary pair rather than dualistic opposites: they are connected and thus bound to mutually support and sustain each other.

According to Nicolescu’s program of transdisciplinarity, *in vivo* knowledge is not a static knowledge of the “objective” facts *per se* but represents a dynamic understanding of meanings that by necessity brings in the dimension of values which is traditionally (that is, *in vitro*) considered “subjective,” that is, located outside (normal, classical) science. We can summarize the details of *in vitro* and *in vivo* modes of knowledge as follows (Figure 9.6).

KNOWLEDGE (Disciplinary)	KNOWLEDGE (Transdisciplinary)
<i>IN VITRO</i>	<i>IN VIVO</i>
Limited to the objective knowledge of external world (cf. spectator theory of knowledge)	Correspondence, analogy, conversation, sympathy as a <i>relation</i> between the external world of objects and the internal world of subjects
Static knowledge of facts	Dynamic understanding of meanings
Analytic conceptual thought – separation between mind and body; mind <i>observing</i> the world; disembodied cognition.	Synthetic holistic intelligence – harmony or correspondence between mind and body; mind <i>participating</i> in the world; embodied cognition.
oriented towards power, possession and separation from, and control over the Other	oriented towards sharing, cooperating with, and integrating the Other
logic of the excluded middle /dualist philosophy	logic of the included middle /non-dualist philosophy; semiotics
exclusion of values	inclusion of values

Figure 9.6. *Disciplinary and Transdisciplinary knowledge.*
(Adapted and considerably developed from Nicolescu, 2005)

Importantly, a new type of transdisciplinary knowledge engenders new, transdisciplinary education, entailing a sort of reform similar to Capra’s call for ecoliteracy. Nicolescu refers to so-called Chicago experiment conducted by Nobel Prize winning physicist Leon Lederman with children from the most disadvantaged neighborhoods, which demonstrated the emergence of a new type of intelligence. This holistic intelligence is the outcome of the system’s evolution and learning. The new type of transdisciplinary education will take into account all dimensions of the human being, including values, and will necessarily be holistic.

Tarot edusemiotics provides us with an intrinsically transdisciplinary, *in vivo*, mode of knowledge: human cognition is embodied in practical experience! In the ecoliteral framework, and as informed by systems thinking, the *in vivo* knowledge is not a given fact but is an outcome of dynamic inquiry comprising the interactions between a knower and (potentially) known, very much in accord with Dewey’s original, even if untimely, philosophical conceptions.

Moving from the static knowledge of facts to the dynamic process of learning and evaluating experience is equivalent to becoming capable of making multiple transversal connections as semiotic bridges, thus creating the networks as the very foundation for ecoliteracy and a precondition for sustainable living. A paradigmatic semiotic bridge, literally, is a Tarot layout that embodies multiple experiential signs partaking of the transpersonal dimension of experience. Sure enough, Nicolescu points out that personal growth inevitably passes through a transpersonal dimension.

In this way not only are the boundaries between disciplines transcended but so are the boundaries between facts and values. Transdisciplinary moral education in the format of Tarot edusemiotics cannot be reduced to simply inculcating a set of values: values and meanings are embodied in the array of images and as such are discovered in practice through “the pattern recognition inherent in ideographic language [that] enmeshes users in a web of interpersonal relationships” (Shlain, 1998, p. 185) comprising the specific context of each singular reading. The patterns embedded in the Tarot cartographic language unite people like the general use of patterns that historically and culturally “have kept [people] bound to their institutions, not separate from them” (p. 185), in the manner of *oikos*, the whole household. In this way, individual~society too is a complementary pair in which the bipolar terms of the relation necessarily sustain each other.

Dewey’s prophetic call for cooperative, or coordinated, intelligence has been reflected in the *utures studies* discourse on civic and integrated intelligence (e.g. Anthony, 2008; Schuler, 2001). Tarot edusemiotics, when positioned in the context of ecoliteracy and supported by the science of complementary pairs, acquires an important role informed specifically by Dewey’s philosophy of education: it represents, using Dewey’s (1991) words, a *natural resource in the training of thought*. Therefore it can become instrumental for training, informing and transforming future educational leadership. In accord with Dewey’s theory of inquiry (Dewey, 1938) Tarot edusemiotics demonstrates that continuity is ensured between the operations of inquiry (mind) and biological and physical operations (body): they represent a complementary pair in which correspondence is established by the relation “~.” Ethical decision-making is continuous with the whole of the situation embodied in a particular Tarot layout and informed by Tarot edusemiotics, laying down the foundation for moral knowledge represented by a complementary virtual~actual pair; a relation in which both terms are pragmatically real.

For Dewey, as for Capra, it is some tension between an organism and its environment that makes the very situation problematic and uncertain, and resolving the tension is made possible via the insight into the symbolic representation of this very tension through Tarot images functioning as the included Third. We can ask the question: “Is there an as yet unknown assemblage that would...open a way out that had been previously blocked?” (Deleuze & Guattari, 1987, p. 258). This assemblage of Tarot signs, when laid down in front of our eyes, read, and interpreted, indeed becomes known.

The self-organizing, communicative, process of the action of signs in experience leads to the evolution and growth of holistic intelligence; it ensures the added capacity for growth so that “learning naturally results” (Dewey, 1916/1924, p. 154). Our learning from experience is embodied in the Tarot images. Without a triadic relation there would be no network, no feedback, and no extension of an individual experience to the whole ecological household. To repeat, the operational closure or coupling symbolized by the reconciling squiggle “~” represents the moment when a meaning emerges, that is, Tarot edusemiotics represents a long sought-after cooperative process.

As Dewey said, the “response to another’s act involves contemporaneous response to a thing as entering into the other’s behavior, and this upon both sides...Possession of the capacity to engage in such activity is intelligence” (Dewey, 1934/1980, pp. 179-180); this learned capacity is enabled by Tarot edusemiotics. This is *phronesis*, practical wisdom that informs and transforms our actions and our very Selves. Dewey’s emphasis on intelligence as based on communication, and the dynamics of its attainment – also the crucial feature of both Capra and Nicolescu’s conceptualizations – demonstrates that ecoliteracy, even if in disguise, was implicit in Dewey’s untimely philosophy.

Tarot edusemiotics generates what Dewey called intelligence in operation, and that may be considered just another name for ecoliteracy. New meanings that emerge in the course of Tarot educational semiotics are the natural consequences of triadic logic: “When the new is created, the far and strange become the most natural inevitable things in the world” (Dewey, 1934/1980, p. 267); such a creative act is both a prerogative and the pragmatic effect of becoming-ecoliterate in the process of reading and interpreting Tarot signs.

Creativity, then, is the natural mode of existence of an educational leader who is never an individual agent and whose holistic intelligence is informed not by isolated facts but by evolving meanings of experience, which are symbolically represented in Tarot images. The ecoliteral perspective pertaining to Tarot edusemiotics agrees with Dewey’s persistent struggle for the development of active value-judgements grounded in experience and based on emerging meanings versus passive acceptance of given facts. It is through Tarot edusemiotics that we can learn to develop the capacity and power of judgement with regard to the sense of relative values, ourselves becoming able to select, to discriminate, to invent new concepts and meanings in/for experience. We thus acquire the specific capacity to become educational leaders who can facilitate novelty in actual practice.

Capra points out that schools promoting ecoliteracy and systems thinking should pay more attention to emergent structures and to the type of leadership that can facilitate that emergence. And being able to facilitate the emergence of novelty, that is, becoming creative, demands a leader who transfers an intellectual understanding of the interconnections between the mind and the world into their actual practice. Extending human experience from the boundaries of an individual mind to the whole of culture, and connecting it with the natural world, is equivalent to holistic intelligence embodied in practicing Tarot edusemiotics. Reciprocally, it is holistic intelligence that makes one “fluent” in ecoliteracy, in the language of

Tarot signs connecting us humans in one *oikos* and thereby transcending cultural or language barriers.

As Shlain indicates, “writing of any kind will realign the gender politics of any culture” (1998, p. 184); and it is the Tarot legible images that will realign our Western culture with its lost feminine dimension, returning it to the “original condition [as] the first caring relation” (Noddings, 2010, p. 37) – *natural* caring. As Noddings (2010) says in one remarkable passage, if natural caring “never failed, if it could be extended without limits to all others, we would have no need for ethical caring” (p. 37), that is, for theoretical explorations of the concept of care and for putting it back into practice.

Through Tarot edusemiotics we can communicate with the generic Other in nature and culture alike, thus increasing the likelihood of restoring the state of natural caring in our culture. The new culture, as a new Age of Understanding (cf. Deely, 2001) would problematize the centrality of human subjects. The self-organizing dynamics of Tarot edusemiotics bring flexibility to, and create the flow of information within, those existing structures where the role of a leader has been traditionally reduced to maintaining the *status quo* and ensuring the structure’s stability. Vice versa, it is the creative breakdown of the *status quo* as performed by Tarot edusemiotics that creates transformative experiences, thereby enriching practical life with “the magic of the artist” (Dewey, 1934/1980, p. 118), such as the magic performed by a genuine Tarot reader who her-Self is literally reconciled with the Other via the relation “~”; thus forming with her a single whole under the conditions of “total organic resonance” (Dewey, 1934/1980, p. 122).

All natural, non-human, structures tend towards emergence as a condition of their sustainability and survival; “creativity is manifest in the processes of emergence” (Capra, 1997, p. 7). Yet human structures in our culture, functioning on the basis of pre-existing theoretical goals of anthropocentric consciousness, often tend to crystallize and become rigid, thus closing themselves to new opportunities. The task of transforming human structures into open-ended systems in harmony with the natural world, in which emergence is inherent, represents a contemporary challenge at all levels, among which the level of education is crucial.

Such is the task of a creative leader of/for the future. To find a balance and establish a coordinated harmonious relationship between chaos and order, between novelty and confirmation (see Chapter 8), between self and other, is the function of the educational leader who becomes (eco)literate about their complementarity versus their opposition. Such an educational leader will have developed capacity for self-reflection enabled by the logic of the included middle and informing every practical ethical decision with a deep sense of value-judgement.

This capacity can be developed by putting Tarot edusemiotics into practice; thus creating a participatory network of relations so that a prospective leader can facilitate the emergence of novelty rather than repeatedly articulating theoretical goals, missions, policies and the likes. Capra asks a challenging question: How does one facilitate emergence? Well, by creating a learning culture that is not afraid of positing and evaluating practical problems rather than providing

unambiguous answers to clearly demarcated questions. This culture will respect the creativity and novelty that Tarot edusemiotics entails.

For Capra, and for us, leadership means creating conditions for the production of communicative and cooperative networks rather than “leading” univocally by enforcing strict rules or moral norms for action. Tarot edusemiotics in the context of ecoliteracy educates us about the role of the leader: to lead means being open and receptive to the environing world so as to swiftly learn from experience in the very midst of the crucial self~other relations ultimately enabling the unity of shared values between ourselves and others.

A leader of/for the future must be attuned and open to the others in her environment because “to the open mind, nature and social experiences are full of varied and subtle challenges to look further” (Dewey, 1991, p. 33) so as to envisage those “hidden possibilities [and] novelties” (Dewey, 1925/1958, p. 21) of which we can become aware by means of Tarot edusemiotics. Capra emphasizes that systems thinking means a shift of perception from material objects and structures to nonmaterial processes and patterns of organization that represent the very essence of life.

Examining the utopian tradition and the role of education in affirming its value in society, Peters and Freeman-Moir (2006) call for the future generation of educators to embrace imagination through which individuals can be transformed and the collective consciousness expanded. They are certain that it is the “connection between imagination and utopia that brings out the foundations of both in human development [and] is of particular significance for educational theory” (Peters & Freeman-Moir, 2006, p. 3). Tarot edusemiotics embodies the method of imaginative narrative that has been presented in detail in the prequel to this book (Semetsky, 2011) and that duly belongs to *futures studies* methodologies.

It is the creative leap of imagination that creates a structural coupling and completes “the intercourse of the live creature with his surroundings” (Dewey, 1934/1980, p. 22) thus forming a complementary organism~environment pair germane to ecoliteracy. The creative leader of/for the future must be a visionary who “embraces the meaning of the experience. Any experience, however trivial in its first appearance, is capable of assuming an indefinite richness of significance by extending its range of perceived connections” (Dewey, 1916/1924, p. 255). Such leadership will ultimately embody transdisciplinary and transpersonal values.

In the recent volume *Transdisciplinarity in Science and Religion*, Nicolescu (2009) points out that a “new system of values can appear only through the dialogue between different domains of knowledge, between different cultures and different religions. This system does yet not exist” (p. 420). This book however demonstrates that a symbolic system of such a caliber does exist and is represented by Tarot edusemiotics! A semiotic system of Tarot images establishes a paradigmatic dialogue between self and other, between mind and nature, between individuals and societies, between I and Thou, as well as between science and spirituality.

Semiotics as the science of signs – *in vivo* science – incorporates the dimension of meanings, values, and purposes that has been traditionally relegated to spiritual

or religious discourse. Transdisciplinary education leads to the emergence of a trans-relational attitude that, in the manner of Noddings' caring attitude, enables the continuous growth of both participants in the relation. It is by virtue of the transpersonal dimension embodied in Tarot edusemiotics that we develop a trans-relational attitude partaking of "the attitude of care" (Noddings, 1991, p. 161).

Noddings (1991) lists several important components that characterize what she calls interpersonal reasoning. They are the attitude of care, attention, flexibility, and effort aimed at cultivating a relation, as well as a search for an appropriate response, also accompanied by a kind of meta-cognition. In addition to interpersonal reasoning, posited by Noddings, Tarot edusemiotics includes the elements of transpersonal reasoning that are crucial for reading and interpreting Tarot signs. They manifest via intuition or abduction that establishes a transversal line of flight toward the transcendental field of the collective unconscious.

The last chapter will address in detail the functioning of abduction embedded in transpersonal reasoning together with the paradox of new knowledge discovered~created in the process of edusemiotic inquiry.

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CHAPTER 9

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THE PARADOX OF INQUIRY

Tarot edusemiotics creates in practice an unorthodox experimental “foundation” for moral knowledge, both actual and potential, and should help us in repairing what Isaiah Berlin (1990), borrowing a phrase from Marx, called the crooked timber of humanity. Tarot images create an adventure story of our learning in the school of life, with its many events and experiences. Indeed, the “stories lives tell” (Witherell & Noddings, 1991), which unfold when the pictures are read and interpreted in the context of a particular layout (Semetsky, 2011), bind together disparate events and amount to what Charles Taylor (1989) called the quest for the *Good*.

Peirce’s abduction, encompassing the elements of insight, intuition and imagination – the three Is of holistic education – is exercised by a genuine Tarot reader in an unorthodox mode of inference analogous to a certain “automatism [as] the psychic mechanism of perception” (Deleuze, 1993, p. 90). The crisis of perception, acknowledged by Capra (and addressed in the preceding chapter) must be overcome. The intensified perception is enriched by affective imagination and results in “a modification of the objective order, in the institution of a new object ... It involves a dissolution of old objects and a forming of new ones in a medium ... beyond the old object and not yet in a new one” (Dewey, 1925/1958, p. 220) – but in the midst of the in-between, reconciling, relation in accord with the logic of the included middle.

Imagination is indispensable in providing epistemic access to the moral, even if ideal, *Good* via the medium of Tarot edusemiotics. In the Tarot deck the idea of the Platonic Good is symbolized by Arcanum XIX, The Sun (Figure 10.1).

This figure also signifies the idea of Rebirth as a new mode of existence and understanding (see Chapters 6 and 7). The included third of interpretation, as the essence of edusemiotics constituted by the journey through the Tarot pictures, provides “shape and expression to what would otherwise be untold” (Witherell & Noddings, 1991, p. x). The imaginative narratives constructed in the process are pedagogical because each new life experience contributes to self-education and understanding in depth, ultimately eliciting the “rebirth of the individual [as] psychic [and] aesthetic creation” (Kristeva, 2002, p. 76) of the Self equipped with deep spiritual knowledge as Gnosis.

As a metaphor for true knowledge, The Sun nonetheless *casts its projection* in the form of the Shadow, which is illusory but still customarily perceived as the *only* true knowledge. The Shadow metaphor is poignant. The Sun and its Shadow form a complementary pair; if there is no sun there is no shadow either. The concept of the shadow, however, not only expresses one of the Jungian archetypes



Figure 10.1. *The Sun*, from *The Whimsical Tarot*.
(© 2001 US Games Systems, Inc.)

of the collective unconscious symbolized by the image of The Devil (as per Chapter 7) but is also a name for a specific mathematical transformation as an operation of projection which should assist us in better conceptualizing abduction as a mode of inference that triggers the hermeneutic process (Semetsky, 2011) of reading and interpreting Tarot images.

The significance of projection, in its different guises, has been continuously invoked in the chapters of this book. The same conceptualization should also help us in (dis)solving the learning paradox of new knowledge first posited by Socrates. In Plato's famous dialogue *Meno*, Socrates claims that we cannot acquire any new knowledge by learning. He is implicitly addressing the problem of being as-first-known, later formulated by Aquinas, *ens primum cognitum*. Meno is puzzled by what Socrates means when he provocatively says that there cannot be any new knowledge and that what is called learning is a process of recollection. The paradox of inquiry is stated in the following way (Plato, 1999, p. 442):

Meno. And how will you inquire, Socrates, into that which you know not? What will you put forth as the subject of inquiry? And if you find what you want, how will you ever know that this is what you did not know?

Socrates. I know, Meno, what you mean; but just see what a tiresome dispute you are introducing. You argue that a man can not inquire either about that which he knows, or about that which he does not know; for he knows, and therefore has no need to inquire about that – nor about that which he does not know; for he does not know that about which he is to inquire.

Are we facing an absurdity because either one knows *a priori* what it is that one is looking for, or one does not know what one is looking for and therefore cannot have prior expectations of finding anything? According to Plato, the theory of recollection demands that we already possess all knowledge unconsciously and simply recognize given truths. However, if any new knowledge is incompatible

with prior learning – the latter in fact being a precondition for the understanding of what is new – then there is no foundation on which to build such a new knowledge.

Socrates, in fact, argues that to learn something means to discover a previously unknown truth; it is clear, however, that we won't be capable of recognizing it anyway. After his lengthy dialogue with the slave boy, Socrates concludes that it is not possible to acquire any new knowledge that wouldn't have been already possessed by a learner. Therefore we do not learn but must have all possible truths within ourselves. In this way the Socratic paradox leads to the Platonic theory of recollection. We either learn what we always already knew, that is, the concept of learning is meaningless; or we are forever in the dark because it is impossible to recognize this new knowledge even as we are trying to learn something new.

The paradox of inquiry or learning paradox is posited in epistemic terms, yet it has its equivalent in the analytic philosophical tradition in terms of the paradox of analysis, which is stated in semantic (versus epistemic) terms: either the *analysans* has the same meaning as the *analysandum*, in which case the analysis is trivial, or it does not, in which case it is false (cf. Scheman, 2001). Several educational studies have inquired into possible solutions to the learning paradox, mainly with regards to science education and the possibility of students' conceptual change (e.g. Bereiter, 1985; cf. Prawat, 1999).

In the current philosophy of science discourse, abduction is usually taken in one sense only and interpreted as an inference to the best explanation; as such abduction remains the fundamental problem of contemporary epistemology (Hintikka, 1998; Magnani, 2001). Abduction, as we stated earlier, can be open to multileveled interpretation in both logical and psychological terms. It is a type of inference grounded in the creative, artistic, logic of discovery rather than the logic of justification.

The classical philosophical attempt to solve the Socratic paradox belongs to Kierkegaard, who agreed with the seriousness of the problem of new knowledge, but proposed to resolve it in a different manner. Contrary to Plato's positing that we simply have to have all knowledge within ourselves, Kierkegaard suggests that there is no *a priori* knowledge. The impossibility of recognizing any new truth still holds, unless – and here lies Kierkegaard's ingenious solution – an extremely strange occurrence takes place. At the very moment of acquiring true knowledge, says Kierkegaard, a learner becomes remarkably different, capable of distinguishing true knowledge from false even if prior to this moment they were to remain in a state of total ignorance. What happens is enlightenment which, by some miracle, makes a learner knowledgeable rather than leaving them ignorant. New knowledge therefore partakes of the miraculous because it is otherwise impossible to explain a learner's sudden transformation, or the presence of such a decisive moment in their life. For Kierkegaard, it is the decisive moment that brings forth eternal, true, and certain knowledge: the learner is enlightened by God's act.

The metaphor of light is exemplified in The Sun icon, permeated by rays of light. Deleuze was concerned with the possibility of transcending toward "the divine part in us [and establishing] the spiritual relationship in which we are ...

with God as light” (Deleuze, 1986, p. 54). The light metaphor should not, however, take us back to the over-rational *Enlightenment* of modernity or the pre-modern enlightenment elucidated by Kierkegaard, but, in the context of Tarot edusemiotics should lead to postmodern spiritual *Illumination* that would defy pessimism and the frequent fatalistic resignation permeating individual and collective consciousness, locally and globally.

Tubbs (2005) has analyzed in detail Kierkegaard’s philosophy in the context of the role of the teacher and pointed out the necessary presence of the “third partner within a philosophical pedagogy” (p. 404). He has also addressed the important notion of indirect communication, that is, mediation. Indeed, in the context of this book and in the framework of Tarot edusemiotics, the logical and ontological *necessity* of the “third partner,” in its different guises, is clear. It is the included Third that is necessary for (dis)solving the learning paradox; or rather demonstrating that such a paradoxical triadic, *in vivo* or transdisciplinary structure of knowledge is ubiquitous (as we said in the preceding chapter).

Abductive reasoning is hypothetical; the generation and selection of a hypothesis leads to a conjecture different from an inductive inference: in the presence of intuition, perception is not oriented to the environing world but turns “inward upon the objects of conception” (Noddings & Shore, 1984, p. 47), ultimately reaching the depth of the psyche in the form of Gnostic knowledge. Describing the structure of abduction, Peirce noted that “the first premise is not actually thought, though it is in the mind habitually. This, of itself, would not make the inference unconscious. But it is so because it is not recognized as an inference” (Peirce, CP 8.64-65). We stated that abduction appears to function instantaneously because this tiny temporal interval of inference remains unperceived by the conscious mind.

As Dennett thinks, we are not Cartesian *res cogitans* to be somehow added to our bodies, but are “this organization of all the competitive activity between a host of competences that your body has developed” (Dennett, 1996, p. 156). Significantly, the competence that has developed within an immediate coping with the problematic and perplexing situation (as Dewey called it) is in no way reduced to the (mindless) behaviorist stimulus-response model. As belonging to the semiotic process and embedded in the dynamics of the action of signs, abductive inference (and it is important to repeat this) takes time, which however passes unperceived and below the level of awareness.

These unconscious perceptions are implicated as micro-perceptions; they belong to the cartographic microanalysis of establishing “an unconscious psychic mechanism that engenders the perceived in consciousness” (Deleuze, 1993, p. 95) which takes place during Tarot edusemiotics and allows us to read signs as a hermeneutic, interpretive, process (Semetsky, 2011) of learning from experiences expressed in the language of images. This knowledge organization, albeit imperceptible to cognition, becomes nonetheless “fully accepted” (Peirce, CP 7.37) and as such “tends to obliterate all recognition of ... premises from which it was derived” (CP 7.37): the tiny inferential steps themselves stay out of consciousness;

we are not aware of them. Still, despite our remaining unconscious of the duration of abduction, it is amenable to clear insight.

Kihlstrom (1993) described the now-classic experiment on subliminal perception performed by Peirce and his student Jastrow, providing many references to contemporary research in experimental psychology and cognitive science on the topic of the unconscious, which is understood as “a domain of mental structures and processes which influence experience, thought, and action outside of phenomenal awareness and voluntary control” (1993, p. 125) whenever one mental content simply takes over other “competing” mental content. Contemporary neuroscience and neurophilosophy (Varela, 1999) recognize the existence of an imperceptible temporal gap of not more than 5-10 msec in brain activity, during which a kind of unconscious processing of information is supposed to take place. This dynamics determines “the entire readiness-for-action in the next moment” (Varela, 1999, p. 51) – just like archetypes of the collective unconscious, which are defined as “system[s] of readiness for action” (Jung, CW 9, 199) in the psyche and are embodied in the Tarot images.

A multileveled relational system of signs may very well be “instantiated in the neural organization of the brain” (Jackendoff, 2001, p. 65), encompassing both conscious and unconscious information processing. It is reasonable to conclude that it is in the midst of tiny “fast oscillations” (Varela, 1999, p. 50) where abduction intervenes into the process eliciting implicit ethical negotiations and a “rapid dialogue invisible to introspection” (Varela, 1999, pp. 49-50). Varela refers to Walter Freeman (1975, 1999) whose research in neuroscience postulated the existence of fast resonance binding, or coordination.

It is the coordinated activity envisaged by Dewey (cf. Campbell, 1995) – and underwriting the new science of coordination dynamics (Kelso & Engstrom, 2006) invoked in this book – that enacts and re-enacts knowledge contrary to the agency of a central processor. The feeling of habits operating “below direct consciousness” (Dewey, 1922/1988, p. 26) leads to the accompanying feeling of the direction that the multiple various lines of possible actions might take. This feeling is equivalent to the abductive guess along the line of imagination or intuition (the Deleuzian line of flight along which all becomings take place) that allows us to create a meaning for the constellation of images in a particular Tarot layout.

Abduction in this respect is an impulse or “special sensitiveness” (Dewey, 1922/1988, p. 32) that results in “knowledge, judgment, belief” (p. 130), provided of course the scope of this knowledge is much broader than that of analytic reason. It is a mode of affective and intuitive, Gnostic, way of knowing: all signs have a tendency “to affect certain others which stand to them in a peculiar relation of affectability” (Peirce, CP 6.104).

The Tarot spread satisfies a requirement that a semiotic model must “eventually be couched in a language” (Merrell, 1992, p. 190). But precisely because a given model, a Tarot layout, *is* itself a language – the language of pictorial semiotics as a means of visual communication (see Chapter 3) – Tarot edusemiotics embraces both the original and its model at once, combining them as two complementary

poles reconciled in one semiotic relation, thereby overcoming the “problem of expressing the unimaginable, of saying the unsayable” (Merrell, 1992, p. 191).

It is the background of implicit and virtual, yet highly “organized meanings” (Dewey, 1934/1980, p. 266) that motivates abductive judgement in the form of a “reaction against my will” (Peirce, CP 8.144) at the as yet unconscious level. The resulting (re)action would not “spring from reasoning, but from an *immediate coping* with what is confronting us ... [It is] the situation [that] brought forth the actions from us” (Varela, 1999, p. 5, italics in original). Although tending towards making a judgement, the reasoning from abduction remains “subconscious ... [and] does not have to make separate acts of inference” (Peirce, CP 5.181) each of which supposedly would have been articulated and “spelled out” in verbal propositions. Still, “if we were to subject this subconscious process to logical analysis, we should find that it terminated in what that analysis would represent as an abductive inference” (Peirce, CP 5.181).

If reasoning from premises to conclusion is considered to be either deductive, or inductive, or fallacious, then an abductive guess understood as an inference to the best explanation, that expresses merely some likelihood, would seem to represent a fallacious kind indeed; and it is sure enough considered as such within the analytic discourse grounded in the logic of the excluded middle. However the logic of the included middle demands the presence of abduction. An implicit pre-conceptual “content” (not a contradiction in terms) is amenable to clear insight, therefore potentially becoming conscious. The total dynamics of sign-process presupposes its ties to consciousness; thus fulfilling the condition of genuine intentionality or “aboutness” (see Chapter 8).

When Peirce conceived of signs in terms of images, that is, as an extra-linguistic semiotic category, he described them in (onto)logical terms represented by cardinal, and not simply ordinal, numbers. As a multiplicity, Secondness, by definition, contains one and two, so there is Firstness in Secondness as well as in Thirdness. Thirdness as proper reason or intelligence always already contains Firstness as abduction (or intuition, or insight, or imagination in psychological, versus logical, terms) in itself. As a pre-cognitive category, abduction is a qualitative immediacy of experience, a gut feeling, so to speak. Such Firstness – a sort of pre-modern natural attraction – was, together with the Thirdness of mediation, left out as insignificant by the “pure reason” of modernity.

In the context of educational research, Prawat (1999) addressed abduction as plainly a useful heuristics, recognizing nonetheless that “it consists of old and new meanings” (Prawat, 1999, p. 60). He defined abduction as representing a move from what is known to the unknown, missing the important problem of the very creation of a novel hypothesis. Peirce, with a stroke of a genius, paraphrases Shakespeare when positing the ontological status of abduction partaking of “airy nothings to which the mind of a poet, pure mathematician or another might give local habitation and a name within that mind” (Peirce, CP 6.445). Abduction is the “first, present, immediate, fresh, new, initiative, original, spontaneous, free ... Only, remember that every description of it must be false to it” (Peirce, CP 1.302).

Keeping in mind Peirce's words, let me ask: how to explain abduction? How to find out "where the knowledge is coming from" during the edusemiotic process of Tarot readings? How to construct a model for such paradoxical inference, considering the "irreducibly triadic" (Deely, 2001, p. 614) relation between experience and cognition, body and mind? How come a genuine Tarot reader can articulate the images' silent discourse? Mathematics helps, and constructing a diagram, following this book's emphasis on diagrammatic reasoning, will enable us to present a model for abductive inference.

In the spirit of complexity the learning paradox will be clarified by using geometry on the complex plane. The diagram is being constructed on the complex (Gaussian) plane; the two axes are marked with imaginary, on a vertical axis, and real on a horizontal axis, numbers respectively. Imaginary numbers, which were dubbed *magical* by Sir Roger Penrose (2004), do "play a fundamental role in the working of the universe" (Penrose, 2004, p. 67). We are reminded of the icon of The Magician (in Chapter 4) who can connect the opposites by the action of his "magic" wand. An imaginary number i is defined as the square root of minus one – a paradoxical contradiction indeed, considering that squared numbers are always supposed to be positive.

Descartes had a rather derogatory attitude towards imaginaries: it was he who first coined the name. There was no place for them in Newton's mechanistic philosophy either: he considered them plainly impossible. Leibniz recognized their intermediary character and positioned them at the ontological level between being and non-being. The true metaphysics of imaginary numbers was elusive even for Gauss. He however agreed that their geometrical representation establishes their meaning.

An analytical representation of direction is also possible, by means of a vector, or the directed magnitude that can be considered to describe transmission or prehension (Whitehead, 1978) as the act of taking and bringing home. It is the transversal communication across the levels which establishes directedness, and "a vector already indicates in which direction the new structure may be expected" (Jantsch, 1980, p. 46); that's why, as Peirce said, Thirdness is *governing* Secondness! Abduction, in its threefold psychological function as an insight, or intuition, or imagination, but also – logically – as an implicit inference, is modeled by means of the imaginary numbers i along the vertical axis of the complex plane (comprising the magnitude b) and complemented by discursive reason that manifests in verbal "language [as] always a form of action" (Dewey, 1925/1958, p. 184). It is modeled horizontally along the axis of real numbers a (Figure 10.2).

Together, and represented by vectors, that is, having in principle both mathematical and physical properties, they form a *triangle* on the complex plane. Vectors model natural entities, lines of force. In the context of philosophy of mind, Smolensky (1988, 1991) suggests a model of the connectionist network, in the framework of which the real medium of cognition is considered to be an "intuitive processor," mental representations are expressed by vectors, and mental processes are described by differential equations, not unlike Deleuze's conceptualizations of

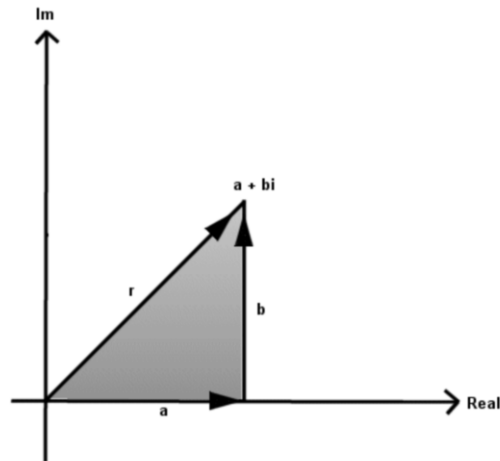


Figure 10.2. The diagram of abduction.

Ideas as differentials of thought (Deleuze, 1994; cf. Semetsky, 2005; 2006, 2008, 2009). A vectorial diagram, therefore, represents the dynamics inherent in abstract structure: it is an organizational, relational, pattern reflecting process-ontology: a process-structure (with a squiggle!).

In Whitehead's geometry, the very idea of the point is the point as irreducibly complex. Whitehead posited *one* world both without and within; this is a single world, yet multileveled or complex; sure enough, "a complex place" (Deleuze, 1990, p. xiv). The higher level of complexity encompasses the physical level in itself like two nested circles, not unlike the Pythagorean tetractys encompassing natural numbers which are inside the integers, which are inside the rationals, which are inside the reals, and the real themselves being just a line among the complex numbers populating the whole plane, notwithstanding an increase in dimensions.

The diagram is constructed on the basis of projective geometry, employing perspectival composition, which uses the technique of parallel projectors emanating from an imaginary object and intersecting a plane of projection at right angles (co-planar) to create images. In the context of Peirce's semiotics, Rene Thom (1985) presents a case of projected shadow as an example of structural isomorphism produced by interaction or coupling. It is light illuminating the original and casting the shadow as its image that itself performs the function of interaction. The formation of images is a manifestation of the universal dynamics that "allows the appearance of forms ... charged with meaning" (Thom, 1985, p. 280).

The complex point symbolizes the closure of the triangle on itself, in agreement with a genuine Peircean triadic self-referential sign; yet strictly speaking this point is akin to the vanishing point mentioned earlier in connection with the triangle argument (Chapter 6):

the principal sense of *ligne d'horizon* is the “vanishing line” on which all parallel horizontal lines in a perspectival composition would, if indefinitely extended, intersect The “projective geometry” associated with such compositions is ... echoed in Deleuze’s ... invocations of *lignes de fuite* and *points de fuite*, usually translated “lines of flight” and “points of flight”: the flight or escape from some constricting frame of action or experience is also, within this frame, a sort of “immaterial” vanishing through or beyond its limits, its event horizon (Joughin, 1995, p. 200).

In [Figure 10.2](#), the length a (in our three-dimensional classical world) is just a shadow or projection of the diagonal transversal line onto the horizontal axis, not unlike a Platonic copy as the image or shadow on the walls of the Cave. The phenomenal realm of the real numbers along the horizontal axis appears to be just a projection, a pale Platonic shadow cast by complex entities constituting the world of Ideas which are genuinely “real” in the Platonic sense. Ditto for Deleuze: the virtual and the actual are both real! As Lou Kauffman (1996) points out, it is quite “remarkable that domains imaginary with respect to arithmetic are virtually real with respect to geometry” (p. 293).

Abduction’s place is on the vertical axis because it is a jump, a leap in imagination after all. Abduction creates the magnitude on the vertical axis leading to *depth* in understanding as the very meaning of the unconscious idea. So in this model, thinking coexists with imagination, deduction with abduction – such complex logic being represented by complex numbers comprising an ordered pair $a+bi$ on the complex plane. Noddings invokes analogous mathematical heuristics in her book *The Maternal Factor* (Noddings, 2010) by means of the “mathematical depiction of the relational self as a ... set of ordered pairs representing encounters” (2010, p. 116).

An encounter – the threshold of the unconscious (or imaginary) dimension when its silent discourse (see Chapter 5) enters our cognition and can be expressed in propositional language – is the very convergence as the vectorial, geometrical, sum of both inferences represented by vectors, which are directional forces in the physical sense. As Deleuze pointed out, differentiation proceeds by virtue of “forces that are directive, directional” (Deleuze, 1993, p. 10). The vectors “add up” or converge. An ontological *general* then, as an “indispensable ingredient of reality” (Peirce, CP 5.431), will be modeled by a point on the complex plane expressed by a complex number as the vertex of the triangle that has both real and imaginary components, $a+bi$.

It is at this point where the “physical universe ceases to be merely physical” (Deely, 2001, p. 621) – that is, it becomes irreducible to its description in terms of classical physics – because this is where “[t]he realm of brute force and physical interaction as such ... becomes caught up in the semiotic web, and the universe becomes perfused with signs” (Deely, 2001, p. 621). This reality’s ingredients belong to the semiotic reality of signs, and the abductive leap demonstrates “the genesis of intuition in intelligence” (Deleuze, 1991, p. 111) invaluable for Tarot hermeneutic.

Abduction, as the magnitude along the vertical axis, creates the depth in the understanding that amounts to a sign's intelligibility because of (non-local) "contact with some sort of Platonic world" (Penrose, Shimony, Cartwright, & Hawking, 1997, p. 125), as stated earlier. To reiterate, Penrose's ontological argument posits the physical world as a *projection* of the Platonic world, and the world of mind arising from part of the physical world, enabling one in this process to insightfully – or abductively – grasp and therefore understand the meanings of Platonic Ideas.

The parallelogram of forces, as the geometrical method for the addition of vectors, amounts to the resultant vector r representing the mediated *indirect* communication – a transversal connection (Chapter 4) – in accord with the rules of projective geometry when two co-planar lines intersect. The resultant vector r as the sum $r=a+bi$ marks new emergent knowledge as different from prior knowledge, because abduction contributes to explicating what was tacit and implicit, therefore enabling a jump onto the succeeding level on a complex plane.

If we imagine positioning ourselves in the very midst of the resultant line, two perspectives may emerge: "Viewing a thing from the outside, considering its relations of action and reaction with other things, it appears as matter. Viewing it from the inside, looking at its immediate character as feeling, it appears as consciousness" (Peirce, CP 6.268); yet it is on the complex plane, exceeding the realm of real numbers, that the complementary matter~consciousness pair (cf. Kelso & Engström, 2006) showcases its full presence! To repeat, Peirce's semiotic categories of Firstness, Secondness and Thirdness are the "conceptions of complexity" (Peirce, CP 1.526).

Tarot edusemiotics is enabled by the leap towards an open future in the form of the abductive inference along the vertical axis of imaginary numbers that establishes the complementary above~below relation, allowing us to indeed insightfully grasp some of the True, the Good and the Beautiful inhabiting the Platonic world. Abduction triggers the interpretation of the subtle meanings implicit in the Tarot signs when invisible information is made visible (Chapter 8). This information as the magnitude b along the vertical axis of imaginary numbers inadvertently transforms the very *direction* the diagonal resultant vector would take. Such is the functioning of Tarot edusemiotics: the reading of images triggered by abduction ensures our access to the deep and complex, Gnostic, knowledge.

A novel abductive hypothesis might literally, as we can see from the [Figure 10.2](#), bring new direction into the line of reasoning, and the semiotic categories of Firstness and Thirdness, the two categories that are only marginal to formal logic, are capable of constructing new emergent knowledge at a different level of organization; yet where this Gnostic knowledge was always already subsisting in the form of imperceptible invisible information (Chapter 8) and would have stayed as such if not for the functioning of abduction in accord with the logic of the included middle.

The resultant vector represents the evolution of meaning as different from the strictly *a priori* knowledge, because abduction contributes to making explicit what was tacit and implicit. But also – and this is crucial – by itself enabling the

transition from the level of real numbers onto the succeeding level of numbers on the complex plane, it recognizes the *unfolding*, the *complication* of knowledge (to remind, *le pli* means the fold). Remember that deep Gnostic knowledge is symbolized as being folded or hidden in The High Priestess's scroll (Chapter 5); it was always posited as secret or esoteric.

Tarot readings initiated by abduction enrich human experience with the creativity and novelty that are precluded by the dyadic logic of identity. New knowledge is achieved by virtue of the triadic logic as semiotics. We are signs among signs, we are the relational entities: "we are [too] defined in relation, [even if] we are individuals – separate physical entities" (Noddings, 2010, p. 113). As separate physical entities we "belong" to the realm of Peircean Seconds; while as relational selves we by definition also encompass the whole gamut of affects (Firsts) together with self-reflective or critical thinking (Thirds) as "anchored in a relational ontology" (Noddings, 2010, p. 115).

The addition vector as a whole is not the sum total of its parts, because as a resultant, it is not a sum in the arithmetical sense, it is *in-between*; but importantly it points in the direction *determined* by our collateral experience (real axis) *together* with the flight of abduction representing the depth of insight, the strength of intuition, or the power of imagination; the three Is of holistic education embedded in Tarot edusemiotics. Taken together, they create *Sens* (meaning and direction) for a particular experience which therefore starts "making sense" for us literally.

Without the Firstness of abduction eliciting the virtual~actual or unconscious~consciousness complementary pairs, all knowledge would remain pretty sequential, empirically additive, because signs would stay at the level of Secondness, perhaps growing in magnitude solely because of arithmetical progression along the horizontal line but not being able to change direction geometrically. It is merely some prior knowledge that would have grown quantitatively as simple addition of "facts" (*in vitro* as per Chapter 9). However tacit and preconscious, implicit knowledge would lack any possibility of explication so as to enable novelty – represented now as a complex number, an ordered pair, pointed at by the end of the arrow of the resultant vector – to come into being, to enter cognition, to *become*.

It is Thirdness as mediation provided by the "third partner" or the interpretant in the Peircean triad that leads to the emergence of new objects of knowledge as newly created concepts, meanings, and values (*in vivo* or transdisciplinary knowledge, addressed in Chapter 9) due to which our experience becomes re-organized in accordance with Dewey's creed. Sure enough, meaning is defined as the organization of knowledge that takes the "form in which the proposition becomes applicable to human conduct" (Peirce, CP 5.425) in the unity between deep inner knowledge and ethical action.

In terms of contemporary information theory, a message's expression of its meaning, its worth or value, is defined as logical depth. The shaded area of the diagram as per [Figure 10.2](#) is equivalent to such logical depth (cf. Hoffmeyer, 1993). Semiotician Jesper Hoffmeyer labels logical depth "a semiotic freedom"

(1993, p. 66). In Peircean terms, freedom at the level of action, that is, as the category of ethics, is Firstness that manifests in the logical form of creative abduction. To reiterate, logic is not understood by Peirce as just an invention of clever logicians but is a *ratio* that already exists in experience, in life, in cosmos. And the logic of the included middle by its very definition creates a proportion, that is, *ratio*. A complete identity can never be totally preserved “in any advance to novelty” (Whitehead, 1966, p. 107); but the relation of analogy or likeness *can*. While “every actual entity in its relationship to other actual entities is ... in the continuum, ... [a]ctual entities atomize the extensive continuum [which] is in itself ... the potentiality for division; an actual entity effects this division” (Whitehead, 1978, p. 67), symbolized by the discrete sequence of Tarot images.

Tarot edusemiotics manifests a harmonious relationship between ethics and logic and also creates the conditions conducive for the semiotic freedom – for reaching the level of intelligibility and understanding referred to by Whitehead as the ultimate promise of knowledge. What we called destiny (see Chapter 3), then, should be defined as a relation or analogy between “ethical reason [and] experimental logic” (Peirce, CP 5.430): not a contradiction in terms but a complementary pair created by ethics and logic, thought and action, which is re-created by Tarot edusemiotics in practice, in experience. Human conduct is not reduced to just an observable behavior but “is a complex of inner thought and outer social interactions” (Deely, 2001, p. 622).

The relation between right reason and experiential logic is of course not strictly identical, but analogical, harmonious and coordinated; otherwise no novelty, diversification or growth of reason as genuine learning would be possible. Learning always takes place “in and through the unconscious” (Deleuze, 1994, p. 165) that reaches its very threshold as a limit case. Tarot edusemiotics allows us “to treat the thing as a unity” (Whitehead, 1966, p. 451) by connecting multiple experiential dots, thus making sense of experience. Tarot hermeneutic brings forth the feeling of “satisfaction” (Whitehead, 1978, p. 283) that Whitehead posited as a specific instance of freedom.

Whitehead’s metaphysics defines existence in self-structuring and self-ordering terms, and order and structure themselves are constantly evolving and developing. The structure of complex knowledge is presented in two modes: internally, or microscopically, as a goal-directed self-determined process, and macroscopically, within the objective field that comprises a series of occasions: “the world within experience is identical with the world beyond experience, the occasion of experience is within the world and the world is within the occasion” (Whitehead, 1961, p. 228) just like in the Hermetic formula, *as above so below*.

In terms of human perception, the unfolding that takes place during the Tarot edusemiotic process proceeds precisely in two modes, and the Tarot layout is equivalent to “the unfolded surface [which] is never the opposite of the fold ... I project the world ‘on the surface of a folding’” (Deleuze, 1993, p. 93). The complex Gnostic knowledge is folded, hidden in the High Priestess’s scroll (Chapter 5), and as such is represented by the ordered pair of real and imaginary numbers. Real numbers are enfolded into complex numbers. Potential tendencies,

or signs, become unfolded when actualizing themselves in experiences. Genuine knowledge is necessarily *embodied* in practice; informational patterns are *embodied* in Tarot images. Physicist Henry Stapp posits

the *physically described world* ... built ... out of objective *tendencies* – potentialities – for certain discrete, whole actual events to occur. Each such event has both a psychologically described aspect, which is essentially an increment in knowledge, and also a physically described aspect, which is an action that *abruptly changes* the mathematically described set of potentialities to one that is concordant with the increase in knowledge. (Stapp, 2007, p. 9, italics in original)

These objective tendencies, even if yet potential or virtual, are signs that, via the string of interpretants, tend to become other signs in the evolutionary process of semiosis. The world according to Peirce, we remember, is perfused with signs, it is composed of them. The complex plane as a whole contains what Peirce would have called *an admixture* or, in other words, the *weighted sum* of real and imaginary components, *a* and *bi*. As John Deely points out (2001, pp. 611-668), based on Aristotle's fourfold scheme, the Latins refined the concept of causality to account for the objective order of physical phenomena, thus abolishing, in a sense, the dualism between cause and reason. The external, ideal, causality – a type of blueprint, or plan, or design – is introduced from without, in contrast to the natural Aristotelian formal cause that organizes its material from within.

But in accordance with the science of coordination dynamics, these “causes” must have been coordinated. One more causal type pertains to the double role of observer or the human participant in the Tarot edusemiotics, in our context. Deely explains the functioning of such extra-ordinary causality:

On the subjective side, a thinker may try to turn attention toward or away from [the object]; but the measure of success lies not in the subjective effort but in the objective content surviving the effort. And since presenting objects is exactly the function of signs, the action of signs is a species of this ... extrinsic formal causality, called “specificative,” (Deely, 2001, p. 633)

Perception turns inwards and directs itself towards the would-be or future-oriented (see Chapter 9), objects of conception by means of the Firstness of insight, intuition, and imagination that – functioning as an abductive *inference* – must have some pre-conceptual informational content even if abduction appears to border on association and guessing. This quasi-cause is irreducible to either ideal or intrinsic formal cause, but retains, as embedded in the total system, *objective* significance for the human *subject*.

Peirce's categories of Firstness, Secondness and Thirdness demand the admixture of mind-dependent and mind-independent relations comprising “dream and reality, possibility and actuality” (Deely, 2001, p. 645) that together can solve the problem of intelligibility. *Tarot edusemiotics does precisely that*. The nonlinear causal circuit demands accessing a quasi-mind in nature in the form of a dialogic

interaction (not unlike Buber's relation between I and Thou) so as to ensure the sign's ultimate *relation to itself* as a condition for the sign's full intelligibility.

The triadic structure is a must: it has to comprise all three Peircean categories so as to reason (Thirdness) in a right, ethical, way, that is, analytically (Secondness), but also insightfully or intuitively (Firstness). Only functioning together would they form a genuine sign representing "synthetic consciousness" and enrich experience with a "sense of learning" (Peirce, CP 1.377), without which education would remain meaningless. The ultimate self-reflective relation that fulfills this condition of learning from experience is created in practice in the process of Tarot edusemiotics, which as such guarantees "*uberty* or richness of thought" (Deely, 2001, p. 627).

Each "actual entity is seen as a process; [and] there is a growth from phase to phase" (Whitehead, 1978, p. 283), from pattern to pattern along the educational and learning journey comprised by Tarot images. The action of signs reaches toward a level of reality over and above the reductive Secondness, which is habitually considered as "the whole truth about existence" (Deely, 2001, p. 627). To repeat, synthetic triadic logic is an *ethics* of thinking (cf. Deely, 2001, p. 622), which in semiotic terms is inseparable from human conduct, that is, ethics as the *logic* of doing; the circularity of evolutionary Thirdness having provided conditions for the flight of abductive inference at the level of "practical, experimental effects" (p. 617).

In fact, an abductive guess is essentially an experiment, an experiment on ourselves as signs embedded in semiosis in the process of becoming-other-signs. It is timely, in this context, to posit this "untimely" question: "Does the school, as a system, afford at present sufficient opportunity for this sort of experimentation?" (Dewey, 1959, p. 56). The answer continues to be, unfortunately, unequivocal. Still, the conceptualizations presented in this book must in future change the answer to the affirmative.

Structured by sign-relations, human experience is an expression of a deeper semiotic process. Because every sign conveys the general nature of thought, and Thirdness is ultimately a mode of being of intelligence or reason, generality does come about from a quasi-mind "located," in our model, on the complex plane. Peirce referred to such quasi-mind, in quite a Platonic manner, as a repository of ideas or significant forms. Signs are capable of exchanging information; they *are* this invisible information transmitting something of the thought's general nature. Due to interpretation these archetypal *generals* can be transformed into significant meanings, which cannot be reduced to either "merely a physical [or] even merely a psychical dose of energy" (Peirce in Deely, 2001, p. 629).

Tarot edusemiotics does overcome this psychophysical dualism, fulfilling as such Wolfgang Pauli's dream of neutral symbolic language. It is abduction, germane to readings and interpretation that insightfully grasps the moral meanings implicit in the quasi-mind, the *Nous*, as *primum cognitum*. Therefore "a *transcendental relative*" (Deely, 2001, p. 619) is always already *immanent* in perception and just needs to be *intensified* so that we become able to perceive "the

most imperceptible [yet] contained in a life” (Deleuze & Parnet, 1987, p. 3), in experience, due to an intensification of consciousness (see Chapter 6).

Aristotle, when attempting to solve Meno’s *aporia*, denounced Plato’s doctrine because of the absurdity of “having the starting-points” (Olszewsky, 2001, p. 141) for knowledge and instead proposed that the first truths “should be arrived at by induction from experience” (p. 142). The gulf between intuition and induction appears to be unbridgeable and the dilemma unsolvable unless we grant that abduction performs both functions: it is both psychological immediacy and logical mediation that, as we already pointed out in Chapter 2, constitute a paradoxical “mediated immediacy” (Peirce, CP 5.181).

Olszewsky (2001) presents Aristotle’s middle term as a bridge between subject and predicate and contrasts it with the supposedly “unmiddled” first starting points that “must somehow be temporally and logically immediate” (p. 142). So the paradox stays put. Olszewsky’s interpretation of Aristotle’s *Posterior Analytics* arrives at the conclusion that the rational cannot be reduced to a solely conscious inference (p. 154). *This very thesis has been elucidated throughout this book.* Tarot edusemiotics is *not* irrational or illogical. It is rather, in Gebser’s terminology, *arational* (Chapter 6), and transcending narrow instrumental rationality. Reason is much broader and more intense than the isolated private mind of the Cartesian subject.

At the psychological level, abduction as an unconscious inference – yet having a logical form, as proposed by Peirce – is intuition, which blends into the *Nous* of the intellectual knowledge. In fact, the generality of *Nous*, “located” on the complex, virtual, plane, contrary to the horizontal or merely actual plane, is what motivates and informs abduction because when “[s]tripped of its thirdness, the sign slips back into the dyadic order of mere actual existence” (Deely, 1990, p. 35). The triadic quality is intrinsic to Tarot edusemiotics; it is only through “a derivative way” (p. 35), which takes the form of projection and the progressive different/ciation of the initially undifferentiated field, that signs do express the deeper, virtual reality.

The virtual is complementary to the actual, it is not opposed to it; these bipolar terms of a harmonious, coordinated relation are united via the dynamics expressed in the logic of the included middle. In general terms “[t]he dynamic unity of opposites can be illustrated with the simple example of a...motion and its projection (onto a line). The circular movement will appear as an oscillation between two opposite poles, but in the movement itself the opposites are united and transcended” (Capra in Kelso & Engstrøm, 2006, p. 74). And the ubiquitous symbol for such oscillation, which itself performs a balancing, harmonizing, function is the squiggle relation, “~,” as a specific syntax of Kelso and Engstrøm’s (2006) science of coordination dynamics.

The Tarot layout is a projection of the virtual reality of the archetypal, informational, patterns in the form of Deleuzian surface effects. Salanskis (1996) noted that Deleuze anticipated what contemporary cognitive scientist “Jean Petitot now calls *morphodynamic* ideas. ... Petitot himself has often drawn attention to the visionary and profound character of Deleuze’s presentation of the notion of structural multiplicity” (Salanskis, 1996, pp. 58-78), that is, the conception of

signs. The emergence of a particular structure, such as one embodied in a Tarot layout (Semetsky, 2011), accords with the fact that “discrete structures emerge via qualitative discontinuities” (Petitot, 1995, p. 231) due to dual, analogue-digital, codification. Petitot points to syntax established “as the expression of a possible thought ... by one of these cognitive archetypes” (p. 229). Such syntax, the notation for which, in the framework of coordination dynamics, is a squiggle “~,” subscribes to the logic of the included middle as semiotics, the science of signs.

The static layout of Tarot images represents an instance of *movement-image-time* as a derivative of past-future into the *living present* (cf. Williams, 2011) by virtue of a “jerk,” as we said in Chapter 9, a term used in complexity and chaos theory, that in physics indicates the rate of change of acceleration with time. We don’t know in fact the exact order (the degree of differentiations) of a hypothetical derivative in the case of Tarot edusemiotics or its precise “magnitude of thirdness” (Deely, 1990, p. 102): the “jerk” is used here as a generic “derivative” embedded in the transformative process of semiosis as the action of signs-becoming-other-signs.

The movement “jerks” when momentarily arrested by the dynamic flow of semiosis whilst being projected onto the static layout of images. The transformation involved in such projection may be much more complex; even if the factual degree of the ontological compactification remains unknown, it is the abductive leap taken by our thinking that establishes “a new threshold, a new direction of the zigzagging line, a new course for the border” (Deleuze, 1995, p. 45).

Stapp (2007, p. 10) points out that John von Neumann, in his mathematical formulation of quantum mechanics, specifically coined “intervention” as a term describing the effects of free choices upon the physical world; yet, these free choices are themselves dependent on reasons, values and the unconscious motivations. For Deleuze, as for Pauli before him, “the unconscious belongs to the realm of physics” (Deleuze & Guattari, 1983, p. 283); to the world of complex Nature that exceeds observable physical reality. The virtual field of the collective unconscious is Deleuze’s transcendental field projected onto the plane of immanent consistency that is “laid out” in the process of Tarot edusemiotics, forming as such a complementary immanence~transcendence pair. This field is always already informational (Chapter 8).

The spontaneous, intervening, abductive leap creates a link between the physical world of *facts* and the world of objective meanings or *values*: Whitehead conceived of facts as being creative or valuative due to the principle of creativity as a precondition for novelty. The semiotic worldview posits the world as evolving, that is, it cannot be totally causally closed as in classical mechanics. Stapp (2007) compares and contrasts classical and quantum mechanics. Both have room for human action, but at the classical level human action appears as fully determined while at the quantum level there is a gap due to Heisenberg’s uncertainty principle; yet the advantage of the gap is such that it opens “at the level of human actions, a range of alternative possible behaviors” (Stapp, 2007, p. 9). The range of alternatives and options becomes explored during the process of Tarot hermeneutic

when interpreting a particular layout of images that reflects a specific problematic situation embedded in real experiential events (Semetsky, 2011).

In contemporary physics event is defined as an actualized possibility of this event's objective tendency, or its *potentia*, to occur. As we said in Chapter 4, Whitehead's philosophy posits actual occasions as spatio-temporal events endowed with experience that, albeit dim and not fully conscious, nevertheless defies the sharp bifurcation of nature into mindless matter and conscious mind. Through abduction, the unconscious reaches the level of awareness; and "properties can pass from definiteness to indefiniteness and conversely" (Shimony, 1997, p. 151). The unconscious becomes conscious when we position ourselves within the very Thirdness of interpretation as though along the resultant vector on the complex plane.

The semiotic triangle in Figure 10.2 has closed on itself – but, and this is important – at a different level of organization. A complex plane would not be complex without the axis of imaginary numbers, but would remain a simple Cartesian grid preventing us from understanding how new objects of knowledge may come into existence and leading to the infamous Socratic paradox forever remaining a paradox. Abduction creates – or rather re-creates by making it explicit – new knowledge; however, as noticed by Noddings (1999) while "abduction is involved... so are deduction, induction, and language moves" (p. 84). If abduction was the sole means, no new knowledge would ever come into play because of the absence of integration, of closure. It would be impossible to construct a closed figure, a triangle representing an area on the plane as an *integrated*, self-referential structure of knowledge.

The leap of imagination, a flash of insight as a sign of Firstness, if it were to take place, would sink back into a dyadic existence, back to the point of its own departure and, worse, we would not notice this. It wouldn't make a difference to us because there would not be any difference potentially capable of making a difference as its own derivative in the first place. Firstness, by definition, does not refer to anything else: to repeat, the abductive inference bypasses our awareness and the mind remains unaware where and when abduction begins and ends. Difference has to be perceived, felt, seen, heard, touched, acted upon; only as such it is capable of making a difference by being integrated into reflective thinking. The latter becomes enacted at the level of action in the experiential world, in other words, at the level of *embodied cognition* enabled by Tarot edusemiotics. But without Firstness, Secondness is impossible, the categories are *cardinal* – and this Peircean finesse is usually ignored.

The fact that the triangle in Figure 10.2 closes on itself makes the total cognitive structure genuinely self-referential, even as we encounter the different levels of knowledge with complex numbers encompassing both real and imaginary. It is the deep understanding (see Chapter 5) of meanings as a province of *in vivo* knowledge (Chapter 9) that enables us to realize that sensible things are particular reflections of universals, or Peirce's generals, "residing" in the intelligible realm. Plato's famous division first presented as the *Line* in the *Republic IV* (509e-511e) was indeed an indication of his envisioning the multiplicity of levels of knowledge

even if he did not have the mathematical tools available to us today to sufficiently describe them.

Without abduction (as Firstness) and a hermeneutic interpretation (as Thirdness) the realm of knowledge would be reduced to its superficial and pale aspect, symbolized by the Shadow projected on the walls of the Cave by deep genuine Gnostic knowledge. Plato, calling upon us to give up our sole reliance on sense-data and instead to use the power of reason to examine the intelligible world, perhaps anticipated the function of what Peirce would later call abduction and which connects both realms. The semiotic triangle closes the Platonic gap between the sensible and the intelligible. Because the growth of reason consists “in embodiment” (Peirce, CP 1.615), in practical manifestation, in this semiotic, communicative, and in-formational/trans-formational process the sensible world becomes intelligible while also affording a degree of sensibility to the intelligible world.

To recapitulate, Plato’s theory of recollection states that we always already possess all the knowledge unconsciously and can simply recognize given truths. Well, not exactly, even if the slave boy in the *Meno* dialogue appears to possess some kind of “tacit precognition” (Magnani, 2001, p. 13). If knowledge is incompatible with prior learning then there is no foundation on which to build any new knowledge. The mathematics of the analytic geometry on the complex plane not only solves the learning paradox by embodying the logic of the included middle in which triadic semiotics is grounded, but also confirms Plato’s insight with regard to what he dubbed *mathematicals* as necessary intermediaries between archetypal Ideas and sensible particulars.

The diagram in [Figure 10.2](#) is a visual model for a genuine triad representing the edusemiotics of Tarot. Solely deductive reasoning is insufficient in the process of Tarot readings; they require an abductive line of flight to enable a mode of transversal communication between the levels. Abduction represents “the birth of stammering, the outline of a broken line which always sets off at right angles” (Deleuze & Parnet, 1987, p. 7) as the orthogonal projection, indeed, of the complex point, representing deeper, Gnostic, knowledge. According to this model and, importantly, without any recourse to either conscious memory or a miraculous moment, the slave boy in the *Meno* dialogue should become capable of lifting “each faculty to the level of its transcendent exercise” (Deleuze, 1994, p. 165) when he starts to apprehend signs in the learning process.

This immanent~transcendent relation is fundamental for Tarot edusemiotics and is a necessary condition for genuine learning equipped with a sense of novelty and wonder. To establish such a complementary pair in our experience requires affective conditions created during such intensified, esoteric (in Deleuze’s words) experiences as the hermeneutics of Tarot. The diagonal line, perhaps this very line along which, as Dewey said, “we are carried out beyond ourselves to find ourselves” (Dewey, 1934/1980, p. 195), over and above our merely horizontal existence, is necessary for the dialogic, semiotic, communication across the levels. Any object of experience contains potentialities as virtual or implicit meanings, even if they are not yet actualized or made explicit. As Peirce said,

All thinking is dialogic in form. Your self of one instant appeals to your deeper self for his assent. Consequently, all thinking is conducted in signs that are mainly of the same general structure as words; those which are not so, being of the nature of those signs of which we have need now and then in our converse with one another ... These non-symbolic thought-signs are of two classes: first, pictures or diagrams or other images (I call them Icons) ...; ... secondly, signs more or less analogous to symptoms (I call them Indices) ... The substance of thoughts consists of these three species of ingredients. (Peirce, CP 6.338)

It is in Tarot edusemiotics that we see the presence of all three types of signs: icons, indices, and symbols. We are using an unorthodox semiotic methodology as the core of the complementary art~science pair when interpreting Tarot images and symbols in our real practice. By “reading the signs [we are] decoding the secrets of intelligent alien life within and without us” (Ansell-Pearson, 1997, p. 4). The diagram of abduction at once dissolves and affirms the paradox of inquiry. It is Thirdness as a diagonal transversal line represented by the resulting vector r that enables the coming into being of new objects of knowledge; it casts its own shadow a as a projection on the horizontal axis as if in Plato’s Cave.

A dyadic relation alone would not lead to the creation of meanings: a sign, “to actualize its potency, must be compelled by its object” (Peirce, CP 5.554) via the abductive leap from the unconscious towards being integrated into consciousness. The diagonal or transversal line casts its shadow on the horizontal axis, appearing as if from nowhere – via projection – because it exists at a level of complexity exceeding the realm of real numbers. In the case of a dyad, the logic of identity as the excluded middle indeed excludes, by its very principles, the Thirdness of mediation expressed as a resultant vector or a diagonal transversal line in the parallelogram of forces that thereby creates a closed area as the operation of integration.

The semiotic triangle in [Figure 10.2](#) must self-referentially close on itself because “a complete, an integral act of thought requires that the person making the suggestion (the guess) be responsible also for reasoning out its bearings upon the problem in hand” (Dewey, 1991, p. 98). Such a problem, a perplexity encountered by the Fool at the edge of the abyss (Chapter 1) as an instance of real experience, in fact initiates this abductive guess by provoking a sense of wonder and a response to “the *thaumasis*...that effects an imaginative fabric of symbolic representations of experience” (Anton, 2001, pp. 11-12) as the genuine function of signs. Hence information in a world “perfused with signs, if ... not composed exclusively of signs” (Peirce, CP 5.448) *must* come to us in a fully Platonic manner, both as the intelligible (yet invisible; cf. Chapter 8) and the sensible (or visible), and we impoverish ourselves whenever we limit our knowledge to immediately perceptible sense-data.

The function of projection is imperative: if the “conception of the role of experience within nature means that ‘human affairs, associative and personal, are projections, continuations, complications, of the nature which exists in the physical

and prehuman world,' [as] Dewey writes" (Campbell, 1995, p. 77), then Tarot edusemiotics as the projection of real human experiences serves as a "means of detour" (Dewey, 1934/1980, p. 4) represented by a self-referential relation necessary for evaluating and understanding this complex multileveled experience. Projection is a means of temporal connection too: "projection and reflection, going directly ahead and turning back in scrutiny, should alternate" (Dewey, 1991, p. 217) if they are to form the self-referential structure of a genuine sign such as the Tarot semiotic system.

The feature of double codification in Tarot edusemiotics (analogue *and* digital, or virtual *and* actual) relates to a specific problem that "for both Whiteheadian process and quantum process is the emergence of the discrete from the continuous" (Stapp, 2007, p. 88). Stapp (2007) posits the hypothetical mechanism of a spontaneous quantum reduction event associated with "a certain mathematical 'projection' operator" (2007, p. 94) whose action seems to be direct (via projection) but which also causes "indirect changes," producing "faster-than-light" effects. These effects indeed manifest themselves in Tarot edusemiotics, not unlike a proverbial and spooky action-at-a-distance. Abduction crosses over the gap between the realms of the sensible and intelligible, or visible and invisible. Reading and interpreting the Tarot images allows us to see the range of possibilities in the actual layouts of pictures that inform our choice of action.

Equally important is the necessity of making right choices; that is, choosing a particular, ethical, course of action. Because of the trans-relational attitude (addressed in Chapter 9), which becomes developed in the course of going through the school of life via Tarot edusemiotics, we acquire phronesis with respect to understanding the meanings for experiences that make us act wisely. We achieve holistic intelligence which should allow us to choose between alternatives in an ethical manner. We become capable of overcoming the crisis in perception, the urgency for which was emphasized by Fritjof Capra (Chapter 9); sure enough, the art~science of perception consists in our developed ability to acknowledge the range of possibilities so as to become able to "refer the present to consequences" (Dewey, 1925/1958, p. 182); to establish in practice a complementary present~future pair.

Tarot edusemiotics illuminates the moral and epistemic context of a particular situation; as Iris Murdoch said, we can only make a choice within the world that we are able to perceive. The ability to perceive is at once a constraint and a central aspect of moral experience and, by implication, of moral education. The range of perception is itself a constraint limiting our choices. However, the expanded perception and the intensified mode of consciousness achieved by Tarot edusemiotics lead to choosing between alternatives and making a morally good choice amidst self~other relations. Our learning by means of the interpretation of Tarot images and, accordingly, revaluation of experience constitutes "an apprenticeship in signs" (Bogue, 2008) that enables one's perception to greatly increase in power, thus perceiving something previously imperceptible.

In the virtual ontology of semiosis, signs are potential tendencies that become actual via their interpretants in a Peircean triad. The logic of the included third

means that there is no simple addition of information (such as along the horizontal line in our scheme). As we said in Chapter 4, this is a process of summation rather than numerical addition. Summation forms a logical product akin to multiplication; signs are multiplicities that can produce power series. As Peirce pointed out, “what is growth? Not mere increase” (Peirce, CP 1.174)! The real and imaginary dimensions complement each other; indeed the transversal diagonal line in the diagram is constructed “not so much ... in their opposition as in their complementarity” (Deleuze & Parnet, 1987, p. 131).

The diagram of complex knowledge in [Figure 10.2](#) demonstrates “a constitution of a new plane, as of a surplus value” (Deleuze & Guattari, 1987, p. 313); a complex plane where a realm of imaginary entities is as if “added” to real numbers “populating” a horizontal line. An operation of simple addition would maintain the linearity of the process; the logic of the excluded middle. But a triadic relation is embedded into the nonlinear dynamics of experience behind the action of signs, in accord with the logic of the included middle, the included Third. Virtual meanings inhabit empirical events; and the practical task – indeed enabled by Tarot edusemiotics – is “to set up ... to extract” (Deleuze & Guattari, 1994, p. 160) the meaning of the particular experience embedded in events.

Experience is not limited to what is immediately perceived by the senses. Tarot edusemiotics develops the *sixth sense* realized in intuition, imagination, and insight, as three Is of holistic education awakened by using abduction, which takes us to the depths of Gnosis, thereby also “transgressing sacred and profane boundaries” (Lewis & Kahn, 2010, p. 1). It is holistic human intelligence partaking of the symbolic dialogical conversation with the *Nous* that enables us to read, interpret and even create anew the elusive signs permeating experience. Intuition – or *noesis* as an operation of the *Nous* – represents the highest portion of human knowledge; abduction takes us to those heights. It enables us to “intuit” the character and nature of such extra-ordinary and intense experience, habitually considered mystical. Deduction is necessarily preceded by “more unconscious and tentative methods” (Dewey, 1991, p. 113) such as abduction, which generates a tentative hypothesis as an implicit premise from which we jump to conclusion without a string of slow, deliberate, logical steps.

Tarot edusemiotics parallels Deleuze’s radical method of transcendental empiricism, which “knows how to transcend the experiential dimension of the visible” (Deleuze, 1990, p. 20) and establish a relation by connecting in practice with the realm of invisible but nevertheless intelligible. To reiterate, the underground sprout of a rhizomatic plant, as a metaphor for a complex relational network, has a stem, the oldest part of which dies off while simultaneously rejuvenating itself at the top. This naturalistic metaphor for creativity is potent because it is precisely when the old is dying off that the new may be created, at the meeting of the old and new, as we said earlier, citing Dewey.

It is at this critical turning point that a rhizomatic line of becoming zigzags in a new direction, therefore betraying “the principle of linear progressive ‘building up knowledge’” (Deleuze, 1995, p. 139) as the simple addition prescribed by the *in vitro*, disciplinary, mode of knowledge that excludes mediation or interpretation

and deprives experience of its meaning, or value, dimension. An intensified, affective, perception overcomes the narrow knowledge of facts and perceives the virtual-signs-in-their-actually-becoming-other in the midst of the relational dynamics signified by the squiggle “~” embedded in Tarot. The intelligent method of Tarot edusemiotics overcomes what ordinary logic would qualify as the madness of mysticism.

Peirce posits abduction as indispensable for growth in intelligibility; abduction borders on paradoxical “instinctive reason” (Peirce, CP 6.475); still it conforms to, and is informed by, the greater “continuum of feeling” (Peirce, CP 6.152) as living, semiotic, cosmic reality. Affects, feelings, desires, and values are implicit in the virtual reality of the archetypal informational patterns. The complex plane always already is; it is just that we are unable to access it without the flight of abduction. As Peirce said, “In the beginning – infinitely remote – there was a chaos of unpersonalized feeling” (Peirce, CP 6.33); such gut feeling as abduction is the first, virtual, “starting point” in the cosmic growth as well.

The dynamic understanding of meanings must be – by the logical necessity of the included middle as the natural *ratio* embedded in life processes – enriched and expanded with affect/desire/love, therefore seemingly blending into Aristotle’s *Nous poietikos*. Sure enough, *phronesis* or practical wisdom is embodied in ethical action performed by a wise, virtuous person and by necessity includes a special sensitivity and sensibility (cf. Baron, Pettit, & Slote, 1997; Varela, 1999); yet how such sensibility operates has never been made clear in philosophical or educational literature.

The model of reasoning represented by [Figure 10.2](#) clarifies, in the context of Tarot edusemiotics, two persistent problems. How is epistemic access to the Platonic world of Ideas made possible? What foundation if any is there for moral knowledge? To remind, Roger Penrose posited the connection between the three worlds, mental, physical and Platonic, as mysterious and defying a full-fledged explanation. The self-referential structure of complex knowledge grounded in the ontology of the virtual enables a glimpse into the functioning of *phronesis*. Wisdom as the highest intellectual virtue would partake of actualized potentiality, in Aristotelian terms. Potentialities as virtual tendencies “inhabit” the Platonic world of Ideas.

The corollary is another inseparable immanent~transcendent triad constituting the Cosmos itself: Self, Nature, God, in which each term in the triadic relation is defined by a “reciprocal presupposition” (Deleuze & Guattari, 1987, p. 109) to each other, that is, functioning on the basis of both bottom-up and top-down “reciprocal causality” (Kelso & Engström, 2006, p. 115) embedded in the complementary nature in which human and post-human dimensions form a complementary pair. Once again, the rationalist causality that associates events on a direct cause-effect basis is complemented by the possibility of bringing these events together as to establish a kinship between them as analogy, sympathy or correspondence. Tarot edusemiotics defies the impossibility of *coincidentia oppositorum* or, in other words, and contrary to negative theology, it does solve the

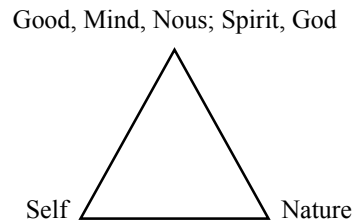


Figure 10.3. A triadic relation that embraces a spiritual dimension of experience.

Neoplatonic problem of knowing oneself and God as One, as a unity, by virtue of a triadic semiotic structure (Figure 10.3).

The spiritual world is semiotic to its core in its function as a necessary relation, the included Third that brings together the realm of the intelligible and the realm of the sensible; the mental and physical worlds form a complementary pair in which the Platonic world of Ideas plays the role of a reconciling relation, a squiggle. The spiritual world in the triad of the Large, the Small and the Human Mind (Penrose, et al., 1997) partakes of Henry Corbin's *Imaginal* world as a *mecocosm* (Semetsky, 2011) between micro- and macro-worlds. The semiotic reality of the spiritual, Imaginal, world is embodied in Tarot images that we read and interpret.

Tarot edusemiotics establishes dialogical communication between worlds, just like the mythical Hermes, the messenger of the gods, who connects the realms of the human and the divine; hence forms a complementary human~divine pair. The language of Tarot images expresses Nature as "contingent, excessive, and mystical" (Deleuze, 1994, p. 57), surpassing its mechanistic description. The notion of contingency is related to the complementarity of the virtual~actual pair. The virtual gives rise to a particular actuality; yet it may very well have given rise to other actualities. Contingency however is not the same as arbitrariness. The virtual can unfold into several "things" but it cannot unfold into just anything. Nature exceeds the observable world of physical facts and includes its own virtual dimension, which however is never beyond experience and hence understanding and intelligibility. The potential for growth in intelligibility – the very process of semiosis – is unlimited. That's why the Fool embedded in the World can always go further in his search for "more intense, disciplined, and expanding realization of meanings" (Dewey, 1916/1924, p. 417).

Abduction takes time, but this time interval is imperceptible: hence an abductive leap borders on a direct – and therefore considered *mystical* – contact with the divine. But it is our growth in reason that moves us closer to the divine in forming a complementary human~divine pair. Our own transformation takes place along the vanishing line of flight *at the very limit of human experience* – yet within intensified and amplified human understanding, not over and above it; in fact "over against any cognition, there is an unknown but knowable reality" (Peirce, CP 5.257), which needs a series of interpretants to ultimately manifest in understanding.

Reality itself is a quasi-utterer of signs understood as potentially interpretable phenomena; a human utterer is in fact an intermediary that post-human reality *speaks through*, enveloping human subjects in itself as equal participants in this I~Thou dialogue. This obvious circularity of self-reference – modeled by the semiotic triangle that closes as if on itself yet on a higher, complex, plane of organization – is what makes “esoteric experiences” (Deleuze & Guattari, 1994, p. 41), including that of Tarot readings, *seem* esoteric or mystical to us.

Aristotle’s *loving Intellect* is still subject to philosophical disputes (cf. Anton, 2000). What is important, however, is that it blends inner knowledge with an impersonal, cosmic and transcendent, entity as both “think” each other. In the context of negative theology, Kearney (2001) elucidates a philosophical problem that refers to the human ability of knowing oneself and God as One and comments that “Creatures need a Creator and a Creator needs creatures” (p. 103). In the philosophical literature the positive answer to the problematic of knowing oneself and God as One is usually relegated to the mystical realm; in the realm of concrete practical experiences the answer would be negative, based on the apparent impossibility of connecting the human with the divine in real life because such a connection appears to be “beyond the limit of all human understanding” (p. 104).

This book has not only demonstrated that the limits of human understanding can and should theoretically be expanded, but has presented Tarot edusemiotics – grounded in the science of signs and coordination dynamics – as a *practical means for realizing this theoretical possibility*. Mysticism and science also form a complementary pair. The reconciling relation “~,” as the core of coordination dynamics, plays the role of what Jung called the transcendent function which is central to Tarot edusemiotics: the “tendencies of the conscious and the unconscious are the two factors that together make up transcendent function. It is called ‘transcendent’ because it makes the transition from one attitude to another organically possible” (Jung, CW 8, 145).

Significantly, Tarot edusemiotics should not be confused with the contemporary “New Age controversy [which simply] explains away” (Kearney, 2001, pp. 47-48) transcendence, but instead grounded in the fact that it is human action in our very practice that can “make the world a more just and loving place, or not to” (p. 5). This injunction (“or not to”) is significant. A love for Gnosis is a necessary condition but it is not sufficient. Human service at the social level is yet another condition.

In the preceding chapter we made the case for educational policy implications derived from Tarot edusemiotics. The unity of theoretical knowledge and practical experience not only acquires a deeper ontological significance but, importantly, *phronesis* – that is, our knowledge of how to act ethically in the social world – becomes almost a guarantee under the condition that we learn how to recognize and enable the functioning of transversal communication in our practical life, how to utilize the theoretical concept of the logic of the included middle in our practice, and how to understand and interpret the language of signs that perfuse our experience. These three *how to* questions are answered by Tarot edusemiotics

whenever “an imaginative projection” (Dewey, 1934/1998, p. 407) succeeds in reaching out to the Platonic *Good*.

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CHAPTER 10

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EPILOGUE

GHOSTS IN THE MACHINE?

Peirce asked, “what *must be* the characters of all signs used by a ‘scientific’ intelligence, that is to say, by an intelligence capable of learning by experience” (CP 2.227; Peirce’s italics). This question demands an answer. These symbolic characters are represented by Tarot images, each one telling us a story of this or that aspect of human experiences, from which we can and should learn. Scientific intelligence, in Peirce’s conception, is informed by semiotics as the *science* of signs and is inseparable from experience, in fact determined by it. By both informing and trans-forming human subjectivity, Tarot edusemiotics complements the creative *art* of hermeneutic interpretation (Semetsky, 2011) with the *science* of signs. The art~science of Tarot is grounded in the logic of the included middle. The included Third of an interpretant in a Peircean triad is symbolized by the squiggle “~” as an unorthodox syntax describing the coordination dynamics embedded in the relational process~structure of the Tarot semiotic system.

Structured by sign-relations, human experience projected in its symbolic form in the *silent discourse* of Tarot images is an expression of a deeper semiotic process connecting nature and culture, with which we are contemporaneous. Peirce specified the community of practice as being unbounded by space or time:

Finally, as what anything really is, is what it may finally come to be known to be in the ideal state of *complete information*, so that reality depends on the ultimate decision of the community; so thought is what it is, only by virtue of its addressing a future thought which is in its value as thought identical with it, though *more developed*. In this way, the existence of thought now depends on what is to be hereafter; so that it has only a potential existence, dependent on the future thought of the community. (Peirce, CP 5.316; italics mine)

With respect to the future thought, emphasized by Peirce, it is Tarot edusemiotics that brings the future into the living present. The ontological primacy of relations renders invalid the dualistic split between mind and world, between past and future, between self and other, between art and science. The relational dynamics is not “subordinate to the verb to be” (Deleuze & Parnet, 1987, p. 57) but embodies the verb “to become” in the interpretive process of signs-becoming-other, more developed, signs. It is Tarot edusemiotics that can educate us and lead us out (significantly, *educare* literally means to lead out) of our old habits of the mind and behavior and towards understanding ourselves and others so that we recover the natural relation embedded in the complementary self~other pair and eventually reconcile often “polarized and conflicting mind-sets” (Kelso & Engstrøm, 2006, p. xvi) at the social level.

EPILOGUE

The patterns of experience reflected in our habits of the mind and action alike are embodied in Tarot images (Semetsky, 2011). By understanding their symbolic language of expression we become capable of deep self-knowledge, thus encompassing what Jung called self-education in the process of individuation, and becoming whole, integrated, human beings. We understand, significantly, that individuation is not identical with individualism; rather, we have a chance of becoming our authentic Selves via multiple encounters and relations with others within the multiplicity of learning experiences, the unconscious and affective dimension of which becomes fully integrated into consciousness.

Importantly, we can understand the very dynamics of cooperation involved in the transformation of habitual patterns so as to become able to eventually change those very habits and attitudes that led to their formation. As Noddings pointed out, our habits as “[d]eeply rooted evolutionary characteristics can and do change, but deliberate change is extremely difficult and may take a long, long time” (Noddings, 2010, p. 205). It is due to the relational self-organizing patterns comprising the dynamics of Tarot edusemiotics that we can enter the very process of semiosis, of which we are a part, thereby becoming able to transform our habits.

We can create alternative patterns of behavior by participating in the process and, as Ervin Laszlo (1991) noticed, becoming able to steer the process – but only if we can know its very nature. By means of Tarot edusemiotics we can become conscious of the evolutionary process of semiosis across the perceived boundaries between nature, culture and the human mind. When the signs as self-organizing “patterns are perceived in a process, there is the possibility of extrapolation. Whatever the nature of the pattern, it provides a handle for grasping something about the way it will unfold in the future” (Laszlo, 1991, p. 50).

It is under this condition that we can engage in semiosis *cooperatively*, in accord with the science of coordination dynamics describing the evolving laws of “the complementary nature [as] the name we have given to nature itself” (Kelso & Engstrøm, 2006, p. 251). As embedded in the flow of semiosis reflected in Tarot edusemiotics, we “[h]uman beings can [not only] be thought of quite literally as the complementary nature *observing itself*” (p. 253) conceptually; we also become capable of observing ourselves empirically, in our very practice, in experience, by immersing in the symbolic network of relations in the unorthodox epistemic process of “reflection and self-reflection... in all manifestations of human life” (Jantsch, 1975, p. 149).

These manifestations of human life are typical universal experiences that are symbolically represented in the array of Tarot images. Even as human existence is

locally conditioned by a multitude of biographical, cultural and historical factors, [it is still] subsuming all this at a deeper level [at which there are]... universal patterns or modes of experience, archetypal forms that constantly arranged the elements of human experience into typical configurations and gave to collective...psychology a dynamic continuity. These archetypes endured as basic a priori symbolic forms while taking on the costume of the

moment in each individual life and each cultural era, permeating each experience, each cognition, and each world view. (Tarnas, 1991, p. 385)

The program of education in these basic symbolic forms or, in other words, in *signs* as self-organizing relational patterns – education as *edusemiotics* – is however missing. Why hasn't the logical and law-based Peircean science of signs as semiotics in general and, by implication, Tarot edusemiotics in particular, become our new habit of the mind? Why do we habitually subscribe to the dualistic worldview? Old habits are resilient and, even if they are subject to evolution and growth, tend to become fixed and rigid while “issuing a command to one's future self” (Peirce, CP 5.487) that, as such, tends to behave in a repetitive manner according to a gamut of unconscious habits. Worse, we habitually believe in the righteousness of our actions, without ever questioning them, because “belief is...a habit of mind essentially enduring for some time, and mostly (at least) unconscious” (Peirce, CP 5.417).

It is through the edusemiotics of Tarot images that we can critically examine our beliefs when they are brought to consciousness in the hermeneutic process of reading and interpretation (Semetsky, 2011). Peirce acknowledged the somewhat “occult nature” (Peirce, CP 5.40) of the unconscious, “of which and of its contents we can only judge by the conduct that it determines, and by phenomena of that conduct” (Ibid.), that is, by our experience. But the contents of the unconscious become visible and perceptible when embodied in the Tarot pictures; and this very experience becomes available to our intensified consciousness when expressed in the language of images.

Kelso and Engström (2006) contend that advances in thinking are curtailed by our old habit to think causally in terms of *either-or* and not *both-and*. They point out that “the hottest topic of the twenty-first century is going to be the problem of coordination, from molecules to organs, from ... human brains all the way to economies, societies, nations” (2006, p. 85). *Education* in the science of coordination dynamics – in the science of *signs* – is imperative; and it is Tarot edusemiotics that can take contemporary education “out of bounds” (Lewis & Kahn, 2010) by introducing in practice a model of informal cultural pedagogy devoted to the creation of new concepts, meanings and values for human experiences.

Considering that “human beings and human brains are themselves *manifestations* of the complementary nature” (Kelso & Engström, 2006, p. 252; italics in original) and that some of our judgements are abductive and subconscious, arising from the depth of the psyche and requiring a language other than the language of propositions for us to become aware of deeply ingrained habits, moral education cannot be limited to solely verbal deliberation. Instead of any top-down approach of imposing a set of values for teachers to transmit them to students, education would benefit from programs of teacher preparation that include the fundamentals of the science of signs in general and Tarot edusemiotics in particular.

EPILOGUE

A comparison can be made with some of the recent developments in cognitive science, which influenced the “emerging sphere of ‘neuroeducation’ [that] provides opportunities for good work but [also] requires professionals adequately trained to handle the challenges posed by neurocognitive advances” (in Illes, 2006, p. 273). Tarot edusemiotics and the functioning of abduction presents educators with an equal if not greater challenge if holistic education in three Is – intuition, insight and imagination – is to acquire momentum (cf. Semetsky, 2007, 2009a, 2009b, 2010a, 2010b, 2011). A group of researchers working with Howard Gardner recently called for a new class of professionals described as neuroeducators (Sheridan, Zinchenko, & Gardner, 2006, pp. 265-276) and who would themselves assume an ethical responsibility to become leaders in educational contexts and settings. This ethical responsibility should be shared by philosophers of education who must take into consideration up-to-date research provided by edusemiotics. Tarot edusemiotics should begin to inform new educational leadership.

Educators as professionals should have an adequate grasp of the advances posited not only by neuroscience and cognitive science but by the science of signs or semiotics, together with the even more fundamental science of life and human nature as mathesis which finds its practical implementations in Tarot symbols and images. A Tarot layout represents, in symbolic form, “the drawing of a ground-plan of human experience” (Dewey, 1934/1980, p. 22; cf. Semetsky, 2011), and it is because of the transformation undergone in our very experience during the hermeneutic process of readings and interpretations that our personal “feelings ... make sense” (Dewey, 1925/1958, p. 258): human experience, equipped with deep inner knowledge as Gnosis, acquires new meanings that are created in the process *per se*.

We do have an inherent “capacity for learning” (Peirce, CP 5.402), however the historical emphasis on verbal language and propositional thought took away the ability to reason with the right hemisphere. Shlain (1998) nonetheless contends that contemporary culture has begun to reinforce “the perceptual mode of the right brain. The personal computer has greatly increased the impact of the iconic revolution and continues to do so” (p. 416). He notices that the “shift from the word on the page to the image on the screen has also blurred the distinctions between men and women as roles, dress, hairstyles, and even language undergo ongoing revisions that serve more to unite the sexes than to separate them” (p. 425). This shift appears to reverse the tendency of the predominance of the left hemisphere that has historically manifested as “misogyny, harsh patriarchy, and a distrust of images” (p. 428).

Learning to *trust the images* – specifically, the Tarot images – will bring back feminine values of which the focal characteristic, in the context of education, is “ethical caring [that] requires a high degree of skill in critical thinking ... directed at the situations and practices of real life, not merely at the perfection of theory” (Noddings, 2010, p. 243). As this book, together with its prequel (Semetsky, 2011), has demonstrated, Tarot edusemiotics brings forth a caring attitude coupled with a thorough self-reflection enabled by the logic of the included middle that inevitably

creates “new forms of spirituality” (p. 244) embodied in deep self-knowledge as Gnosis.

Signs cross over the perceived boundaries between matter and spirit and enrich our lives with the “stored memories of caring and being cared for” (Noddings, 2010, p. 246); the Tarot images can “act as reservoirs for the production of virtuous acts” (Ibid.). To reiterate, we do not have to gird ourselves “with virtues inculcated by elders” (p. 246): values are created in practice, in experience, by learning from this very experience when it becomes unfolded picture by picture in front of our eyes. We read and interpret the multiplicity of images that unfold into a pictorial text comprising an experiential “curriculum” as *currere* (cf. Pinar, 2004) in the school of life, while simultaneously fulfilling “the moral duty to meet needs” (Noddings, 2010, p. 236) of others and to ethically respond to them when assisted by the counsel of Tarot (Semetsky, 2011).

In Plato’s *Symposium*, Diotima the Priestess (cf. Garrison, 1997) teaches Socrates that a spirit or daimon by the name Eros or Love is located in-between lack and plenty. Julia Kristeva refers to Diotima as the “great priestess... the wise stranger [who] dictates to Plato the ideal, idealized, and in that sense ‘Platonic’ concept of love” (Kristeva, 1987, p. 71). In contrast to the male-dominated structure of possession-love, Diotima epitomizes the unifying principle of in-between (cf. Kelso & Engström, 2006) serving as such the synthesizing function entailed by the logic of the included middle; this principle, importantly, is “more feminine and maternal” (Kristeva, 1987, p. 72).

This ephemeral daimon, a spirit, partakes of Peircean evolutionary Love as Agape and of Noddings’ maternal instinct (Noddings, 2010). Significantly, being a daimon, a sign, it can hold two opposites together as one coordinated harmonious whole, therefore capable of reconciling that which analytic thinking habitually perceives as binary irreconcilable opposites. To repeat, it is the love for wisdom and the desire for Gnosis that not only distinguish true philosophers from sophists but also drives the authentic Tarot reader (cf. Semetsky, 2011) to put into practice the *human eros* so that we become able to create and “live a life of ever-expanding meaning and value” (Garrison, 1997, p. 1).

Tarot edusemiotics demonstrates harmony or analogy between “ethical reason [and] experimental logic” (Peirce, CP 5.430) because of the triadic logic of relations, due to which our very experience, both literally and symbolically, functions as the included Third, the included middle. This ethical reason (not a contradiction in terms!) should now become the core of semiotic research in order to establish what Winfried Nöth recently designated, in the context of education, as an “intercultural competence” (2010, p. 9). This is an urgent matter in the present geopolitical context that displays diverse and polyvalent “signs of the times” (Semetsky, 2006, 2010a) amidst cultural conflicts and clashes of values. The language of signs that can “speak” in *real characters* reflecting meanings and values – meanings and values *shared* by humankind – needs to be understood.

Nel Noddings’ persistent call for “new vocabularies and new meanings for old vocabularies” (1993, p. 6) in education will be answered by us learning the language of signs, images and symbols embedded in Tarot edusemiotics. Applying

EPILOGUE

this new vocabulary in practice, we achieve a better understanding of ourselves and others which is paramount for improving relations across habitual dualistic divides that haunt contemporary culture. Since ancient times, the best names in philosophy and science alike have pursued “a reconciliatory mind-set” (Kelso & Engström, 2006, p. 185): from the One~Many of the Neoplatonists to the golden mean of Aristotle, to Peirce’s triadic semiotics, to Niels Bohr’s complementarity principle, to the science of coordination dynamics, to the art~science of Tarot edusemiotics elucidated in this book, which all enable “a more harmonious attitude toward ourselves, each other, and the world around us” (p. 186).

Noddings (2010) comments that before nursing became a profession, to call for a nurse meant to call for a *woman* who would be simply “holding” and “staying with” as the basic response of the one who *cares*, even if these activities, which are fundamental to mothering, nursing and the best teaching are usually ill-defined. Indeed educators, who may encounter a variety of moral problems in their professional daily practice but traditionally attend mostly to teaching a range of available pre-given facts, do have a good deal to learn from the “caring [and] sacred science” (Watson, 2004) of nursing (Semetsky, 2009a; cf. Johnstone, 1994) and counseling (Semetsky, 2011). Tarot edusemiotics supports and strengthens Noddings’ belief in “a whole new way of talking about activities [as] ways of being in the world [that] are inherently relational” (Noddings, 2010, p. 177).

Noddings wants schools to make valuable contributions to the cultural evolution of masculinity; she emphasizes however that the “most difficult challenge for the schools would be to analyze and reconstruct the whole curriculum to make it inclusive of female experience” (2010, p. 231). Considering that this book presented Tarot edusemiotics in its extended sense as a symbolic school of life, the many lessons of which reflect ubiquitous self-organizing patterns of information as signs and are coded in the language of images as the expression of the archetypal feminine, the integration of right-hemispheric feminine values acquires its practical possibility.

It is then, as Shlain (1998) remarks, that the “right brain, suppressed for so long, burst forth with an exuberance not seen since Dionysus cavorted with his retinue in the forests” (p. 412). Indeed, for too long we have succumbed to the over-rational Apollonian culture. Both need to be reconciled in one complementary Apollo~Dionysus pair. Educating moral people (cf. Noddings, 2002), in formal educational settings and in the informal school of life alike, demands developing a sense of value-judgement for novel situations versus the reductive approach of inculcation of pre-given values. The sensitivity to moral contexts that we can develop through learning the subtle language of Tarot signs and images involves the appreciation of proportionate values, that is, our ability to discriminate between and evaluate values *per se*. And this ability requires, reciprocally, a transformation of our habits which can be effectively achieved by Tarot edusemiotics, due to which we not only acquire information but enrich it with meaning.

The “unique blend of self-organizing...tendencies gives rise to, in fact *creates*, new functional information. Once created, this functional information can modify, guide and direct the dynamics” (Kelso & Engström, 2006, p. 91) of behavior.

Information is meaningful and functional if it allows us to communicate better; “ultimately, information is functional if it helps [us] survive in the world” (p. 98). Kelso and Engstrøm agree that *nonverbal* language – by imparting observable effects on the patterns of coordination – can be used for communication; hence it “can be thought of as functional information” (p. 98). They emphasize that functional information is never arbitrary with respect to the dynamics this information directs.

Tarot images, as signs that embody functional information, are not random groupings. They “speak” in the language of pictorial semiotics, and this language-like structure which enables communication is what makes information meaningful and not arbitrary. As Kelso and Engstrøm point out, “Information is functional precisely because it ‘speaks’ – formally and biologically – in the language of self-organized pattern generation” (2006, p. 108), these archetypal patterns represented by Tarot Arcana. In Tarot edusemiotics “information emerges as a result of the inherently nonlinear, functionally self-organizing dynamics” (p. 102) constituting the process of semiosis as the action of signs grounded in the indirect, nonlinear logic of the included middle. Signs are virtual tendencies “that are ... complementary” (p. 103) and, when coordinated, give rise to agency, to the sense of Self.

With a nod to the Cartesian myth, Kelso and Engstrøm (2006) assert that “coordination as a self-organizing process means not only that there is no ghost in the machine, but that there is also no ghost and no machine” (p. 93). I think, however, that the myth of the ghost of the machine is not just a myth. It appears that there *are* ghost-like entities in the machine, while – importantly – the diagrammatic “machine” itself is virtual or abstract and *not* a mechanical apparatus or a central processor; and the “ghosts” are the triadic signs, the semiotically *real* relational entities that need a Peircean interpretant to fully manifest as pragmatic effects at the level of empirical reality.

The collective mind of us humans expresses itself by virtue of the “functional information [that] lies in the metastable way human beings behave in a social and cultural context” (Kelso & Engstrøm, 2006, p. 103); whilst the collective mind of the *mindful universe* (Stapp, 2007) is itself an informational structure that becomes meaningful at the level of human experience, which necessarily functions as an interpretant, the included middle, in the universe perfused with signs. Nothing becomes a meaningful sign unless it is interpreted. Otherwise signs are literally doomed to remain disembodied ghosts in their virtual state of being as just

“traits,” of content and expression, between which it [a genuine sign, a diagram] establishes a connection The diagram retains the most deterritorialized content and the most deterritorialized expression, in order to conjugate them. ... The diagrammatic or abstract machine does not function to represent, even something real, but rather constructs a real that is yet to come, a new type of reality. ... [O]n the diagrammatic level ... form of expression is no longer really distinct from form of content. The diagram knows only traits and cutting edges that are still elements of content insofar

EPILOGUE

as they are material and of expression insofar as they are functional, but which draw one another along, form relays, and meld in a shared deterritorialization. (Deleuze & Guattari, 1987, pp. 141-142)

Even if signs may be just airy *no-things* whose mode of existence is a multitude of differential relations determining the ghostly traits as “opposite tendencies [that] *must* coexist to make possible the creation of functional information” (Kelso & Engström, 2006, p. 104; italics in original), they become present to consciousness during the process of Tarot edusemiotics. We become able to “undo the folds ... that pass through” (Deleuze, 1993, p. 93) the thresholds of experience, which are symbolically expressed in the language of images.

Tarot images embody events and situations, and as Noddings (2010) argues, it is “situational practices” (p. 245) that serve as a basis for developing virtues. We learn from situations, events and experiences in the edusemiotic process of moving from sign to sign embedded in the symbolic school of life and anchored in the logic of the included middle as the epitome of the anti-dualistic, feminine and relational, approach. Significantly, the Holy Ghost as Spirit derives from the original Hebrew world for Spirit, *Ruah* (meaning breath), as a *feminine* noun.

It is “the best female models and practices” (Noddings, 2010, p. 249), including Tarot edusemiotics, that should set the standard for contemporary education that encompasses the three Is of intuition, insight and imagination. This model of moral education will be able to reorganize our “routine, unintelligent habit[s]” (Dewey, 1922/1988, p. 55) by transforming them into new, “more developed” (Peirce, CP 5.316) habits of thoughts and actions that are being “intelligently controlled” (Dewey, 1922/1988, p. 23).

Crawford and Rossiter (2006) in the context of spiritual education, advocated making “use of a *language of meaning* [that] would articulate messages for human development within a framework of *reasons for living*” (p. 399; italics in original). This book has demonstrated that Tarot images, symbols and signs represent the universal *language of meanings*, grounded in experience, in life, therefore ultimately related to the very *practice of living* contingent on our knowledge of mathesis as the ubiquitous science of life and human nature.

It is human development (cf. Semetsky, 2011) – in contrast to economic growth (which, in any case, became a dubious construct in the present conditions of economic meltdown world-wide) – that has been articulated as a form of education specifically focused on learning as the treasure *within* (Delors, 1996) by the UNESCO International Commission for Education in the 21st Century. To the four pillars of education – specified as learning to know, learning to do, learning to live together, and learning to be – I propose to add a fifth: learning a new language that strengthens the four pillars in its capacity as an unorthodox foundation for moral knowledge. Indeed, as Beare (2001) commented, a significant part of the curriculum for the future belongs to “intangibles ... dealing with the depths from which we generate our life purposes and aspirations” (p. 21).

The intangibles become tangible when virtual meanings hiding in the depth of the collective psyche become actualized and we acquire a real opportunity “to

show the imperceptible” (Deleuze, 1995, p. 45) in the form of the legible images of Tarot signs. The Tarot images function as “indications, evidence, signs, clues to and of something still to be reached” (Dewey, 1929/1984, p. 80); and it is because of the action of semiosis, which cuts across dualistic boundaries, that we can achieve this “something” in the form of the deep meaning of our experiences during the hermeneutic process of reading and interpreting Tarot signs.

The edusemiotics of Tarot ensures “novelty in action, greater range and depth of insight and increase in poignancy of feeling” (Dewey, 1934/1980, p. 23). It is by reading the signs and learning from embodied experiences that we reach toward their manifold meanings and achieve insight into the depth of the collective unconscious encompassing the experiences of humankind. As Noddings (1999) made clear, it is by acquiring more knowledge about the needs of others that we are inspired to increase our own competence. And the means for such self-education lies in understanding the process~structure of Tarot edusemiotics and the language of its symbolism.

John Deely, in his survey of philosophy from ancient times to the turn of the 21st century (Deely, 2001) speaks of the four Ages of Understanding, tracing the development of philosophical thought from antiquity to postmodern philosophers, the first of which, for Deely, was Charles S. Peirce. These four Ages, connected intellectually and historically by the theory of signs as their dominant theme, cover Ancient Greek philosophy, the Latin age of European philosophy from the 4th to the 17th centuries, then the Modern period beginning with Descartes and Locke, followed by the Post-modern period that began with Peirce and continues today.

It is only logical that in order to participate fully in the process of signs’ evolution and growth we have to learn how to read and understand the language of signs. It is this deep empathic knowledge grounded in the logic of the included middle and enabling our “reading the emotional state, needs, and intentions of others” (Noddings, 2010, p. 170) as embodied in the Tarot images, that will move us closer into what I believe (paraphrasing Deely) will become the New, *fifth* Age of Understanding. This New Age shall provide us with unprecedented semiotic freedom to act intelligently and wisely in the world perfused with signs. This New Age of Understanding will become

a new Golden Age ... in which the right-hemispheric values of tolerance, caring, and respect for nature will begin to ameliorate the conditions that have prevailed for the too-long period during which left-hemispheric values were dominant. Images ... are the balm bringing about this worldwide healing. (Shlain, 1998, p. 432)

Imagination, intuition and insight are right-brain, feminine qualities; and the shift to “the right-hemispheric values through the perception of images” (Shlain, 1998, p. 432) – such as Tarot images – will have an impact on human culture equivalent to that made by the written alphabet which in the course of its development happened to have “killed the Goddess” (p. 432) and nearly eradicated the feminine presence in human culture. Reading signs and learning from experience will contribute to the integration of the iconic information and ideographic language of

EPILOGUE

Tarot images; it will bring a holistic dimension to moral life and education and will “restore natural caring relations” (Noddings, 2010, p. 28) at personal, social and ecological levels.

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INDEX

- A
Abduction, 14, 15, 42, 43, 59, 97,
171, 218, 232, 234, 253, 268, 273,
275–287, 293–295, 304
Abductive inference, 14, 19, 48, 132,
234, 276, 278, 279, 282, 285, 286,
289
Abject, 102, 187–189, 191–193, 195,
197, 199, 201–203, 205–208
Abjection, 187–195, 198, 200, 201
Abt, L.E., 217
Abbyss, 11, 13, 16–18, 24–27, 29, 31,
47, 164, 171, 227, 228, 232, 247,
291
Action-at-a-distance, 231, 292
Actual, 16, 18, 25, 29, 48–51, 54, 58,
83, 86, 96, 98, 101, 102, 105, 107,
113, 114, 116, 117, 124, 127, 131,
135, 141, 142, 153, 158, 167, 169,
172, 175, 176, 184, 193, 195, 203,
205, 206, 208, 221–223, 226, 230,
236, 238, 249–251, 258, 264, 265,
273, 281, 283–287, 289, 292, 295
Actualization, 59, 89, 101, 115, 143,
146, 175, 228, 249
Aestraea, 204
Affect, 4, 24, 30, 43, 47–50, 52, 70,
72, 76, 77, 79, 82, 108, 110, 117,
123, 126, 132–134, 141, 143, 146,
153, 170, 172, 177, 183, 186, 187,
191–193, 204, 208, 214, 224, 232,
235, 249, 250, 252, 253, 261, 277,
283, 294
Agape, 106, 112, 117, 259, 305
Agency, 33, 102, 187, 244, 277, 307
Agent, 12, 35, 113, 137, 140, 203,
205, 244, 245, 259, 265
Aion, 143, 160
Akashic field, 83, 135
Aleatory, 16, 19, 179
Alienation, 87, 217, 239, 254
Allen, P., 248
Alphabet, 53, 80, 91, 124, 125, 136,
148, 254, 309
Ambiguity, 96, 130, 148, 187, 195,
198
Amplification, 60, 72, 73, 87
Analogical, 6, 42, 71, 77, 224, 284
Analogue, 87, 103, 114, 141, 216,
221, 232, 288, 292
Analogy, 1, 6, 60, 72, 74, 76, 83, 90,
106, 107, 147, 163, 219, 249, 263,
284, 294, 305
Anima, 116, 167
Anomaly, 61, 62, 96
Anonymous, 147, 167, 249
Ansell-Pearson, K., 143, 222, 291
Anthony, M., 245, 264
Anthropocentric, 96, 103, 247, 266
Anticipation, 52, 57, 108, 187, 206,
234, 237
Anton, J.P., 291, 296
Aphex, E., 73
Apollo, 42, 167, 230
Apprenticeship, 129, 130, 292
Arcana, 3, 11, 13, 15, 19–26, 28, 29,
31, 32, 53, 56, 61, 68–70, 74, 77,
79, 91, 97, 104, 111, 117, 124,
153, 154, 162, 163, 167, 169, 173,
178, 184, 200, 202, 214, 216, 218,
234, 248, 250, 254, 307
Arcanum, 3, 14, 15, 17, 19, 21, 24,
27, 28, 30, 32, 58, 68, 91, 95–98,
102, 103, 105, 106, 113, 114, 119,
124, 125, 128, 136–138, 140, 144,
154, 164, 171, 173, 184, 186,
189–191, 197, 198, 200, 204, 208,
218, 231, 247, 251, 257, 258, 273
Arché Philosophical Research Centre,
80
Archetype, 3, 12, 18, 24, 25, 29, 32,
33, 35, 45, 46, 49–56, 58, 62, 68,

INDEX

- 73–75, 79, 85, 90, 96, 97, 99, 107,
111, 113, 114, 117, 132, 137, 143,
146, 154, 160, 170, 172, 184, 185,
193, 220, 221, 224, 230, 236, 258,
273, 277, 288, 302
- Aristotle, 40, 83, 116, 155, 163, 285,
287, 294, 296, 306
- Art, 17, 23, 25, 30, 50, 71, 82–84, 91,
97, 100, 115, 119, 126, 132, 139,
143, 146, 159, 161, 162, 164, 167,
175, 178, 202, 213, 220, 224, 238,
260, 291, 301, 306
- Artist, 111, 114, 165, 222, 259, 266
- Art–science, 161, 220, 260, 291, 292,
301, 306
- A-signifying, 13, 28, 110, 188, 244
- Assemblage, 78, 96, 110, 113, 123,
141, 252, 264
- Attitude, 4, 5, 12, 51, 54, 55, 61, 117,
140, 146, 185, 192, 199, 202, 214,
220, 238, 243, 268, 279, 292, 296,
304, 306
- Attractor, 115, 146
- Auger, E., 39
- Augustine, 79, 83, 89, 90, 159
- Aurora, 144
- Authenticity, 170, 173
- Autonomy, 19, 54, 98, 117, 142, 145
- Autopoiesis, 73, 98
- Autopoietic, 28, 73, 87, 98, 99, 105,
107, 113, 224, 248
- Awareness, 5, 16, 27, 28, 33, 43, 45,
47, 50, 58, 87, 97, 101, 106, 108,
113, 117, 119, 141, 143, 162, 176,
184–186, 191–193, 208, 214, 223,
244, 247, 248, 253, 276, 277, 289
- B**
- Bacon, F., 80, 255
- Balance, 60, 68, 192, 223, 226, 227,
246, 247, 266
- Barrow, J.D., 31
- Barthes, R., 67
- Baudrillard, J., 194, 195
- Becoming-other, 18, 19, 22, 24, 27,
28, 30, 31, 34, 44, 47, 52, 74, 78,
88, 99, 108, 113, 119, 126, 129,
131–133, 141, 145, 161, 172, 186,
190–192, 198, 200–202, 206–208,
218, 222, 224, 238, 246, 248, 286,
288, 294, 301
- Becoming-woman, 7, 119, 123–148
- Behaviour, 4, 26, 27, 45, 47, 50, 54,
70, 77, 82, 84, 108, 114, 153, 163,
170, 185, 193, 199, 204, 222, 223,
227, 235, 247, 265, 276, 284, 288,
301, 302, 306
- Belenky, M., 6
- Belief, 4, 5, 43, 51, 81, 124, 136, 141,
144, 153, 167, 170, 177, 183, 191,
197, 200–202, 214, 235, 256, 258,
277, 303, 306
- Bereiter, C., 275
- Bergson, H., 18, 51, 132, 253
- Berlin, I., 273
- Bertalanffy, L.v., 26
- Bifurcation, 41, 62, 70, 98, 142, 208,
217, 248, 289
- Binary, 5, 42, 85, 96, 99, 100, 110,
112, 113, 143, 156, 160, 161, 165,
193, 195, 203, 205, 228, 230, 247,
254, 255, 257, 262, 305
- Biology, 224, 225, 228, 246
- Bipolar, 99, 112, 118, 133, 142, 155,
156, 159, 161, 226, 228, 233, 254,
264, 287
- Birth, 79, 108, 124, 143, 145, 170,
173, 199, 259, 290
- Body, 13, 14, 18, 22, 29, 32, 40, 41,
45, 51, 53, 56, 77, 101, 105, 106,
109, 123, 135, 139, 147, 153, 163,
164, 187–189, 195, 203, 208,
220–222, 238, 256, 258, 263, 264,
276, 279
- Body~mind, 14, 22, 77, 105, 106,
163, 164, 220, 221, 263
- Bodymind, 41, 46, 47
- Bogue, R., 22, 25, 29, 33, 130, 195,
252, 292

- Bohm, D., 68, 77, 78, 82, 90, 206,
216, 223, 228, 232
- Bohr, N., 254, 306
- Borch-Jacobsen, M., 87
- Borradori, G., 26, 33, 111
- Bosteels, B., 62, 129, 136
- Boundary, 23, 99, 108, 117, 186, 187,
220, 224, 230, 231
- Boundas, C.V., 128, 132, 146
- Brain, 41, 42, 53, 71, 113, 163, 179,
200, 253, 254, 277, 304, 306, 309
- Bridge, 8, 40, 42, 58, 78, 100, 116,
124, 160, 177, 193, 199, 202, 228,
230, 264, 287
- Brier, S., 27, 60, 175
- Briggs, J., 34, 146
- Bruegel the Elder, Pieter, 190
- Bruner, J., 67
- Bruno, G., 97, 230
- Buber, M., 117, 118, 140, 248–250,
259, 286
- C
- Calculus, 80, 112, 251
- Campbell, J., 277, 292
- Capra, F., 244–248, 263–267, 273,
287, 292
- Cardinal, 47, 136, 147, 249, 278, 289
- Care, 4, 8, 45, 61, 71, 106, 115, 117,
119, 127, 134, 137, 138, 140, 142,
144, 160, 173, 176, 192, 200–205,
238, 245, 248, 250, 260, 266, 268
- Caring, 5, 7, 8, 61, 106, 117, 118,
123, 126, 127, 134, 138–140, 164,
192, 199–201, 203, 204, 206, 220,
238, 259, 266, 268, 304–306, 309
- Cartographic, 129, 142, 264, 276
- Cartography, 129, 133, 142, 146
- Casey, E., 191, 195, 199
- Category/categories, 2, 4, 15, 26, 34,
40–42, 46, 47, 50, 52, 56, 57, 67,
68, 73, 77–79, 81, 88, 97, 98, 101,
102, 110, 115, 142, 189, 205, 214,
220, 226, 247, 258, 262, 278, 282,
284–286, 289
- Catharsis, 191, 198
- Causality, 19, 45, 46, 77, 102, 103,
113, 155, 229, 245, 246, 285, 294
- Cause, 1, 18, 19, 42, 46, 48, 57, 61,
73, 77, 96, 102, 105, 115, 116,
164, 179, 195, 196, 229, 246, 262,
285, 292, 294
- Celtic Cross, 213
- Chalmers, D., 236, 245
- Chance, 12, 14, 16, 25, 32, 33, 40, 47,
48, 85, 113, 153, 207, 302
- Change, 3, 12, 18, 22, 27, 34, 35, 41,
47, 50, 51, 57–61, 74, 78, 88, 96,
108, 109, 115–117, 123, 133, 134,
172, 173, 187, 191–193, 198, 201,
214, 220, 227, 228, 236, 237, 243,
244, 247, 248, 255, 259–261, 275,
283, 285, 286, 288, 292, 302
- Chaos, 11–35, 74, 106, 107, 119, 146,
194, 206, 227, 232, 247, 266, 288,
294
- Character, 1, 22, 39, 48, 55, 57, 59,
72, 80, 81, 98, 118, 163, 165, 169,
171, 174, 177, 184, 199, 215, 216,
222–224, 226, 235, 237, 257, 279,
282, 287, 293, 301, 305
- Child, 11, 12, 34, 35, 52, 123, 132,
171, 188
- Children, 4, 16, 23, 137, 140, 160,
165, 172, 174, 176, 177, 263
- Choice, 3, 12, 16, 17, 23, 24, 27, 59,
86, 119, 130, 220, 288, 292
- Chora, 199
- Chronos, 143, 160
- Cilliers, P., 26, 27
- Cinema, 217
- Cipher, 61, 257
- Circularity, 286, 296
- Clinical, 51, 59, 99, 108, 117, 126,
129, 147, 148, 205, 243, 256
- Code, 1, 67, 72, 75, 77, 107, 114,
141, 204, 220–222
- Codification, 82, 221, 288, 292
- Coelho, P., 80

INDEX

- Cogito, 5, 22, 40, 44, 107, 109, 134, 143, 168, 172, 203, 205, 218, 245, 246, 260
- Cognition, 42, 43, 46, 48, 52, 59, 87, 98, 108, 234, 236, 263, 268, 276, 279, 281, 283, 289, 295, 303
- Cognitive, 3, 4, 6, 24, 29, 35, 48, 50, 58, 67, 106, 108, 142, 161, 162, 168, 169, 208, 213–217, 219, 236, 246, 251, 277, 288, 289, 304
- Cohen, L., 115, 158
- Coincidence, 53
- Coincidentia oppositorum, 53, 83, 139, 175, 229, 252, 294
- Colapietro, V., 15, 19, 58
- Collective unconscious, 3, 22, 32, 33, 44–46, 49–52, 54, 55, 57, 58, 60, 61, 70, 74, 75, 78, 83, 84, 96, 107, 108, 114, 123, 126, 132, 135, 144, 146, 154, 178, 217, 218, 223, 228, 274, 277, 288, 309
- Communication, 2, 5–7, 13, 40, 42–44, 53, 56, 73–76, 78–83, 89–91, 95–119, 128–130, 141, 160, 164, 188, 216, 217, 219, 220, 231, 235, 237–239, 247, 249, 251, 253, 254, 256, 265, 276, 277, 279, 282, 290, 295, 296, 307
- Community, 14, 48, 91, 100, 244, 247, 256, 301
- Compactification, 75, 76, 217, 288
- Competence, 305, 309, 376
- Complementarity, 54, 85, 127, 163, 164, 254, 266, 293, 295, 306
- Complementary pair, 5, 112, 113, 118, 130, 131, 142, 147, 156, 162, 164, 167, 178, 220, 221, 224, 226, 228–230, 244, 248, 252, 254, 262, 264, 273, 283, 284, 290, 294–296
- Complex, 1, 3, 13, 18, 25–28, 57, 60, 70, 73, 74, 81, 84, 96, 99, 102, 111, 112, 116, 117, 135, 174, 179, 185, 213, 215, 218, 220, 225, 226, 230, 236, 248, 249, 279–290, 292–294, 296
- Complexity, 26–28, 44, 58, 60, 82, 86, 98, 102, 111, 205, 219, 232, 279, 280, 282, 288, 291
- Complex plane, 279, 281–283, 285, 286, 289, 290, 293, 294, 296
- Complicity, 145, 221, 223, 254
- Computation, 215, 216, 222, 224, 225, 230–232, 234, 236, 237
- Computer, 216, 217, 226, 231, 304
- Concept, 2, 4, 8, 17, 18, 21, 24, 28, 45, 52, 67, 81, 99, 102, 106, 111, 114, 116, 119, 123, 135, 139, 140, 143, 148, 155, 159, 163, 183–185, 188, 198, 219, 220, 222, 228, 234, 236, 245–247, 250, 254, 257, 259, 266, 273, 275, 285, 296, 305
- Confirmation, 85, 140, 147, 204, 226, 227, 266
- Conjunction, 13, 14, 21, 22, 28, 30, 31, 49, 76, 83, 104, 107, 116, 133, 134, 158, 161, 188, 200, 221, 252
- Connection, 12–14, 18, 21, 24, 28, 29, 32, 42, 45, 46, 50, 57, 58, 68, 70, 77, 91, 96, 100, 101, 103, 109, 112, 116, 123, 124, 134, 135, 146, 153, 163, 167, 168, 175, 177, 190, 191, 197, 205, 206, 216, 221, 225, 228, 230, 231, 245–247, 249, 251, 252, 254, 261, 264, 265, 267, 280, 282, 292, 294, 296, 307
- Consciousness, 12, 40, 68, 98, 123, 153, 185, 214, 246, 276
- Constraint, 16, 70, 85, 115, 116, 225, 292
- Construction, 3, 39, 98, 111, 116, 192, 197, 198, 201, 232, 233
- Content, 2, 42, 50, 53, 54, 56–60, 67, 74, 88, 101, 108–110, 114, 128, 130, 141, 175, 191, 192, 214, 227, 237, 277, 278, 285, 303, 307
- Context, 2, 3, 8, 17, 27, 30, 40, 41, 44, 47, 56, 67, 68, 71, 72, 74, 76, 78, 83, 85, 87, 95, 105, 115, 127, 128, 130, 134, 139, 141, 146, 153, 154, 156, 159, 162, 168, 170, 172,

- 174–177, 183, 192, 194, 198, 202,
204, 205, 213–216, 225, 227, 229,
232, 237, 243–245, 250–252, 256,
258, 261, 262, 264, 267, 273, 276,
278–280, 285, 286, 292, 294, 296,
304–308
- Continuity, 14, 15, 17, 27, 28, 46, 52,
102, 106, 118, 147, 176, 177, 200,
249, 264, 302
- Continuum, 16, 72, 103, 108, 284,
294
- Contraction, 157, 160, 253
- Convergence, 7, 22, 28, 281
- Conversation, 74, 98, 103, 116, 124,
126, 145, 247, 262, 263, 293
- Coordination, 5, 99, 100, 104, 105,
112–115, 128, 131, 156, 159,
161–164, 188, 193, 216, 227–229,
231–233, 237, 244, 247, 252, 255,
259, 261, 262, 277, 285, 287, 288,
296, 301–303, 306, 307
- Corbin, H., 41, 85, 295
- Corporeal, 18, 41, 153
- Corpus subtile, 143
- Correspondence, 41, 60, 72, 81, 90,
107, 161, 219, 225, 231, 234, 257,
262–264, 294
- Cosmology, 14, 75, 216, 217
- Cosmos, 83, 175, 238, 249, 259, 284,
294
- Counsel, 305
- Couple, 113, 117, 220, 228, 233, 235,
262, 304
- Coupling, 59, 99, 105, 106, 108, 227,
236, 256, 265, 267, 280
- Crawford, M., 174, 176, 308
- Creation, 14, 31, 32, 43, 44, 50, 55,
60, 77, 81, 84, 100, 104, 107, 108,
111, 115, 124–126, 132, 133, 138,
144, 148, 158, 162, 173, 175, 186,
187, 191, 196, 198, 200, 201, 206,
208, 222, 231, 235, 247, 253, 256,
257, 260, 273, 278, 291, 303, 308
- Creative, 3, 5, 17, 18, 24, 27, 28, 32,
34, 52, 71, 73, 82, 83, 85, 96, 97,
99, 101, 103, 104, 106, 110,
113–119, 124, 126, 127, 129, 130,
136, 139, 141, 142, 146–148, 153,
159, 162, 167, 168, 174–176, 197,
199, 205–208, 218–221, 224, 238,
243, 248, 249, 253, 256, 259, 260,
265–267, 275, 284, 288, 301
- Creativity, 17, 23, 25, 96, 98, 100,
112, 113, 115, 116, 123, 143, 146,
148, 198, 219, 260, 265–267, 283,
288, 293
- Creator, 96, 118, 208, 229, 256, 296
- Crisis, 183, 187, 198, 244, 273, 292
- Critical, 4, 7, 24, 40, 43, 52, 62, 99,
108, 117, 126, 129, 133, 140, 141,
144, 147, 148, 155, 169, 177, 183,
186, 194, 198, 201–203, 205, 206,
237, 238, 243, 248, 256, 258, 283,
293, 304
- Culture, 1, 3–8, 26, 27, 32, 33, 39, 55,
75, 76, 79, 81, 96, 97, 100, 106,
145, 147, 148, 163, 170, 175, 179,
185–187, 193, 196, 197, 199–201,
203, 205–207, 216, 220, 221, 225,
234, 243, 260, 265–267, 301, 302,
304, 306, 309
- Cunningham, D., 168, 169
- Curriculum, 167, 176, 177, 220, 227,
235, 305, 306, 308
- Cushing, J., 109
- Cybersemiotics, 60
- D
- Danesi, M., 1, 3
- Davies, M., 214
- Death, 18, 26, 70, 85, 170, 173, 187,
189, 197, 199, 258, 260
- Decipher, 41, 72, 80, 128, 196
- Decision, 3, 12, 16, 24, 29, 86, 87,
113, 116, 119, 164, 174, 183, 204,
224, 255, 264, 266, 301
- Deely, J., 2, 5, 22, 46, 59, 71, 74, 79,
88, 89, 91, 131, 147, 158, 215,
225, 234, 245, 258, 266, 279, 281,
284–288, 309

INDEX

- de Gébelin, A., 124
 DeLanda, M., 142, 250, 251
 Deleuze, G., 13, 47, 68, 96, 123, 153, 184, 215, 243, 273
 Delors, J., 202, 308
 Delpech-Ramey, J., 123, 128, 251, 253, 254, 256, 259
 Dennett, D., 220, 223, 225, 232, 234, 237, 276
 Depth, 12, 18, 21, 22, 39, 44, 49, 50, 53, 58, 62, 72, 75, 82, 83, 105, 109, 117, 119, 127, 132, 135, 139, 158, 168, 207, 219, 238, 249, 252, 260, 273, 276, 281–283, 293, 303, 308, 309
 Derivative, 118, 256, 287–289
 Descartes, R., 14, 43, 76, 80, 256, 279, 309
 Desire, 7, 13, 27, 61, 101, 106, 140, 142, 143, 157, 167, 169, 185, 192, 197, 199, 214, 220, 235, 236, 250, 252, 294, 305
 de Souza, M., 46
 Destiny, 84, 114, 284
 Determinism, 32, 84, 85, 142, 154, 191, 220
 Development, 2, 3, 6, 7, 11, 12, 15, 21, 22, 29, 31, 32, 39, 40, 44, 45, 51, 52, 54–56, 78, 79, 82, 86, 106, 123, 133, 156, 158, 163, 168, 170, 172, 174, 176, 177, 200, 202, 205, 207, 219, 234, 243, 247, 253, 259, 265, 267, 304, 308, 309
 Devil, 58, 184–187, 191, 192, 195, 196, 201, 208, 274
 Dewey, J., 12, 40, 72, 96, 126, 155, 183, 216, 243, 273
 Diagram, 41, 43, 114, 129, 133, 216, 226, 233–236, 251, 279, 280, 283, 290, 291, 293, 307
 Dialectics, 85, 184, 192, 197, 201
 Dialogue, 19, 44, 59, 107, 178, 201, 204, 227, 267, 274, 275, 277, 290, 296
 Dichotomy, 161, 189, 203
 Difference, 16, 22, 24, 25, 27, 28, 30, 31, 34, 60, 72, 82, 102, 103, 106, 110, 113–115, 123, 124, 128, 132, 168, 175, 202, 204, 221, 236, 247, 250, 256–258, 289
 Differential, 22, 112, 114, 132, 144, 251, 279, 280, 308
 Digital, 72, 103, 114, 141, 216, 221, 232, 288, 292
 Dilemma, 3, 72, 86, 174, 246, 287
 Dionysus, 42, 167, 306
 Diotima, 305
 Direction, 17, 18, 23, 31, 113–116, 139, 232, 238, 244, 277, 279, 282, 283, 288, 293
 Discovery, 12, 14, 29, 32, 143, 168, 172, 179, 184, 218, 232, 238, 250, 275
 Discrete, 28, 111, 132, 216, 232, 284, 285, 288, 292
 Disembodied, 97, 142, 176, 202, 203, 263, 307
 Diversity, 31, 33, 47, 97, 102, 105, 205, 230, 257
 Divination, 39, 73, 249
 Divine, 42, 83, 91, 106, 114, 118, 124, 136, 137, 139, 141, 159, 160, 164, 178, 229, 249, 275, 295, 296
 Doll, W., 203, 220, 227
 Douglas, M., 193
 Dream, 2, 50, 55, 56, 76, 78, 81, 86, 91, 133, 135, 154, 184, 197, 198, 206, 232, 258, 285, 286
 Dualism, 14, 22, 41, 42, 76, 96, 106, 130, 131, 135, 143, 157, 161, 162, 216, 218, 253, 262, 285, 286
 Dummett, M., 79, 124, 179, 214, 215
 Duration, 33, 132, 253, 277
 Dyad, 101, 158, 220, 228, 234, 236, 244, 260, 291
 Dynamics, 5, 8, 18, 19, 21, 23, 26, 27, 39, 47, 52, 54, 57, 58, 60, 75, 76, 78, 81, 88, 100, 104, 107, 112–116, 118, 123, 126, 146, 156, 158, 159, 161–164, 168, 172, 174,

- 188, 193, 194, 206, 207, 214, 216,
227–229, 231–233, 236, 238, 244,
247, 249, 252, 255, 259, 261, 262,
265, 266, 276–278, 280, 285, 287,
288, 293, 294, 296, 301–303, 306,
307
- E
- Ecoliteracy, 244, 245, 247, 248,
262–265, 267
- Ecological, 3, 244, 247, 249, 253,
258, 265, 310
- Ecology, 244, 245
- Eco, U., 71, 81, 266
- Ecstasy, 238
- Education, 12, 40, 71, 95, 123, 153,
183, 215, 243, 273
- Educational semiotics, 131, 133, 160,
169, 247, 265
- Effect, 7, 18, 19, 31–33, 35, 42, 46,
48, 50, 51, 56, 61, 73, 75, 76, 96,
164, 179, 187–189, 193, 224, 229,
246, 262, 265, 294
- Ego, 12, 32, 96, 105, 113, 123, 146,
160, 172, 185, 190
- Egorov, B.F., 73
- Einstein, A., 90, 156, 157
- Eiser, J.R., 146
- Embodied, 4, 13, 15, 24, 28, 39, 43,
51, 53, 55, 56, 58, 60, 71, 72, 75,
82, 85, 87, 88, 96, 99, 101, 103,
107, 110, 111, 118, 119, 127, 130,
132, 133, 139, 141, 142, 146, 162,
166, 168, 170, 175, 178, 188, 192,
195, 197, 200, 203, 208, 214, 218,
223, 225, 234, 236, 239, 244, 245,
249–253, 256, 258, 260, 263–265,
268, 277, 285, 288, 289, 294, 295,
302, 303, 305, 309
- Embodiment, 16, 18, 24, 49, 70, 138,
142, 145, 174, 176, 189, 256, 290
- Emerald Tablet, 107
- Emergence, 17, 25, 52, 62, 72, 88,
100, 108, 113–115, 126, 139, 141,
243, 247, 248, 256, 260, 263, 265,
266, 268, 283, 288, 292
- Emergent, 99, 110, 113, 158, 176,
230, 265, 282
- Emmeche, C., 17, 33, 34, 106, 107
- Emotion, 4, 7, 13, 21, 43, 54, 61, 70,
77, 79, 88, 134, 140, 153,
169–171, 178, 191, 195, 250
- Emotional, 1, 3, 6, 7, 46, 58, 70, 87,
128, 141, 171, 173, 217, 219, 309
- Empathy, 4
- Emperor, 138, 195, 208
- Empiricism, 14, 25, 131–133, 164,
252, 293
- Empress, 137, 138, 140, 160
- Enantiodromic structure, 86
- Encounter, 3, 17, 24, 33, 49, 58, 105,
134, 148, 167, 204, 221, 222, 230,
247, 250, 257, 281, 289, 306
- Energy, 27, 50, 54, 55, 74, 83, 133,
154, 171, 193, 199, 216, 218, 223,
226, 230, 236, 248, 259, 286
- Engström, D., 5, 15, 47, 85, 90, 112,
113, 131, 132, 146, 156, 161–164,
168, 170, 172, 216, 228–230, 236,
237, 239, 244, 247, 259, 262, 277,
282, 287, 294, 301–303, 305–308
- Ennead, 83
- Enstasy, 238
- Entropy, 103, 224, 230, 231, 248
- Environment, 16, 18, 22, 25, 27, 28,
46, 60, 82, 83, 88, 98, 99, 108,
116, 117, 164, 177, 224, 227, 244,
248, 264, 267
- Episteme, 44, 96, 125, 156, 245, 253,
254
- Epistemology, 22, 60, 127, 236, 238,
275
- Equilibrium, 26–28, 34, 76, 110, 227
- Eros, 106, 107, 138, 159, 160, 305
- Esoteric, 41, 72, 78, 90, 124, 132,
134, 135, 161, 163, 220, 224, 251,
257, 283, 290, 296

INDEX

- Esotericism, 41, 72, 78, 90, 124, 132, 134, 135, 161, 163, 220, 224, 251, 257, 283, 290, 296
- Esposito, J., 47
- Essence, 18, 35, 42, 49, 107, 111, 135, 162, 163, 165, 173, 200, 222, 267, 273
- Ethical, 3, 4, 8, 17, 52, 61, 81, 85, 86, 96, 106, 108, 109, 117, 119, 126, 139, 142, 145, 160, 164, 173, 178, 185, 202, 203, 205, 207–209, 217, 233, 235, 238, 239, 243, 245, 246, 256, 260, 264, 266, 277, 283, 284, 286, 292, 294, 304, 305
- Ethics, 4, 7, 8, 45, 61, 71, 86, 106, 117, 119, 127, 134, 138, 140, 142, 144, 145, 153, 167, 170, 173, 183–209, 220, 235, 245, 248, 259, 260, 284, 286
- Event, 3, 4, 13, 16–19, 21, 22, 27–30, 33, 44, 45, 47, 51, 53, 55, 56, 70, 72, 73, 75, 77, 78, 90, 97–99, 103, 106, 110–112, 114, 126, 128, 130, 132, 140, 141, 143, 146, 147, 155–158, 170, 171, 183, 188, 191–195, 197, 200–203, 205–207, 215, 220, 228, 230, 238, 246, 247, 250, 252, 255, 273, 281, 285, 289, 292–295, 308
- Evil, 143, 144, 185, 186, 205
- Evolution, 1, 2, 4, 7, 15, 22, 27, 28, 40, 41, 44, 45, 47, 50, 57, 71, 83, 84, 102, 103, 105, 106, 109, 116, 134, 154, 162, 165, 169, 172, 184, 200, 208, 215, 216, 218, 220, 224–226, 230–233, 236–238, 248, 259, 263, 265, 282, 303, 306, 309
- Excluded middle, 5, 13, 15, 17, 28, 34, 40, 58, 80, 97, 125, 129, 155, 156, 163, 189, 228, 229, 244, 253, 257, 261–263, 278, 291, 293
- Existence, 22, 62, 72, 73, 75–77, 84, 98, 115, 118, 119, 125, 130–132, 134, 135, 142, 145–147, 161, 163, 173, 175, 177, 179, 186, 187, 202, 221, 223, 235, 243, 245, 248, 249, 256, 259, 260, 265, 273, 277, 284, 286, 287, 289, 290, 301, 302, 308
- Existential, 21, 48, 55, 146, 153, 172, 173, 178, 238
- Ex nihilo*, 231, 251
- Expopedagogy, 96, 97, 100, 123, 126, 161
- Experience, 13, 40, 71, 96, 123, 155, 183, 215, 243, 273
- Experiment, 6, 67, 126, 168, 177, 208, 254, 263, 277, 286
- Explicate, 77, 82, 111, 206, 232
- Expression, 3, 7, 16, 18, 21, 32, 53, 54, 74–76, 79–82, 101, 108–111, 114, 126, 131, 132, 134, 141, 147, 157, 159, 163, 171, 174, 175, 177, 178, 192, 193, 195, 213–216, 219, 228, 231, 236, 239, 251, 273, 283, 286, 288, 301, 302, 306–308
- F
- Facts~values, 203
- Faivre, A., 41, 82, 90, 148, 167, 253
- Family, 79, 134, 161
- Fate, 84, 174
- Fauré, E., 8
- Fear, 51, 61, 68, 88, 148, 157, 162, 185–187, 191, 214
- Feedback, 27, 28, 47, 58, 60, 81, 83, 98, 102, 103, 141, 214, 246–248, 262, 265
- Feeling, 4, 6, 40, 45–47, 51, 54, 61, 70, 71, 77, 79, 106, 109, 110, 113, 114, 116, 119, 132, 137–141, 144, 153, 168–172, 187, 191, 195, 233, 237, 250, 254, 277, 278, 282, 284, 294, 304, 309
- Female, 123, 125, 136, 138, 167, 306, 308
- Feminine, 7, 8, 42, 68, 71, 76, 123–125, 136, 138, 144, 174, 178, 179, 199–201, 204, 254, 255, 260, 266, 304–306, 308, 309
- Fetzer, J.H., 168

- Field, 1, 3, 15, 18, 21, 22, 25, 29, 32, 33, 40, 45, 46, 48, 50, 51, 55, 56, 67, 74, 75, 78, 79, 83, 84, 91, 107, 111, 115, 126, 127, 131, 133, 135, 142, 146, 154, 164, 167, 193, 198, 199, 202, 207, 209, 217, 219, 221–223, 230, 233, 243, 244, 254, 255, 268, 284, 287, 288
- Firstness, 15, 18, 19, 32, 33, 40, 42, 43, 46–48, 50, 53, 58, 59, 68, 99, 102, 109, 132, 139, 258, 278, 282–286, 289, 290
- Fluctuation, 27, 28, 87, 112, 113, 189, 201, 224, 226
- Fodor, J., 214–216, 239
- Fold, 21, 23–27, 29, 32–34, 99, 100, 108, 111, 116, 128, 130–132, 146, 208, 229, 249, 283, 284, 308
- Fool, 2, 11–35, 42, 47, 48, 68, 74, 77, 78, 95, 97, 104, 106, 119, 130, 136, 137, 145, 154, 164–166, 169–173, 191, 199, 200, 206, 227, 228, 231, 232, 246, 247, 251, 291, 295
- Forecast, 52, 236
- Foreknowledge, 52, 107
- Foresight, 243, 255
- Foundation, 3, 67, 111, 125, 153, 156, 162, 184, 199, 204, 264, 273, 275, 290, 294, 308
- Fox, M., 61
- Freedom, 15, 16, 24, 25, 40, 71, 84–86, 107, 112, 117, 142, 173, 186, 232, 237, 283, 284, 309
- Freeman-Moir, J., 6, 206, 208, 243, 267
- Freeman, W., 277
- Freud, S., 125, 130, 133, 184
- Future, 6, 12, 15, 16, 22, 23, 26, 28–30, 48, 51, 52, 57, 73, 80, 84, 85, 90, 101, 108, 133, 143, 147, 157–159, 173, 196, 197, 206, 215, 220, 222, 224, 234–238, 243, 248, 252, 255, 258–260, 264, 266, 267, 282, 285, 286, 288, 292, 301, 302, 308
- Future anterior, 16, 29, 157, 197
- Futures studies, 156, 243, 255, 264, 267
- G
- Gad, I., 45, 86
- Game, 11, 73, 79, 86, 91, 160, 175, 215
- Gardner, H., 304
- Garrison, J., 6, 7, 34, 85, 106, 161, 175, 176, 305
- Gauss, C.F., 162, 279
- Gearhart, S., 193
- Gebser, J., 153–156, 158–166, 172, 173, 191, 231, 234, 237, 250, 287
- Genesis, 85, 124, 125, 139, 167, 195, 199, 231, 239, 281
- Genius, 215, 230, 249, 259, 278
- Genosko, G., 110
- Geography, 32, 49, 129, 130
- Geometry, 11, 59, 111, 234, 279–282, 290
- Gestalt, 53, 78
- Gettings, F., 5
- Ghost, 178, 202, 203, 301–309
- Gidley, J., 206, 208, 243
- Gilligan, C., 6, 141, 174
- Giroux, H., 33, 35
- Globalization, 4, 203, 243
- Gnosis, 35, 82, 89, 125, 126, 130, 136, 142, 147, 159, 162, 167, 173, 179, 219, 220, 245, 251–254, 256, 258–260, 273, 293, 296, 304, 305
- Gnostic, 71, 72, 90, 119, 131, 132, 134, 136, 137, 143, 147, 154, 155, 162, 170, 238, 250, 252, 254, 276, 277, 282–284, 290
- God, 32, 45, 51, 78, 80, 97, 106, 112, 118, 127, 136, 137, 139, 159, 160, 164, 167, 177, 178, 186, 191, 195, 249, 275, 276, 294–296
- Goddard, M., 100, 101, 238

INDEX

- Goddess, 123, 124, 136, 147, 148, 204, 309
 Golden Age, 124, 204, 309
 Good, 55, 67, 86, 106–108, 132, 143, 144, 153, 185, 186, 194, 205, 234, 235, 273, 282, 292, 304, 306
 Goodchild, P., 132
 Grace, 106, 118, 145
 Gravity, 90
 Greene, M., 6
 Greimas, A.J., 116
 Griffin, D.R., 46, 77
 Grossberg, L., 31
 Grosz, E., 32
 Growth, 4, 7, 13, 15, 22, 25, 27–29, 34, 39, 44, 61, 102–104, 106, 125, 134, 158, 169, 176, 205, 220, 246, 264, 265, 268, 284, 286, 290, 293–295, 303, 308, 309
 Guattari, F., 13, 16, 17, 23, 24, 29, 32, 35, 49, 68, 72, 75, 82, 85, 96, 97, 99, 100, 103–105, 108–111, 114, 119, 123, 124, 126–129, 132–136, 141, 142, 145–148, 153, 157, 164, 169, 174, 202, 206, 208, 215, 222, 231, 238, 251–254, 259, 260, 262, 264, 288, 293, 296, 308
 Guiraud, P., 82
- H
- Habit, 57, 58, 60, 74, 87, 88, 112, 114, 189, 239, 244, 303, 308
 Hacking, I., 125
 Hanson-Roberts, M., 165
 Hardt, M., 102, 115, 175
 Harmony, 44, 68, 91, 109, 113, 128, 207, 209, 227, 233, 263, 266, 305
 Healing, 41, 68, 118, 129, 137, 141, 197, 198, 200, 243, 251, 309
 Hederman, M.P., 6, 91, 128, 131, 145, 156, 158, 178, 179, 186, 195–197, 200, 206, 225
 Heeren, J., 73, 74
 Heisenberg, W., 112, 288
- Hemisphere, 71, 76, 304
 Hermeneutic, 3, 7, 40, 52, 54, 58, 68, 71, 85, 95, 128, 132, 139, 142, 145, 155, 161, 201, 213, 245, 246, 251, 255, 260, 274, 276, 281, 284, 288, 290, 301, 303, 304, 309
 Hermes, 82, 97, 107, 124, 159, 160, 295
 Hermeticism, 83, 106, 147, 245
 Hermit, 24, 170
 Hero, 80, 148
 Heterogeneous, 30, 98–100, 103, 104, 128, 130, 164, 231, 248
 Hieroglyph, 61, 257
 Hieroglyphic, 41, 72, 80, 82, 175
 Hildegard of Bingen, 254, 255
 Hillman, J., 83
 Hintikka, J., 275
 History, 23, 32, 42, 45, 50, 75, 79, 83, 95, 97, 123, 170, 196, 220, 255, 260, 261
 Hoffmeyer, J., 6, 17, 33, 34, 74, 106, 107, 216, 283
 Holder, J., 17, 41
 Holistic, 7, 42, 53, 61, 62, 74, 76, 81, 103, 105, 123, 125, 158, 165, 173, 177, 186, 188, 230, 255, 258, 261, 263, 265, 273, 283, 292, 293, 304
 Holomovement, 228
 Home, 125, 160, 161, 199, 279
 Homer, 154
 Hopcke, R., 137
 Hope, 7, 61, 68, 88, 140, 141, 143, 144, 186, 187, 196–203, 207, 214, 232, 236
 Horn, J., 227
 Horror, 186, 188, 194
 Human, 13, 40, 68, 95, 124, 153, 186, 217, 243, 283
 Humankind, 4, 8, 45, 50, 80, 102, 136, 154, 170, 194, 207, 217, 223, 305, 309
 Hypothesis, 19, 26, 42, 43, 157, 179, 214, 215, 217, 276, 278, 282, 293

- I
- I Ching*, 41, 45, 80, 86
- Icon, 2, 21, 29, 41, 42, 51, 53, 55, 76, 77, 87, 91, 102, 104, 107, 110, 113, 117, 129, 131, 133, 136, 164, 192, 194, 226, 275, 279, 291
- Iconic, 48, 55, 76–79, 91, 192, 226, 304, 309
- Idea, 1, 7, 11, 13–15, 19, 23, 25, 29, 33, 40, 43, 45, 47, 51–54, 56, 57, 60, 74, 77–81, 88, 96, 97, 101, 103, 105–107, 114, 117, 124, 137, 139, 140, 142–144, 155, 165, 167, 169, 171, 174, 175, 201, 208, 217, 218, 220, 222, 223, 234–237, 239, 243, 245, 246, 251, 258, 261, 280–282, 286, 287, 290, 294, 295
- Idel, M., 229
- Identity, 1, 13, 14, 22, 32, 61, 102, 106, 155, 172–174, 183, 188–190, 192, 197, 201, 207, 220, 222, 257, 258, 283, 284, 291
- Ideographic, 80, 256, 264, 309
- Ignorance, 26, 34, 179, 224, 230, 248, 275
- Illes, J., 304
- Image, 13, 42, 68, 95, 124, 154, 184, 217, 249, 274
- Imaginal, 41, 85, 141, 207, 295
- Imagination, 6, 35, 43, 47, 48, 50, 71, 82, 85, 96, 102, 103, 106, 108, 109, 125, 131–133, 154, 160, 161, 168, 169, 171, 193, 207, 224, 225, 261, 267, 273, 277–279, 281, 283, 285, 289, 293, 304, 308, 309
- Immanence, 44, 59, 105, 119, 126–129, 133, 135, 142, 144, 146, 164, 178, 225, 288
- Immanent~transcendent, 132, 290, 294
- Impersonal, 12, 25, 33, 83, 114, 221, 252, 296
- Implicate, 29, 34, 51, 55, 58, 60, 77, 82, 102, 111, 143, 148, 192, 206, 228, 232, 252, 276
- Inayatullah, S., 156, 206, 243, 245
- In-between, 13, 23, 31, 41, 59, 86, 109, 112, 113, 132, 141, 143, 163, 167, 189, 207, 249, 262, 273, 283, 305
- Included middle, 5, 13, 15, 17, 22, 23, 27, 28, 34, 42, 47, 50, 56, 59, 61, 62, 71, 76, 81, 86, 89, 97, 105, 112, 118, 124, 127, 129–132, 139, 142, 148, 160–162, 168, 172, 175, 188, 191, 197, 202, 203, 215, 218, 219, 221, 224, 226, 228, 231, 233, 234, 247, 248, 258, 261–263, 266, 273, 278, 282, 284, 287, 288, 290, 293, 294, 296, 301, 304, 305, 307–309
- Inclusion, 4, 42, 47, 78, 110, 112, 118, 164, 220, 262, 263
- Index, 41, 96, 99, 102, 112, 126, 191, 193
- Individuation, 12, 13, 18, 22, 25, 28, 29, 33, 45, 50, 55, 60, 61, 68, 73, 88, 133, 143, 145, 154, 163, 165, 170, 191, 197, 207, 219, 221, 248, 259, 302
- Inference, 14, 19, 42–44, 48, 59, 89, 111, 132, 218, 234, 253, 273–276, 278, 279, 281, 282, 285–287, 289
- Infinity, 104, 130, 191
- Information, 16, 40, 71, 99, 125, 178, 192, 213, 243, 277
- Inquiry, 1, 14, 17, 22, 23, 26, 32, 40, 41, 95, 97, 99, 177, 243, 245, 263, 264, 268, 273–297
- Insight, 6, 24, 35, 56, 70, 71, 96, 106, 109, 125, 131, 136, 154, 160, 161, 183, 218, 224, 233, 234, 261, 264, 273, 277–279, 283, 285, 289, 290, 293, 304, 308, 309
- Instability, 27, 33, 58, 106, 113, 189, 224, 248
- Instinct, 4, 5, 71, 138, 184, 185, 305
- Instruction, 27, 68, 73, 107, 139, 168, 169, 202, 256
- Intangible, 33, 118, 164, 217, 308

INDEX

- Integral, 79, 148, 153–179, 186, 188, 200, 201, 224, 234, 250, 258, 291
- Integration, 12, 28, 50, 58, 71, 103, 116, 148, 154, 155, 158–160, 162, 163, 165, 169, 173, 176, 183–209, 214, 245, 254, 259, 260, 289, 291, 306, 309
- Intellect, 50, 54, 83, 91, 139, 234, 296
- Intellectual, 2–4, 13, 43, 44, 109, 124, 167, 175, 205, 207, 246, 256, 265, 287, 294
- Intelligence, 40, 41, 46, 81, 83, 84, 90, 105, 108, 116, 139, 168, 216, 223, 247, 258, 262–265, 278, 281, 286, 292, 293, 301
- Intelligent, 83, 90, 106, 108, 153, 167, 174, 177, 183, 223, 291, 294
- Intelligible, 13, 82, 83, 134, 199, 217, 224, 258, 289–293, 295
- Intensification, 72, 119, 148, 153, 156, 159, 191, 200, 208, 231, 287
- Intensity, 24, 29, 32, 33, 70, 72, 102–104, 106, 109, 110, 114, 159, 161, 236, 252
- Intentionality, 32, 79, 131, 174, 214, 278
- Interaction, 13, 18, 21, 26, 40, 60, 67, 88, 90, 97–99, 105, 115, 177, 185, 227, 236, 237, 246, 248, 263, 280, 281, 284, 286
- Interdependence, 14, 27, 119, 203, 247
- Interpretant, 2, 4, 17, 39, 42–44, 46, 47, 50, 52, 54–58, 60, 62, 74, 76, 87, 89, 90, 97, 103, 105, 110–112, 129, 134, 135, 141, 143, 156, 158, 170, 188, 203, 218, 220, 226, 230–233, 238, 248, 251, 255, 283, 285, 292, 295, 301, 307
- Interpretation, 1, 2, 4, 14, 17, 33, 39, 40, 42–44, 46–59, 61, 62, 67, 68, 71, 72, 76, 77, 85, 88, 89, 127, 129–132, 139, 141, 148, 155, 156, 161, 169, 171, 184, 191, 193, 196, 197, 201, 207, 214, 220, 222, 224, 225, 228–230, 236, 245–247, 250, 255, 260, 273, 275, 282, 286, 287, 289, 290, 292, 293, 301, 303, 304
- Interpreter, 2, 40, 48, 53, 57, 59, 71, 89, 171, 255
- Intuition, 6, 14, 30, 31, 33, 35, 43–45, 56, 71, 80, 89, 106, 109, 116, 125, 131, 132, 136, 139, 154, 160–162, 218, 219, 224, 253, 261, 268, 273, 276–279, 281, 283, 285, 287, 293, 304, 308, 309
- Intuitive, 30, 44, 82, 126, 132, 160, 163, 172, 179, 218, 219, 234, 253, 277, 279
- Invisible, 71, 77, 88, 109, 117, 126, 128, 132, 134, 137, 142, 143, 159, 186, 190, 199, 217, 218, 222–224, 230, 232, 236–239, 258, 277, 282, 286, 291–293
- Irrational, 5, 24, 50, 54, 135, 148, 155, 156, 161, 162, 229, 287
- Isis, 124, 147
- I-Thou, 248
- Ivanovic, F., 42
- J
- Jackendoff, R, 3, 231, 277
- Jameson, F., 88
- James, W., 17, 40, 83, 87
- Jantsch, E., 44, 56, 57, 75, 78, 79, 83, 87, 98, 103, 158, 215, 217–219, 224, 227, 235, 236, 238, 279, 302
- Janus, 78, 81, 101, 108, 110, 131, 134, 153, 157, 160, 230, 233, 258
- Jerk, 256, 288
- John Damascene, 42
- Johnstone, M.J., 306
- Josephson, B., 75, 78
- Joughin, M., 281
- Journey, 12, 14, 15, 17–19, 24, 25, 32, 45, 68, 78, 84, 104, 132, 136, 145, 147, 154, 163–165, 171, 173, 191, 200, 232, 273, 286
- Joy, 145, 167, 195, 207, 250

- Juarrero, A., 99, 102, 115
 Judgement, 42, 43, 185, 186, 202,
 203, 234, 246, 257, 258, 265, 266,
 278, 303, 306
 Jung, C.G., 3, 12, 22, 23, 29, 45, 46,
 49–58, 60, 61, 70, 75, 78, 83, 85,
 86, 96, 99, 109, 126, 130, 132,
 133, 135–138, 143, 145, 146, 154,
 155, 160, 184, 185, 189, 190, 216,
 221, 223, 230, 258, 277, 296, 302
 Justice, 79, 204, 217, 218
- K
- Kahn, R., 96, 97, 100–102, 108, 123,
 132, 137, 148, 160, 161, 169, 179,
 189, 200, 255, 293, 303
 Kairos, 143, 160, 219
 Kant, I., 155
 Kasdan, E., 33
 Kauffman, L., 47, 199, 229, 281
 Kauffman, S., 75, 84, 91
 Kearney, R., 249, 252, 296
 Kellert, S.H., 26
 Kelso, J.A.S., 5, 15, 47, 85, 90, 112,
 113, 131, 132, 146, 156, 161–164,
 168, 170, 172, 216, 228–230, 236,
 237, 239, 244, 247, 259, 262, 277,
 282, 287, 294, 301–303, 305–308
 Kennedy, J.B., 157
 Kerslake, C., 135, 143, 147
 Kevelson, R., 2, 16, 25, 32, 107
 Kierkegaard, S., 275, 276
 Kihlstrom, J.F., 277
 Kirkby, J., 195
 Klyukanov, I., 101, 116
 Knowledge, 11, 40, 71, 96, 125, 153,
 183, 219, 243, 273
 Kolberg, L., 174
 Kristeva, J., 4, 70, 87, 102, 123, 183,
 184, 187–199, 201, 202, 207, 273,
 305
- L
- Lacan, J., 78, 235
- Language, 1, 4–8, 16–18, 23, 29, 34,
 35, 43, 53, 55, 62, 67–91, 97, 100,
 106, 108–110, 112–114, 117, 124,
 125, 128, 130, 131, 134, 137–139,
 141, 143–145, 147, 148, 154, 155,
 162, 170, 174, 175, 177–179, 189,
 191–193, 196, 197, 199, 200, 202,
 203, 208, 213–217, 220, 222–225,
 230–235, 237, 239, 244, 250, 252,
 254–256, 258–260, 264–266, 276,
 277, 279, 281, 286, 289, 295, 296,
 302–310
 Laszlo, E., 55, 56, 58, 70, 74, 75, 83,
 86, 135, 220, 223, 230, 248, 249,
 302
 Latour, B., 230
 Law, 5, 14, 26, 40–41, 47, 48, 87, 97,
 102, 106, 107, 112, 113, 135, 138,
 140, 163, 189, 194, 195, 216, 221,
 223–225, 232–234, 237, 250–251,
 302
 Layout, 3, 18, 22, 29, 33, 39, 43, 49,
 55–60, 70, 72, 74–79, 82–85, 87,
 88, 114, 119, 127–135, 142, 147,
 157, 158, 160, 171, 174, 185, 188,
 192, 213–215, 219, 220, 223, 226,
 229, 236, 239, 247–249, 253, 264,
 273, 277–278, 284, 287–289, 292,
 304
 Leader, 136, 244, 259–261, 265–267,
 304
 Leadership, 244, 260, 264, 265, 267,
 304
 Learning, 2–7, 12–15, 17, 21, 22, 24,
 27, 29, 30, 32, 34, 39, 40, 44–46,
 48, 51, 55, 56, 58, 60, 61, 68, 72,
 78, 95, 97, 105, 113, 119, 123,
 128, 133, 136, 139, 145, 148, 161,
 166, 168–172, 176, 177, 188, 191,
 195, 200, 202–208, 216, 218, 219,
 221–223, 225–227, 234, 235, 238,
 245–248, 250, 252, 253, 255, 259,
 262–267, 273–276, 279, 284, 286,
 290, 292, 301, 302, 304–306,
 308–310

INDEX

- Lecomceva, M.I., 73
 Lederman, L., 263
 Leibniz, G.W., 78, 80, 81, 91
 Lesson, 3, 4, 15, 19, 21, 27, 43, 119,
 136, 137, 140, 165, 172, 173, 178,
 191, 194, 200, 201, 203, 205, 207,
 235, 306
 Lévi, E., 124
 Lévi-Strauss, C., 7, 88
 Lewis, T., 96, 97, 100–102, 108, 123,
 132, 137, 148, 160–161, 169,
 178–179, 189, 200, 255, 293, 303
 Libido, 133, 259
 Life, 3, 11, 41, 68, 101, 123, 153,
 183, 214, 246, 273, 302
 Light, 72, 96, 109, 110, 132, 160,
 185, 186, 207, 255, 275, 276, 280
 Lightning, 186, 187, 189–191, 195
 Liminal, 87, 143
 Line of flight, 31, 84, 145, 161, 197,
 221, 254, 256, 268, 277, 290, 295
 Linguistic(s), 1, 6, 70, 80, 81, 110,
 136, 183, 184, 193, 213–217, 235,
 251
 Lloyd, S., 75, 216, 218, 223–226,
 231, 232, 238, 248
 Locke, J., 2, 309
 Logic, 2, 11, 40, 67, 96, 123, 153,
 184, 215, 243, 273, 301
 Logos, 82, 125, 136–139, 147,
 162–164
 Logos spermatikos, 145
 Lotman, Y., 6, 74–75, 79, 81, 83–84,
 193, 216, 220
 Love, 4, 97, 106, 107, 112, 132, 136,
 137, 148, 173, 187, 199, 201, 207,
 220, 238, 249, 250, 259, 294, 296,
 305
 Luhmann, N., 60, 98–99, 247
- M**
 Machine, 32, 98, 108, 114, 135–136,
 142, 202, 221, 234, 235, 301–310
 Machinic, 14, 100, 222
 Magic, 95–97, 102, 103, 107, 111,
 113, 116, 153–154, 156, 159, 256,
 259, 260, 266, 279
 Magician, 32–33, 91, 95–119, 124,
 154, 157, 160, 196, 246, 254, 256,
 279
 Magnani, L., 275, 290
 Malfatti (Johann Malfatti de
 Montereaggio), 251
 Map, 84, 114, 125, 129, 132, 134,
 141, 142, 146, 158, 195, 231, 244,
 251
 Markoš, A., 221, 222
 Martin, S., 89, 117, 134, 140, 155,
 225, 248
 Marx, K., 273
 Massumi, B., 18
 Material, 16, 21, 22, 29, 33, 40, 41,
 50, 51, 55, 70, 75, 78, 80, 83–85,
 90, 91, 98, 100, 102, 103, 108,
 109, 116, 132, 134–136, 142, 147,
 158, 163, 164, 167, 168, 176–178,
 185, 191, 218, 226, 249, 257, 267,
 285, 308
 Maternal, 4, 5, 7, 71, 106, 138, 192,
 260, 305
 Mathesis, 80–82, 97, 100, 109, 111,
 139, 145, 197, 205, 224, 239,
 250–253, 256–261, 304, 308
 Matter, 14, 18, 24, 32–33, 40, 43, 50,
 53, 62, 73, 80, 81, 83, 85, 90, 91,
 97–99, 103, 107, 109, 114–116,
 130, 134, 140, 143, 153, 157, 163,
 165, 183, 189, 196, 216–218, 221,
 226, 230, 236–237, 239, 248, 254,
 282, 289, 305
 Matter~spirit, 165, 249
 Maturana, H.R., 108
 May, T., 49, 153, 243
 McLuhan, M., 5, 68
 Mead, G. H., 40
 Meaning, 1, 12, 67, 96, 125, 154,
 183, 213, 243, 275, 303
 Mediation, 1, 4, 12, 15, 40, 43, 46,
 55, 58, 62, 72, 81, 89, 98, 99, 105,

- 110, 146, 173, 208, 225, 226, 236, 239, 262, 276, 278, 283, 287, 291, 293–294
- Meier, C.A., 137, 143
- Meme, 220–224, 230, 232, 234, 236
- Memoria, 83, 159
- Memory, 4, 40, 51, 52, 79, 82–84, 90, 147, 157–159, 193, 226, 290
- Memosphere, 220, 239
- Meno, 274, 287, 290
- Mental, 2, 3, 22, 41, 45, 46, 54, 57, 58, 76, 78, 79, 87–88, 90, 153–156, 160–162, 172, 187, 195, 214–216, 223, 230, 234–236, 277, 279–280, 294, 295
- Mentalese, 213, 215–217, 223, 235, 239
- Merrell, F., 11, 15, 16, 18, 19, 24, 29, 33, 41, 42, 46, 47, 57, 68, 80, 111, 130, 132, 141, 146, 147, 232, 256, 277, 278
- Message, 3, 5, 21, 72, 160, 167, 198, 200, 205, 222, 283
- Meta-language, 1, 79, 87, 221, 222
- Metaphor, 1, 2, 13, 26, 45, 76, 88, 109, 125, 126, 132, 206, 273, 275, 276, 293
- Metaphysics, 91, 98, 167, 174–175, 206, 228, 279, 284
- Method, 7, 12, 25, 43, 44, 49, 52, 59–61, 73–74, 83, 95, 97, 117, 125, 131–133, 139, 155, 156, 159, 173, 176, 183, 202, 206, 208, 229, 246, 250, 252–254, 256–260, 267, 282, 293, 294
- Michaux, H., 23
- Michelangelo, 17, 77
- Microanalysis, 276
- Miles, M., 83
- Milojevic, I., 206, 243, 244
- Mind, 1, 13, 40, 70, 96, 127, 154, 186, 214, 243, 276, 301
- Mitchell, E., 230
- Möbius, 99, 229
- Monster, 101–102, 123
- Monstrous, 102, 108, 123, 148, 161, 162, 189
- Morality, 7, 86, 153, 185, 234
- Mother, 123, 137, 138, 140, 160, 178
- Movement, 2, 26, 34, 104, 110, 115, 123, 125, 132, 133, 145–147, 167, 188, 197, 199, 225, 231, 238, 251, 254, 256, 287, 288
- Muller, J., 58
- Multiplicity, 7, 12, 13, 18, 26, 31, 72, 96–97, 114, 115, 117, 146, 199, 205, 221, 225, 278, 287–290, 302, 305
- Murdoch, I., 292
- Music, 104, 115, 127, 162
- Mystic, 60, 61, 68, 71, 103, 147, 154, 245, 253, 254, 256
- Mystical conjunction, 107, 158
- Mysticism, 5, 46, 101, 134, 136, 215, 229, 252, 254, 294, 296
- Myth, 82, 84, 123, 133, 154, 159, 161–163, 178, 213, 307
- N
- Narcissus, 159, 162
- Narrative, 54, 67, 73, 78, 85, 224, 243, 255, 267, 273
- Naturalistic, 55, 86, 153, 213, 215, 220, 235, 293
- Nature, 1, 12, 40, 68, 95, 123, 156, 195, 214, 243, 285, 301
- Need(s), 4, 7, 8, 41, 45, 46, 48, 53, 54, 61, 68, 71, 72, 79, 84, 95, 106, 110, 118, 127, 131, 134, 138, 140, 145, 153, 154, 157, 160, 171, 173, 176–178, 186, 191–193, 197, 199, 207, 213, 216, 251, 252, 261, 274, 286–287, 291, 295, 296, 305–307, 309
- Negri, A., 102
- Neoplatonism, 154, 245
- Network, 13, 18, 25–27, 76, 98, 111, 125–126, 129, 146, 147, 226, 228, 245–249, 254–256, 258, 262, 264–267, 279, 293, 302

INDEX

- Neumann, E., 185–186, 200, 249
 Neuroeducation, 304
 Neutral language, 143, 162, 232, 252
 Neville, B., 172
 New Age, 144, 266, 296, 309
 New Jerusalem, 258
 Newton, I., 279
 Nichols, S., 45, 96, 207
 Nicolaidis, A., 228
 Nicolescu, B., 245, 261, 263, 264, 267
 Nietzsche, F., 145, 207, 260
 Noddings, N., 4, 6–8, 12, 14, 26, 30, 31, 40, 41, 43–46, 61, 71, 86, 87, 106, 117, 119, 123, 125–127, 134, 137, 138, 140, 142, 144, 148, 153, 160, 162–164, 167, 169–173, 176, 177, 183, 186, 191, 192, 194, 199–201, 203, 204, 208, 218, 219, 235, 238, 245, 248, 256, 258–261, 266, 268, 273, 276, 281, 283, 289, 302, 304–306, 308–310
 Nomad, 22, 23, 108, 133, 254, 260
 Non-contradiction, 5, 17, 21, 41, 50, 257, 259
 Nonlinear, 26, 46, 60, 88, 104, 133, 227, 285–286, 293, 307
 Nonlinearity, 26
 Non-local, 45, 46, 57, 75, 77, 109, 115, 132, 134, 230, 231, 282
 Nonsense, 19–21, 28, 30, 33
 Nonverbal, 1, 7, 17, 31–32, 72, 73, 80, 81, 134, 136, 184, 192, 199, 216, 217, 237, 307
 Nothing, 12, 15, 19, 25, 26, 30, 33, 43, 49, 71, 72, 76, 90, 136, 142, 172, 186–188, 231, 232, 236, 248, 255, 307
 Nöth, W., 4, 40, 53, 70, 72, 80, 81, 89, 91, 95, 96, 184, 216, 305
 Nous, 44, 83, 84, 139, 223, 286, 287, 293, 294
 Novalis, 172
 Novelty, 11, 23, 24, 27, 30, 32, 52, 85, 87, 90, 112, 113, 139, 224, 226, 227, 248, 265–267, 283, 284, 288, 290, 309
- O
- Olshewsky, T., 287
 Olssen, M., 243
 Ontology, 48, 75, 86, 103, 117, 127, 128, 135, 142, 145, 157, 164, 175, 230, 235, 238, 245, 249, 283, 292, 294
 Opposites, 15, 21, 30, 42, 44, 53–55, 61, 83–86, 95, 96, 99, 100, 107, 112, 113, 116, 117, 126, 131, 132, 134, 139, 142, 143, 147, 156, 158–165, 167, 175, 184–187, 189, 192, 197, 202, 203, 205, 207, 228–230, 233, 237, 247, 249, 252, 254–257, 262, 279, 284, 287, 305, 308
 Organic, 6, 14, 17, 21, 27, 28, 74, 108, 114, 177, 225, 238, 246, 253, 259, 266
 Organism, 16, 27, 28, 108, 164, 176, 224, 230, 244, 264, 267
 Origin, 14, 19, 95, 99, 124, 154, 156, 164, 173, 230, 244, 254
 Outside, 13, 19, 21, 26, 27, 44, 57, 61, 71, 81, 91, 99–101, 105, 108, 110, 111, 115, 129–131, 135, 142, 145, 161, 162, 167, 184, 185, 187, 201, 204, 218, 261–263, 272
- P
- Paideia*, 206
 Paradigm, 25, 50, 62, 78, 82, 104, 133, 162, 232, 239, 246, 247, 251, 252, 264, 267
 Paradox, 17, 21, 33, 47, 79, 100, 109, 130, 229, 273–297
 Parapsychology, 82
 Parnet, C., 13, 14, 18, 49, 84, 108, 127, 134, 145, 147, 153, 168, 207, 208, 221, 225, 260, 287, 290, 293, 301

- Participation, 28, 60, 61, 68, 144, 162, 167, 173, 234, 253
- Participation mystique, 162
- Patriarchy, 7, 123, 148, 179, 304
- Patterns, 3–5, 22, 41, 44–47, 50, 51, 53, 55, 58, 61, 62, 74, 77, 78, 84, 88, 113–116, 123, 127, 132, 146, 153, 154, 157, 163, 168–170, 175, 185, 188, 193, 197, 217, 219, 220, 222, 223, 232, 235–237, 244, 251, 262, 264, 267, 280, 285–287, 294, 302, 303, 306, 307
- Pauli, W., 45, 53, 56, 137, 143, 144, 160, 162, 230, 232, 252, 286, 288
- Peat, D., 15, 34, 57, 68, 146, 238
- Pedagogy, 7, 97, 126, 127, 161, 183, 202, 203, 207, 208, 222, 255–257, 276, 303
- Peirce, C.S., 12, 39, 70, 97, 125, 157, 188, 214, 244, 273
- Penrose, R., 59, 233–236, 279, 282, 294, 295
- Percept, 82, 101, 117, 126, 132, 146, 250, 252, 253
- Perception, 6, 11, 12, 33, 34, 39, 42, 44, 45, 47, 53, 56, 70, 73, 76, 82, 85, 88, 101, 106, 111, 114, 133, 142, 156, 160, 162, 172, 173, 219, 223, 238, 244, 249, 250, 252, 255, 267, 273, 276, 277, 284–286, 292, 294, 309
- Personality, 5, 12, 54, 61, 68, 165, 172, 186, 249
- Perspectival composition, 158, 162, 234, 235, 280, 281
- Peters, M.A., 6, 206, 208, 243, 256, 267
- Petitot, J., 287, 288
- Phenomenology, 88
- Philosopher, 1, 2, 4, 6, 8, 16, 40, 41, 55, 59, 70, 71, 79, 80, 85, 107, 117, 136, 147, 161, 167, 178, 205, 214, 220, 222, 236, 261, 304, 305, 309
- Philosophy, 1–3, 5, 30, 40, 41, 46, 50, 61, 80–83, 98, 99, 105, 109, 112, 113, 118, 126, 128, 129, 131, 132, 134–137, 154, 155, 159, 161, 163, 164, 167, 170, 173, 183, 201, 206, 208, 215–217, 223, 224, 236, 238, 245, 249–251, 259, 263–265, 275–277, 279, 289, 306, 309
- Phronesis, 106, 116, 117, 265, 292, 294, 296
- Physical, 18, 22, 24, 26, 33, 40, 45, 47, 51, 57, 58, 67, 74, 76, 77, 79, 81, 82, 84, 88, 90, 98, 102, 103, 107, 108, 112, 116, 135, 136, 143, 146, 153, 173, 176, 187, 188, 206, 214–216, 221, 225, 230, 231, 233–237, 239, 249, 257, 264, 279–283, 285, 286, 288, 291, 294, 295
- Physics, 19, 45, 75, 78, 97, 109, 112, 143, 216, 224, 225, 229, 250, 256, 281, 288, 289
- Piaget, J., 11, 261
- Picasso, P., 159
- Pictures, 3, 11, 16, 18, 19, 21, 25, 26, 29, 39, 41, 43–45, 50–52, 54–56, 67, 68, 70, 72, 73, 76–80, 87, 88, 91, 96, 101, 107, 113–115, 119, 125, 127, 129, 130, 132–135, 140–142, 146, 164, 165, 170, 172, 174, 178, 185, 186, 188, 190, 191, 193, 195, 199, 200, 204, 207, 214–221, 234, 239, 252, 258, 273, 291, 292, 303, 305
- Pinar, W., 176, 305
- Plato, 89, 132, 136, 199, 206, 217, 237, 274, 275, 287, 290, 291, 305
- Plotinus, 83
- Poet, 71, 114, 154, 278
- Poetry, 114
- Poincare, H., 111, 219
- Polany, M., 55
- Policy, 8, 185, 199, 239, 243, 257, 260, 266, 296

INDEX

- Politics, 140, 167, 256, 260, 266
Popp, J.A., 220, 221, 234
Posner, R., 67, 77
Possession, 13, 52, 86, 108, 195, 263, 265, 305
Post-human, 118, 128, 130, 200, 229, 237, 247, 294, 296
Post, van der, L., 45
Potential, 4, 7, 15, 18, 24, 25, 35, 48, 50, 51, 56, 57, 67, 71, 78, 83–85, 90, 91, 101, 102, 105, 107, 117–119, 125–127, 130, 133, 140, 143, 159, 169, 171, 172, 176, 179, 192, 195, 204, 206, 208, 216, 223, 226, 229, 232, 235, 236, 243, 249, 252, 253, 256, 259, 260, 273, 284, 285, 292, 295, 301
Potentiality, 11, 16, 24–26, 33, 48, 51, 52, 59, 72, 85, 101, 103, 107, 115, 116, 148, 200, 222, 251, 284, 285, 290, 294
Power, 7, 23, 24, 27, 30, 33, 50, 55, 58, 85, 91, 96, 97, 101, 104–106, 109, 117, 126, 133, 143, 145, 177, 187, 194, 195, 207, 218, 222, 232, 238, 244, 252, 259, 263, 265, 283, 290, 292, 293
Practice, 5, 8, 13, 16, 25, 29, 32, 33, 40, 47, 49, 54, 59, 60, 62, 67, 70, 74, 83, 85–87, 95–97, 100, 101, 109, 118, 119, 125, 127, 129, 131–133, 137, 138, 141, 142, 144, 145, 162, 164, 168–170, 174, 176–179, 183, 184, 199, 202–204, 206–208, 216, 220–222, 230, 232, 235, 236, 238, 243, 244, 247, 248, 250, 251, 255, 256, 258–261, 264–266, 273, 284–286, 291–293, 296, 301–305, 308
Pragmatic maxim, 12, 25, 29, 35, 46–49, 51, 58, 193, 237, 246
Prawat, R., 275, 278
Praxis, 35, 176, 246
Precognition, 77, 290
Prediction, 26, 52, 57, 147, 220
Pribram, K., 74
Priestess, 124, 125, 127, 128, 131–133, 136, 137, 139, 140, 144, 145, 147, 148, 174, 175, 178, 254, 283, 284, 305
Priestley, J., 174
Prigogine, I., 25, 74, 248
Probability, 27, 30, 85, 112, 116, 220, 255
Problems, 16, 28, 32, 43, 45, 48, 72, 77, 86, 137, 139, 141, 143, 144, 153, 155, 174, 191, 204, 205, 222, 223, 225, 227, 229, 231, 243, 244, 266, 274, 275, 278, 285, 291, 292, 294–296, 303, 306
Process, 12, 39, 67, 95, 123, 153, 183, 214, 243, 273
Projection, 22, 24, 29, 59, 75–77, 127, 158, 171, 195, 217, 233, 273, 274, 280–282, 287, 288, 290–292
Projective geometry, 59, 111, 234, 280–282
Projective hypothesis, 157, 217
Proposition, 5, 16, 17, 42, 43, 50, 109–111, 134, 139, 169, 191, 215, 278, 283, 303
Proto-mental, 98, 107, 213, 216
Proust, M., 252
Psyche, 1, 12, 14, 19, 22, 29, 32, 44, 46, 50–54, 58, 60–62, 68, 70, 72, 74–76, 83–87, 99, 109, 119, 127, 143, 158, 159, 163, 168, 171, 184–187, 192, 201, 202, 207, 219, 221, 223, 234, 252, 276, 277, 303, 308
Psychoanalysis, 2, 4, 52, 70, 82, 177, 183
Psychoid, 53
Psychology, 6, 12, 39, 40, 45, 49, 50, 58, 67, 70, 82, 135, 138, 157, 171, 172, 177, 185, 238, 246, 277, 302
Puer aeternus, 11
Pythagoras, 136
Pythagorean, 280

- Q
 Quantum, 14, 27, 75, 76, 78, 112,
 163, 216, 226, 228, 230–232, 234,
 238, 288, 292
 Qubit, 216
- R
 Radest, H., 171
 Radford, M., 172
 Ramey, J., 259
 Ratio, 80, 85, 105, 246, 284, 294
 Rational, 12, 17, 24, 51, 54, 86, 111,
 123, 148, 155, 156, 160, 161, 167,
 172, 189, 280, 287
 Rationality, 5, 40, 58, 96, 97, 116,
 125, 129, 136, 138, 156, 161, 229,
 244, 252, 253, 287
 Reality, 5, 12, 16, 22, 24, 26, 34, 35,
 40–42, 46–49, 51–53, 56–58, 60,
 62, 67, 68, 70, 76–78, 81, 82, 85,
 88, 90, 91, 101–103, 107, 113,
 115, 117–119, 127, 128, 132, 134,
 141–143, 145–147, 156, 158, 167,
 168, 171–175, 178, 179, 183, 189,
 192, 193, 196, 197, 200, 203, 216,
 218, 219, 232, 235, 244, 245,
 248–252, 258, 281, 285–288,
 294–296, 301, 307
 Reason, 5, 25, 34, 35, 40, 42, 43, 46,
 90, 96, 97, 105, 125, 131, 139,
 148, 174, 197, 208, 228, 245,
 277–279, 284–288, 290, 294, 295,
 304, 305, 308
 Rebirth, 155, 170, 171, 198, 199, 201,
 273
 Reconciliation, 5, 113, 116, 164, 227,
 233, 236, 247
 Relation, 13, 39, 70, 95, 125, 156,
 186, 217, 244, 273
 Relational, 2, 4, 13, 14, 18, 21, 26,
 41, 55–57, 60, 61, 76, 78, 88, 100,
 103, 106, 108, 110–112, 115, 117,
 118, 123, 125, 126, 135, 137, 138,
 142, 146, 147, 161, 164, 168, 174,
 177, 199, 200, 202, 221, 227,
 229–231, 244, 247, 248, 251, 254,
 277, 280, 281, 283, 292–294,
 301–303, 306–308
 Relationship, 3, 6, 48, 54, 57, 61, 70,
 76, 77, 83, 88, 137, 172, 179, 185,
 189, 208, 231, 233, 244, 245, 264,
 266, 275, 284
 Religion, 8, 51, 97, 124, 136, 167,
 175, 177, 254, 255, 267
 Renaissance, 41, 154
 Representation, 2, 3, 8, 25, 32, 46–49,
 51–53, 58, 59, 75, 78, 81, 83, 87,
 88, 103, 139, 170, 171, 193, 208,
 214–216, 218, 221, 234, 235, 249,
 253, 264, 279, 291, 321
Res cogitans, 41, 76, 163, 164, 245,
 276
 Research, 1–3, 6, 14, 67, 80, 81, 86,
 91, 97, 146, 163, 206, 207, 214,
 225, 239, 257, 261, 277, 278, 304,
 305
Res extensa, 41, 163, 245
 Resonance, 18, 77, 78, 107–110, 134,
 145, 253, 266, 277
 Responsibility, 85, 86, 145, 173, 178,
 185, 235, 239, 258, 260, 304
 Resurrection, 258
 Revolt, 187, 195, 198, 201, 207
 Revolution, 76, 184, 193, 200, 304
 Rhizomatic, 13, 14, 18, 24, 125, 126,
 130, 136, 139, 147, 246, 254, 293
 Rhizome, 13, 34, 125, 126
 Rhythm, 28, 34, 104, 116, 131, 231
 Right-hemispheric, 306, 309
 Robertson, S.L., 243
 Rockwell, W.T., 216, 233, 235
 Rogers, C., 6
 Romanyshyn, R., 141
 Rosen, R., 225
 Rossiter, G., 174, 176, 308
 Rotman, B., 15, 19
 Rucker, R., 31
 Rule, 14, 42, 59, 79, 87, 164, 170,
 186, 201, 205, 208, 221, 222, 234,
 267, 282

INDEX

- Rupture, 13, 28, 49, 96, 110, 186, 188
 Russell, B., 30, 41
- S
- Salanskis, J.-M., 287
 Samuels, A., 45, 50, 61, 74, 133, 185, 230
 Schelling, F.W.J., 25, 34
 Scheman, N., 275
 Schizophrenic, 68, 82
 School, 8, 12, 13, 15, 21, 23–25, 31, 40, 68, 70, 74, 78, 82, 84, 101, 119, 126, 136, 137, 140, 154, 163, 166, 169, 176, 177, 191, 194, 205, 207, 219, 235, 244, 250, 251, 259, 261, 265, 273, 286, 292, 305, 306, 308
 Science, 1, 30, 40, 70, 96, 131, 156, 188, 213, 244, 275
 Screen, 42, 76, 304
 Sebeok, T., 39, 51, 73, 130
 Secondness, 15, 33, 40, 47, 48, 57, 81, 99, 102, 258, 278, 279, 282, 283, 285, 286, 289
 Self, 12, 47, 68, 95, 126, 154, 183, 214, 244, 273
 Self-education, 12, 55, 60, 126, 139–141, 176, 183, 202, 203, 218, 221, 252, 273, 302, 309
 Self-knowledge, 12, 58, 89, 126, 136, 159, 183, 224, 229, 238, 259, 302, 305
 Self-organization, 56, 71, 78, 79, 81–84, 88, 98, 102, 113, 115, 163, 245, 247
 Self~other, 118, 126, 129, 146, 162, 172, 174, 176, 203, 224, 233, 239, 244, 248, 249, 259, 262, 267, 292, 301
 Self-reference, 47, 58, 78, 91, 112, 159, 218, 225, 227, 229, 237, 248, 296
 Semanalysis, 4, 70, 183, 184, 193, 196, 198
 Semetsky, I., 2–3, 6–8, 39–41, 43, 44, 47, 49, 52, 56, 58, 59, 61, 70, 71, 76, 77, 85–87, 95, 97, 98, 103, 104, 106, 109, 117, 123, 126–128, 130, 132, 135, 137, 143, 161, 162, 169, 173, 174, 179, 184, 197, 201, 202, 206, 208, 213, 214, 217, 219, 223, 243–246, 248, 250–255, 259, 267, 273, 274, 276, 280, 288, 289, 295, 301–306, 308
 Semiology, 2, 82
 Semiosis, 1, 2, 4, 5, 8, 15–17, 19, 26–28, 32, 33, 35, 39–41, 46, 48, 49, 51, 52, 56, 57, 59–62, 68, 72, 75, 77–79, 81, 83, 86, 88, 89, 95, 99, 100, 102, 105, 107, 110, 111, 113, 115, 119, 123, 130–133, 144, 146, 147, 157, 158, 163, 172, 191, 192, 199, 200, 216, 222, 227, 228, 231, 233, 237, 238, 243, 244, 247, 256, 259, 260, 262, 285, 286, 288, 292, 295, 302, 307, 309
 Semiosphere, 6, 74, 75, 77, 81, 83, 216, 220, 222, 239
 Semiotic, 14, 40, 68, 95, 126, 156, 184, 213, 243, 276
 Semiotic Society of America (SSA), 2
 Sense, 12, 39, 70, 96, 123, 155, 183, 223, 244, 275
 September 11 (9/11), 201
 Series, 13, 15, 17, 18, 21–23, 28, 30, 31, 39, 46–49, 53, 73, 89, 99, 100, 105, 106, 108, 110, 123, 134, 143, 145, 154, 160, 167, 170, 232, 254, 284, 293, 295
 Service, 95, 118, 207, 260, 296
 Shadow, 58, 138, 141, 184–186, 195, 202, 206, 273, 280, 281, 290, 291
 Shakespeare, W., 71, 278
 Shekhinah, 136, 139, 178, 255
 Sheridan, K., 304
 Sheriff, J., 47
 Shimony, A., 47, 59, 91, 233, 282, 289

- Shlain, L., 7, 42, 53, 68, 71, 76, 114, 123, 125, 136, 148, 179, 200, 254, 255, 264, 266, 304, 306, 309
- Shock, 187–190, 208
- Sign-function, 2, 51, 96, 100, 106
- Significance, 3, 4, 30, 32, 34, 41, 45, 48, 52, 53, 70, 74, 87, 116, 118, 131, 148, 154, 177, 184, 185, 193, 198, 206, 251, 267, 274, 285, 296
- Signification, 1, 2, 24, 33, 58, 67, 70, 75, 78, 82, 89, 107, 110, 131, 183, 189, 257
- Signosphere, 5, 72
- Silent, 19, 78, 81, 113, 128, 134, 145, 196, 220
- Silent discourse, 78, 79, 88, 105, 109–111, 141, 144, 145, 147, 178, 191, 192, 279, 281, 301
- Silverman, H., 32
- Silverman, K., 78, 84, 88
- Simon, H.A., 217, 218
- Simons, M., 243, 244
- Simultaneous, 7, 88, 143, 157, 158
- Singularity, 32, 114, 117, 208, 222, 230, 256
- Situation, 23, 27, 43, 44, 47, 52, 54, 56, 70, 72, 86–88, 115, 130, 140, 155, 174, 191, 195, 250, 264, 276, 278, 289, 292
- Slaughter, R., 243
- Slote, M., 205, 294
- Smolensky, P., 279
- Smolin, L., 75, 76
- Social, 2, 4, 5, 13, 22, 29, 32, 40, 57, 61, 62, 73, 76, 85, 87, 98, 103, 117, 135, 142, 164, 172, 177, 179, 183–185, 190, 193, 197, 199, 209, 221, 222, 238, 244, 246, 247, 255, 259–261, 267, 284, 296, 301, 307, 310
- Society, 2, 6, 7, 125, 126, 148, 199, 244, 253, 256, 264, 267
- Socrates, 136, 178, 183, 205, 274, 275, 305
- Solidarity, 106, 253, 255, 260
- Sonesson, G., 67
- Sophia, 136, 137, 139, 178
- Soul, 61, 83, 90, 103, 109, 116–118, 137, 142, 144, 154, 159, 160, 162, 163, 167, 171, 173, 238, 250–252, 254, 256, 258
- Spencer-Brown, G., 30, 232
- Spinks, C.W., 32, 44, 53, 55, 103
- Spinoza, B., 48, 76
- Spirit, 116–118, 134, 136, 137, 162, 164, 165, 167, 171, 175–178, 188, 194, 208, 249, 279, 295, 305, 308
- Spiritual, 3, 8, 46, 73, 74, 80, 84, 97, 100, 101, 105, 118, 119, 133, 134, 136, 145, 147, 148, 153, 162–164, 167, 168, 170–173, 176–178, 198, 200, 207, 238, 239, 248, 249, 251, 254, 256–260, 267, 273, 275, 276, 295, 308
- Spirituality, 8, 46, 125, 140, 174, 179, 267, 305
- Spontaneity, 14, 25, 106, 223, 246
- Squiggle, 5, 112, 116, 118, 126, 131–134, 139, 156, 161, 163, 188, 197, 220, 221, 227, 233, 247, 249, 252, 253, 261, 262, 265, 280, 287, 288, 294, 295, 301
- Stapp, H.P., 62, 103, 147, 163, 285, 288, 292, 307
- Star, 144, 184, 198–200, 232, 247
- Stengers, I., 25
- Stivale, C.J., 78, 127, 142
- Stoics, 18, 89, 101
- Stone, L., 183, 187, 198, 201
- St. Pierre, E.A., 142, 207
- Subjectivity, 4, 15, 18, 19, 21–24, 27, 31, 32, 60, 78, 88, 95, 143, 172, 188, 192, 197, 198, 201, 231, 252, 261, 301
- Subject-object, 218, 220
- Subliminal, 16, 82, 222, 223, 277
- Substance, 75, 118, 123, 124, 142, 167, 217, 239, 291
- Summation, 105, 293

INDEX

- Surface, 16, 18, 19, 22, 29, 33, 76, 127, 128, 134, 135, 145, 146, 189, 215, 217, 253, 284, 287
- Surplus, 1, 60, 67, 104, 107, 192, 202, 231, 293
- Survival, 4, 5, 72, 81, 266
- Symbol, 1, 6, 14, 15, 17, 18, 25, 29, 41, 51, 67, 68, 96, 97, 102, 104, 105, 112, 113, 116, 123, 125, 136, 140, 144, 154, 155, 159, 160, 164–166, 186–189, 191, 195, 200, 217, 223, 233, 236, 238, 257, 258, 287
- Symbolism, 3, 4, 33, 39, 54, 58, 71, 77–80, 96, 97, 117, 126, 127, 133, 143, 162, 165, 187, 195, 196, 200, 202, 205, 208, 217, 249, 309
- Sympathy, 6, 7, 106, 249, 263, 294
- Symptom, 1, 2, 51, 52, 72, 82, 128, 143, 291
- Synchronicity, 45, 50, 57, 58, 62, 109, 143, 155, 230
- Syntax, 68, 79, 112, 139, 215, 233, 247, 287, 288, 301
- Synthesis, 39, 40, 51, 54, 72, 124, 135, 157, 158, 184, 254, 261
- Synthetic, 7, 40, 42, 46, 52, 68, 72, 188, 253, 263, 286
- System, 13, 45, 68, 96, 125, 168, 183, 213, 245, 277
- Systems theory, 39, 55
- T
- Taboo, 6, 101, 145, 161
- Tabula rasa, 34, 131
- Tao, 105
- Tarnas, R., 303
- Taylor, C., 170, 199, 273
- Teacher, 43, 119, 134, 136, 139, 170, 177, 205, 221, 276, 303
- Teleology, 26, 106
- Tendency(ies), 40, 47, 48, 53, 56, 57, 60, 70, 112–115, 131, 156, 185, 189, 228–230, 237, 249, 251, 277, 284, 285, 289, 292, 294, 296, 304, 306–308
- Terror, 195, 201
- Tertium, 40, 42, 54, 155, 161, 163, 173, 252
- Text, 67, 68, 71, 79, 81, 84, 86, 88, 90, 136, 183, 196, 197, 202, 223, 224, 305
- Thelen, E., 58
- Theology, 258, 294, 296
- Theory, 3, 6, 8, 11–13, 17, 23, 26, 28, 29, 39–41, 55, 58, 60, 72, 78, 80, 83, 86, 117, 129, 133, 156, 157, 164, 168, 175, 194, 203, 206, 214, 215, 220, 225, 227, 234, 237, 243, 245, 248, 251, 257, 258, 263, 264, 267, 274, 275, 283, 288, 290, 304, 309
- Therapy, 95, 96, 118
- Thinking, 2, 5–7, 15, 17, 19, 21, 23, 26, 29–31, 34, 40–43, 48–52, 55, 97, 103, 104, 107, 109, 116, 117, 132, 133, 138, 140, 142, 147, 174, 176, 179, 183, 188, 189, 194, 201, 202, 206, 223, 224, 229, 234, 235, 239, 243, 245, 246, 250, 253, 255, 259, 261, 263, 265, 267, 281, 283, 286, 288, 289, 291, 303–305
- Thirdness, 15, 16, 40, 46–48, 50, 54–59, 89, 99, 102, 105, 110, 111, 139, 162, 278, 279, 282, 283, 285–291
- Thom, R., 225, 280
- Threshold, 1, 31, 32, 58, 96, 100, 113, 135, 143, 169, 223, 281, 284, 288, 308
- Tilde, 112, 118, 159, 163, 199, 227, 236, 262
- Time, 4, 8, 14, 16, 18, 19, 23, 29, 35, 49, 51, 53, 56, 57, 75, 76, 80, 83, 97, 100, 102, 103, 108, 114, 118, 124, 128, 132, 133, 135, 143, 153, 156–160, 162, 168, 173, 174, 176, 183, 188, 191, 197, 200, 206, 207,

- 215, 217, 230, 233, 235–237, 239, 256, 257, 276, 288, 295, 301–303
- Time-freedom, 173, 237
- Timeless, 22, 143, 206
- Tomberg, V., 147, 167
- Tower, 70, 102, 184, 186, 187, 189–193, 195–201, 207, 208, 213, 217, 232, 247
- Tower of Babel, 189, 190, 208, 213
- Tradition, 1, 6, 41, 82, 83, 90, 136, 147, 148, 154, 161, 164, 249, 251, 255, 267, 275
- Transaction, 16, 17, 21, 26, 28, 97, 101, 107
- Transcendence, 44, 59, 116, 127, 135, 164, 178, 218, 225, 288, 296
- Transcendental, 33, 59, 103, 126–128, 131, 133, 135, 142, 250, 268, 286, 288
- Transcendental empiricism, 25, 131–133, 252, 293
- Transcendent function, 52, 54, 55, 108, 296
- Transformation, 2, 28, 35, 43, 45, 51, 53, 54, 57, 58, 61, 70, 72, 74, 88, 90, 98, 109, 111, 115, 116, 133, 139, 162, 163, 197, 201, 208, 235, 238, 243, 245, 249, 256, 258–260, 274, 275, 288, 295, 302, 304, 306
- Transmutation, 143, 163, 165, 172, 207
- Transpersonal, 75, 77, 101, 171, 177, 229, 244, 245, 247, 264, 267, 268
- Transversal, 13, 35–119, 128, 130, 131, 133–135, 141, 142, 146, 197, 235, 238, 239, 247, 252, 253, 261, 264, 268, 279, 281, 282, 290, 291, 293, 296
- Tree, 125, 136, 138
- Triad, 28, 40, 47, 54, 70, 87, 89, 105, 110, 117, 135, 226, 229, 231, 233, 235, 236, 250, 262, 283, 290, 292, 294, 295, 301
- Triangle (semiotic triangle), 47, 89, 157–159, 162, 215, 234–236, 250, 258, 279–281, 289–291, 296
- Triangle argument, 157–159, 162, 215, 235, 280
- Trickster, 32, 96, 97, 103, 113, 160
- Trinity, 136
- Trust, 76, 200, 304
- Truth, 5, 12, 42, 48, 100, 104, 129, 133, 146, 155, 158, 167, 169, 170, 275, 286
- Tubbs, N., 276
- U
- Uncanny, 137, 148, 161, 189, 193, 250
- Uncertainty, 74, 87, 164, 187, 208, 217, 288
- Unconscious, 12, 43, 68, 96, 123, 153, 183, 214, 249, 274
- Understanding (Ages of; Fifth Age of), 2, 5, 6, 11, 80–83, 90, 101, 109, 124, 137, 138, 145, 148, 162, 168, 170, 172, 174, 176, 177, 179, 188, 191, 200, 205, 206, 208, 209, 213, 217, 220, 224, 225, 229, 234–237, 245, 249, 250, 252, 253, 260, 263, 265, 266, 273, 275, 281, 282, 284, 289, 292, 294–296, 301, 302, 306, 309
- UNESCO, 8, 202, 308
- Union, 28, 44, 54, 70, 116, 139, 163, 229
- Universal, 4, 18, 26, 35, 40, 50, 51, 61, 78–81, 84, 90, 91, 97, 105, 113, 117, 142, 144, 145, 147, 154, 160, 170, 173, 195, 200, 202, 208, 216, 217, 229, 230, 232, 239, 250, 251, 259, 280, 289, 302, 308
- Universal language, 80, 81, 91, 144, 147, 308
- Universe, 1, 14, 22, 49, 75, 79, 90, 98, 100–103, 107, 116, 124, 128, 132, 145, 157, 164, 165, 167, 175, 189, 199, 214, 216, 218, 220,

INDEX

- 224–226, 228, 230–234, 237, 238,
246, 279, 281, 307
- Unthought, 21, 109, 129, 131, 136,
143, 153
- Untimely, 161, 206, 207, 263, 265,
286
- Unus Mundus, 53, 113, 207, 237, 254
- Utopia, 136, 267
- V
- Vacuum, 75, 230
- Validity, 22, 95
- Value, 28, 33, 40, 42, 48, 81, 86, 95,
101, 104, 106, 117, 144, 147, 164,
168, 174, 176, 183, 184, 194, 200,
202, 203, 221, 227, 231, 232, 235,
237, 244, 248, 265–267, 283, 293,
294, 301, 305, 306
- Van Eenwyk, J.R., 74, 146
- Vanishing point, 234, 235, 280
- Varela, F.J., 28, 73, 98, 99, 105–109,
111, 115, 117, 131, 219, 247, 261,
277, 278, 294
- Vector, 279, 281–283, 289, 291
- Veil, 147
- Vernadsky, V., 75, 79
- Vessel, 200
- Violence, 185, 195, 197, 200, 201,
206
- Virtual, 16, 25, 33, 46, 48, 49, 51, 52,
72, 75, 86, 88, 89, 101, 102,
113–115, 127, 128, 130, 131, 135,
141–143, 145, 146, 148, 153, 158,
172, 175, 193, 221–223, 228, 230,
232, 234, 238, 249–251, 253, 264,
278, 281, 285, 287, 288, 290,
292–295, 307, 308
- Virtual~actual, 142, 249, 264, 283,
295
- Visible, 21, 55, 77, 84, 96, 109, 111,
112, 128, 134, 135, 137, 142, 143,
146, 154, 159, 186, 217, 218, 223,
224, 230, 232, 234, 236, 237, 239,
245, 250, 257, 282, 291–293, 303
- Vocation, 257, 259
- Voice, 6, 19, 71, 101, 141, 145, 174,
178, 199, 261
- Von Balthasar, H.U., 147, 249, 254
- Von Eckardt, B., 57, 58, 214
- von Neumann, J., 288
- Vygotsky, L., 40, 87
- W
- Waite, A.E., 11
- War, 185, 194, 195
- Warning, 145
- Watson, J., 134, 306
- Watts, A.W., 105, 106, 108
- Wexler, P., 137, 141
- Wheeler, J.A., 163, 230
- Whimsical Tarot, 165, 166, 174, 175,
274
- Whitehead, A.N., 1, 8, 30, 43, 98,
100, 107, 113, 115, 116, 231, 279,
280, 284, 286, 288, 289
- Whitmont, E., 136
- Whole, 1, 7, 8, 12, 16, 25–27, 30, 35,
47, 49, 51, 53, 55, 68, 70, 77, 88,
90, 91, 100, 105, 116, 117, 124,
129, 138, 140, 143, 148, 154, 159,
161, 163, 165, 168, 173, 175, 178,
186–188, 193, 194, 199, 216, 224,
225, 228, 231, 236–239, 244, 246,
247, 249, 253, 259, 264–266, 280,
283, 285, 286, 302, 305, 306
- Wholeness, 12, 73, 102, 113, 154,
159, 172, 200, 201
- Whorf, B.L., 179
- Williams, J., 17, 21, 22, 29, 44, 108,
128, 141, 157, 160, 288
- Wisdom, 15, 23, 91, 96, 116, 124,
125, 132, 136–138, 174, 178, 205,
220, 229, 265, 294, 305
- Witherell, C., 96, 171, 273
- Wittgenstein, L., 215
- Wolfe, C., 247
- Woman, 7, 119, 123–148, 199, 200,
254, 306
- Women, 6–8, 123, 124, 136, 138,
140, 185, 254, 255, 304

INDEX

World, 11, 40, 67, 96, 123, 154, 185,
215, 243, 276

Y

Yates, F., 41, 83, 91, 97, 159

Youth, 11

Z

Zero, 15, 16, 20, 25–27, 30, 32, 33,
68, 95, 97, 130, 154, 164, 172,
173, 197, 231, 232, 251

Žižek, S., 25, 34

Zournazi, M., 201