Second Language Learning and Teaching

Krystyna Droździał-Szelest
Mirosław Pawlak *Editors*

Psycholinguistic and Sociolinguistic Perspectives on Second Language Learning and Teaching

Studies in Honor of Waldemar Marton

Springer

Second Language Learning and Teaching

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Editors

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Editors
Krystyna Drożdział-Szelest
Faculty of English
Adam Mickiewicz University
Poznan
Poland

Mirosław Pawlak
Faculty of Pedagogy and Fine Arts
Adam Mickiewicz University
Kalisz
Poland

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Preface

There are few scholars who deserve a tribute as much as Professor Waldemar Marton, not only as a distinguished specialist in the field of second language acquisition and foreign language education, but also as a friend, colleague, and teacher. On the one hand, he was one of the first Polish applied linguists who published books and papers abroad, thus making a name for himself in the international arena, a task that was indeed a major accomplishment in the 1970s and the 1980s when Poland was in many ways cut off from the outside world. On the other hand, he was the first to introduce the cognitive principles of foreign language pedagogy into Poland, never being enticed by the promises of non-interventionist approaches and at all times stressing the need for systematic instruction in the formal aspects of language. Those who have known him well for many years or have had the privilege to work with him will attest that he is a great friend and colleague, someone they can always count on, someone who is always willing to help out and provide guidance, but also someone who is always a pleasure to be with on a purely social plane. Most importantly perhaps, he has always been a respected mentor, not only for doctoral students whose work he has supervised as well as less experienced colleagues, but also for undergraduates and graduates, all of whom have held him in high esteem, because of his extensive knowledge, academic work, decency, modesty, great class, or respect for others. It is indeed not often that we come across all such commendable characteristics in a single person, but it surely helps explain the recognition Professor Marton enjoys among many eminent scholars from Poland and abroad as well as the fact that, when approached, little did they hesitate to agree to make a contribution to this volume, intended as a collection of studies in his honor.

The papers included in this book have been divided into three parts, devoted to theoretical issues, empirical investigations, and classroom practices. The first part, entitled *Theoretical considerations*, opens with a contribution by Maria Dakowska, who considers the interfaces between cognitive science and foreign language pedagogy, arguing that the latter has assumed the status of an autonomous discipline. Subsequently, Michael Sharwood Smith provides his perspective on the interface debate in second language acquisition by comparing the claims of emergentist and modular positions. This is followed by three papers, the primary concern of which is to forge links between theory and practice, with Maria

Wysocka focusing on issues that need to be explored in the light of the rise of English as an international language, Hanna Komorowska demonstrating the ways in which metaphor can be used in language instruction and teacher education, and Halina Chodkiewicz considering the possibilities of accomplishing a dual focus on content and language in teaching reading in a second or foreign language. Part II, *Research projects*, brings together five papers which report the findings of research into different aspects of language learning and teaching. First, Susan Gass, Jennifer Behney, and Baburhan Uzum discuss the results of a study that sought to determine the impact of working memory capacity and inhibitory control on the effects of interactive feedback. In the next two research projects, Anna Cieślicka puts to the empirical test the claims of idiom decomposition hypothesis, whereas Anna Michońska-Stadnik explores the relationship between the cognitive styles of reflectivity and impulsivity and the acquisition of grammar structures. Then, Anna Niżegorodcew reports the results of a small-scale study that aimed to tap learners' motivations behind their decision to sign up for English courses in different language schools, pointing to the still high regard for teaching methods. Finally, Michael Pasquale and Dennis Preston seek to gain insights into the beliefs about language instruction displayed by language teachers and learners at secondary and university levels, thereby contributing to the field of what they call folk linguistics. The last part, called *Classroom applications*, opens with the consideration of the current status of a teaching method, with Krystyna Droździał-Szelest arguing that, despite all the criticism, the concept is still needed as it helps practitioners develop their personal approach to teaching. Next, Mirosław Pawlak considers the principles of instructed language acquisition proposed by theorists and researchers as a point for reference for a tentative model of teaching grammar in foreign language contexts. In the last two papers, first, Teresa Siek-Piskozub demonstrates how simulations can be employed with the purpose of enhancing the intercultural communicative competence of future teachers of English, and, second, Roger Berry presents the inadequacies of the personal pronoun paradigm in English, emphasizing that poor pedagogic descriptions are bound to translate into ineffective grammar instruction. We hope that the multiplicity of theoretical, empirical, and pedagogic perspectives represented by the papers included in this book will ensure its relevance to wide audiences, not only scholars, but also undergraduate, graduate, and doctoral students as well as teachers, and that it will also contribute to some degree to improving the quality of second and foreign language education.

Krystyna Droździał-Szelest
Mirosław Pawlak

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The editors would like to express their gratitude to Professor Janusz Arabski (University of Silesia, Poland) who kindly agreed to review the papers included in the present volume. His invaluable comments and suggestions have without doubt greatly enhanced the quality of this work.

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Part I
Theoretical Considerations

Foreign Language Didactics Encounters Cognitive Science

Maria Dakowska

Abstract The choice of the topic stems from the fact that Professor Waldemar Marton is the intellectual pioneer who introduced cognitive thought into Poland and developed it further while conducting his own research on foreign/second language learning and teaching within this framework. Since his first account of David Ausubel's (1968) cognitive views in educational psychology, cognitive conceptions have proliferated in the field of foreign language learning and teaching. Their potential and actual impact on our understanding of non-primary language learning cannot be overestimated. After all, language learning *is* cognitive by definition. Needless to say, in the past decades cognitivism has spread like fire not only in psychology, but also in philosophy, epistemology, neuroscience, artificial intelligence, linguistics, psycholinguistics, translation studies, psychology of communication, sociology of cognition, cultural anthropology and second language acquisition research. We are witnessing a cognitive turn in these fields and an emergence of an interdisciplinary cognitive science. The question arises as to whether or not foreign language didactics (FLD) can (or should) become a member of this alliance and if so, on what terms and bases? For one thing, the encounter mentioned in the title immediately evokes what for foreign language didactics still constitutes a sensitive issue of identity. To make matters worse, not all of the developments in the cognitive sciences are equally relevant to the concerns of foreign language didactics. For this reason, the paper aims to determine the nature of this relationship on the basis of substantive (subject matter) criteria; in other words, it is intended to: (a) discern the aspects and level of magnitude of cognitive processes investigated by the potentially relevant cognitive sciences, and (b) to discern the aspect of cognition of relevance to foreign language didactics, understood as an autonomous empirical discipline, constituted in accordance with the cognitive conception of science. For this purpose, it is necessary to identify the fundamental unity underlying human cognitive phenomena of interest to the cognitive sciences, including FLD, and discern their specific aspect which justifies a relative autonomy of FLD within the cognitive alliance.

M. Dakowska (✉)
University of Warsaw, Warsaw, Poland
e-mail: m.b.dakowska@uw.edu.pl

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1 Introduction

Cognition is a complex term which refers to a multiaspectual phenomenon with a number of levels of magnitude. In the past four or five decades, research on this phenomenon has evolved in a number of disciplines, resulting in highly specialized perspectives and conceptions. Inevitably, therefore, any concern with matters 'cognitive' is entangled in this pluralism of levels, aspects, foci of interest, perspectives, approaches and modelling strategies adopted by the cognitive disciplines which feature psychology, philosophy, epistemology, neuroscience, artificial intelligence, linguistics, psycholinguistics, translation studies, psychology of communication sociology of cognition, cultural anthropology and second language acquisition research. The purpose of this article is to evaluate the impact of these cognitive conceptions on the field of foreign language didactics (FLD), understood as a relatively autonomous empirical discipline. Such a discipline does not look for immediate transplantations of ideas and findings from its related areas, but defines their impact on the basis of its own, i.e. field-internal, criteria and in the context of its own research agenda.

The relevance of cognitive conceptions to the discipline of foreign language didactics has been my research concern for at least past two decades. The article from 1993 (Dakowska 1993) investigated the status of a *grammar rule* in foreign language use and learning and drew a distinction between a metalingual generalization about language forms and their context of use, i.e. a rule, on the one hand, and the manifestation of the available knowledge in speech production which gradually takes place in the mind of the foreign language learner, on the other. Following that, a monograph (Dakowska 1996) outlined selected models of language learning from the point of view of their function as representations of the subject matter for the discipline of foreign language didactics. This outline emphasized the role of the language learner's cognitive system as the locus of the operations of language use and learning performed by the human agent, justifying the need for anthropocentric models of language use and learning in depicting the subject matter of foreign language didactics. Their cognitive status, qualitatively different from linguistic models of language as a system of forms, derives from representing language use as human cognitive operations rather than from being merely decreed as cognitive (see also Dakowska 1997). In Dakowska (2000), a contrast was proposed between two poles of modelling language learning, i.e. the *linguistic one*, which represents the learning process as taking place in inanimate matter, developing as linearization of language forms, and the *cognitive one*, which represents language learning as taking place in a living human organism. The article from 2002 (Dakowska 2002) presented a cognitive conception of foreign language teaching as a reflection of our understanding of foreign language learning, which is cognitive by definition. A chapter in the subsequent book (Dakowska 2003) outlined what was called a 'cardinal' cognitive paradigm, which contained a list of essential recurrent tenets of the cognitive framework as well as important terminological distinctions in the use of the adjective 'cognitive' by several important authors. Critical remarks were made on some conceptions in second language acquisition (SLA) research which constructed an inconsistent 'cognitive' view

of language by way of adding some of the cognitive factors to some of the descriptive linguistic concepts referring to the notion of language as a system of forms (e.g. a rule), or underestimated the specificity of language in the cognitive system reducing language learning solely to the acquisition of a cognitive skill. The article from 2010 (Dakowska 2010) focused on the significance of the cognitive conception of science as a specialization of human cognitive interaction with the real world in the social context for foreign language didactics, a very young discipline with a very long history, still forging its own academic identity. The present contribution is based on the previously developed arguments and terminological distinctions to focus on the position of foreign language didactics, understood as a relatively autonomous empirical discipline, among the cognitive sciences, especially cognitive psychology, psycholinguistics and epistemology of science.

2 Some Key Terminological Distinctions

In view of the abundance of research which can be qualified as cognitive, it would be helpful to keep in mind the following distinct conceptual categories:

(a) cognition as a phenomenon investigated at various levels of specificity, ranging from the neuronal level of the individual brain, unavailable to our awareness, via the intrapersonal level of mental representations, available to us as phenomenal experience and thought, to the level of interpersonal communication, i.e. cognition and behaviour as a social phenomenon;
(b) the notion of cognitive science, the study of the mind, understood as an alliance of disciplines dealing with various aspects of cognition, regarded as an interdisciplinary and, hopefully, terminologically compatible endeavour;
(c) cognitive perspectives or frameworks within these sciences, reflecting not only their subject-matter specificity, but also the intellectual predilections of individual researchers, e.g. artificial versus human intelligence, modular versus non-modular conceptions of language.

According to *Concise encyclopedia of psychology*, *cognition* is the term designating all the processes involved in knowing and the functioning of the mind including perception, attention, memory, imagery, language functions, developmental processes, problem solving and artificial intelligence (Corsini 1987). Two important questions can be distinguished in cognition: the contents of human knowledge and the nature of the processes of acquisition and use of that knowledge. A major theme in cognitive psychology is the constructivist claim that cognition is a highly active process, which involves selection and integration of incoming (environmental) stimuli as well as generation of knowledge by our reasoning processes. The term *cognition* is central to the field of foreign language didactics because it refers to the processes of human learning in real time, understood in terms of human information processing, whereby information is encoded, recoded, decoded, i.e. translated into other formats, as well as chunked, elaborated

upon, stored, retrieved and used—constructively as well as creatively (Barsalou 2009). In his comprehensive account of the first decades of its growth, Gardner (1985, p. 6) formulates a definition of cognitive science in the following way:

> I define cognitive science as a contemporary, empirically based effort to answer long-standing epistemological questions – particularly those concerned with the nature of knowledge, its components, its sources, its development and its deployment. Though the term *cognitive science* is sometimes extended to include all forms of knowledge – animate as well as inanimate, human as well as nonhuman — I apply the term chiefly to efforts to explain human knowledge. I am interested in whether questions that intrigued our philosophical ancestors can be decisively answered, instructively reformulated, or permanently scuttled. Today cognitive science holds the key to whether they can be.

Advances in the individual cognitive sciences, especially cognitive psychology, psycholinguistics, neurolinguistics and cognitive linguistics, approach language from a number of perspectives: as neuronal networking of the brain at the micro level, as an abstract system of forms for the construction of meaning, a hypothetical construct representing human language device, as well as on-line human operations of language use and learning. Language learning is cognitive by definition, but the adjective 'cognitive' is used in various senses. It is not unheard of in the SLA literature to juxtapose *cognitive* and *social* conceptions of language acquisition, which—to me—is not substantiated, and interpret 'cognitive' as equivalent to mental and individual, but in a purely linguistic sense, i.e. in the sense of formal properties of language as an artefact/outcome/product of cognitive processes (see Watson-Gegeo 2004; Seidlhofer 2003; Zuengler and Miller 2006).

From the point of view of foreign language didactics, the matter is more fundamental than taking a side in a controversy, however. The way we visualize and/or conceptualize the foreign language learner's cognitive equipment and language processing, i.e. the psycholinguistic processes of language use and learning, determines our educational organization and strategies of foreign language teaching. Cognition—in the sense of the functioning of our cognitive system and its information processing—features prominently in the focus of interest.

3 A Brief Retrospective

According to Matlin (1994), but not only (e.g. Gardner 1985), the beginnings of the cognitive science go back to the Symposium on Information Theory held at MIT in 1956, attended by the leading American figures in communication and human sciences, who recognized the cognitive trends in various disciplines, including psychology, linguistics, computer simulations of cognitive processes, as part of a larger whole. Later Chomsky published his celebrated review of Skinner's *Verbal behaviour*, which provided an impetus for innovative research in psychology, psycholinguistics and linguistics, subsequently leading to the emancipation of psychology and psycholinguistics from linguistics (Slobin 1971; Abrahamsen 1987; McCauley 1987). Internationally, among the founding fathers

of cognitive psychology were Anderson, Ausubel, Bartlett, Broadbent, Bruner, Miller, Neisser, Piaget and others. The initial period of its development was marked by a strong reaction to behaviourism, leading to a revision of the goals and the subject matter of psychology and significant reformulations in the definition of science. Most importantly, cognitivists showed revived interest in the mind and the brain, and recognized the significance of consciousness as a default setting in a living human being in their research (Gardner 1985; Baars 1997; Velmans 2000; Gillet and McMillan 2001; Koch 2004; Thagard 2005; Baars and Gage 2007).

Their key cognitive tenets include the inevitable interaction of the organism with its environment afforded by top-down and bottom-up processing, the centrality of mental representation, the intentional, goal-oriented, strategic properties of our cognitive functioning and behaviour, the universal human ability of chronological and feature coding, the use of schemata and other organizing structures in information processing (for the purposes of recognition, storage, retrieval and construction), the role of human cognitive curiosity as the driving force behind cognition and, most importantly, the semantic quality of our mental life, i.e. our search for meaning and sense in ourselves as well as our environment, thought and action.

As for the impact of the cognitive school of thought on foreign language teaching, it was strongly felt at the time of the Cognitive Code Learning Theory, built on the basis of Chomsky's Transformational Generative Grammar and Ausubel's cognitive tenets in educational psychology, introduced in Poland by Marton (1978) in his monograph *Dydaktyka języków obcych w szkole średniej. Podejście kognitywne* [Foreign language didactics in secondary school: A cognitive approach] and later in the textbook for English as a foreign language *English. Yes* by Marton and Szkutnik (1978). The Cognitive Code-Learning Theory, as well as the Cognitive Method, implemented Ausubel's (1968) theory of meaningful learning and the idea of advanced organizers in the teaching of grammar. The method stressed the role of explicit grammar rules, taught both inductively and deductively, and the use of the native language for a number of purposes; it also recommended problem-solving activities of various sorts as well as the development of vocabulary and nontrivial content in reading passages (cf. Carroll 1966; Chastain 1976; Marton 1976, 1978, 1987; Dakowska 2005). At that time, the attribute 'cognitive' in the context of foreign language teaching referred only to those teaching strategies which targeted the learner's awareness in the sense of focal attention. Such was the function of the explicit presentation of grammar rules, i.e. metalingual information about form-function mappings in the foreign language, to make the learner aware of the formal regularities in language. The underlying rationale was that the knowledge of these metalingual properties would be available for/convertible into the ability of language use. Although the method gave way to much more sophisticated advances in the field of foreign language teaching, it still has its proponents in slightly modified guises (Rychło 2008). Unlike in the early decades, however, the concept of learning in the cognitive framework has been broadened to embrace a whole spectrum of processes which make up our information processing experience, such as informal learning, e.g. perception, observation, and participation in interaction, as well as more deliberate/structured studying,

reasoning, creativity, and, finally, various metacognitive processes which enable us to regulate our cognition to a considerable extent. Of some guidance may be an informal definition of learning, understood as a relatively permanent change in the individual mental representation. As a matter of fact, any form of experience can be the source of such a change, thus fulfilling the condition for learning. Clearly, the field of foreign language didactics cannot afford to underestimate these important developments in understanding human learning.

4 Cognition at Different 'Orders of Magnitude'

In addition to cognitive psychology, other cognitive disciplines capture cognitive processes at different levels, in various aspects and scope. Philosophy takes up issues such as the mind/body problem—monism and dualism, as well as nativism and empiricism, regarding the sources of knowledge (e.g. Gardner 1985; Godfrey-Smith 2003; Thagard 2005; Barsalou 2009). Epistemology, i.e. the philosophical theory of knowing, is interested in the sources of knowledge and truth (e.g. Woleński 2005). The cognitive theory of science, also called the 'natural' epistemology, regards research operations performed by scientists as more sophisticated and rigorous human cognitive processes (e.g. Johnson-Laird 1983; Giere 1988, 1992, 1999, 2006; Carruthers et al. 2002; Gopnik and Melzoff 1996; Johnson-Laird 2006; Nersessian 2008). Philosophy of mind investigates a number of issues, e.g. Fodor (1983) is well known for his work on the modularity of the mind, Searle (1999), Dennett (1997), Thagard (2005), Velmans (2000), among others, theorize about consciousness and intentionality. Cognitive psychology seeks to explain human cognitive interaction with the natural and sociocultural environment as well as the construction of its mental representations, reasoning processes and the acquisition and use of knowledge underlying our thought, action, volition, emotions and creativity (e.g. Anderson 1975, 1983, 1985; Cohen 1977; Marcus and Zajonc 1985; Aitkenhead and Slack 1987; Matlin 1994; Eysenck and Keane 1995; Sternberg 1996; Solso 1998; Eysenck 2006; Nęcka et al. 2006; Barsalou 2009). Psycholinguistics focuses on language development as well as language use in comprehension and production, i.e. verbal communication in speech and writing; some psycholinguistic approaches include non-verbal behaviour, such as gesture in language models (Carroll 1986; Jay 2002). Cognitive communication research focuses on the transindividual level and aims at explaining the interpretive and choice-making, i.e. strategic, processes used in our interaction, attributing them to the underlying powers and properties of the mind (Hewes 1995). According to Fiske and Taylor (1984, p. 1), social cognition is "the study of how people make sense of other people and themselves. It focuses on how people think about people". It investigates social behaviour and its role in determining human inferences, choices, decisions and judgment to explain how the behaviour, thoughts and feelings of individuals are influenced by actual, imagined or implied presence of others (Lindzey and Aronson 1985). Cognitive thought in political psychology (political

cognition) seeks to understand the cognitive processes in the domain of politics, the processes which produce political opinion, choice and voting behaviour (McGraw 2000). Cultural anthropology is concerned with the cultural determinants of human behaviour and the cultural diversity of human structures whereas anthropology is based on the conviction that the human mind is the same everywhere (Cole 1996; Shore 1996; Strauss and Quinn 1997). Cognitive linguistics addresses the modular-non-modular controversy (e.g. Krzeszowski 1997), the latter stating that language manifests basic cognitive abilities (Górska 2000); cognitive linguists make use of the notion of schema and construal, and they postulate the centrality of meaning represented in the user's mind; at the same time they opt for usage-based models of language (Ungerer and Schmid 1996; Langacker 2008). Neuroscience is the most molecular approach in that it investigates neuronal processing, especially the localization of language, and defines our cognitive activity including learning, as alterations in the synaptic connections between cells in neuronal networks (e.g. Gardner 1985; Baars and Gage 2007; Koch 2004). Neuroscience uses brain imaging technology such as PET (i.e. positron emission tomography) and fMRI (i.e. functional magnetic resonance imagining), to register the metabolic activity of various brain regions, where PET registers the blood flow and fMRI the use of oxygen supply signalling increased brain activity. Present research suggests a massively distributed nature of processing in our brain, similarly to the parallel distributed processing (PDP) models, the only difference being that the latter are essentially sub-symbolic. Cognitive neuropsychology of communication (see Balconi 2010) investigates the neuronal bases of language use in communication, e.g. such processes as comprehension in visual and auditory modality, and uses such concepts as inferential models, mutual knowledge between speakers, decoding intentions in the interpersonal contexts. Balconi (2010, p. 3) stresses that: "[w]e focus on three features that characterize the linguistic and communication domains: the structural and functional multiplicity of systems underlying language and communication, the multi-componentiality of those systems, particularly related to non-verbal components, and their intrinsic dynamism".

One of the founders of cognitive psychology provided an account which is significant today more than ever for its emphasis on the ecological validity of cognitive accounts. In *Cognition and reality* (1967, p. 2) Neisser wrote:

> Because psychology is about people, it cannot shirk the responsibility of dealing with fundamental questions about human nature (…). Every age has its own conceptions – men are free or determined, rational or irrational; they can discover the truth or are doomed to illusion. In the long run, psychology must treat these issues or be found wanting. A seminal psychological theory can change the beliefs of a whole society, as psychoanalysis, for example, has surely done. This can only happen, however, if the theory has something to say about what people do in real, culturally significant situations. What it says must not be trivial, and it must make some kind of sense to the participants in these situations themselves. If a theory lacks these qualities – if it does not have what is nowadays called 'ecological validity' – it will be abandoned sooner or later.

According to Benjafield (1992, p. 35), ecological validity comes from the study of realistic environments and opportunities they afford to people.

5 Unpacking the 'Black Box'—Inside the Human Cognitive Architecture

The notion of cognitive architecture refers to an understanding of our cognitive functioning. Cognitive psychologists usually accept such basic components of our cognitive system as perception, attention, working and permanent memory, planning, monitoring, retrospection and anticipation. The substance on which these subsystems operate is information, which comes in hierarchically embedded structures and clusters, and the processes or operations which work on information are both resource-demanding, i.e. controlled, and well-practiced, i.e. automatic. The cognitive processes available to our awareness make up only a small fraction of all the information processing which goes on in our system. Our cognitive architecture is sometimes divided into the central processor and the executive system (Aitkenhead and Slack 1987; Lindsay and Norman 1991; Eysenck and Keane 1995; Eysenck 2006; Baars and Gage 2007; Barsalou 2009).

5.1 Cognition in a Living Organism

Life is the property manifested in functions such as metabolism, growth, sensitivity/response to stimulation, reproduction and socialization by which living organisms are distinguished from dead organisms or from inanimate matter. Consciousness is a default setting in a living human organism. The relationship between a living organism and its environment, i.e. its ecosystem, is synergetic, i.e. they are inseparable. Humans can survive in their ecosystem but not in such environmental conditions to which their organisms are not adapted, nor are they able to process information beyond their spectrum of sensitivity. The point often stressed by cognitivists is that during evolution the human cognitive system for information processing has adjusted itself and specialized for environmental conditions conducive to human survival.

Artificial Intelligence (AI) models or computer simulations of our cognitive functioning should be distinguished from representations of human cognitive activity aspiring to ecological validity in that the latter are subject to motivational and emotional factors, such as anxiety, to individual differences such as intelligence and creativity, problems with cognitive resources, such as burnout, fatigue, malnutrition, and, last but not least, with hormonal influences which fluctuate along our life span (see also Thagard 2005; Baars and Gage 2007).

5.2 The Cognitive Organism as an Agent

It is essential in cognitive models of language use and learning to recognize that the status of the learner is that of an agent, which can be contrasted with various other representations, such as structuralist or connectionist models. Fogel (1993, p. 119)

makes an important distinction here: “Connectionist models avoid a central planning agent and allow cognitive activity to emerge from the multiple transactions of the system”. Therefore, it seems appropriate at this point to emphasize that here the learner is visualized as an organism which is intentional (forward-driven, predisposed to act), goal-oriented (selective) and self-regulated (steerable, with a locus of control), an organism whose contribution to the process of language use and learning is constructive, i.e. involving selection and integration, and even creative. This contribution makes language use and learning somewhat hard to measure exactly, but characteristically human nevertheless. Since language use and learning are not limited to identifying the grammatical system of the target language, but must be regarded as multicomponential and heterogeneous processes, we should expect complexity and variability and be willing to accept them to do justice to human nature.

5.3 Language Learning as Human Information Processing

From the point of view of the field of foreign language learning and teaching, which is interested in exploring language learning so that languages can be taught, it is especially significant that language learning takes place in the mind of a living human organism, in human cognitive architecture which presupposes consciousness and the available human cognitive resources, which have their neuronal (brain) correlates. Human cognitive architecture determines all our cognitive processes, including foreign language learning. If we can activate foreign language use, we can also, at the same time, activate foreign language learning. At the most elementary level, cognition refers to the processes and structures whereby humans process information, or, should we say, a certain spectrum of information in order to survive, adapt to the environment, as well as effectively regulate their own behaviour and meet their needs.

Most if not all cognitive psychologists indeed conceptualize the activity of the human mind as a form of information processing (e.g. Neisser 1967; Bruner 1973; Neisser 1978; Aitkenhead and Slack 1987; Bruner 1990; Lindsay and Norman 1991; Matlin 1994; Solso 1998; Velmans 2000; Eysenck 2006; Nęcka et al. 2006). We may envisage a whole hierarchy of information processing to contextualize the spectrum relevant to our model, perhaps leaving the precognitive level aside. The material basis of information processing is our neuronal brain tissue (with the rest of the nervous system) and energy, which is generated, emitted and propagated within and between human organisms. When energy has a form recognizable to the recipient, it makes a difference, i.e. it becomes information. From the point of view of human cognition, information processing takes the form of learning, i.e. perceiving, decoding, comprehending, structuring and storing information. From the point of view of human communication, i.e. mutual contact and influence in which we code and decode information in different formats, information is processed for its significance, relevance and meaning to the human subject, his or her state and circumstances in the world, especially relationships with others. Meaning is the crucial factor what makes verbal communication tick.

When we look at energy as stimulus, we stress its ability to affect/upset the entropy of the target system by activating the receptor cells. *Impulse* (impetus) points to the thrust aspect of this energy. The term *signal* implies the emitting behaviour of a certain form by an organism, the source of this energy. Clearly, in this sense, only a living organism can generate, send out and process information. Generating, emitting and propagating energy in our nervous system takes the form of electrochemical activity, with various neurotransmitters to diffuse across the gaps between neurons (Baars and Gage 2007; Balconi 2010). In this way, neurotransmitters act as molecular messengers which make neuronal communication possible by 'carrying' the information across the brain and the rest of the nervous system. The neurochemical activity of the brain is fed/sustained by our metabolic processes. Communication takes place at various orders of magnitude, such as crossing the gaps in the synapses in the brain tissue at the most micro level, and beating the barriers of time and space, as in verbal communication via the Internet at the most global level.

6 Information and Communication in Modelling Language Learning

The meaning of the adjective 'cognitive', outlined in Sect. 4, is a rich conceptual network which presents a challenge to the emerging discipline of foreign language didactics. The underlying unity of the cognitive sciences, including FLD, can be seen in two elementary, yet inextricable notions—information and communication, the characteristics of which are summarized in Table 1.

From the point of view of foreign language learning and teaching, the most relevant span of information processing, which outlines our problem space, is at the level of our cognitive functioning including verbal communication. Definitely, this model of language learning is infeasible without reference to a human/living organism, an organic locus of the processes, whose brain must be fed, who performs the necessary processing, makes the requisite decisions and tries to sustain his or her livelihood in the sociocultural environment. This information processing span embraces the organism's consciousness, which: (a) admits of degrees, ranging from focal awareness to peripheral states of consciousness and sub-consciousness, and (b) houses only a tip-of-the-iceberg segment of all the processing that goes on in the subject's cognitive system.

Cognitive psychology defines information as an interpretable element which derives its meaning from the system it is a part of (Neisser 1967; Bruner 1973). As has already been said, information is what makes a difference; it does not exist independently of the human perceiver, or more exactly, of the information processing system of the human subject (I deliberately leave out other organisms). Information derives its significance from the context of various forms and structures in which it is perceived, be it clusters, constructions, hierarchies or systems (Lindsay and Norman 1991). Where there is no form recognized by the processing subject, there is no information.

Table 1 Information and communication as prime constituents of human cognitive activity

Information as the elementary unit of cognition	Communication as the core mechanism of human cognitive activity
Prime constituents of information are meaning and form engrafted upon some substance which acts as information vehicle/transmitter; information must have some material subsistence, in this case the human brain and its neuronal activity; any entity, including inanimate matter, can be the source of information for our cognitive system, but only higher living organisms can send it out in the sense of emitting behaviour; human beings process information selectively and constructively, they use compensatory processes such as inferences and other forms of reasoning, as well interpretative behaviour	Human cognitive activity and communication share the following defining properties: (1) both are a form of (strategic) interaction, i.e. mutual influence, within the human cognitive subsystems, as well as the human being and his or her natural and sociocultural environment; this interaction involves humans and: (a) inanimate matter (object/agent relationship), (b) other living organisms (mixed relationship), and (c) other human beings (agent/agent relationship); (2) both cognition and communication are constrained by our mental representations/images of the target or the addressees of our cognitive/communicative behaviour; we initiate/emit and address our cognitive/communicative behaviours as well as interpret the incoming information in the context, i.e. in the light of these mental representations; feedback information can modify our initial images or models; this applies to human cognition of, or communication with, animate and well as inanimate matter; for these reasons, both cognition and communication are dynamic, i.e. subject to change and restructuring
Information is coded and recoded into various formats and substance suitable for human processes and operations at various orders of magnitude and complexity, e.g. neuronal activity, interpersonal communication, cultural artefacts, i.e. works of art; human language is a most potent and precise device for coding meanings and transmitting them to other human cognitive systems; quintessentially, language is a complex hierarchical information system for coding and recoding meaning into multiple formats and substances; in this sense it is polymorphic and multicomponential	Verbal communication involves human interaction by means of verbal messages in which the participants code meanings into formats engrafted upon some substance, such as light waves (the graphemic code) or sound waves (the phonemic code) or gesture (as in sign language) or texture (as in Braille); this structuring of substance gives relative permanence and motility to information, i.e. serves as the vehicle/transmitter of meaning represented in the mind of the sender to the mind of the addressee; this is the way in which the addressee can be affected by the sender; verbal communication, which is an open system by definition, is of the essence not only in forming human relationships and hierarchies in social structures, but human culture sensu largo; language as the code of human communication is inextricable from the human organism it is living in; it is the core human constituent

(continued)

Table 1 (continued)

Information as the elementary unit of cognition	Communication as the core mechanism of human cognitive activity
Information is transmitted when the form of its energy affects the state of the neighbouring entities of the whole subsystem which is sensitive to this information format; i.e. the subsystem can register and categorize this particular format; information is recoded in the sense that it is redescribed or matched (coupled) with a representation in a different code capable of affecting other subsystems, e.g. semantic information can be recoded into, or matched by, information in the phonetic code or gesture; human information processing is massively parallel (simultaneous in different subsystems) and polymodal, i.e. distributed (simultaneous in various formats)	Verbal communication involves entire bodies and minds of the participants; all kinds of information systems are used for the purpose of transmitting meaning across humans in space and time; its nature is deeply heterogeneous, i.e. involves various information codes (in the sense of systems of transformations into different formats) which are processed simultaneously for the sake of meaning

The notion of information in the field of cognitive psychology has the same function as the notion of atom in the natural sciences, or the notion of cell in biology. I see a fascinating analogy between the atomic theory of matter and the information theory of human cognition. Information may be hard to define at the most elementary level and much easier at higher levels, when it makes up more noticeable constellations, but its reality, be it inferred or observed, as well as its central relevance in human thought and action are unquestionable. Information at the micro-level of genetic coding is necessary for human life and reproduction; at the level of neuronal activity it conditions the functioning of our nervous system, while at the macro-level of cognitive coding and communication it makes human survival, as well as human societies and cultures possible. Human learning, including language learning, is a form of communication: it is based on interpersonal information transmission, whereby information sent by one subject is registered and re-presented, i.e. mapped, copied, redescribed, reconstructed, as well as stored and used by another processing subject. In this case, the term 'transmission' does not mean that information changes hands like money, making it no longer available to the sender; it means 'propagation by duplication'. What is changed in this transmission are human conditions, states, situations, and relationships.

Information and its sophisticated internalized and externalized systems, i.e. knowledge, have become our basic commodity, a vital part of the economy and professional activity in our Information Age. Computer technology and computer networks, built by human minds, are but our specialized cognitive tools, which externalize and reify our information processing ability, multiply and put it to use to enable us to do things our natural brains would not be capable of doing with this immensity, speed, accuracy and complexity. However, the fact that we are living in the Information Age is not a justification for turning to the perspective of human information processing in cognitive psychology. The reasons are more substantive than the need for a current, trendy metaphor.

Etymologically, information unites the most essential properties of human cognitive behaviour: the fact that humans are programmed to go after meaning, which is derived by assigning structure to the perceptual field, so that it can be regarded as a coherent, i.e. meaningful whole to be processed and operated upon further. Information does not exist without its form, i.e. in a way neutral to form. Stimulus energy becomes informative when it is structured by the perceiving subject, so that through interrelationships/contrasts with its environment it stands out as an entity with borders, and some function in the system. The ability to structure environmental as well as internal cognitive material as information, which is to say, to consciously or subconsciously assign it structural properties and treat it as meaningful, must be recognized as a universal feature of human cognitive activity. Assigning structure (or structuring) is not limited to its mental manifestations; it also takes external forms, as in the case of structuring various raw material in our natural and social environment, evidenced in all human cultures.

We deal with meaning and sense all the time. This is to say that we are capable of constituting and using signs as well as generating and interpreting their meaning in the context of social interaction. Language is the most potent code for these

fundamental human purposes. Consciousness is inseparable from intentionality, which is always aspectual, i.e. goal-oriented (Searle 1999). Intentionality enables the human subject to guide his/her behaviour, i.e. organize, direct and regulate it, for example, respond to environmental stimuli as well as initiate or withhold action. Admittedly, there are life-span constraints on the development of intentionality. A human being is not only an open, but also a self-regulating (self-steerable, or self-dirigible, or self-navigable) system, specialized for receiving and using the environmental information. Information exchange with the environment is indispensable for our biological and cognitive survival. The human mind/brain is an adaptive organ specialized for dealing with the environment, i.e. the real world. Its representation of the world is not a mirror image but an individual construction, which does not have to mean an inaccurate one. Our brain would be useless from the evolutionary point of view if this were the case (Velmans 2000; Nęcka et al. 2006).

In contrast to models of inanimate matter, machines, artificial intelligence and non-human organisms, the model of language learning appropriate for our purposes must retain the parameters of living human organisms with natural intelligence—language users, i.e. organisms characterized by consciousness who are agents in their search for meaning, equipped for social interaction. Human agency has its locus of control, goals and choices in the human cognitive architecture, probably in the working memory. Language learning, which takes place in the human cognitive architecture, is both organismic and cognitive by definition. It materializes as language use, i.e. acts or episodes of adaptive, goal-oriented, intelligent communicative behaviour of constructing/encoding and reconstructing/decoding meaning. Reflection about it can make use of various perceptual and reasoning operations, depending on the age of the learner.[1]

7 Scientific Research in a Cognitive Perspective

A significant question to be asked at this point is about science as a type of cognitive activity. What do we mean by science in the cognitive conception? What is the nature of the relationship between the scientist and the real world? What are the levels of scientific activity and their specialized functions? How do scientists go about the inevitable modelling of the subject matter? What kind of guidelines can constrain this process in our empirical discipline which has aspirations to generate applications derived from understanding the relationships between factors in the model of the subject matter?

Gopnik and Melzoff (1996, p. 15) state that scientific reasoning is self-conscious and explicit; it has a logical structure and involves metacognitive, i.e. self-regulated, cognitive activity, it is deliberate, as normatively constructed by

[1] I wish to refrain from discussing the difference between noticing and reasoning available in foreign language learning and teaching at this point.

philosophers of science. In their view, science is cognitive by definition. Cognition is about how minds arrive at veridical conceptions of the world. Scientists use cognitive abilities and recognize truth. They have the same brains and use these brains assisted by culture to develop knowledge of the world, to produce and accept theories. Cognitive science assumes that humans are endowed by evolution with a variety of devices—substantive and domain specific as well as general—whose purpose is to enable us to arrive at a roughly veridical view of the world. Human cognition involves representations of the world and rules that operate on these representations. They are transformed after time and are deeply influenced by information that comes from other people. They are not merely conventional but they allow us to communicate. Science gets things right, i.e. enables us to arrive at a truthful account of the world. Scientists converge on similar accounts because similar minds approaching similar problems presented with similar patterns of evidence converge on approximations of accurate representations. However, cognitive psychologists do not maintain that our cognition is always accurate or foolproof because, like any human cognitive activity, it is characterized by making interpretations and judgments. For this reason, we may—and do—develop distorted thinking about environment and other people—"[h]uman life is so complex, and so much information we receive is through language, that it is possible for cognitions and cognitive processes to develop which do not reflect accurately the reality of a person's environment" (Corsini 1987, p. 205). Fortunately, the effects of cognitive activities are subject to social negotiations and modifications.

7.1 Identifying the 'Order of Magnitude' Relevant to Foreign Language Didactics

As has been argued earlier, the cognitive disciplines and foreign language didactics are substantively related via their interest in the human subject alias the language learner. In view of this abundance of perspectives, several related steps are required to identify the relevant segment in the spectrum of cognition.

1. The first source of orientation comes from the conception of foreign language didactics, understood as an autonomous empirical discipline. Autonomy, i.e. being governed by one's own laws, is the discipline's right to select its own research subject matter and define it in and on its own terms, from the point of view of its own priorities. The field's goal is to conduct comprehensive, i.e. theoretical as well as empirical, research into this subject matter in order to seek its understanding, i.e. explanation, which can be converted into applicative knowledge. The empirical character of the discipline results from focusing on language learning as a phenomenon in the empirical reality, i.e. represented as a spatiotemporal event, involving human agents interacting by way of characteristically human operations of language use, i.e. verbal communication in the sociocultural setting. This level of specificity of the subject

matter representation determines the capacity of the field to produce applications, i.e. useful knowledge about language use in comprehension and production, in speech and writing, for the purpose of conveying meaning to others in various sociocultural situations and domains. As a result of these disciplinary constraints, language is represented as inseparable from the human being; localized in the human cognitive system for information processing. The operations of language use are constitutive/fundamental rather than controvertible in this framework (for the material on the controversy, see Seidlhofer 2003), whereas language learning is taken to be a derivative of language use in verbal communication.

2. An additional step in identifying the order of magnitude of the cognitive processes relevant to foreign language didactics refers to the feasible scope and nature of educational intervention into the processes of language use and learning, i.e. foreign language teaching. The question is, which sphere of cognition in the sense of 'which cognitive processes' can/must/should be addressed in reconstructing the necessary conditions of language use and learning and how can these processes be induced, activated, enhanced, stimulated, facilitated, cultivated, catalyzed, etc. in the educational context? Although neurolinguistic processes are the absolutely indispensable brain correlates of foreign language use and learning, they cannot be considered as primary target of didactic intervention in foreign language teaching in our educational system on a mass scale, at least not yet. The most important area targeted by the discipline in question is verbal communication, i.e. interpersonal interaction involving language use, categorized as input, interaction and feedback, in which language use taps: (a) specialized knowledge representations, external as well as internal, (b) language skills in various modalities, and (c) discourse genres in typical and not-so-typical human situations. Centrally relevant, therefore, are the psychological and psycholinguistic perspectives on cognition. Educational intervention in foreign language teaching takes the form of external (environmental) stimulation of the learner's cognitive processes, such as selecting input materials, presenting models of discourse and communicative behaviour, designing specifically calibrated tasks, introducing various forms of interaction, stimulating memory processes, grading the materials and tasks for skill learning, incorporating accuracy into practice, form-focused activities, etc.

7.2 Foreign Language Didactics as a Cognitive Discipline: Levels of Specialization

Table 2 summarizes the levels of specialization of foreign language didactics as a cognitive discipline, which can be described in terms of a continuum from the more to the less specific, with number 1 at the bottom of the table being the most specific and number 7 at the top being the most general.

Table 2 Levels in the discipline of foreign language didactic and their function

The level of the discipline	Its distinctive function in the cognitive framework of FLD
7. An emerging cognitive paradigm for human sciences including FLD	The centrality of human search for meaning and sense, recognition of the interpretive and constructive character of human cognitive processes, as well as its aspectual nature, profound changes in conceptualizations of language; rejection of the structuralist view of language as a powerful formal system leading to a deeply decentralized notion of language as a distributed diversified entity and focus on verbal communication as an open, complex, dynamic polymorphic phenomenon
6. Meta-reflection about the discipline	An absolutely necessary level to evaluate the match or mismatch between the goals of FLD vis a vis its advances and findings; the level at which more global policy issues are negotiated
5. Theoretical level including research by means of (concept-based) reasoning and theory construction	Theories are invented, constructed; their purpose is to provide generality and transfer of findings to new situations; "If you want to get ahead, get a theory" is the cognitive adage (Karmiloff-Smith and Inhelder 1974); denying the role of theory construction and other forms of concept—as opposed to data-based reasoning precludes innovation in FLD
4. Empirical research, i.e. data-based studies	Empirical research without theory is blind and theory without empirical research is empty; empirical methods are selected on the basis of the calibre of the question asked; data are taken, not given, i.e. their scope and nature reflect the existing condition of FLD; innovative data sampling in empirical research presupposes a conceptual change, i.e. theoretical innovation
3. The strategy of modelling the subject matter	The goal is to represent the subject matter, i.e. the phenomenon of verbal communication by human beings as a coherent (i.e. unitary) hierarchical system of factors deemed relevant from the point of view of the discipline of FLD, as opposed to a sum of the parts transferred from models of other disciplines, as advocated in the interdisciplinary conception of SLA research
2. The subject matter of the discipline	It is constituted by the human being represented as a living organism mentally equipped for his or her cognitive interaction with the sociocultural and natural environment in the form of human information processing, specialized for the ubiquity of verbal communication with other people; verbal communication is decomposable into inalienable, specifically lingual human entities, i.e. language knowledge (i.e. mental representation), language operations (i.e. language use as skill) and language products in the form of discourse
1. The domain of foreign language learning and teaching in the empirical reality	Targeting the empirical phenomenon is essential in any discipline with applicative aspirations; FLD communicates with the empirical reality via a deliberate conceptual *interface* established when its model representations: (a) target the real phenomenon of language use in verbal communication, and (b) use sufficiently specific terminology to capture human operations in space and time; language use is the essence of language learning

8 Concluding Remarks: Advantages of Modelling Foreign Language Learning as Human Information Processing

Information is inseparable from the human being; it does not exist without or outside the sensitive organism equipped for perceiving and interpreting it. Human organisms as well as social systems operate via information; it is the elementary unit of human cognitive processes. Like beauty, information is in the eye (mind) of the beholder, and it materializes in human interaction with the sociocultural environment, especially in human relationships. Information is the most elementary unit of this cognitive substance, usually structured and highly elaborate, processed by the human being, and it has the following essential properties: it can be coded within our cognitive system, i.e. represented in a symbolic form, transformed from one format of representation into another, and stored. But most importantly, information can be generated (produced) by one person to be sent out, i.e. communicated interpersonally: one organism can encode it and send it out to be decoded by another organism); it can be propagated, disseminated, transported, picked up, compressed, elaborated upon, and copied in other human organisms. Thanks to these basic properties of information, the field of foreign language learning and teaching can capture the dynamic quality of its polymorphic subject matter within a unified as opposed to interdisciplinary framework. This polymorphism results from the fact that in one focus of investigation we embrace three qualitatively different entities which make up the cycle of verbal communication: language as its mental representation, i.e. knowledge, language as a kind of behaviour, i.e. skill, and language as the product of verbal communication, i.e. discourse.

Talking about learning, especially language learning, information is an ideal concept for demystifying the human being's position vis a vis his or her environment. The exchange of information and subsequent learning is possible thanks to characteristically human perception, which is sensitive to, and capable of picking up and processing a spectrum of information types, especially with its modality-specific receptors, which register, identify, interpret and take in even distant environmental physical energies, and convert them into information meaningful to the processing organism to become input for mental representation and further processing. Perception results in mapping and interpreting the information accessible to the human receptor system in a given situation, subject to the selective mechanism of attention. Relevant to processing is the form and structure of the external energy stimulus to be recognized on the basis of the information already in the processing system's memory, to be further interpreted for meaning. New systems of information can also be constructed and represented internally by the human being on the basis of productive and creative cognitive operations.

Secondly, information as a concept is sufficiently versatile to unify the three basic aspects of the processing mechanism: (a) the subsystems in the processor with specialized function, (b) the modality-specific substance of processing, which affords various types of formatting and comes in different, constellations and entities, and (c) the processes which operate on information, such as the controlled

and the automatic ones. Language users rely on various kinds of information: phonemic, graphemic, syntactic, semantic, associational, relational, e.g. syntagmatic, paradigmatic, hierarchical, depending on the size of the communicative unit under consideration. Thanks to such properties as transformability, (re)codability, storability, and communicability, information is sufficiently specific to integrate the three components of verbal communication, each with a distinct status:

- the internal representations, i.e. distributed, yet highly organized mental structures of knowledge, resourced in communicative operations;
- the behavioural representations, i.e. hierarchical, highly integrated skills, manifested in language use as comprehension and production of speech and writing, operating within the temporal constraints of verbal communication;
- the external representations, i.e. highly organized, primarily linear manifestations of communicative processes in the form of discourse, an environmentally available recordable unit of verbal communication, input for comprehension and output of production, especially indispensable as input for language learning.

Moreover, information is a sufficiently sensitive concept to provide the lowest common denominator for the increasingly complex systems of non-lingual, paralingual and lingual information systems in their joint function of conveying meaning in verbal communication. At the same time, information is sufficiently flexible to be represented in formats required in the process of coding and decoding the communicative intention: the conceptual/propositional form, the pre-verbal form, and the verbal form in the context of other communicatively relevant non-lingual information systems available at each stage. The conceptual/propositional information is selected from among other thoughts, propositions, sensations and images, as communicative intention in the mental context of human relationships; the pre-verbal information is selected from among all sorts of syntagmatic plans and other linear constructions organizing discourse processing. The verbal form is chosen from among various language specific lexical units, clusters and constructions. Additionally, information is a suitably elementary unit to integrate verbal communication with other cognitive processes (and their outcomes), collectively called reasoning. Indeed, only information can be structured, restructured and integrated into a system, analysed, synthesized, elaborated, condensed, developed into an innovative (creative) quality, (re)defined, (re)ordered, (re)organized, compared and contrasted, as well as explicated, etc.

From the point of view of language learning, human information processing is a sufficiently specific perspective to capture language development as growth and restructuring of language knowledge, both in terms of representational as well as behavioural change, the degree of certainty and explicitation of this knowledge, the development of non-target-like into target-like forms, and an increasing coordination, awareness, control and automatization of the use of these forms. In other words, the concept of information is sufficiently precise to reflect the distinction between the way language is represented and stored, the way it is processed and used, and the way its storage and use is becoming increasingly available to awareness and regulated by the learner. In this perspective, learning foreign language

information clusters involves not only their perceptual structuring, but a considerable elaboration and enrichment of information available in the environmental stimulus.

The distinct specificity of language as an instance of information processing results from the arbitrary and segmental nature of its code(s) and its complex organization. Information is convertible, i.e. it can be transformed (recoded) in various formats or transcoded (e.g. from speech into writing), unifying heterogeneous entities into a polymorphic problem-space of internal/mental, behavioural and external representations. It is significant from the point of view of learning that—especially in human interactions with other people—information can be copied and mapped from the sociocultural environment onto the mental representation of the learning subject, as well as interpreted, evaluated, multiplied, propagated, recorded and created in various forms of external, behavioural and internal representations. It is typical of human processes that mental representations may take time to develop fully, that they may develop gradually taking interim forms, that information may be too fuzzy to be registered, that it may fade away, be ignored or discarded, forgotten, confused, misfiled, misinterpreted, etc., as well as identified, segmented, classified, stored, strengthened, elaborated upon, or otherwise articulated, explicated, and proliferated.

To wrap up this imposing list of advantages, information as the lowest common denominator holds the field's subject matter together, at the same time doing justice to its dynamic protean nature. The notions of information and communication afford a considerable degree of terminological compatibility with other cognitive disciplines and, possibly, a considerable amount of knowledge trading to their mutual benefit.

References

Abrahamsen, A. 1987. Bridging boundaries versus breaking boundaries: psycholinguistics in perspective. *Synthese* 72: 355-388.

Aitkenhead, A. M. and J. M. Slack, eds. 1987. *Issues in cognitive modelling.* London: Lawrence Erlbaum Ass.

Anderson, B. F. 1975. *Cognitive psychology. The study of knowing, learning and thinking.* New York: Academic Press.

Anderson, J. R. 1983. *The architecture of cognition.* Cambridge, MA: Harvard University Press.

Anderson, J. R. 1985. *Cognitive psychology and its implications.* New York: W. H. Freeman and Co.

Ausubel, D. P. 1968. *Educational psychology. A cognitive view.* New York: Holt, Rinehart and Winston.

Baars, B. J. 1997. *In the theatre of consciousness. The workspace of the mind.* Oxford: Oxford University Press.

Baars, B. J. and N. M. Gage, eds. 2007. *Cognition, brain, and consciousness. Introduction to cognitive neuroscience.* Amsterdam: Academic Press.

Balconi, M., ed. 2010. *Neuropsychology of communication.* Milan: Springer.

Barsalou, L. 2009. *Cognitive psychology. An overview for cognitive scientists.* New York: Psychology Press.

Benjafield, J. G. 1992. *Cognition.* Englewood Cliffs, NJ: Prentice Hall.

Bruner, J. 1973. *Beyond the information given. Studies in the psychology of knowing.* New York: W. W. Norton and Co.

Bruner, J. 1990. *Acts of meaning.* Cambridge, MA: Harvard University Press.
Carroll, D. W. 1986. *Psychology of language.* Monterey, CA: Brooks/Cole Publ.
Carroll, J. B. 1966. The contribution of psychological theory and educational research to the teaching of foreign languages. In *Trends in language teaching*, ed. A. Valdman, 93-119. New York: McGraw Hill.
Carruthers, P., S. Stich and M. Siegal, eds. 2002. *The cognitive basis of science.* Cambridge: Cambridge University Press.
Chastain, K. 1976. *Developing second-language skills. Theory to practice.* Chicago: Rand McNally.
Cohen, G. 1977. *The psychology of cognition.* New York: Academic Press.
Cole, M. 1996. *Cultural psychology. A once and future discipline.* Cambridge, MA: Harvard University Press.
Corsini, R. J., ed. 1987. *Concise encyclopedia of psychology.* New York: John Wiley and Sons.
Dakowska, M. 1993. Language, metalanguage and language use. *International Journal of Applied Linguistics* 3: 79-100.
Dakowska, M. 1996. *Models of language use and language learning in the theory of foreign language didactics.* Frankfurt am Main: Peter Lang.
Dakowska, M. 1997, Cognitive modelling of Second Language Acquisition. *Communication and Cognition*. Special issue: *Communication, cognition, and second language acquisition* 30: 29-53.
Dakowska, M. 2000, Mechanizm czy organizm? Dwa bieguny modelowania akwizycji języków obcych. In *Problemy komunikacji międzykulturowej*, eds. B. Kielar, J. Lewandowski, J. Lukszyn and T. P. Krzeszowski, 335-351. Warszawa: Grafpunkt.
Dakowska, M. 2002. A cognitive view of foreign language teaching. In *Language function, structure and change*, ed. W. Oleksy, 117-131. Frankfurt am Main: Peter Lang.
Dakowska, M. 2003. *Current controversies in foreign language didactics.* Warszawa: Wydawnictwo Uniwersytetu Warszawskiego.
Dakowska, M. 2005. *Teaching English as a foreign language. A guide for professisonals.* Warszawa: Wydawnictwo Naukowe PWN.
Dakowska, M. 2010. Kognitywna koncepcja nauki a glottodydaktyka. In *Translatoryka. Koncepcje – Modele – Analizy*, eds. S. Grucza, A. Marchwiński and M. Płużyczka, 41-53. Warszawa: Wydawnictwo Uniwersytetu Warszawskiego.
Dennett, D. C. 1997. *Natura umysłów.* Warszawa: Pańswowy Instytut Naukowy.
Eysenck, M. W. 2006. *Fundamentals of cognition.* Hove and New York: Psychology Press.
Eysenck, M. W. and M. T. Keane 1995. *Cognitive psychology. A student's handbook.* Hove: Psychology Press.
Fiske, S. T. and S. E. Taylor. 1984. *Social cognition.* New York: McGraw Hill.
Fodor, J. A. 1983. *Modularity of the mind.* Cambridge: Cambridge University Press.
Fogel, A. 1993. *Developing through relationships. Origins of communication, self, and culture.* Chicago: The University of Chicago Press.
Gardner, H. 1985. *The mind's new science. A history of the cognitive revolution.* New York: Basic Books.
Giere, R. 1988. *Explaining science. A cognitive approach.* Chicago: The University of Chicago Press.
Giere, R. 1999. *Science without laws.* Chicago: The University of Chicago Press.
Giere, R. 2006. *Scientific perspectivism.* Chicago: The University of Chicago Press.
Giere, R., ed. 1992. *Cognitive models of science*. Minneapolis: The University of Minnesota Press.
Gillet, G. R. and J. McMillan. 2001. *Consciousness and intentionality.* Amsterdam: John Benjamins.
Godfrey-Smith, P. 2003. *Theory and reality. An introduction to the philosophy of science.* Chicago: The University of Chicago Press.
Gopnik, A. and A. N. Melzoff. 1996. *Words, thoughts, and theories.* www.netlibrary.com

Górska, E. 2000. What's 'cognitive' about cognitive grammar? *Kwartalnik Neofilologiczny* XLVII 3: 269-279.
Hewes, D. E. 1995. *The cognitive bases of interpersonal communication.* Hillsdale, NJ: Lawrence Erlbaum Ass.
Jay, T. B. 2002. *The psychology of language.* Upper Saddle, NJ: Prentice Hall.
Johnson-Laird, P. N. 1983. *Mental models.* Cambridge, MA: Harvard University Press.
Johnson-Laird, P. N. 2006. *How we reason.* Oxford: Oxford University Press.
Karmiloff-Smith, A. and B. Inhelder 1974. *If you want to get ahead, get a theory. Cognition* 3: 195-21
Koch, C. 2004. *The quest for consciousness. A neurobiological approach.* Englewood, CO: Roberts and Co. Publishers.
Krzeszowski, T. P. 1997. O znaczeniu przymiotnika 'kognitywny'. In *Koncepcje kognitywne w lingwistyce, translatoryce i glottodydaktyce*, eds. F. Grucza and M. Dakowska, 23-32. Warszawa: Wydawnictwo Uniwersytetu Warszawskiego.
Langacker, R. W. 2008. Cognitive grammar as a basis for language instruction. In *Handbook of cognitive linguistics and second language acquisition*, eds. P. Robinson and N. I. Ellis, 66-88. New York: Routledge.
Lindsay, P. H. and D. A. Norman. 1991. *Procesy przetwarzania informacji u człowieka.* Warszawa: Wydawnictwo Naukowe PWN.
Lindzey, G. and E. Aronson, eds. 1985. *The handbook of social psychology*. New York: Random House.
Marcus, H. and R. B. Zajonc. 1985. The cognitive perspective in social psychology. In *The handbook of social psychology*, eds. G. Lindzey and E. Aronson, 137-230. New York: Random House.
Marton, W. 1976. *Nowe horyzonty w nauczaniu języków obcych.* Warszawa: Wydawnictwa Szkolne i Pedagogiczne.
Marton, W. 1978. *Dydaktyka języka obcego w szkole średniej. Podejście kognitywne.* Warszawa: Wydawnictwo Naukowe PWN.
Marton, W. 1987. *Methods in English language teaching. Frameworks and options.* New York: Prentice Hall.
Marton, W. and L. Szkutnik. 1978. *English. Yes.* Warszawa: Wydawnictwa Szkolne i Pedagogiczne.
Matlin, M. W. 1994. *Cognition.* Fort Worth: Harcourt and Brace
McGraw, K. M. 2000. Contributions of the cognitive approach to political psychology. *Political Psychology* 21: 805-832.
McCauley, R. 1987. The not-so-happy marriage of linguistics and psychology. *Synthese* 72: 341-353.
Neisser, U. 1967. *Cognitive psychology.* New York: Appleton Century Crofts.
Neisser, U. 1978. *Cognition and reality.* New York: Freeman.
Nęcka, E., J. Orzechowski and B. Szymura 2006. *Psychologia poznawcza.* Warszawa: Wydawnictwo Naukowe PWN.
Nersessian, N. 2008. *Creating scientific concepts.* Cambridge, MA: The MIT Press.
Rychło, M. 2008. *The educational approach to language teaching.* Warszawa: Wydawnictwo Naukowe PWN.
Searle, J. R. 1999. *Umysł na nowo odkryty.* Warszawa: Państwowy Instytut Wydawniczy.
Seidlhofer, B., ed. 2003. *Controversies in applied linguistics.* Oxford: Oxford University Press.
Shore, B. 1996. *Culture in mind.* New York: Oxford University Press.
Slobin, D. 1971. *Psycholinguistics.* Glenview, IL: Scott, Foresman, and Co.
Solso, R. L. 1998. *Cognitive psychology.* Boston: Allyn and Bacon.
Sternberg, R. J. 1996. *Cognitive psychology.* Fort Worth: Harcourt Brace.
Strauss, C. and N. Quinn, 1997. *A cognitive theory of cultural meaning.* Cambridge: Cambridge University Press.
Thagard, P. 2005. *Mind. Introduction to cognitive science.* Cambridge, MA: The MIT Press.
Ungerer, F. and H. J. Schmid. 1996. *An introduction to cognitive linguistics.* London: Longman.

Velmans, M. 2000. *Understanding consciousness.* London: Routledge.
Watson-Gegeo, K. A. 2004. Mind, language, and epistemology: Toward a language socialization paradigm for SLA. *Modern Language Journal* 88: 331-350.
Woleński, J. 2005. *Epistemologia. Poznanie, prawda, wiedza, realizm.* Warszawa: Wydawnictwo Naukowe PWN.
Zuengler, J., and E. R. Miller. 2006. Cognitive and sociocultural perspectives: Two parallel SLA worlds? *TESOL Quarterly* 40: 35-58.

Only Connect: The Interface Debate in Second Language Acquisition

Michael Sharwood Smith

Abstract One commonly used term in recent second language acquisition literature is *interface*. It is used in different senses. Even for those who have adopted a generative linguistic approach to second language (L2) development, there are alternative views. Frequently, the focus is on interfaces that mark the boundary between the inner core of language that is governed by cognitive principles that are unique to language and those areas which lie outside. Here, the talk is, for example, of the syntax/pragmatics or syntax/discourse interface or the syntax/phonetics interface (cf. Sorace 2010). It is often stated that sources of difficulty characteristic of L2 acquisition may not be located within the core area, but rather in how it connects with structures outside, i.e. across the relevant interfaces. For example, while learners whose L1 requires grammatical subjects to appear in all contexts, may rapidly acquire the empty subject position of null subject languages like Polish, they have persistent difficulties in identifying what, pragmatic or discourse factors dictate their use in certain contexts rather than in others. However, there are also approaches that explain interfaces somewhat differently, namely those inspired by Jackendoff's proposals concerning the language faculty (Jackendoff, 1987, 2002; Carroll, 2001, 2007; Truscott and Sharwood Smith, 2004; Truscott and Sharwood Smith, forthcoming). Such approaches add a badly needed processing dimension to the debate. There are also emergentist approaches that do without interface-based distinctions, such as O'Grady's (2005), which require interface problems to be explained in different ways.

M. Sharwood Smith (✉)
The Academy of Social Sciences, Warsaw, Poland
Heriot-Watt University, Edinburgh, UK
University of Edinburgh, Edinburgh, UK
e-mail: msharwood@blueyonder.co.uk

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1 Introduction

One thing we learn from linguistics about the notion of language is firstly that, though it can be grasped in a very general sense, it is a very vague, fuzzy notion, difficult to define clearly. Secondly, in order to really get to grips with it, it has to be broken up into much more clearly defined sub-areas like syntax, phonology, semantics and pragmatics, all of which have their own particular sets of rules and principles. This does not mean the way of dividing up these areas is straightforward. In fact, it depends very much of the theory behind the description what, say, counts as grammatical. Traditionally, definite and indefinite articles in English are classed as 'grammar' because they are function words but some would argue that the article system (or, if you like, determiner system) itself is part of morphosyntax but the shape these forms take is a lexical and phonological matter, and the way they are used in varying contexts is more to do with semantics and pragmatics. Is everything then 'grammar'? In other words, even this particular linguistic term is problematic. Then, for language learning research and hence for language teaching research as well, the question arises whether each and every one of these sub-areas can be acquired in the same way, i.e. whether the same learning mechanisms are involved. For those approaches to learning that see all human learning, that is all cognitive development, as proceeding in the same manner, governed by the same mechanisms, the differences between learning usage aspects of a foreign language, pragmatic rules, and learning syntax will be relatively small and be more a matter of varying complexity than anything else. If, on the other hand, you follow a more modular approach to the human mind and particularly one which espouses some form of specialised language faculty or *language module* that is markedly different from other cognitive areas of the mind, then you may find that these differences may be much more pronounced.

In the discussion that follows three recent approaches to the mechanisms of language acquisition in real time will be compared, one that adopts an approach that says all learning is governed by the same principles and two alternative approaches that do not adopt this position. Each of these alternative approaches is based on one particular model of language in the mind. However, they do differ in how they account for language development. A key term in any modular approach, is the term *interface* which, very roughly phrased, requires us to distinguish: (a) the way in which we acquire the core grammatical system and (b) the way in which we learn how to make that system work, that is, how we should link up the basic system in order to perform in a native-like way in everyday speech and writing. The core system, so some claim, can be acquired perfectly by proper exposure to language in use. For the second type of language learning, bridging the gap (interface) between the basic system and various types of usage, continuous exposure to the language brings with it no guarantee at all that much will be acquired. The implication for teachers might be that intervention should be concentrated on this second area. This general idea may well hold no surprises for experienced language teachers but the devil is in the detail. A proper theoretical framework is needed to pinpoint and explain exactly what these 'interface problem areas' might be.

2 O'Grady's (2005, 2008) Emergentism

The first approach is an emergentist one. This is a useful option to consider first since it contrasts with the other two in that the debate about interfaces is rendered irrelevant or trivial if an emergentist approach is adopted. O'Grady (2008, p. 448) defines emergentist approaches as follows: "[t]he phenomena of language are best explained by reference to more basic non-linguistic (i.e. 'non-grammatical') factors and their interaction—physiology, perception, processing, working memory, pragmatics, social interaction, properties of the input, the learning mechanisms, and so on". This approach is attractive because it puts all kinds of learning into the same explanatory framework. In other words, it denies that we need to resort to the idea of a special language module to properly account for language acquisition, particularly in the young child. Because it avoids that additional complication, it therefore can be characterised as a parsimonious approach like a number of other approaches including those following the tenets of behaviourism, connectionism and also including many cognitive psychological approaches to learning. Of course, if such approaches cannot properly account for the emergence of a complex grammatical system in the untutored, cognitively immature child with relatively few errors and without explicit correction, then the arguments against the existence of language faculty will not hold water. The question of child language acquisition aside, it may still be the case, however, that such specialised language mechanisms operating within the constraints imposed by what is generally known as Universal Grammar (UG), if they exist, cease to operate in early childhood leaving older learners to rely on the framework set by their first language system and general learning strategies for acquiring any new language (Chomsky 1965; Selinker 1972; Bley-Vroman 1990, 2009). Again, this is also a hotly contested issue (Krashen 1985; White 2003; Goad and White 2008).

Unlike a number of radical emergentist approaches, O'Grady's version accepts that an account of acquisition must deal in terms of symbolic representations and not interconnected nodes that do not represent anything. Linguistic development proceeds in the same manner as any other kind of cognitive development as the outcome of repeated exposure to linguistic utterances. Crucial to his account is the notion of an efficiency-driven processor which processes utterances in small chunks (segments, morphemes) in linear fashion, as they are encountered. This processor is not constrained by anything like UG and does not have any particular sequence imposed on it by a special 'language acquisition device', an early idea of Noam Chomsky's that was interpreted by acquisition researchers in the 1960s and 1970s as responsible for fixed orders of acquisition of, in particular grammatical morphemes (Chomsky 1965; Brown 1973; Dulay and Burt 1974). In the case of language, the actions of O'Grady's processor results in the gradual emergence of operations and sequences of operations that are required to form and/or interpret sentences (O'Grady 2005, p. 93). Acquired linguistic properties are the outcome of samples of language encountered by the learner interacting with the efficiency-driven linear processor.

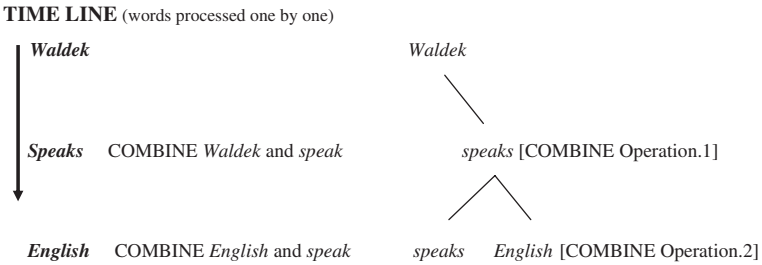

Fig. 1 The COMBINE operation (adapted from O'Grady 2005, pp. 8–9)

It is appropriate to give just a few details of how O'Grady's (2005) model works. During the parsing of incoming input, the *Combine Operation* adheres to an imperative, which is: 'MINIMISE BURDEN ON WORKING MEMORY'. This is accompanied by a simple *Efficiency Requirement*, which says 'RESOLVE DEPENDENCIES AT THE FIRST OPPORTUNITY'. Figure 1 provides a simple example of this ('Waldek speaks English') of how this combining operation works out in practice. This assumes that what he calls the 'functor' in the lexicon, which here is the verb 'speak', carries the following information: 2 arguments, one left, one right (see O'Grady 2005 for more detailed explanation). At an early stage in processing, since some form-meaning relations can be inferred without syntactic knowledge (O'Grady's 'bootstrapping assumption'), a word is assigned an interpretation, and a conceptual structure (the meaning) for the incoming sentence begins to be projected (O'Grady 2010a, b). Words are processed in linear order, one by one. With verbs, a search begins for arguments belonging to the verb in the lexicon—the nominals to the left and/or right ('Waldek', 'English') are then given an appropriate interpretation (say, 'agent' or 'theme').

After the *Combine Operation* has been executed, another one, called the *Resolve Operation*, will, at the first opportunity presented, match up the nominal with the argument requirement in the verb so, in this example, 'Waldek' can be, and is therefore immediately matched up with the appropriate argument provided by 'speak'. This is called *index copying*. The efficiency-driven processor does, O'Grady says, the best job it can "given the hand it is dealt with" (2005, p. 12), although the lexical properties of words may not always facilitate processing. The general idea is that, as more and more input is processed, the learner develops computational routines to handle the language. More properly phrased, appropriate computational routines 'emerge'.

Overt grammatical correction by a third party, a teacher say, is not included in this approach. However, something still needs to be said at this appoint about the automatic *self-correction* of errors. In O'Grady's model, there is certainly no language acquisition mechanism responsible for monitoring progress and stepping in to repair and adjust the current L2 grammar. Take basic word order, for example. If the first language of the learner is a verb-final language with: (a) the (correct) default L1 order being the literal equivalent of '(Waldek) English+speaks' and (b)

the target language (L2) being a verb-initial language with the default order of the verb phrase, being, as is correct in English itself, (Waldek) 'speaks+English', this will mean that efficient processing routines for the verb-final L1 turn out to be inefficient in processing the verb-initial L2. In such cases, the learner's computational system will err from time to time. In the case of L2, initially dominant L1 routines will be initially easier to implement but some of these will obviously prove to be inefficient. New computational routines will evolve simply in accordance with the efficiency requirement. No error detection is necessary and hence no repair needed by any special language acquisition device, which, of course, in O'Grady's model, does not exist. Provided the errors have detectable consequences, for example, a dependency is not resolved or the resulting interpretation of the utterance is implausible, faulty computational routines will be dropped in favour of routines that avoid such problems. The problem-avoiding routines will be strengthened as a result of further processing of the L2 and no appeal to special grammatical principles is needed to account for this. So, in O'Grady's emergentist approach, learning consists "largely of the emergence of efficient computational routines" (2005, p. 193). The addition of 'largely' reflects the fact that the development of routines is usage–based so that a transitive verb like 'speak', could initially look for both of its arguments, say, to the right but on encountering English L2, the learner will develop the appropriate left and right look routine (O'Grady 2005, p. 195).

Most people would acknowledge that learning an L2 involves various forms of internal competition as the new system is gradually developed against the background of an already established one—in a bilingual situation this would mean the mother tongue (L1). The characterisation of this competition involved will differ according to that approach adopted. In the case of O'Grady's model, it is the computational routines that compete following general cognitive principles of construction that hold across all domains, including language.

3 Interfaces

The term *interface*, as it is used in current debates within the field of second language acquisition, assumes approaches to language acquisition that, unlike emergentist approaches, do espouse some version of a language faculty. In one sense, *language faculty* is a misleading term since by no means does it cover all of what we generally associate with the term *language*. Rather, it refers to the core grammatical system and hence excludes some if not all of semantics as well as pragmatics, phonetics and a great deal of what falls under the rubric of *lexical*. No one but no one would argue that these areas are not crucial to what we understand by language, and acquiring a language. The term *interface* is accordingly used to refer to the connections between the inner core (governed by UG) and this substantial outer ring of systems. This accordingly gives rise to such terms as the *semantic interface*, *the pragmatic interface*, the *phonetic interface* and the *lexical interface*. The question posed in such debates is how we are to account for the

obvious problems that second language acquirers encounter, especially in later stages of development, where they seem to fall somewhat short of a native-like level of ability, even after many years of exposure to the target language. Some point to evidence that second language acquirers are perfectly able in the right circumstances to acquire the basic system and by so doing indicate they can still use the language faculty that guaranteed them native ability in this area of their first language. Where their problems arise, as older learners, is precisely in linking up the basic system with the outer areas. For example, a Polish learner of English can acquire a system that, unlike Polish, requires all subjects to be filled, including all subject pronouns that appear communicatively redundant or illogical (as in '*it* is raining': compare with Polish 'falls rain', i.e. 'pada descz') and can do this even though encountering English utterances does not rule out in principle the possibility that sometimes you *can* leave them out.[1] However, although the same learner can also acquire the determiner system (DP, determiner phrase) that Polish also does not possess (having no articles only demonstratives like 'ten' and 'ta') actually acquiring the ways in which the system is implemented to express various semantic and pragmatic means is quite another matter and is typically problematic. This connection or implementation problem is precisely what is meant by problems at a given interface (see extensive discussion in Sorace 2011 and peer commentaries in the same issue).

4 Modularity According to Jackendoff (1987, 2002)

Whereas O'Grady's (2005) emergentist model assumes no special language module, that is no UG, the remaining two approaches to be introduced do. In view of the compelling evidence (*pace* O'Grady and others) of a special domain dedicated to handling human language, a matter which is debated extensively in the literature, they both adopt an account of the language faculty promoted by Ray Jackendoff (see discussion in Hauser et al. 2002 and Pinker and Jackendoff 2005). In other words, they diverge from the orthodox Chomskyan model although they belong to the same tradition (Jackendoff 1987, 2002).

The attraction of Jackendoff's framework lies in the extent to which it goes beyond syntax and phonology to elaborate, more than any other model, the connections or 'interfaces' between these two core aspects of language and cognition in general. In addition, he has incorporated in his theory an account of language processing which is absent from Chomskyan approaches, which are deliberately limited to talking about grammatical properties in abstract terms and not how they are used, or acquired in real time. One could also perhaps add that the modular architecture that he proposes allows for some flexibility as to which particular

[1] Leaving aside the question of whether you can apply a consciously learned rule to insert pronouns where instinctively you wanted to leave them out (Krashen 1985; Sharwood Smith 2004).

Fig. 2 The language faculty: internal and external interfaces

linguistic account can be applied to the explanation of syntactic and phonological properties, although his own preferences are clear especially in more recent publications (Jackendoff 2002; Culicover and Jackendoff 2005).

It is worth introducing some basic features of Jackendoff's modular architecture before going on to talk about the last two approaches. Although it can be discussed as an abstract system of rules and principles in the same way as any classical Chomskyan account, it is much more convenient to use his on-line processing version, this being the aspect that is most relevant to what will be discussed later. This means including an account of how memory operates, a feature left out of a purely property-based description. Memory is important for on-line processing at any given moment since it involves temporary storage of items in working memory as well as access to items in longer term memory. It is also important for acquisition since this must involve changes in memory.

In Jackendoff's account, the domain-specific faculty that is part of our biological endowment consists of two separate largely autonomous modules, one dealing with phonology and the other with (morpho)syntax. There is an *internal* interface that puts phonological properties 'in registration with' syntactic properties, and *external* interfaces that put syntactic properties 'in registration with' items in the conceptual system and phonological properties 'in registration with' those sensorimotor systems which handle perception and production. This is displayed in Fig. 2 with the internal (core) system in boldface. The debate in second language acquisition about interfaces touched on earlier can be reformulated as having to do with the external interfaces that link up the two dedicated linguistic modules inside to systems that are external to this core linguistic system. Each of the interfaces that are represented in Fig. 2 can be said to be governed by principles that differ qualitatively from those that govern other cognitive systems, in other words UG principles. This means that UG shapes not only the way elements of morphosyntax and phonology are combined but also how these elements are combined with elements outside to create speech and writing patterns, and patterns of conceptual structure used in comprehension and production of spoken and written (and signed) utterances. The internal interfaces between phonology and syntax display high connectivity: some elements are in close correspondence (a phonological 'word' is very similar although not identical to an equivalent category in syntax, for example), whereas areas linked up by what are here called external interfaces are not so richly interconnected.

'Putting into registration with one another' should not be misunderstood as 'translating' one thing into another: what happens is that elements (structures, structural combinations) in one module get matched up by the intervening interface (the bidirectional arrows in Fig. 2) with others in a separate, adjacent modules, thus forming a chain of distinct types of structure, each originating from a

Auditory-acoustic processing ⇔ phonological processing ⇔ syntactic processing ⇔ conceptual processing

Fig. 3 Processing of incoming speech

separate module. For example the complex phonological structure /valdek/ will be matched up with a syntactic structure like NP (Noun Phrase) plus associated features like number (singular), gender, where there is grammatical gender (masculine) gender, animacy and so on. The syntactic structure will, in turn, be put into registration with (matched up/interfaced with) a complex conceptual structure, i.e. representing a particular combination of meanings reflecting all the relevant facts that speaker knows about this person in question in this context. This extends the chain one link further and we end up with a prototypical word ('Waldek'). Lexical items or lexical 'entries' do not exist as such: they are better described either as 'rules' coindexing structures across completely separate systems or, alternatively, since we are talking in processing terms, as 'chains' which consist of a phonological structure (PS) in registration (coindexed) with a syntactic structure (SS) and conceptual structure (CS) thus: PS ⇔ SS ⇔ CS, with the bidirectional arrows indicating the interfaces.

To sum up, the processing of incoming speech involves the operations depicted in Fig. 3.The arrows are bidirectional because processing is incremental and can work in both directions. Several candidate chains are temporarily maintained in working memory so a best-fit can be achieved. This means there are some repeated to-and-fro passes through the separate modules before a chain of representations are selected. Also the same system is implemented in reverse in order to move from meaning (conceptual structure) through to speech or writing.

Turning now to the question of memory, this, in Jackendoff, is also modularised to reflect the architecture just described: not only is there a separate *conceptual memory*, but also a *syntactic memory* and a *phonological memory*, each with their own unique types of structure. Processing within a module involves a dedicated processor whose task it is to assemble items (i.e. properties, structures, representations) that appear in its own working memory and according to the unique principles of that module. The phonological module is the only place where phonological structures can be formed and processed, and the same holds for syntactic structures and the syntax module. Only a subset of items in memory can be processed at any given moment: processors handle only those items from that store that appear in working memory. *Working memory* is an area where structures in long term memory are temporarily activated sufficiently strongly to allow manipulation on-line. The more a structure is established in memory, the more easily it is activated enough to appear in working memory. This means that, in principle at least, frequent exposure to a structure will increase its chances of being used in performance. However, it is possible that some aspects of an utterance will not be processed deeply enough to make it as far as the linguistic system. Mere exposure to language alone does not guarantee anything.

Jackendoff seems not to pursue the question of how knowledge about language, metalinguistic knowledge that is accessible to awareness, can be characterised. It seems plausible that he would treat it as something handled in conceptual structure. Both of the approaches discussed below certainly see it in those terms. Hence, the (explicit) knowledge of what a word or syllable is, or what a rhyme is up to and including an extensive technical knowledge of how the Polish case system works is all constructed in the conceptual system and encoded in conceptual structure (Sharwood Smith 2004). The language modules, as it were, know nothing about it. They just do their job processing what comes in. To use Carroll's (2001) example, the metalinguistic concept FEMININE is qualitatively different from the morphosyntactic gender feature required for languages like French (and Polish) but not English; in other words learning facts about French or Polish gender and related concepts is quite different from creating appropriate representations in the phonological and morphosyntactic systems described above (Carroll 2001, p. 152ff). This may be interpreted as theoretical backing for the distinction familiar from the early second language acquisition literature and associated with the views of Stephen Krashen, who drew a sharp line between an intuitive knowledge of grammar, inaccessible to conscious introspection, on the one hand, and, on the other, the kind of technical knowledge about grammar that is learned consciously in traditional formal education (Krashen 1985).

5 Carroll's (2001) Autonomous Induction Theory

Carroll's (2001, 2007) own approach, based on Jackendoff, provides a particular view of how the acquisition of language takes place. Change in L2 grammars, in her model (Autonomous Induction Theory) is based on the notion of *failure-driven* learning (see also Wexler and Culicover 1980; Schwartz 1999). Each of the levels of linguistic representation, phonological, syntactic, etc., and each of the interface rules that map one level of representation on to another, have a given set of properties at a given point in development. The question is, is this fully compatible with the utterances that are currently being processed? This kind of question is probably pre-theoretical in that any account of acquisition will have to ask it. Recall that in O'Grady (2005) this was a matter of efficiency. The parser will try and do its job but will always be seeking ways of increasing efficiency and will create new or revised operations on this basis. In Carroll's system, the question is similar: is the input to a particular level of representation entirely consistent with the current state of the system? If so, there is no reason for change, except in the sense of strengthening the current state (as mentioned earlier). However, if the answer is no: the input cannot be assigned a full representation by the current configuration of properties, then there is parsing failure. At this point, special learning mechanisms kick into change either properties inside the relevant module (level of representation) and adjust the appropriate interface rules in order to accommodate novel input. It should be noted in passing that it was Carroll who first stressed

the importance of a proper definition of input. As far as she was concerned, language to which the learner is exposed cannot be called *input* but rather should be renamed *stimuli*. Input is an internal event and therefore refers to later stages of processing, that is, input into one or other of the mental subsystems, i.e. levels of representation, hence the remark earlier about the general effect or non-effect of frequency of on the strength of already existing elements in the various modules involved in language (see also Zyzik 2009).

In cognitive psychology in general it is assumed that concept learning proceeds according to various problem-solving strategies, a key one being induction, drawing conclusions from instances, which can be, although does not have to be, a quite conscious process. This kind of inductive learning process is specifically rejected as a satisfactory account of language acquisition by those espousing some form of language faculty. Indeed the failure of inductive reasoning to account for young children acquiring grammar is a raison d'etre for positing the existence of a language faculty. It is also not the kind of induction that Carroll (2001) attributes to her language acquisition device. She adapts Holland et al.'s (1986) induction theory to conform with the principles of Jackendoff's architecture. This means that, instead of working in an unconstrained fashion for all types of cognition, induction works 'autonomously' on linguistic (i.e. phonological and morphosyntactic) representations and is limited to building structure within the constraints of the principles determined by the appropriate level of representation (module). In this way, induction-based explanations are rendered compatible with a UG perspective on L1and L2 acquisition and to distinguish it from general induction, Carroll calls this domain-specific version *i-learning*.

Carroll (2001, p. 131) describes i-learning as "the novel encoding of information in a representation". This novel encoding is triggered when parsing cannot analyse current input with the existing parsing procedures. Taking as an example the article system again, when encountering a sequence like 'the English teacher', when the parser has processed 'the' (a determiner, or Det) and arrives at 'English' which is actually an adjective, the current state of that parser might instead favour triggering N(oun) after Det. Since there are in fact other possibilities in English, an native-like parser or one in a more advanced state would of course allow Det N, Det Adj, and Det Adv. On encountering the next word 'teacher', it may register an inconsistency. It is assumed there will be feedback, that is, cues in the input from other levels (phonological, conceptual) that will lead to the construction of parsing procedures, which permits the selection of one of three above-mentioned possibilities following the processing of Det. At intermediate stages of acquisition, however, these possible analyses for the novel form should compete until such time as **N** is not automatically favoured to follow Det (Carroll 2001, p. 136). In checking for consistency between the input into, respectively, phonology, syntax and conceptual structure with the current state, Carroll's autonomous induction system may identify differences which then trigger one or more operations aimed at reducing the inconsistency. Initially, L2 input will be mapped on L1-based representations wherever possible. New representations will compete with the old ones until their strength is established via further exposure to the language. This may

sound not unlike O'Grady's account. One crucial difference, however, are the constraints imposed on the way the operations responsible for reducing inconsistency can work. Also Carroll's system works on the basis of identifying failure whereas O'Grady is simply working on a principle of efficiency.

6 The Modular On-line Growth and Use of Language Framework (MOGUL)

Parsimony was mentioned as an attractive quality for an explanation of language acquisition. O'Grady's approach scores highest in this regard but this crucially depends on the question of whether a domain-specific analysis of human linguistic ability and its development in the individual can be discarded. The question now arises whether a Jackendoff-based approach has to also assume a language acquisition device of the kind that Carroll proposes. The component of the MOGUL framework that is based on Jackendoff but which nonetheless supplies a different answer to this question is Acquisition by Processing Theory (APT), where acquisition is characterised as *the lingering effect of processing* (Truscott and Smith 2004). APT, like O' Grady's emergentist model, rejects the need for any separate developmental mechanism (such as i-learning). Hence, it is not 'failure-driven' in the sense of parsing failure triggering 'repair'. Transition is accounted for by the operations of the parsers to build strings of representations on the basis of the best overall fit for the current input. There is no (re)construction of parsing procedures within a separate induction-based LAD as described in Carroll's account of i-learning. Rather, growth is the outcome of the parsers' continuing attempts to find the best overall fit for input: items that are ultimately selected in response to given input will, as a result, gain in strength and acquire an improved chance of being selected in future. The parser, as it were, does not understand failure so there is nothing to trigger repair operations. Looking at the operations of the parser as outside observers, we can say that there is something that amounts to a response to parsing failure and subsequent repair but we cannot impute this sense of failure to the internal workings of the parser itself. Hence, MOGUL has a less parsimonious explanation of acquisition than O'Grady's in that MOGUL assumes constraints imposed by a language-specific mental system. At the same time, it is more parsimonious than Carroll's AIT approach in that it does without a special acquisition device.

7 Interfaces Again

Returning to the question of interfaces, how do these three models of real-time acquisition view the issue of areas that constitute areas of special learning difficulty? As mentioned earlier, it is difficult to see how the notion of interface (in the present sense of the term) has any real status in emergentist models since there is

no language module at the centre of the language system now in the broadest sense of the term 'language'—to interface with. At the same time, an efficiency-driven parser is not going to develop new routines readily if there are no detectable consequences for interpreting utterances incorrectly, i.e. in a non-native manner. The cues that should indicate to the learner (or, more properly, the learner's acquisition mechanisms) the particular use of a definite article or the obligatory suppliance of a subject pronoun in a language where omission of pronouns is possible in some contexts but absolutely not in others, may be sometimes very subtle and often undetectable. Also, the learner has strongly established L1 routines that can be relied on for the time being, although systems that are not instantiated in the L1 will not be catered for. Adjusting the computational routines to achieve a more native-like state will therefore take a long time or simply not happen. If there is no prior language system in place perhaps the detection of subtle cues is more efficient so for the L2 learners the very fact of a pre-existing L1 system might disguise the cues needed to devise new operations to appropriately select determiners or subject pronouns according to the semantic or pragmatic context. In this way, emergentists might regard the positing of interfaces quite unnecessary, not only because they do not believe in a language module of any kind anyway but also because the observed difficulties that learners do experience can be attributed to the existence of strong L1 routines and the too subtle nature of the cues that ought to trigger appropriate changes in the learner's semantic and pragmatic knowledge of the L2 system. The obvious solution that some might offer at this point is that the learner might be given explicit information in the form of rules to compensate for semantic or pragmatic complexity of the evidence in the language itself. The effectiveness of explicit knowledge building on the way the learner processes and interprets L2 utterances is an important and contentious subject in its own right. At this juncture, it is appropriate only to say that the topic his still highly controversial (Sharwood Smith 2004; Truscott and Sharwood Smith forthcoming).

As regards the two other approaches, based on Jackendoff, and which therefore assume the existence of an inner core language system, the notion of interface is interpreted in frameworks that are trying to explain real-time development. Ironically, the whole debate about interfaces has been carried out in the context of a classical generative framework which has few pretensions about solving real-time development issues apart from locating and describing the problem in terms of linguistic theory. To advance beyond a definition of the boundaries (interfaces) where problems arise and relating to this to the debate about whether a second language learners UG is intact or not, no further coherence can be achieved in such explanations precisely because the psycholinguistic real-time clement is missed out. This is the contribution of approaches such as Carroll's and MOGUL. If you are convinced that an emergentist approach is always going to fall short of a full explanation of these issues, then the right choice still has to be to incorporate a real-time processing framework into your account. In other words, we need to know in psycholinguistic terms why on-line processing operations that were able to reconstruct a full native-like language system in childhood seem to fail at the points defined by the interfaces. There are many questions remaining but they cannot be answered by ignoring acquisition as real-time processing.

References

Bley-Vroman, R. 1990. The logical problem of foreign language learning. *Linguistic Analysis* 20: 3-49.

Bley-Vroman, R. 2009. The evolving context of the Fundamental Difference Hypothesis. *Studies in Second Language Acquisition* 31: 175-198

Brown, R. 1973. *A first language*. Cambridge, MA: Harvard University Press

Carroll, S. 2001. *Input and evidence: The raw material of second language acquisition*. Amsterdam: John Benjamins.

Carroll, S. 2007. Autonomous Induction Theory. In *Theories in second language acquisition*, eds. B. VanPatten and J. Williams, 155-174. London: Routledge.

Chomsky, N. 1965. *Aspects of the theory of syntax*. Cambridge, MA: MIT Press.

Culicover, P. and R. Jackendoff. 2005. *Simpler syntax*. Oxford: Oxford University Press.

Dulay, H. C. and M. K. Burt. 1974. Natural sequences in child second language acquisition. *Language Learning* 24: 37-53.

Goad, H and L. White. 2008. Prosodic structure and the representation of L2 functional morphology: A nativist approach *Lingua* 118: 577-594.

Hauser, M., N. Chomsky and W. T. Fitch. 2002. The language faculty: What is it, who has it, and how did it evolve? *Science* 298: 1569-1579.

Holland, J. H., K. J. Holyoak, R. E. Nisbett and P. R. Thagard. 1986. *Induction: Processes of inference, learning and discovery*. Cambridge, MA: MIT Press.

Jackendoff, R. 1987. *Consciousness and the computational mind*. Cambridge, MA: MIT Press.

Jackendoff, R. 2002. *Foundations of language: Brain, meaning, grammar, evolution*. Oxford: Oxford University Press.

O'Grady, W. 2005. *Syntactic carpentry: An emergentist approach to syntax*. Mahwah, NJ: Lawrence Erlbaum.

O'Grady, W. 2008. The emergentist program. *Lingua* 118: 447-64.

Pinker, S. and R. Jackendoff. 2005. The faculty of language: What's special about it? *Cognition* 95: 201-236.

Krashen, S. D. 1985. *The input hypothesis: Issues and implications*. New York, Longman.

Schwartz, B. D. 1999. The second language instinct in language acquisition: Knowledge, representation and processing, eds. A. Sorace, C. Heycock and R. Shillcock, 133-160. Dordrecht: Elsevier.

Sharwood Smith, M. 2004. In two minds about grammar: On the interaction of linguistic and metalinguistic knowledge in performance. *Transactions of the Philological Society* 102: 255-280

Selinker, L. 1972. Interlanguage. *IRAL* 10: 209-231.

Sorace, A. 2011. Pinning down the concept of 'interface' in bilingualism. *Linguistic Approaches to Bilingualism* 1: 1-33.

Truscott, J. and M. Sharwood Smith. 2004. Acquisition by processing: A modular perspective on language development. *Bilingualism: Language and Cognition* 7: 1-20.

Truscott, J. and M. Sharwood Smith, forthcoming. Input, intake, and consciousness: The quest for a theoretical foundation. *Studies in Second Language Acquisition.*

Wexler, K. and P. Culicover. 1980. *Formal principles of language acquisition*. Cambridge, MA: MIT Press.

White, L. 2003. *Second language acquisition and Universal Grammar*. New York: Cambridge University Press.

Zyzik, E. 2009. The role of input revisited: Nativist versus usage-based models. *L2 Journal* 1: 42-61.

Teaching English as an International Language: Problems and Research Questions

Maria Wysocka

Abstract The fact that English has become a means of global communication at present appears to have been the cause of different changes that can be observed in the language system itself as well as in the process of its teaching, learning and use. The purpose of the present chapter is to show the nature of these new phenomena and to point to the necessity of organizing specific research in particular fields. The most important areas of studies will then include: (1) factors determining the development of English as an international language, (2) the rules of simplification of language material, (3) the influence of English on other languages, whose users acquire it as an international language, (4) the nature of the acquisition process of English as an international language, (5) the characteristic features of its teaching and learning, (6) the possibilities of forming an optimal method of teaching English as an international language, (7) concentrating on intercultural communication, (8) teacher education and teacher qualifications, (9) the features of the learner and user of English as an international language, and (10) the nature of strategies of communication in English as an international language.

1 Introduction

It was many years ago that professor Roman Dyboski[1] (1931, pp. 57–62) expressed his opinion about the possibility of English becoming an international language. Here are the two excerpts from his chapter:

> Undoubtedly did we step into the period of the history of mankind in which English will be the dominant international language, perhaps during a century, or maybe even longer (…).

[1] I was very impressed when, by chance, I found a copy of the journal *Neofilolog* from 1931, being impressed even more so having discovered in it professor Dyboski's article about the perspectives of English of becoming an international language. Since the text was written so

M. Wysocka (✉)
Institute of English Studies, University of Silesia, Silesia, Poland
e-mail: maria.wysocka@poczta.onet.pl

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> Whoever realizes clearly what the above presented general tendencies that may be observed all over the world in the domain of language are like cannot have any doubts at all that the hour marking the times where everybody will learn English in Poland will strike in the nearest future. The general international necessity will become superior to such considerations as geographical neighborhood or political allegiances. The first symptom which proves this necessity is already clearing its path here: it is the quickly increasing demand to learn English that appears among adults, particularly in such industrial centers as Katowice.[2]

There are a number of reasons for English occupying the position of an international language now, proving at the same time that Professor's Dyboski's ideas have become reality. The development of English into an international language (henceforth EIL) is justified by historical, political and sociological factors. Schneider (2011, p. 37) points to the most essential phenomena that influenced its appearance. He stresses that English was the language of the British Empire, and therefore it was used all over the world from the beginning of the nineteenth century. Besides, he considers English to be "the language of the industrial revolution and of technological innovation". He also adds that "in the twentieth century it was strengthened further as the language of the world's remaining superpower and the leading force in globalization, the United States". These processes, which undoubtedly account for the formation and development of EIL, continue to be reinforced even now by the global use of the Internet and other mass media having accepted English as the dominant language.

Currently English is now used both as a lingua franca, the language used by native speakers of different languages (cf. Modiano 2009, pp. 59–60), and as EIL, the officially accepted means of communication in various international institutions all over the world. Its characteristic features are described by McKay (2002, p. 12), who points out that:

- EIL is used for global communication between countries and also for *wider communication within multilingual societies*;

(Footnote 1 continued)
many years ago, I thought that I might acquaint the reader with the original Polish version of the fragments quoted here: "Wstąpiliśmy niewątpliwie w okres dziejów, w którym panującym językiem międzynarodowym będzie angielski—może przez jedno stulecie, a może I dłużej. (…) Kto jednakowoż zdaje sobie jasno sprawę z przedstawionych powyżej tendencyj ogólnoświatowych w dziedzinie językowej, ten wątpić ani na chwilę nie może, że godzina powszechnej nauki języka angielskiego w Polsce wybije w niedalekiej przyszłości i że jako ogólna międzynarodowa konieczność weźmie górę nawet nad względami na sąsiedztwo geograficzne i sympatje polityczne. Pierwszym objawem, dowodzącym, że ta konieczność już toruje sobie u nas drogę, jest szybko wzrastający w ostatnich latach popyt na naukę języka angielskiego wśród dorosłych, szczególnie w takich centrach ruchu przemysłowego jak Katowice" (Dyboski 1931, pp. 57–62).

[2] All the quotations from Polish sources have been translated by the author of the present chapter.

- as EIL functions as an international means of communication it has lost its ethnicity, which means that it does not belong to the countries where it is used as the native language;
- consequently, EIL is used by people representing different cultural background, and as such, EIL is connected with the culture of the country of its users;
- this means that one of the main functions of EIL is to make its users able to present the ideas connected with their culture to other people.

Thus, EIL is of heterogeneous character and "is by definition a language that belongs to all those who speak it and not to the few who acquire and use it from childhood" (McKay 2002, p. 43).

It is obvious that the system of EIL exhibits the features that make it different from ethnic English. At the same time, the process of EIL acquisition as well as its teaching, pose many questions (e.g. Phan 2008; Modiano 2009), the answers to which would require exploratory research. The aim of the present chapter is to point to the most important areas that deal with the nature of EIL, as well as with its teaching and learning, and to bring up those problems and questions that could serve as a basis for future research. In the following sections these questions will be formed with reference to EIL itself and also to the nature of its acquisition and teaching processes.

2 EIL as the 'Neutral' Means of Communication

The prognosis for EIL is that it is going to be accepted by people from all over the world serving as a means of international communication. This means that EIL has to be deprived of specific features characteristic of those ethnic languages native to EIL users. In the course of its natural development EIL may reveal tendencies slowly leading to the appearance of its global, completely neutral form. That is the stage when it becomes commonly used and understood by everybody. Its final shape is going to be formed by means of different neutralization processes spontaneously affecting particular subsystems. The neutralization of EIL will most probably be manifested in various ways by different social groups and communities in the course of its natural acquisition. It must be assumed that EIL neutralization processes show a dynamic character, and result in establishing completely neutral forms. Symptoms of neutralization can already be seen in simplified language where functional elements are considered redundant and omitted or generalization processes occur. Among the tendencies observed by Schneider (2011, p. 8) the following examples could be quoted:

- a tendency to leave out grammatical endings both on verbs (as in 'it start' or 'coconut fall') and in nouns, when the plural is clearly contextually implied but not formally expressed by an '-s', as in 'in other opinion', 'different person' or 'ourself';
- questions do not require 'do-' support or inversion, as in 'why falls' and 'why coconut fall'.

Szymańska (2011) also described the grammar of English used as Lingua Franca as one that does not refer to the norms of UK or any other native speaker's country. She illustrated this with the following examples of simplified language behavior:

- dropping the 3rd person singular '-s' ending;
- omitting indefinite and definite articles or inserting them in improper places;
- simplifying the use of question tags, e.g. inserting 'isn't it?' instead of other forms;
- replacing infinitive constructions with that-clauses.

Neutralization processes may be facilitated and reinforced by speakers' attempts to achieve ultimate success in communication. Jenkins (2000, p. 175) writes "that speakers take into consideration the listener's knowledge and converge by, for example, using less jargon with an interlocutor who does not share their expertise, in order to increase mutual intelligibility". This supports Communication Accommodation Theory, also cited by Jenkins (2000, p. 21) according to which "speakers may adjust their speech either in the direction of that of their interlocutors (convergence) or away from that of their interlocutors (divergence). The former process, that of convergence, is the one of particular interest to us in the context of EIL". On the other hand, we must be aware of the fact that EIL is being acquired and used by individuals who look at it through the systems of their native languages. This may certainly inhibit the development of neutralization processes. Schneider (2011, pp. 21–22) writes about "word choice and usage characteristic for young world Englishes, where local phrases are introduced into English expressions, thus making these expressions understood only in local communities". He supports this statement with the examples of English spoken in India, in which the phrases 'What is your good name?' and 'What goes of my father?' include elements translated from Hindi. Native languages of EIL users need not be the only factors inhibiting neutralization processes, understood here as components of EIL natural development. These factors must be identified and their nature described. At the end of neutralization processes, EIL grammar rules as well as its lexical material could likely appear as neutral, i.e., they could be applied, used and understood by all EIL users, or, in other words, by the international/global speech community.

Neutralization processes must be identified and their character must be described and analyzed. The whole phenomenon must definitely be subjected to specific research that could provide answers to the following questions:

- What are the criteria from the point of view of which particular types of neutralization processes might be distinguished?
- What are the factors that influence the character of neutralization processes in the whole EIL material?
- What are the factors inhibiting the development of EIL neutralization processes?
- What are the factors that influence the dynamics of neutralization processes?
- What are the factors determining the order of appearance of neutralization processes?
- What is the quality of particular types of neutralization processes?
- What are the connections between particular types of neutralization processes?
- What language material could be finally defined and described as neutral?

Answers to these questions will unquestionably lead to the appearance of other problems that will require further thorough investigation. Research into EIL neutralization processes could be done on the basis of different language corpora and, additionally, by means of specifically designed longitudinal diagnostic studies. Their results could provide data about the nature and dynamics of EIL natural development.

3 EIL and Other Languages

Crystal (2002, p. 17) was probably one of the first to ask the question whether "the emergence of a global language would hasten the disappearance of minority languages and cause wide-spread language death". The fact that EIL might influence other language systems, above all the native languages of its users, is without doubt. Still, the presence of this phenomenon must undergo thorough investigation, since, as we know, learners' L1 is involved in the process of EIL acquisition and learning. Biedrzyńska (2011), for example, examined the influence of English as a FL on the native language competence of advanced learners of English. The results of her research based on corpus data analysis showed that texts produced in the L1 by her participants contained lexical and structural borrowings from English which, according to the author, exerted a negative influence on the style of the L1 texts produced. It has to be pointed out that these L1 changes were of a temporary character.

Studies related to the influence of EIL on other language systems could, in my opinion, also be based on corpus data analyses which will have to include samples of spoken and written texts. It will also be of crucial importance to state whether the changes observed in the substance of L1 are temporary or permanent. Comparisons of EIL influence on the L1 systems of its users with the data gained from EFL learners, as is the case with the study mentioned above, will also be worth undertaking.

4 The Nature of EIL Acquisition

EIL acquisition could be discussed in terms of the *macroacquisition process*, which includes its types A and B as presented by Brutt-Griffler (2002, pp. 138–139) and discussed by McKay (2002, pp. 13–15). In-depth studies will have to address each of these two types, separately. Case studies could also be conducted to examine the *EIL microacquisition processes*, manifested by individual EIL learners. Studies of the EIL macroacquisition process could also concentrate on the character and dynamics of neutralization processes development (cf. point 2) and on the systems used by particular speech communities, in order to estimate the degree of EIL neutral nature.

The product of the macroacquisition process, i.e., EIL itself, must also become the object of empirical investigation. Stages of possible fossilization could be distinguished there as well. The quality of the macroacquisition process will certainly depend on the age and sex of EIL users. In addition, even more interesting studies

might be carried out in order to look into role of learners' L1 in the process of EIL learning. Longitudinal diagnostic studies devoted to language transfer could contribute to the current knowledge about the nature of the neutralization processes.

Finally, the macroacquisition process could also be discussed in terms of the concept of *macrointerlanguage*. Its approximative systems could be distinguished on the basis of studies on neutralization processes. The final goal of learners would be the ability to communicate in EIL, a language that would manifest the features of a completely neutral system, while being understood by all its users.

5 The Process of EIL Teaching and Learning

Numerous problems arise when we start thinking about the process of systematic teaching and learning of EIL, or guided acquisition process, as it is conducted in institutions like schools (cf. Baylon and Mignot 2008, pp. 315–316). These problems are mainly connected both with the nature of EIL, as well as with the aims of its users. Modiano (2009, p. 59) points out that "learners are no longer learning English because it is used primarily to communicate with native speakers but are acquiring English because it will be required of them in a wide range of work related educational and social activities, many of which will not include native speakers". As a neutral system of communication, EIL has no native speakers, nor can we think of it as L1 for those individuals acquiring it. Such a situation runs counter to the widely-accepted teaching methods, particularly Communicative Language Teaching (CLT) (cf. McKay 2002, pp. 111–116; Modiano 2009, pp. 58–77). Baylon and Mignot (2008, p. 326) point out that "communicative competence is determined by internal rules of each language. It cannot be separated from a given culture and a given language. They also stress that language learning always means learning a new communicative competence". This suggests that the latter may no longer be the goal of EIL teaching and learning since the system of EIL is connected with many cultures. Therefore, we may assume that cross-cultural communicative competence in EIL, which will be the purpose for its teaching and learning, will also show its neutral character. In order to expand the knowledge about the nature of EIL teaching, we would need research into the features of the whole teaching-learning process. We will also have to set up teaching procedures optimal for diversified teaching situations. EIL teachers and their qualifications are of special significance and require detailed discussion, which will be undertaken in the following section.

6 The EIL Teacher

EIL teachers are unique because the language they teach is also unique in spite of the language being used as an ordinary means of communication. EIL teachers must be conscious of the fact that the language they teach does not belong to any

one culture. Neither is it used by any community as a native language. As a tool for international communication EIL is gradually acquiring a neutral character, while its users represent multicultural identities. The most essential characteristics of EIL teachers characteristics will be presented and discussed below.

6.1 Native and Nonnative Teachers

This section will begin with a few words in defense of native teachers. The division between native and nonnative teachers of English might lead us to believe that the latter are themselves inferior and therefore underestimate their own professional competence (cf. Phan 2008, pp. 95–96; Llurda 2009, pp. 119–131; Modiano 2009, pp. 58–76). Still, both groups of teachers are indispensable for successful EFL teaching. Native teachers are the best possible models for learners to imitate and also the best partners in conversations and fluency development. They also help learners keep their vocabulary up-to date. Additionally, they are a valuable source of knowledge concerning the culture of the target language (TL) country. On the other hand, nonnative teachers provide both good and clear explanations of TL rules and explain the nature of their students' errors. Phan (2008, pp. 138–139) quotes the opinions of his interviewees (i.e., teachers of English), who support the above and illustrate the differences between native and nonnative groups of teachers in the following way:

Interviewee 1:

> Non-native teachers of English often understand better the difficulties faced by their students because they share L1 with their students. Moreover, they tend to know grammar of the target language better than native speakers. They can explain it in L1 if their students don't understand properly in L2. However, their language proficiency is not good as native teachers' of English.
>
> Native teachers of English have some advantages. Because they teach their mother tongue, they don't have language difficulties. However, they don't often analyze their grammar as well (as non-native teachers). They have the advantage with pronunciation. They can also know what is appropriate to say, since they're more familiar with their mother-tongue styles. They also understand their cultures, and they can explain many concepts only existing in English.

Interviewee 2:

> The bright side of a native teacher:
>
> – good at four macro-skills; have a deep knowledge and understanding of culture and history of his country, so that he will not have any trouble in explaining the language he is teaching; has plenty of experiences and illustration to make his lectures more vivid and interesting; takes less time for preparing vocabulary, pronunciation, grammar.

The dark side of a native teacher:

– cannot catch up the difficulties that non-native students get involved in their expression in writing or speaking. Sometimes there's no understanding between teacher and students due to different cultures, different styles of living; don't know where and when they need to stop in their lecture to give more explanation to their students.

While native teachers are absolutely necessary for teaching EFL, since they transmit the culture of English speaking countries, nonnative teachers may in fact be more successful in teaching EIL that is not culture-specific. Learners coming from different cultural backgrounds and forming multicultural groups are really a challenge for teacher education, which must be developed parallel to teachers' knowledge of the dynamics of the processes of EIL neutralization. Thus, studies focusing on the character of the EIL teacher become another research area that would relate to the specific type of EIL teacher education and EIL teacher professional development, in addition to practical procedures as they are applied in the course of the teaching process.

6.2 Developing Cross-Cultural Communicative Competence

According to Aleksandrowicz-Pędich (2005, pp. 28–29), the concept of *intercultural* or rather *crosscultural communicative competence* "suggests more practical approach, emphasizing the abilities indispensable for someone's successful communication with the representatives of other cultures". She also explains that the term *crosscultural* refers to various phenomena present in different coexisting cultures, whereas the term *intercultural* may be associated with contacts among people. In light of these terminological differences, the general aim of EIL teaching is to develop in learners who come from different cultures the ability to use the neutral language system of EIL to express ideas which are cross-culturally acceptable. This, in turn, would lead to avoiding various misunderstandings that might appear when culturally unique norms of behavior are violated (cf. e.g. Pomorski 1999, pp. 96–98; Zawadzka 2004, pp. 197–200; Dittmar 2010, p. 230; Mihułka 2010, p. 155). The teaching procedures applied will then result in the development of crosscultural communicative competence in EIL learners.

This idea can be compared with the concept of *intercultural negotiation competence*, which, according to Spychała (2010, pp. 357–366), "can be used in interactions with foreign community members". She writes that "developing in a certain culture means learning to interpret both verbal and nonverbal behavior of the persons we meet every day. It can be said that we take part in the process of decoding the reality that surrounds us". Successful EIL learners will then have to be able to interpret the behavior of individuals belonging to other cultures. Komorowska (2001, pp. 15–16) views students' intercultural (crosscultural) competence as a means thanks to which the student can function in the contemporary multilingual and multicultural world. She lists the following aspects of the development of crosscultural competence:

- observing similarities and differences between one's own culture and other cultures;

- developing the ability to analyze new cultural phenomena, including the traditions and behavior of the representatives of other communities;
- developing the ability to look at people and their problems from the point of view of the members of other cultures; this is connected with the ability to understand someone else's point of view, someone else's cultural traditions, as compared to one's own, as well as the ability to understand someone else's historical background;
- developing the ability to use this knowledge in order to look at one's own culture, customs, traditions and ways of thinking in a more objective way;
- developing tolerance and the ability to establish contacts with the representatives of other cultures without any conflicts;
- developing the ability to cope with problems and intercultural misunderstandings that may arise in the course of contacts with individuals coming from other cultures and/or ethnic groups.

When presenting Bennet's Developmental Model of Intercultural Sensitivity (DMIS) Chutnik (2007, pp. 120–121) writes about "the stage in which cultural differences are minimized. This is the stage in which the individual's outlooks on culture are perceived as universal. It is also seen as the last stage of cultural development that aims at the world of common values. (…) The individual's own culture is experienced in the context of other cultures. Differences are not treated as threats but rather as challenges".

Taking the above statements into account, we may say that the world of common values appears to be the ultimate goal of the development of crosscultural communicative competence. It will be discussed and described in terms of a neutral system of EIL, the teaching and learning processes of which are likely to develop in this direction. EIL teachers' preparation for carrying out such a teaching process, including the continued professional development of the EIL teacher, will then be of specific nature and will require special study. The challenges faced by EIL teacher education will be dealt with in the next section.

6.3 EIL Teacher Education

Apart from knowledge of the EIL language material itself, as well as of the changes which the EIL is currently undergoing, EIL teachers must be prepared to develop the crosscultural communicative competence of their learners. Considering the different cultures of particular teachers and the various student groups, the following types of relations can be observed:

- the teacher and his/her students belong to the same culture;
- the teacher faces a homogeneous group of students who belong to a different culture from his/hers;
- the teacher faces a multicultural group of students.

In all these cases, EIL teaching poses specific problems and difficulties. In the first case, both teachers and students have to imagine and accept the fact that the same

ideas may and will be expressed in different ways by people coming from other cultures which are different than theirs. The second type of teacher-student relations is becoming more and more frequent due to the increased mobility of nonnative EIL teachers. Problems faced by EIL migrant teachers are described by Petrič (2009, pp. 135–149) who points out that "migrant teachers may refer to their L1 and culture as a teaching tool to help students develop an awareness of different linguistic and cultural frameworks". Such behavior may be of quite intuitive and spontaneous nature and may be observed both in teachers and in their learners, who, as a group. are homogeneous. The problem becomes even more complicated when the teacher faces a multicultural classroom. Penczek-Zapała (2010, p. 167) writes about a teacher who "as the one who sets rules and in the end gives grades to his or her students may impose his or her own culture and work according to it". She also stresses the fact that "in a multicultural class, by definition, there are students from more than one culture, so there may be multiple sets of values and attitudes that may at some points be contradictory to each other. For this reason it may be hard to accommodate all the potential needs of students. This is why it could be tempting to choose one, dominant culture. And which one could be better than the one that the teacher already knows so well?".

It is clear that apart from the knowledge of the EIL language material itself and the natural development of this system, EIL teacher education must also concentrate on the neutral character of crosscultural communicative competence. EIL teachers will constantly have to keep these in mind while working with their students on EIL development. Krajka (2010, p. 252) suggests four types of issues or problems that can be possibly encountered here, and finding solutions to them appears to be of crucial importance. He writes about *methodology related issues*, which are connected with the different philosophies of learning represented by students, *personality-related issues*, including the possibility of difficult teacher-student relations, *language-related issues*, where students might pretend that they do not understand the teacher, and *culturally-related issues* "encompassing learners from very different cultural backgrounds in mixed ethnic classes". These issues may be treated as basic categories of problems that EIL teachers are bound to encounter in multicultural classes. In the course of their education, EIL teachers will have to be equipped with the basic knowledge concerning general rules of behavior in particular types of situations. Properly trained EIL teachers will be able to work out solutions to unique problems that will appear in their individual, heterogeneous groups of learners during their EIL teaching practice. These teachers will also become sensitive to "exploring students' experiences of personal contacts with members of other cultures" (Kleban 2010, p. 285), thus being aware of the importance of taking students' needs into consideration.

The above discussion gives us a general view of the principles involved in structuring the education of EIL teachers. It also clarifies the path for EIL teachers' individual professional development so that, in the course of their EIL teaching practice, they can avoid conflicts ending in failure, such as those described by Aleksandrowicz-Pędich (2011). The general idea of EIL teacher education would then comprise two main areas: firstly, the teacher's knowledge of the processes responsible for changes and transformations in the EIL language material, and, secondly, working out the

optimal ways of developing crosscultural communicative competence in multilingual and multicultural classrooms. Specially designed research will have to concentrate on the identification and description of both.

7 In Search of Practical Solutions

EIL teaching practice brings to light the problems which could be solved only in the course of the teaching–learning process and then be successful only with particular groups of learners. They relate first of all to its basic elements, i.e., the presentation of the new language material, the development of EIL habitual behavior and communication skills and also the assessment of learners' achievements. It may appear extremely difficult, or even impossible, to work out the principles of EIL teachers' behavior along with teaching procedures that apply to the introduction of EIL language material and its implementation. The situation of the teacher and students belonging to the same ethnic group will be the easiest to cope with (see Sect. 6.3). Multicultural student groups are unique and, as such, will require unique treatment. Teachers will therefore have to be specially prepared for contact with such heterogeneous groups of learners. Prior to real teaching they will have to gather the knowledge about the learners' cultures, including the specific character of teacher-student relations. This will form the basis upon which teachers will be able to work out the most neutral ways of behavior. Teachers will also need data connected with their students' native languages. The knowledge of the ways in which learners express particular notions and ideas as well as their ways of behavior during discourse will certainly help teachers to organize their knowledge, and they will be able to refer back to this while introducing the neutral EIL material. Bringing advance organizers of various kinds into play is likely to be the most useful.

The presentation of the new EIL language material itself will also require specific explanations, referring to the rules of grammar as well as to new words and phrases. Each level of language competence will require the selection of exercises optimal for each group of learners. One of the greatest challenges for teachers will be to choose the language for communicating with their students while teaching. Will it be the native language used by the majority of students in a given group? Will it be EIL in its less neutral version, and if this is the case, how could this version be set up? The decisions of EIL teachers in this respect will again have to match the needs of each individual group of learners.

The process of EIL teaching carried out in multicultural and multilingual classrooms must then be especially prepared by teachers before it really starts. On the other hand, the quality of the teaching–learning process itself may appear unique and specific, designed for each group of students in question. The EIL teacher is expected to optimize his/her decisions for each case. In the end, EIL teachers will have to be equipped with detailed knowledge of how to organize action research, undertaken to supply the data for choosing the procedures considered necessary in

a classroom setting. Details about action research will have to be included in the whole system of EIL teacher education which was discussed in Sect. 6.3.

Teaching EIL also requires a different approach to language testing. Zafar Khan (2009, pp. 190–205) analyzed the character of TOEFL tests and showed that they are not suitable for testing learners' knowledge of EIL. On the basis of the results of her case study and came to the conclusion that a test that measures students' ability to use English as an international language must lay emphasis on communication tasks rather than on distinguishing and nitpicking errors or deviations from the standard North American English found in the TOEFL. She pointed out that "certain terms may not refer to anything that exist in the local contexts of particular foreign language settings, and expecting students to recognize and use such terms is not only redundant but adds an unnecessary burden to their studies". Wajda (2010, pp. 104–105) presents the following features of *alternative assessment* which may be suitable to the evaluation of EIL learners' achievements. Its most essential elements include:

- Alternative assessments may be treated as informal classroom-based procedures (…) as such are often contrasted with standardized tests which are administered on formal occasions.
- They are formative rather than summative. The information is collected over a period of time rather than at one point.
- Traditional tests prefer selected-response designs, such as multiple-choice items, in contrast to alternative assessments, which favor open-ended creative formats, providing students with opportunities to show their individual characteristics.
- Alternative assessments are often based on activities and materials that have genuine communicative function and use real-life contexts and situations.
- Alternative assessments concentrate on both products and processes of learning, putting emphasis on metacognition and self-monitoring and that is why learner strategies and learning styles often form part of assessment programmes.
- Alternative assessments entail collecting information from numerous sources (e.g. a portfolio may include different samples of the students' performance, records of teachers' observations or self-assessment checklists).
- Alternative assessment is sensitive to both individual and cultural differences between learners, which result from various levels of cognitive development, exceptionality, ethnic or linguistic diversity and personal experiences.

The features of assessment listed above may form a theoretical basis for EIL teachers to construct language tests that would serve as tools for measuring the level of EIL use in their heterogeneous classes. Such tests will certainly require the establishment of specific criteria for analyzing their results.

The EIL teaching process would then require from teachers to develop the ability to collect special information from and about students before instruction starts. Later, they will have to decide on what would work in each of the groups taught. These decisions could rely on the results of action research, especially designed for multilingual and multicultural classes. EIL teachers will also have to be able to construct valid and reliable tests by means of which they will be able to measure the level of their learners' crosscultural communicative competence.

8 Conclusions

Problems that appear in the course of teaching English as an International Language refer to theoretical and practical aspects of the whole process. The former are connected with the nature of the language material being taught while the latter with the nature of its teaching, both of which require careful investigation. Research projects will then have to cover the following areas:

- identification and description of neutralization processes, which may be considered responsible for EIL natural development;
- identification and description of the factors influencing the dynamics of EIL development;
- quantitative and qualitative research into the influence of EIL on different systems of native languages of EIL users;
- studies of the characteristic features of EIL natural acquisition and organized teaching processes;
- studies regarding the nature of the process of the development of crosscultural communicative competence;
- studies detailing the construction of an optimal model for EIL teacher education;
- establishing general ways of resolving the possible problems, conflicts as well as misunderstandings that might appear in multilingual and multicultural groups of learners;
- establishing techniques and procedures for introducing and practicing the EIL material;
- working out the ways of explaining the rules of EIL grammar to multilingual groups of learners;
- working out the models of EIL achievement and proficiency tests.

Looking for solutions to these problems will undoubtedly give rise to the appearance of new questions and will force us to take note of new phenomena, of whose existence we had no earlier knowledge or realization. It is quite obvious that the research on the complex nature of EIL, its various transformations, and the process of its acquisition and teaching has only just begun.

References

Aleksandrowicz-Pędich, L. 2005. *Międzykulturowość na lekcjach języków obcych*. Białystok: Wydawnictwo Uniwersytetu w Białymstoku.

Aleksandrowicz-Pędich, L. 2011. Dyskomfort 'trzeciego miejsca' – trudności interkulturowe ucznia. In *Nauka języka obcego w perspektywie ucznia*, ed. H. Komorowska, 120-138. Warszawa: Wydawnictwo Akademickie Łośgraf.

Baylon, Ch. and X. Mignot. 2008. *Komunikacja*. (translated by M. Sowa). Kraków: Wydawnictwo FLAIR.

Biedrzyńska, A. 2011. *The dynamics of native language competence of a bilingual speaker*. An unpublished Ph.D. dissertation. Katowice: University of Silesia.

Brutt-Griffler, J. 2002. *World English. A study of its development*. Frankfurt: Multilingual Matters.

Chutnik, M. 2007. *Szok kulturowy. Przyczyny, konsekwencje, przeciwdziałanie*. Kraków: Wydawnictwo UNIVERSITAS.

Crystal, D. 2002. *English as a global language*. Cambridge: Cambridge University Press.

Dittmar, N. 2010. Register. In *Variation and change. Pragmatic perspectives*, eds. M. Fried, J-O. Östman and J. Verschueren, 221-234. Amsterdam: John Benjamins.

Dyboski, R. 1931. *Język angielski jako język światowy*. *Neofilolog* 2: 57-62.

Jenkins, J. 2000. *The phonology of English as an international language*. Oxford: Oxford University Press.

Kleban, M. 2010. Teacher education needs 'multivoiced learning spaces': Reflections on the encounters between Polish and International students. In *Coping with diversity*, eds. H. Komorowska and L. Aleksandrowicz-Pędich, 275-289. Warszawa: Wydawnictwo Szkoły Wyższej Psychologii Społecznej "Academica".

Komorowska, H. 2001. *Metodyka nauczania języków obcych*. Warszawa: Fraszka Edukacyjna.

Krajka, J. 2010. Preparing language teachers for multinational classrooms – guidelines for foreign language methodology training. In *Coping with diversity*, eds. H. Komorowska and L. Aleksandrowicz-Pędich, 242-262. Warszawa: Wydawnictwo Szkoły Wyższej Psychologii Społecznej "Academica".

Llurda, E. 2009. Attitudes towards English as an International Language: the pervasiveness of native models among L2 users and teachers. In *English as an international language. Perspectives and pedagogical issues*, ed. F. Sharifian, 119-135. Bristol: Multilingual Matters.

McKay, S. 2002. *Teaching English as an international language*. Oxford: Oxford University Press.

Mihułka, K. 2010. Trening interkulturowy na lekcji języka obcego a rozwój sprawności mówienia. In *Mówienie w języku obcym – sukcesy i porażki uczenia się i nauczania*, eds. M. Pawlak and E. Waniek-Klimczak, 153-165. Konin: Wydawnictwo UAM and PWSZ w Koninie.

Mikułowski Pomorski, J. 1999. *Komunikacja międzykulturowa. Wprowadzenie*. Kraków: Wydawnictwo Akademii Ekonomicznej.

Modiano, M. 2009. EIL, native-speakerism and the failure of European ELT. In *English as an international language. Perspectives and pedagogical issues*, ed. F. Sharifian, 58-77. Bristol: Multilingual Matters.

Penczek-Zapała, M. 2010. Teachers in multicultural classrooms. In *Coping with diversity*, eds. H. Komorowska and L. Aleksandrowicz-Pędich, 164-176. Warszawa: Wydawnictwo Wyższej Szkoły Psychologii Społecznej "Academica".

Petrič, B. 2009. 'I thought I was an Easterner, it turns out I am a Westerner!': EIL migrant teacher identities. In *English as an international language. Perspectives and pedagogical issues*, ed. F. Sharifian, 135-153. Bristol: Multilingual Matters.

Phan, L. H. 2008. *Teaching English as an international language. Identity, resistance and negotiation*. Frankfurt: Multilingual Matters.

Schneider, E. W. 2011. *English around the world. An introduction*. Cambridge: Cambridge University Press.

Spychała, M. 2010. Interkulturowa kompetencja negocjacyjna a rozwój sprawności komunikacyjnych na lekcji języka obcego. In *Mówienie w języku obcym – sukcesy i porażki uczenia się i nauczania*, eds. M. Pawlak and E. Waniek-Klimczak, 357-366. Konin: Wydawnictwo UAM and PWSZ w Koninie.

Szymańska, A. 2011. Affective factors determining the process of ELF teaching. Paper presented during the 23rd International Conference on Second Language Acquisition and Foreign Language Learning. Szczyrk, Poland.

Wajda, E. 2010. Alternative perspectives in Language assessment. In *Coping with diversity*, eds. H. Komorowska and L. Aleksandrowicz-Pędich, 102-117. Warszawa: Wydawnictwo Wyższej Szkoły Psychologii Społecznej "Academica".

Zafar Khan S. 2009. Imperialism of International Test: an EIL perspective. In: *English as an International Language: perspectives and pedagogical issues*, ed. F. Sharifian, 190–205. Multilingual Matters, Bristol.

Zawadzka, E. 2004. *Nauczyciele języków obcych w dobie przemian*. Kraków: Oficyna Wydawnicza „Impuls".

Metaphor in Language Education

Hanna Komorowska

Abstract This chapter, situated in the interpretivist paradigm, seeks qualitative ways to arrive at an understanding of teachers' and students' approaches to education in general and language learning in particular. In the first part of the text, roots of modern approaches to language and education and their presentation through metaphor are sought in the Hasidic tradition developed in the eighteenth century in the territories of the then Polish-Lithuanian Commonwealth. The analysis of the use of metaphor in Hasidic teaching is based on what Martin Buber calls *legendary anecdotes* and *sententional answers*. Recent views on the role of metaphor are then discussed in the second part of the article. Ways are also presented in which education can make use of metaphor and its manifestations in linguistic expressions within two models in which conceptualizations are explained, i.e. the conduit model or the blueprint model. In the third part of the text, the supportive value of metaphor in language learning processes is looked at and the role of metaphor in developing skills is analysed. Teacher education is also discussed with special emphasis on approaches to the development of linguistic and intercultural competence, encouraging motivation and creativity, as well as promoting teachers' and learners' autonomy and self-reflection. In the final part of the text, implications of using metaphor for the practice of language teaching and teacher education are discussed.

1 Roots of Modern Approaches to Education: The Use of Metaphor in Hasidic Teaching

Roots of modern approaches to education promoting intellectual activeness, self-reflection, autonomy and interaction are usually sought in the writings of Jan Amos Komensky and Jean Jacques Rousseau. Yet numerous examples of systematic educational practices of this kind can be found in the eighteenth century Hasidic movement. A favourite way of prompting reflection, raising awareness,

H. Komorowska (✉)
University of Social Sciences and Humanities; Warsaw University, Warsaw, Poland
e-mail: hannakomo@data.pl

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opening new insights and eliciting new hypotheses in interaction with others was metaphor as a teaching device used by the great *tzaddiks*.

Metaphor as a way of explaining notions and convincing others had always been used by great religious teachers, as demonstrated in various holy books, of which the *New Testament* serves as a good example. Yet the first attempts to systematically use metaphors for pedagogic purposes in everyday teaching can be found in the educational practices of eighteenth century Hasids living in the Polish-Lithuanian Commonwealth—the Kingdom of Poland and the Grand Duchy of Lithuania. *Hasidim* lived mostly in territories usually termed as Lithuania and the then Austrian Galicia (now Belorussia and Ukraine), but also in central Poland (Komorowska 2012).

The beginning of the Hasidic movement in those territories is usually traced back to the year 1730 when Baal-Shem Tov (Besht), "master of the word" and a spiritual guide of famous *tzaddiks*-to-be, started his teaching. Its full development is connected with the activity of Dov Baer, the Great Maggid of Mizritch (Międzyrzec) and his disciples who later established centres of their own and became outstanding community leaders. The decline of the movement is linked to the turn of the eighteenth and nineteenth centuries when the leadership of a community became hereditary and thus institutionalized (Ouaknin 2004), and when the initially innovative movement started changing into routine and orthodoxy.

Metaphor was widely used not only by Baal-Shem Tov and the Great Maggid, but also by all the prominent *tzaddikim*, such as Shneur Zalman of Liady, the founder of the Chabad and the still-existing Lubavitch dynasty, Nachman of Bratzlav, the Seer of Lublin or Elimelech of Lizhensk (Leżajsk). It became the main tool of their everyday educational practice throughout the whole of the eighteenth century, as can be seen in *Toldot Yaakov Yosef* by Joseph of Polonnye, who in the 1780s described how teachers guided their disciples in ways which were much later enthusiastically presented, but also critically discussed by Martin Buber and Gershom Scholem (Buber 1955/2002, 1991; Scholem 1941/1995).

New insights, dressed in metaphors, usually came from the teacher-preacher, either a travelling *tzadik noded* or a settled *tzadik yoshev*. They might, however, also have come from peers, as interaction in the group was encouraged due to the Hasidic notion of *machloket*—diversity. Much later it was Lévinas who, in *L'Au-delà du verset*, came back to this idea stating that everyone, through his or her uniqueness, enables the appearance of a new aspect of truth (Lévinas 1982). The diversity of meanings, ways and answers was something especially treasured, as it stimulated the questioning thought, so metaphors helping to see many issues in a new, unusual light, were highly valued as they open one to new experiences. It is worth noting that such a diversity of meanings together with the diversity of metaphors used by the *Hasidim* was possible due to the independence of communities (*havurot*) unrestricted by power structures of authority.

Apart from simple analogy-based metaphors through which the unique bond of the teacher and his disciple is presented (the *rebbe*, referred to as a shepherd, a father, a king responsible for his nation or a teacher), metaphor can be found in a

form particularly important in this movement, termed by Martin Buber the *legendary anecdote*, which points to important messages hidden in everyday events, and especially in such an anecdote's crucial component called the *sententional answer* given by the teacher to his disciple (Buber 2005). Explanations were, therefore, based on simple everyday situations, each of which was creatively used to search for new meanings. When Rabbi Baruch's grandson started to cry, because while playing hide and seek for a long time his friend did not even start to look for him, the Rabbi—who wanted his disciples to comprehend the nature of the dialogic relation of a pious Jew with God—said: "This is what God tells us—I am hiding, but no one is looking for me" (Buber 2005, p. 114). A similar way of explaining can be found in the Hasidic tradition of "descent" (Ouaknin 2004, p. 61) where a symbolic fall, "descent into the abyss", must precede the completion of a task—as Dov Baer, the Maggid of Mizritch, used to say using the incessantly powerful metaphor of the seed, "the seed does not germinate until it has come apart in the earth" (Buber 2005, p. 117).

Yet metaphor was not there to lead to a well formed, final answer because judgments, single right answers, close the issue and this is not what Hasidic thought had ever valued highly. What was regarded highly was openness to possibilities. Metaphors were valued because they functioned perfectly as the so-called *live answers*—explaining something, but at the same time opening new vistas and stimulating further considerations (Blanchot 1969).

In spite of this well established tradition of using metaphor in religious teaching—or perhaps precisely because it was associated with religious teaching, and especially Jewish religious teaching—educators throughout the nineteenth and much of the twentieth century were not eager to take up the idea and saw no need to use the concept of metaphor in the teaching/learning process. Their approach can best be summarized in the claim that "learning something radically new is quite understandable (…) without the introduction of metaphor at all" (Green 1996, p. 620) and in maintaining that the process of learning new material can be explained in terms of argument and inference. The first meagre attempts to take up the issue can be observed in the second half of the twentieth century.

2 Recent Views on the Role of Metaphor in Education

In the twentieth century two approaches to the role of metaphor in education could be noticed. According to the first, the only value of metaphor, as in the Aristotelian tradition, is aesthetic, which implies that in education its usefulness is limited to the teaching of literature. According to the second, its value may be heuristic and invites analogies and models to take its place in the teaching of various subjects. Yet even in this second approach, the use of metaphor in education is not always recommended on the grounds that metaphor is not considered essential to cognitive understanding. Sometimes its use is even discouraged as a teaching technique, as it does not invite analytic thinking, tolerates lack of precision in explanations

and leads to misunderstanding. Thus, both approaches in fact see the cognitive significance of metaphor as "severely limited" (Petrie and Oshlag 1996, p. 579).

Since the late 1980s more favourable views on the role of metaphor have been surfacing and the usefulness of metaphor in the acquisition of new knowledge, especially in the field of science-related subjects, has been acknowledged (Vosniadou and Ortony 1989). Researchers started looking at theories containing metaphors as "way stations toward a more explicit and literal rendering of the theory" (Petrie and Oshlag 1996, p. 581). This positive attitude was soon moved to education and training (Postman 1996; Cameron and Low 1999a, b; Martinez et al 2001; Cameron 2003; Saban 2006).

Solid ground for it was found in the work of Piaget, who—in an attempt to "understand how human beings become rational beings, how they master their own behaviour and how they emancipate themselves from dependence on the environment and on tradition" (Moscovici 2000, p. 209)—introduced the distinction between the type of learning in which new concepts fit former experience and the type of learning in which the change of our concepts is indispensable. *Accommodation* as a form of learning linked to the acquisition of radically new knowledge needs metaphor in order to help us change our cognitive structures, as opposed to *assimilation* which can easily be based on other teaching techniques (Piaget 1963; Piaget and Inhelder 1973).

With the development of linguistics and psychology the supportive value of metaphor in learning was noticed more and more often, most probably because its mechanisms were considered in line with the process of education, i.e. moving from the well-known to the less well-known, from familiar to novel concepts, and from concrete to abstract ones. Metaphors are now considered helpful in the extension of a cognitive framework or ability providing "a rational bridge from the known to the radically unknown, from a given context of understanding to a changed context of understanding" (Petrie and Oshlag 1996, p. 584).

Investigating conceptual metaphor as a cognitive tool, a mode of thought and its manifestations in linguistic expressions (Górska 2010a, b), cognitive linguists at the same time paved the way for the recognition of the educational potential of metaphor. They stated namely that metaphors are expected to facilitate the understanding of a more abstract or more complex domain by providing a referential context which can be helpful to arrive at a description of a scientific model or theory (Lakoff and Johnson 1988). This is possible through mapping the meaning of a more concrete source domain onto a more abstract target domain (Niemeier 2000). This explanatory power of metaphors proved attractive for educators—the change of perspective first took place when educators understood the structure of metaphor.

The way education can make use of metaphors depends on *the choice of a model* in which conceptualizations are explained—the *conduit model* or the *blueprint model*. According to the former model, language is the vehicle by which meaning is transferred from the speaker to the hearer; according to the latter—"the speaker holds a conceptual representation of events which he intends should be replicated in the mind of the listener" (Tomlin et al. 1997, p. 64). In education, the conduit model, based on transmission of knowledge from the teacher to the learner, can only guarantee appropriate decision-making in standard situations, while the blueprint model, based

on experiential learning, makes it possible for the learner to actively construct his/her understanding and creatively take decisions in new contexts (Hopkins 1994; Palinscar 1998). Both cognitive linguistics and second language acquisition theory tend to see the blueprint model as more compatible with their view of meaning as negotiated in the process of communication. The two models in fact illustrate more general positivist and interpretivist perspectives, according to paradigm shift processes described by Kuhn (1962). The blueprint model has slowly been replacing the conduit model over the last three or four decades, as can be seen in the writings of Schwandt (1994) or Jacobs and Farrel (2001). Language teachers can also witness the same paradigm shift manifested in the foreign language classroom by the move from what was called traditional/transmission teaching, as passing knowledge of vocabulary and structure to students typical of the positivist paradigm towards communicative/interactive/experiential teaching, as encouraging learning typical of the interpretive one (Potocka 2006).

The blueprint model can, however, prove successful and make it possible for the metaphor to give us the power to conceptualize and reason on a certain condition: "in order to understand a target domain in terms of a source domain, one must have appropriate knowledge of the source domain" (Lakoff and Turner 1989, p. 60). It means that, in order to successfully understand the educational metaphor, some prior understanding of both domains of the metaphor is indispensable—this helps combine the mnemonic powers of metaphor with the engagement in analytical thought (Sticht 1996). According to Schön, understanding "how we come to see things in new ways" (1996, p. 138) has to do with the generativity of metaphor. The effective use of educational metaphors as comprehension support requires *four steps*, i.e. (Petrie and Oshlag 1996, pp. 597–599):

- identifying and pointing to difficulty, often called "the anomaly step", when students start perceiving the situation as problematic;
- presenting the situation in the form of a metaphor which helps students to see the new material as if it were well-known;
- enabling students to act on the material verbally or experientially formulating new hypotheses and trying them out;
- correcting mistakes.

Although based on similarities, metaphors have also been found to be a useful way of attracting attention to differences (Carter and Pitcher 2010). This helps to encourage students to look at which aspects of the metaphor are highlighted and which are downplayed (Black 1962).

3 The Role of Metaphor in Developing Language Skills

Metaphor soon proved attractive for language teachers for two reasons: firstly, as a support in the development of *comprehension skills*, and, secondly, as a way of avoiding the use of the mother tongue and *increasing the time of exposure* to the second/foreign language.

In language education, however, it is not only input and comprehension that are important, but also active language use. Communicative potential is significantly dependent on the student's vocabulary. Here, awareness of metaphor is seen as a way to improve both *vocabulary acquisition* (Boers 2000; Kalyuga and Kalyuga 2008) and *vocabulary retention* (Gao and Meng 2010), which then become important factors in attaining higher levels of oral proficiency. So far metaphorical expressions have been used in foreign and second language teaching as part of the learning materials, mainly to teach vocabulary and collocations, e.g. presenting phrasal verbs or idiomatic expressions; this, however, means teaching mainly dead metaphors. Suggestions have also been made to use metaphors in teaching prepositions, e.g. the difference between 'in the picture' and 'on the picture' can be explained by presenting the picture as a box (Gałkowski 2006). This approach is close to the *semasiological orientation* in linguistic research and it is from the results of this kind of research that materials designers most probably draw their examples. What seems to be a more fruitful approach in vocabulary teaching is the *onomasiological approach*, where domains would be analysed with examples grouped according to cognitive schemata. This would support comprehension of the language material and vocabulary enrichment, at the same time opening the way for creativity on the part of the students, who—in the production phase—could think of their own metaphors according to more general rules presented to them by the teacher.

Metaphors can also support the development of *communicative competence and productive skills* as researchers suggest to move from the comprehension of analogy to metaphor production. By producing new metaphors students can show their understanding of the subject (Vosniadou and Ortony 1989) and the ability to identify important aspects of the situation (Petrie and Oshlag 1996). Recent research shows the role of metaphoric competence in developing the overall language proficiency of the learner (Littlemore and Low 2006), and, in consequence, both process and product in metaphor instruction is being investigated.

Instruction in metaphors also seems helpful in developing *writing skills* through its contribution to the quality of the revision process and due to its motivational value, as demonstrated in the research project on 4th and 5th graders (Rudden 1994, cited in Jensen 2006). Yet, developing spontaneous production, both oral and written, poses numerous problems at lower levels of linguistic proficiency; mediation between two linguistic codes can, therefore, prove to be of considerable help. Although translation techniques had for a long time been negatively associated with the Grammar Translation Method, the advent of the Communicative Approach and then the Postmethod Era invited a variety of old and new techniques appropriate for a given context to find their place in the teaching–learning process, translation techniques included. Translation itself becomes a metaphor for education, as it functions as a creative and interpretive act which involves poetic transposition (Farquhar and Fitzsimons 2011).

The role of metaphor in education is important not only for the product manifested e.g. in vocabulary enrichment and production skills advancement, but also in functioning as an affective aid making learning memorable, i.e. in eliciting and sustaining *motivation* (Petrie and Oshlag 1996). Those aspects of metaphor have

always been acknowledged by creative teachers, who based their work on student involvement in the learning process. Intuitively, many of them were making use of what today is termed the first step in the four-step model of using metaphor for educational purposes which was presented in Sect. 2 above—creating a problematic situation which surprises students and provokes their questions. In this way, motivation is elicited and then maintained throughout the three remaining active stages. At the same time, the unexpected image provides for the durability of memory and functions as a mnemonic device. Motivation in classroom situations, however, is most commonly influenced by teacher-student rapport and interpersonal relations in the learning group. Motivational issues of this kind can easily be combined with the work on vocabulary enrichment discussed above as, for example, positive and negative emotions involved in interpersonal interaction are communicated through metaphors connected with FIRE: 'burning with resentment', 'burning sense of injustice', 'blazing with rage', 'hot temper', 'he flared up', 'tempers have cooled down', 'it sparked his passion', 'some spark has gone out of him', 'heated debate', 'you need to perform well when the heat is on', 'books can ignite his imagination', 'it sparked off an idea' (Kövacses 2000, pp. 84–88).

A particularly interesting aspect that many researchers would like to understand and explain is how human beings become creative. In order to come up with concrete educational solutions, however, we have to understand how people extend their cognition by perceiving new aspects of objects and phenomena when presented with information from other people and how this leads them to *creativity* in their own lives. Here comes another important role of metaphor in education. The power of metaphor to encourage creativity can best be demonstrated using the example of poetic thought—it operates through extending and elaborating schemas, and questioning the existing boundaries of concepts, and thus ends up composing complex metaphors (Lakoff and Turner 1989). Creative metaphors can, therefore, be presented through literary texts. In language teaching methodology, where the role of authentic, non-didactic texts is so strongly stressed, the role of literary texts becomes especially important. Today's language education comes back to the long-lost idea of introducing such texts into the teaching/learning process (Kramsch and Kramsch 2000). They prove a valuable resource as examples and a new form of Content and Language Integrated Learning (CLIL), called LLIL—Literature and Language Integrated Learning, which contributes not only to the social and moral development of learners, but also to their reading comprehension—a transversal skill running across all subject-areas (Sroka 2011).

Critical thinking can be developed through analysing metaphors and deciding which aspects of metaphor in the concrete domain can be creatively used to gain new insights and which seem useless and why, which have actually been highlighted and which hidden, but also how similarities and differences function (Ricoeur 1975; Thayer-Bacon 2000; Yob 2003). Considering the learning environment and learners' motivation, discussing pictorial and multimodal metaphors on billboards and in commercials can be valuable, with special emphasis being placed not only on the cultural context, but also on reactions expected by advertisers and on actual responses on the part of the viewers.

Metaphors can also help support the overall development of the learner and especially his *intercultural competence*. Shared knowledge and understanding of common reality is the basis for the concept of *social representations* crucial for the development of this competence. As Deaux and Philogéne put it: "[i]t is through those commonly shared and collectively elaborated shared representations that we make sense of the world and communicate that sense to each other" (Deaux and Philogéne 2001, p. 4). Individuals form their thoughts via influencing one another in the process of communication. In this sense, social representations at the same time make communication possible and result from it. They are "the products of social thinking, structuring beliefs and knowledge, but they are also processes by which we construct our reality" (Deaux and Philogéne 2001, p. 5). They shape attitudes and opinions, but might also lead to conventions and stereotyping. Understanding social representations of learners is, therefore, crucial for shaping attitudes and developing intercultural competence.

According to Sèrge Moscovici (2001), the father of the theory of social representations, which was first published in 1961, metaphors play an important role in the creation of social representations "precisely because they slot ideas and images which are little familiar into others which are already familiar" (2001, p. 20). Social representations are shaped by two processes—*anchoring*, when the unfamiliar object is assimilated, i.e. entered into the existing categorization of our mind, and *objectification*, when the abstract is turned into something concrete and becomes real (Deaux and Philogéne 2001). Some of those representations are incorporated into personal representations, often contributing to our identity formation, and some are not, depending on the individual's volitional and non-volitional dimensions such as (Breakwell 2001):

(a) awareness—individuals may be aware of social representations partially, fully or they may be completely unaware of them;
(b) understanding—even if they are aware of representations, they may understand them partially or fully;
(c) acceptance—individuals may decide to accept a certain social representation, or refuse to accept it, however popular it might be;
(d) assimilation—individuals differ in their capacities of anchoring and objectivizing in order to construct a social representation;
(e) salience—representations will differ across people and for the same person across time and contexts; those representations which are related to identity, for instance, tend to be guided by principles of continuity, distinctiveness, self-efficacy and self-esteem.

Formation of social representations is supported by classifying, sorting and perceiving similarities and differences. Individuals use a variety of learning styles to deal with those processes. Visual, auditory, kinaesthetic and tactile learning styles have been distinguished, but although they differ in terms of the sensory channel preferred by the learner, all of them relate to the same source, i.e. the human body.

More and more attention is nowadays given by researchers to the role of embodiment in cognition. Embodiment is considered crucial for the acquisition of new knowledge because "perception cannot be understood without reference to action" (Gibbs 2006, p. 49) and because many aspects of language and communication can

be traced back to bodily experience" (Gibbs 2006, p. 207). As Jäkel (2003, p. 129) points out, awareness of the role of bodily experience in our language and cognition can be traced back to the ideas of many important authors working in the field of philosophy, anthropology and linguistics over the last three hundred years, such as John Locke and his *An essay concerning human understanding* (1689), Immanuel Kant and his *Kritik der reinen Vernunf* (1781), Ernst Cassirer and his *Philosophie der symbolischen Formen* (1923) or Benjamin Lee Whorf and his *The relation of habitual thought and behaviour to language* (1939). Sensorimotor experience is a preconceptual, precognitive fundament of most of the so-called image schemata—structures that recur in everyday bodily experience such as: CONTAINERS, PATHS, LINKS, FORCES, BALANCE, and in various orientations and relations: UP-DOWN, FRONT-BACK, PART-WHOLE, CENTER-PERIPHERY, etc. (Jäkel 2003, pp. 31–32). The use of metaphors is, therefore, in line with the primary, bodily experience of the learners and can thus prove effective not only in adult language learning, but also in child and adolescent learning, due to the combination of the kinaesthetic learning modality prevailing in younger learners and of the concrete character of the source domain.

4 The Role of Metaphor in Educational Research and Study

Two ways of using metaphor in educational research can be distinguished. Firstly, it was used as a heuristic model which helped to explain and describe the educational system. Secondly, metaphor was used as a tool in research on teachers' and learners' attitudes and beliefs related to schools, classrooms and the educational process. Let us look at both fields.

In the last two decades of the twentieth century metaphors of education played an important role, functioning as heuristic models offering new insights into the whole process of teaching and learning as well as at the institutions and agents involved. Heuristic models were needed to analyse *educational systems* when traditional education started giving way to progressive solutions—in line with the heuristic function being connected to theory change and theory constitution (Bielenia-Grajewska 2009; Ortony 2006). The fact that the authoritarian teaching/learning process was presented through the metaphor of WAR invited new symbolic interactionist studies of teaching and learning in terms of THEATRE (Goffman 1959/1990), and soon paved the way for sociologists of education and social psychologists of the classroom to analyse education along these lines, looking at managers, directors, scenarios, actors and the audience involved (Delamont 1976; Janowski 1992). The metaphor of theatre opened new vistas for research methodology and gave birth to qualitative research on classroom interaction (Woods 1983). Analysing education as a relation between the teacher and the student, researchers of the interactionist period then based their classroom research on the metaphors of MARKET to describe different perspectives on teachers' and students' intentions, roles and goals as well as ways of negotiating meanings and

solutions in the democratic classroom context. This soon invited new ways of looking at school as an institution; metaphors of TEMPLE/MONASTERY/PRISON/PSYCHIATRIC WARD/MILITARY BARRACKS/FACTORY started to be used by educators and researchers to outline attitudes, the power structure involved, values cherished, roles described and enacted as well as the hidden curriculum (Giroux and Purpel 1983; Nalaskowski 2002; Tuohy 2002).

Metaphors, apart from functioning as heuristic models, proved an especially useful tool in the research on *teachers' and learners' perspectives on learning and teaching* (Saban et al 2007). Research on teachers' metaphors of *the classroom* yielded metaphors which reflected the knowledge of on-going educational debates described above, e.g. metaphors of WORKSHOP/PLAYGROUND/COURTROOM/FACTORY/GREENHOUSE/PARADE GROUND as well as PRISON, CHURCH and the MINEFIELD (Bowen and Marks 1994). In similar teacher-oriented research metaphors of *learning* included those of a CLICK ('it just clicked together', 'he has clicked'), LIGHT ('he has seen the light'), MOVEMENT ('they do not move so much', 'this sudden leap') and JIGSAW ('the pieces come together', 'it all came to place') (Cortazzi and Jin 1999). Learning as understanding was described as GRASPING, but also FOLLOWING, similarly to obedience (Haser 2000), and as SEEING (Ponterotto 2000) with its metonymic aspect (Barcelona 2000; Feyaerts 2000; Niemeier 2000; Radden 2000). Metaphors of *teaching*, on the other hand, in the research by the same authors included a JOURNEY ('an endless journey', 'a mystery trip'), PLANT GROWTH ('like waiting for a tree to grow'), a SKILL ('it's like juggling'), an OCCUPATION ('you are a judge or a priest'), ENTERTAINING ('constant acting', 'a comedy hour'), SEARCHING FOR TREASURE ('like mining priceless jewels'), a FAMILY RELATIONSHIP ('a respected aunt', 'a responsible uncle'), but also a WAR ('arming the troops', 'fighting') and CONSTRUCTION ('like building a house') (Cortazzi and Jin 1999).

One of the biggest studies in this field was conducted with the aim of gaining new insights into how metaphors could help teachers to self-reflect on their roles and responsibilities (Clarken 1997, cited in Jensen 2006). Five dominant metaphors with which teachers tended to describe their work were identified, i.e. they saw themselves as parents, gardeners, prophets, pearl oysters, and physicians. Mathematics teachers in three case studies presented by Chapman (1997) viewed their problem-solving work with their pupils as community, adventure and game, which proved helpful in pre-service math teacher education. Physical education teachers tended to view their role through metaphors of parenting or group leadership (Bibik 1997).

The most comprehensive research perspective so far on the role of metaphor in analysing teaching was offered by Oxford et al. (1998) in their article "Clashing metaphors about classroom teachers: Toward a systematic typology for the language teaching field". Four basic categories were distinguished on the basis of metaphors generated by students, teachers and former students, i.e.

- *Social Order*, where the teacher engaged in the process of *moulding* is seen as a manufacturer with full control over the classroom;
- *Cultural Transmission*, where the teacher is viewed as a gatekeeper in control of knowledge as power;

- *Learner-centredness*, where the teacher is seen as a nurturer;
- *Social Reform*, where the teacher is considered a representative of critical pedagogy and an agent of change.

De Guerrero and Villamil (2000) distinguished as many as nine categories, i.e. a co-operative leader, knowledge provider, agent of change, nurturer, innovator, tools provider, artist repairer, and gym instructor. These can easily be conflated into just four, namely: leader/instructor, provider/nurturer, agent of change and artist. Only five categories have, on the other hand, been identified by Chen (2003, p. 24), i.e. art, business, science, power, and personal dynamics. An important angle of research on the teaching profession comes from the metaphor of burn-out, first introduced by Freudenberger in the 1970s to describe exhaustion caused by physical and social pressure on a professionally engaged individual (Freudenberger 1974).

Research on *learners' perceptions of language teachers* through metaphor is an example of another line of inquiry. 23 Malayan university students produced 27 metaphors which were then grouped by the researchers into three categories: teacher as caretaker (mother, parent), teacher as giver (candle, fruit tree) and teacher as an essential element (vitamin, water, sunshine), which, in the authors' opinion, roughly correspond to Oxford et al. (1998) categories of Social Order and Learner-centredness, and teacher as conduit category (encyclopaedia, walking dictionary), corresponding to Oxford et al. (1998) Culture Transmission. It was interesting that the Learner-centredness metaphors were far more popular (18) than the remaining categories: 3 for Social Order and 6 for Cultural Transmission (Nikitina and Furuoka 2008), which might reflect either the successful implementation of the Communicative Approach or the students' needs and ideals.

Metaphors depicting the learners' perceptions of the learning process were related to nurturing, search and journey (Cortazzi and Jin 1999), with the latter as an especially frequent category (Caballero 2006). A quantitative study (Pishghadam and Navari 2010) conducted on learners' perceptions of language teachers in formal and informal contexts in Iran, based on metaphors identified by Nikitina and Furuoka (2008), demonstrated the prevalence in upper secondary schools of behaviouristic categories linked to the concept of the teacher as provider or moulder and the learner as recipient, as well as the prevalence of cognitive and situational categories viewing teachers as scaffolders and learners as developing organisms or constructors in the contexts of language institutes.

Ways in which student teachers conceptualize their roles and responsibilities through metaphor were investigated in the research by Dooley (1998). Metaphors collected refer to several aspects of education such as

- the educational policies (e.g. the market metaphor of school);
- the teaching process (e.g. guiding or gardening);
- teaching actions (pottery, artistry);
- the learner (e.g. sponge, filter);
- the learning process as a tool for discovery (spiral staircase or ladder);
- school as an institution (e.g. family, factory).

Metaphors also serve as tools in the research on dynamics of *change in teachers' opinions over time*. Trainees preparing for the teaching profession in the course of pre-service teacher education are reported to use metaphors in their explanatory function, often concentrating on reaching balance in the classroom and trying to understand what balance is about, especially when dealing with tensions between, e.g. play and control, teacher and student expectations or outside expectations and individual choice (Mann 2004, 2008). It is interesting to point out that teachers' perceptions depend on the length of professional experience. Novice teachers tend to conceptualize their work through gatekeeping metaphors while more experienced teachers move towards gardening and growth metaphors (Zapata and Lacorte 2007). With experience, teachers also tend to move from teacher-centred to learner-centred perspectives (Alger 2008). These changes demonstrate the paradigm shift from transmission to interpretivist ways of language teaching.

5 Conclusion: Metaphor in Action: Practical implications for Language Teacher Education

In Sect. 3 above ways of using metaphor in the process of language acquisition and learning have been discussed. But metaphor does not have to be used in language learning only. It has a role to play in teacher education as well. Donald Schön in his seminal book *The reflective practitioner* pointed out that metaphors provide food for thought in both pre- and in-service teacher training and can lead to new insights in teacher education (Schön 1983). More than a decade later Postman drew the attention of educators to the fact that metaphor, alongside with definitions and questions, is one of the three "most potent elements with which human language constructs a world view" (1996, p. 175). Although some specialists in language education at once understood the pedagogical value of metaphors (Thornbury 1991), no immediate reaction followed on the part of teacher education establishments. Since then, however, the situation has changed considerably and this opinion is now shared by many teacher educators (Kramsch 2003; Massengill et al. 2005; Farrel 2006), who believe that trainees could benefit from metaphor analysis which—as Guerrero and Villamil put it—is "an excellent heuristic for bringing implicit assumptions to awareness, encouraging reflection, finding contradictions, and ultimately fostering change in educational beliefs and practices" (2000, p. 341). As such, metaphor can promote reflection and open new vistas in understanding teachers' own situation as educators, and it can also help elicit their views, encourage discussions in peer groups, and arrive at new solutions (Cook-Sather 2003; Saban 2006; Botha 2009).

By identifying the metaphors student teachers use, introducing new ones and analysing them, teacher educators could more successfully counteract the impact of prior experience which often makes trainees teach the way they were taught in their school days. Asking trainee teachers during their teaching practice if they see themselves as FRIEND/PARENT/GUIDE/GARDENER/MODEL or ACTOR

(Cortazzi and Jin 1999) rather than an AUTHORITY/DIRECTOR/CAREGIVER/REFEREE or AGENT OF CHANGE (Marchant 1992), as well as encouraging them to reflect on advantages and disadvantages of particular points of view can greatly promote their professional awareness and development. Trainees might also concentrate on the language of classroom management and metaphors used therein (Low and Littlemore 2009). This would help to move away from transmission teaching visualized either through "the root metaphor of education as production and the multiple branches that spring from it—school as factory; curriculum as assembly line; teacher as factory worker, machine, or executive; and students as products—create a version of reality that is scarcely more humane than the construct of the Matrix" (Cook-Sather 2003, p. 954) or through a root metaphor of teacher as therapist and student as a passive, sick patient whose illness is to be diagnosed and cured (2003, p. 956). Instead, it could bring us closer to dynamic, interactive and experiential interpretivist teaching in line with the more and more eclectic Communicative Approach and the Post-Method Era.

References

Alger, C. 2008. Secondary teachers' conceptual metaphors of teaching and learning: Changes over the career span. *Teaching and Teacher Education* 25: 743-751.

Barcelona, A., ed. 2000. *Metaphor and metonymy at the crossroads. A cognitive perspective*. Berlin – New York: Mouton De Gruyter.

Bibik, J. M. 1997. *Metaphors for teaching: How health and physical education teachers describe their roles*. Georgetown: McGraw Hill.

Bielenia-Grajewska, M. 2009. The role of metaphors in the language of investment banking. *Ibérica* 17: 139-156.

Black, M. 1962. *Models and metaphors. Studies in language and philosophy.* New York: Cornell.

Blanchot, M. 1969. *L'Entretien Infini*. Paris: Gallimard.

Boers, F. 2000. Metaphor awareness and vocabulary retention. *Applied Linguistics* 21: 553-571.

Botha, E. 2009. Why metaphor matters in education? *South African Journal of Education* 29: 431-444.

Bowen, T. and J. Marks. 1994. *Inside teaching.* London: Macmillan.

Breakwell, G. M. 2001. Social representational constraints upon identity processes. In *Representations of the social,* eds. K. Deaux and G. Philogéne, 271-284. Oxford: Blackwell.

Buber, M. 1955/2002. *The legend of the Baal-Shem.* London: Routledge.

Buber, M. 2005. *Tales of the Hasidim.* New York: Random House.

Caballero, R. 2006. Journey metaphors in foreign language teaching-learning: Ways of travelling/learning in multimedia environments. *Mélanges CRAPEL.* 28: 201-209.

Cameron, L. 2003. *Metaphor in educational discourse*. London: Continuum.

Cameron, L. and G. Low, eds. 1999a. *Researching and applying metaphor.* Cambridge: Cambridge University Press.

Cameron, L. and G. Low. 1999b. Metaphor. *Language Teaching* 33: 77-96.

Carter, S. and R. Pitcher. 2010. Extended metaphors for pedagogy: Using sameness and difference. *Teaching in Higher Education* 15: 579-589.

Chapman, O. 1997. Metaphors in the teaching of mathematical problem solving. *Educational Studies in Mathematics* 32: 210-228.

Chen, D. 2003. A classification system for metaphors about teaching. *Journal of Physical Education Recreation & Dance* 74: 24-31.

Clarken, R. 1997. Five metaphors for educators. Paper presented at the Annual Meeting of the American Education Research Association, Chicago.
Cortazzi, M. and L. Jin. 1999. Bridges to learning, metaphors of teaching, learning and language. In *Researching and applying metaphor*, eds. L. Cameron and G. Low, 149-176. Cambridge: Cambridge University Press.
Cook-Sather, A. 2003. Movements of mind: The matrix, and re-imagining Education. *Teachers College Record* 105: 946-977.
De Guerrero, M. and O. S. 2000. Villamil. Exploring ESL teachers' roles through metaphor analysis. *TESOL Quarterly* 34: 341-351.
Deaux, K. and G. Philogéne, eds. 2001. *Representations of the social*. Oxford: Blackwell.
Delamont, S. 1976. *Interaction in the classroom*. London: Methuen.
Dooley, C. 1998. Teaching as a two-way street: Discontinuities among metaphors, images, and classroom realities. *Journal of Teacher Education* 49: 97-107.
Farrell, T. S. C. 2006. 'The teacher is an octopus': Uncovering pre-service English language teachers' prior beliefs through metaphor analysis. *RELC Journal* 37: 236-248.
Farquhar, S. and P. Fitzsimons. 2011. Lost in translation: The power of language. *Educational Philosophy and Theory* 43: 652-662.
Feyaerts, K. 2000. Refining the Inheritance Hypothesis: Interaction between metaphoric and metonymic hierarchies. In *Metaphor and metonymy at the crossroads. A cognitive perspective*, ed. A. Barcelona, 59-78. Berlin – New York: Mouton De Gruyter.
Freudenberger, H. J. 1974. Staff burn-out. *Journal of Social Issues* 30: 159-165.
Gałkowski, B. 2006. *Rules, words and prefabs: Making sense of formulaicity in foreign language teaching.* Unpublished doctoral dissertation. Institute of English, Warsaw University.
Gao, L. and G. Meng, G. 2010. A study on the effect of metaphor awareness raising on Chinese EFL learners' vocabulary acquisition and retention. *Canadian Social Science* 6: 110-124.
Gibbs, Jr., R.W. 2006. *Embodiment and cognitive science.* Cambridge: Cambridge University Press.
Giroux, H. and D. Purpel. 1983. *The hidden curriculum and moral education.* Berkeley: McCutchan Publishing Corporation.
Goffman, D. 1959 (1990). *The presentation of self in everyday life.* London: Penguin.
Górska, E. 2010a. On the diversity of linguistic evidence for conceptual metaphor. *Studia Anglica Posnaniensia* 45: 81-106.
Górska, E. 2010b. Life is music. A case study of a novel metaphor and its use in discourse. In *English text construction,* eds. A. Laffut, D. Van Hulle and L. Vandelanotte, 275-293. Amsterdam: John Benjamins Publishing.
Green, T. F. 1996. Learning without metaphor. In *Metaphor and thought,* ed. A. Ortony, 610-620. Cambridge: Cambridge University Press.
Haser, V. 2000. Metaphor in semantic change. In *Metaphor and metonymy at the crossroads. A cognitive perspective,* ed. A. Barcelona, 171-194. Berlin – New York: Mouton De Gruyter.
Hopkins, M. 1994. *Narrative schooling. Experiential learning and the transformation of American education.* New York: Teachers College Press.
Jacobs, G. M. and T. S. C. Farrel. 2001. Paradigm shift: Understanding and implementing change in second language education. *TESL-EJ* 5: 1-15. (http://tesl-ej.org/ej17/a1.html, accessed February 13, 2013).
Janowski, A. 1992. *Uczeń w teatrze życia szkolnego.* Warszawa: Wydawnictwa Szkolne i Pedagogiczne.
Jäkel, O. 2003. *Metafory w abstrakcyjnych domenach dyskursu.* Kraków: Universitas (first published 1997 as *Metaphern in abstrakten Diskurs-Domänen. Eine cognitive-linguistische Untersuchung anhand der Bereiche Geistestätigkeit, Wirtschaft und Wissenschaft*).
Jensen, D. F. N. 2006. Metaphors as a bridge to understanding educational and social contexts. *International Journal of Qualitative Methods* 5: 1-17. (http://ejournals.library.ualberta.ca/index.php/IJQM/article/viewFile/4403/3527, accessed February 13, 2013)).
Kalyuga, M. and S. Kalyuga. 2008. Metaphor awareness in teaching vocabulary. *Language Learning* 36: 249-257.

Komorowska, H., ed. 2011. *Issues in promoting multilingualism: Teaching – learning – assessment*. Warsaw: FRSE.

Komorowska, H. 2012. 18th c. Hasidic thought and contemporary approaches to language and education. In *Reconstructing Jewish identity in pre- and post-Holocaust literature and culture,* eds. L. Aleksandrowicz-Pedich and M. Pakier, 65-84. Frankfurt am Mein: Peter Lang.

Kövacses, Z. 2000. The scope of metaphor. In *Metaphor and metonymy at the crossroads. A cognitive perspective,* ed. A. Barcelona, 79-92. Berlin – New York: Mouton De Gruyter.

Kramsch, C. and O. Kramsch. 2000. The avatars of literature in language study. *Modern Language Journal* 84: 553-573.

Kramsch, C. 2003. Metaphor and the subjective construction of beliefs. In *Beliefs about SLA: New research approaches,* eds. P. Kalaja and A. M. F. Barcelos, 109-128. Dordrecht: Kluwer Academic Publishers.

Kuhn, T. 1962. *The structure of scientific revolutions.* Chicago: The University of Chicago Press.

Lakoff, G. and M. Turner. 1989. *More than cool reason. A field guide to poetic metaphor.* Chicago and London: The University of Chicago Press.

Lakoff, G. and M. Johnson. 1988. *Metaphors we live by.* Chicago: University of Chicago Press.

Lévinas, E. 1982. *L'Au-delà du verset. Lectures et discours talmudique*. Paris: L'Edition de Minuit. Collection "Critique".

Littlemore, J. and G. Low. 2006. Metaphoric competence and communicative language ability. *Applied Linguistics* 27: 268-294.

Low, G. and J. Littlemore. 2009. The relationship between conceptual metaphors and classroom management language: Reactions by native and non-native speakers of English. *Ibérica* 17: 25-44.

Mann, S. 2004. Evaluation. In *Adults learning languages: A CILT guide to god practice*, eds. H. Harnisch and P. Swanton, 113-129. London: CILT.

Mann, S. 2008. *Teachers' use of metaphor in making sense of the first year of teaching.* Paper presented at TESOL Convention, New York.

Marchant, G. J. 1992. A teacher is like a...: Using simile lists to explore personal metaphors. *Language and Education* 6: 35-45.

Martinez, M. A., N. Sauleda and G. L. Huber. 2001. Metaphors as blueprints of thinking about teaching and learning. *Journal of Teaching and Teacher Education* 17: 965-977.

Massengill, D., M. Mahlios and A. Barry. 2005. Metaphors and sense of teaching: How these constructs influence novice teachers. *Teaching Education* 16: 213-229.

Moscovici, S. 2000. *Social representations. Explorations in social psychology*. Cambridge: Polity Press.

Moscovici, S. 2001. Why a theory of social representations. In *Representations of the social,* eds. K. Deaux and G. Philogéne, 8-35, Oxford: Blackwell.

Nalaskowski, A. 2002. *Przestrzeń i miejsca szkoły*. Krakow: Impuls.

Niemeier, S. 2000. Straight from the heart – metonymic and metaphorical explorations. In *Metaphor and metonymy at the crossroads. A cognitive perspective,* ed. A. Barcelona, 175-213. Berlin – New York: Mouton De Gruyter.

Nikitina, L. and F. Furuoka. 2008. A teacher is like … Examining Malaysian students' perceptions of language teachers through metaphor analysis. *Electronic Journal of Foreign Language Teaching* 5: 192-205.

Ouaknin, M. A. 2004. *Chasydzi.* Warszawa: Wydawnictwo Cyklady.

Oxford, R., S. Tomlinson, A. Barcelos, C. Harrington, R. Z. Lavine and A. Saleh. 1998. Clashing metaphors about classroom teachers: Toward a systematic typology for the language teaching field. *System* 26: 3-50.

Palinscar, A. S. 1998. Social constructivist perspectives on teaching and learning, *Annual Review of Psychology* 49: 345-375.

Petrie, H. G. and R. S. Oshlag. 1996. Metaphor and learning. In *Metaphor and thought,* ed. A. Ortony, 561-578. Cambridge: Cambridge University Press.

Piaget, J. 1963. *The psychology of intelligence.* New York: International Universities Press.

Piaget, J. and B. Inhelder. 1973. *Memory and intelligence.* New York: Basic Books.

Pishghadam, R. and S. Navari. 2010. Examining Iranian language learners' perceptions of language education in formal and informal contexts: A quantitative study. *Modern Journal of Applied Linguistics* 2: 171-185.

Ponterotto, D. 2000. The cohesive role of cognitive metaphor and discourse and conversation. In *Metaphor and metonymy at the crossroads. A cognitive perspective,* ed. A. Barcelona, 283-298. Berlin – New York: Mouton De Gruyter.

Postman, N. 1996. *The end of education. Redefining the value of school*. Vintage: Random House.

Potocka, D. 2006. *Developing professional competence in the process of pre- and in-service teacher education*. Unpublished Ph.D. dissertation. Institute of English, Warsaw University.

Radden, G. 2000. How metonymic are metaphors? In *Metaphor and metonymy at the crossroads. A cognitive perspective,* ed. A. Barcelona, 93-108. Berlin – New York: Mouton De Gruyter.

Ricoeur, P. 1975. *La Métaphore Vive.* Paris: Seuil.

Rudden, J. 1994. Instruction in metaphor and its influence on revisions made by third and fifth graders. Paper presented at the Annual Meeting of the College Reading Association, New Orleans.

Saban, A. 2006. Functions of metaphor in teaching and teacher education: A review essay. *Teaching Education* 17: 299-315.

Saban, A., B. N. Kocberker and A. Saban. 2007. Prospective teachers' conceptions of teaching and learning revealed through metaphor analysis. *Learning and Instruction* 17: 123-139.

Scholem, G. 1941 (1995). *Major trends in Jewish mysticism*. New York: Random House.

Schön, D. 1983. *The reflective practitioner.* New York: Basic Books.

Schön, D. 1996. Generative metaphor and social policy. In *Metaphor and thought,* ed. A. Ortony, 137-163. Cambridge: Cambridge University Press.

Schwandt, T. A. 1994. Constructivist, interpretivist approaches to human inquiry. In *Handbook of qualitative research,* eds. N. K. Denzin and Y. S. Lincoln, 118-137. London: Sage.

Shokouhi, H. and M. Isazadeh. 2009. The effect of teaching conceptual and image metaphors to EFL learners. *The Open Applied Linguistics Journal* 2: 22-31.

Sroka, M. 2011. Reading in the language classroom. A literature approach to Content and Language Integrated Learning. In *Issues in promoting multilingualism. Teaching – learning – assessment,* ed. H. Komorowska. Warsaw: FRSE.

Sticht, T. G. 1996. Educational uses of metaphor. In *Metaphor and thought,* ed. A. Ortony, 621-632. Cambridge: Cambridge University Press.

Thayer-Bacon, B. J. 2000. *Transforming critical thinking; Thinking constructively.* New York: Teachers College Press.

Thornbury, S. 1991. Metaphors we work by: EFL and its metaphors. *ELT Journal* 45: 193-200.

Tomlin, R. S., L. Forrest, P. Ming Ming and K. Myung Hee. 1997. Discourse semantics. In *Discourse studies: A multidisciplinary introduction. Volume 1: Discourse as structure and process*, ed. T. A. van Dijk, 63-111. London: Sage Publications.

Tuohy, D. 2002. *Dusza szkoły. O tym, co sprzyja zmianie i rozwojowi.* Warszawa: Wydawnictwo Naukowe PWN.

Vosniadou, S. and A. Ortony. 1989. Similarity and analogical reasoning. A synthesis. In *Similarity and analogical reasoning,* eds. S. Vosniadou and A. Ortony, 60-75. Cambridge: Cambridge University Press.

Woods, P. 1983. *Sociology and the school. An interactionist viewpoint.* London: Routledge and Kegan Paul.

Yob, I. M. 2003. Thinking constructively with metaphors. A review of Barbara J. Thayer-Bacon. 2000. *Transforming critical thinking; Thinking constructively.* New York: Teachers College Press. *Studies in Philosophy and Education* 22: 127-138.

Zapata, G. and M. Lacorte. 2007. Pre-service and in-service instructors' metaphorical constructions of second language teachers. *Foreign Language Annals* 40: 521-534.

Dual Focus on Language and Content as an Issue in L2/FL Reading Development

Halina Chodkiewicz

Abstract Research into L2/FL reading and its instruction conducted over the last decades has made it clear that the development of reading ability cannot be properly defined only with reference to general text comprehension skills. A better explanatory framework is needed to account for the complexity of knowledge/content processing by means of linguistic tools. What is more, one has to bear in mind that reading activities take place in diverse sociocultural contexts, with a range of objectives set for them, and remain under the inherent influence of text and learner variables. Recent literature has also recognized the fact that, immersed in the educational system, both native and non-native learners struggle with the acquisition and expansion of subject matter knowledge. As part of literacy, reading substantially contributes to the acquisition of new informational content by the learner, the restructuring of general knowledge, as well as language proficiency enhancement. This paper is intended to seek some emerging theoretical foundations which would be helpful in approaching reading development with a dual focus on language and content which, as it is claimed, should form the basis for L2/FL reading instruction in formal educational settings. With this goal in mind, the paper tackles the following four areas of concern: (1) the conceptualization of reading by basic models of text comprehension, (2) the relationship between reading development and language acquisition, (3) the impact of the schema theory on understanding reading comprehension, and the weaknesses of this theory, (4) the implementation of language-content integration within content-based teaching frameworks.

1 Introduction

The ability to read has always been of paramount interest to researchers and practicing teachers involved in L2/FL instruction. With the enhancements of electronic technologies and the growth of world globalization, the role of literacy (reading and writing) has even been strengthened, as it is a daily routine for many individuals to read

H. Chodkiewicz (✉)
Maria Curie-Sklodowska University, Lublin, Poland
e-mail: hachod@hektor.umcs.lublin.pl

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different types of traditional and electronic texts for personal, educational and professional purposes. Understandably, whatever aspects of reading are considered, the main tendency is to seek some explanation for the complexity of the phenomenon of text comprehension. When defining reading, Grabe and Stoller (2002, p. 9) refer to a well-known simplistic view of reading as "the ability to draw meaning from the printed page and interpret this information appropriately", only to show how incomplete it is. Conceptualizing reading, as they argue, has to address such issues as purposes for reading involving different combinations of skills and strategies, processes and knowledge bases in reading, the view of reading as a time-constrained cognitive process and its relationship with language proficiency. Bernhardt (2010, pp. 16–17) puts reading in a broader sociocultural perspective quoting the definition of literacy worked out by the Programme for International Student Assessment (PISA) by the Organisation for Economic Co-operation and Development (2006). Part of it states that: "*[r]eading literacy* is understanding, using and reflecting on written texts, in order to achieve one's goals, to develop one's knowledge and potential and to participate in society. This definition goes beyond the notion of reading literacy as decoding and literal comprehension: it implies that *reading literacy* involves understanding, using and reflecting on written information for a variety of purposes (…)". Bernhardt draws attention to the significance of this definition in acknowledging the "intricacy of linguistic tools" used for comprehension and gaining information indispensable for one's participation in modern social systems.

Likewise, the present paper adheres to the view that drawing solely on psycholinguistic or constructive-integrative models in explaining reading, or accounting for general comprehension skills in terms of language processing, prevents one from gaining a comprehensive view of the reading process characteristic of the L2 learner's performance. Literacy has to be put in an adequate perspective in order to investigate it both as a linguistic activity and a social activity, and competently define how the two facets interact and constrain each other (cf. Wallace 1992; Colombi and Schleppegrell 2002; Grabe 2009; Bernhardt 2010). This is also the reason why defining the reading process in a generic way has its limitations. Reading comprehension comprises numerous activities that take place in diverse sociocultural contexts (including classroom settings) fulfilling learners' purposes and motivations. They can entail a variety of reading materials, such as literary texts or multiple expository texts that contribute to the acquisition of the learner's knowledge.

A significant development that has added new arguments against the universal approach to reading concerns the findings of research into different ways of discourse processing in selected disciplinary fields (e.g. history, science, mathematics). As a consequence, the concepts of *disciplinary knowledge* and *disciplinary comprehension* have received common acceptance, whereas the differentiation between *content knowledge*, *domain knowledge* and *disciplinary knowledge* has become more often embarked on (Shanahan 2009). The relationship between the three notions is not of a hierarchical type. While domain knowledge is defined as a field of study representative of some content knowledge, disciplinary knowledge is not just a part of content knowledge as it is constructed on the basis of some formal tradition, a selection of topics, and has some rhetorical and linguistic

characteristics. This is the type of knowledge which is used in order to acquire some new content in the field (Shanahan 2009). Thus, considering L2/FL learners' goals of knowledge acquisition, aiming at balancing content and language-focused dimensions in reading instruction, has to be seen as a most vital issue which awaits further theoretical and empirical examination.

It also needs to be remarked that in order to deal with L2 reading ability and comprehension processes properly, one has to consider the many issues in L1 and L2 reading theory, research and instruction that overlap. Despite differences between L1 and L2 contexts, numerous parallels between them can be found, in particular at higher levels of proficiency when analogous goals for L1 and L2 instruction are established. What is more, most learners taking up L2/FL courses have already developed their literacy skills in L1 to such an extent that they get transferred to L2 contexts activating cross-linguistic processing. In fact, explaining the complex L2 reading issues is not possible without referring to the advances reached by theory and research into native language reading development and use.

In the attempt at finding a dependable explanation for the importance of maintaining a steady focus both on language and content in L2/FL reading development and keeping the right balance between the two, the present paper discusses four major problems. First, the dominant text comprehension models are analyzed so as to pinpoint shifts in dealing with the most important aspects of reading comprehension of interest in the L2/FL context. Second, the discussion moves on to the interpretation of the relationship between text comprehension and L2 language acquisition processes. Third, some space is devoted to exploring schema theory, so influential for L2 reading instruction, with a view to presenting its criticism, as well as suggesting a better rendering of the problem of knowledge in the reading process. Finally, selected content-based reading frameworks are evaluated in light of their interpretation of language and content connections.

2 Conceptualizing Text Comprehension: Changing Models in Explaining L2 Reading

Despite the overwhelming amount of debate on the issues of reading comprehension processes both in L1 and L2, the key concepts providing an explanatory picture of the dominant views have not always been the same. Although text comprehension is of vital concern for L1/L2 educators, they have often been unable to deduce relevant information from the shifts in thinking brought about by new reading models. An interesting synthesis of the changing views on reading comes from Fox and Alexander (2009), who analyze three models of text comprehension: *extraction-assembly, constructive-integrative,* and *transitional extensions models,* by adopting four criteria: views of the text, typical texts utilized for instruction, and the reader's activity and product. The common denominator for extraction-assembly models, popular in the 1960s and 1970s, is the assumption that texts provide static, simple and unambiguous messages coded in graphic symbols to develop reading skills. The information

extracted and assembled by the reader is matched with the existing mental contents. In contrast, constructive-integrative models, dominant over the last 20 years, posit that although propositional network constitutes the textbase of a narrative or informational text, meaning is constructed on the basis on background knowledge, which enables the reader to arrive at a situation model of the text.

Interestingly, Fox and Alexander (2009, pp. 233–234) recognize the rise of a new trend in modeling reading, labeled transitional extensions, which sheds light on several significant aspects of text processing. First of all, text comprehension is treated as a connective activity, which is based not on one reader—one text processing, but on readers' capabilities of navigating a hypertext, as well as looking for connections between multiple texts. Secondly, texts considered in this model are of different types, static or fluid, informational or argumentative, and, what is more, their writers are not invisible participants of the reading process but are evaluated for their credibility and accuracy. Thirdly, by allowing to create meaning across texts, the model highlights the importance of their content and knowledge developed on their basis. As a result, a profound role is played by readers' interactive responsiveness to text comprehension, as well as by working out collaborative text interpretations. Although the name of this particular reading model is not commonly used by researchers, current publications on text comprehension discuss the problem of reading a vast variety of electronic texts and the need for developing the ability to navigate websites in search of the information required. Similarly, the problems of critical literacy, reading multiple texts (concerning one topic or domain-knowledge) and incorporating collaborative work on reading texts to replace silent reading have frequently been addressed (e.g. Klingner and Vaughn 2000).

However, the transitional extensions model representing a significant shift in modeling text comprehension has not been acknowledged in current L2 reading literature. After a long period of reliance on assembly-extraction models, constructive-integrative models seem to have become a major conceptualization of the reading process. Grabe (2009), for instance, assumes that the L2 reading process functions due to the interaction of components at two major levels: (1) *lower-level processing*, which covers word recognition, syntactic parsing and semantic-proposition encoding, and (2) *higher-level comprehension processing,* which helps the reader construct a coherent situation model of a text in memory. Efficient functioning of the reading process is also possible due to such mechanisms as strategies, goals, inferencing, background knowledge, and comprehension monitoring, all of which have attracted considerable attention of L2 reading specialists so far.

Many of the ideas associated with constructive-integrative reading models stem from Kintsch's (1998, 2005) premise that in order to understand a sequence of clauses the reader applies his/her knowledge from long-term memory so as to integrate all the information in working memory. The comprehension of a text covers four levels: *the surface code*, *the propositional textbase* (i.e. meaning of the text expressed through logically organized propositions), *the situation model* (content of the text referring to the real world) and *text genres*, and is constantly modified in the process of reading (the connectionist view). All text perception and comprehension processes are based on a spreading activation network, and, in the case of

a comprehension failure, the reader's strategic behavior provides some repair for it (Kintsch 2005).

It is worth noting that the currently supported postmodern perspective in conceptualizing reading comprehension gives priority to the individual reader's interpretation of the text, which means the acceptance of multiple text interpretations. This phenomenon is explained by *the landscape model* (Linderholm et al. 2004); as reading is based on multiple cognitive processing, particular elements in the text are activated in a fluctuating way (cohort activation), which is possible owing to the reader's background knowledge and purpose. The *standards of coherence* readers impose on reading contributes to a high level of comprehension variation across readers and situations.

Even this very brief overview of basic models of text comprehension reveals that it is the concept of content that is central to explaining how the reading process functions. In terms of Kintsch's (1998) model, one can talk about the content/meaning of textbase that leads to creating—with the help of background knowledge—a new quality content of a situation model of the text. Similarly, text content, as mentioned in the transitional extensions model, when utilized by the reader, contributes to the development of his/her topic-based knowledge. An important role is also assigned to reading purposes. This is not to say that the purposefulness of reading is a new concept—rather it has generated a revived interest among reading specialists and led to its fruitful reconsideration. Especially with reference to the academic level, the significance of *reading to learn* as well as to evaluate, critique and use the information gained while reading in the future has been underlined. With reading perceived as a tool for knowledge expansion, the concepts of information, content and knowledge, rather than globally described meaning or general comprehension, are associated with reading different genres of texts in socioculturally different contexts (Grabe 2009).

In developing her L2 reading model, Bernhardt (2005, 2010) recognizes the superiority of a compensatory model for defining the specificity of second language learning context. She refers to Stanovich's (1980) compensatory model, which assumes that particular levels of processing in reading help the reader compensate for deficits occurring in other aspects of the reading process. Bernhardt proposes a model which comprises three sets of factors that affect L2 readers' performance, and provides the percentages of variance they cause: (1) L1 literacy (alphabetics, vocabulary, text structure, beliefs about word and sentence configuration, etc.)—20 %, (2) L2 language knowledge (grammatical form, vocabulary knowledge, cognates, L1/L2 linguistic distance, etc.)—30 %, (3) unexplained variance (comprehension strategies, engagement, content and domain knowledge, interest, motivation, etc.)—50 %. Each set of variables can provide a fair amount of support for another if considerable flexibility is left to those processes. What is more, the role of factors involved in all the knowledge sources gets intensified with the development of proficiency. It is interesting to observe that the concept of content and domain knowledge has been inserted into the model as part of quite a large component whose variance is not specified, while at the same time the concept of background knowledge (reminiscent of schema theory, to be critically evaluated in Sect. 4) has been left out. The

model surely points to a considerable significance of language-based aspects, some of which (cognates, L1-L2 distance) fall into the range of cross-linguistic properties, which is missing in general text comprehension models.

3 Towards Understanding the Relationship Between Reading Comprehension and Language Acquisition

In the last quarter of the twentieth century the area of ELT witnessed the emergence of two standpoints that not only found a steady place in heated debates in the mainstream methodology, but whose attempt at shedding new light on the role of information/content processing in language acquisition and use has not passed unnoticed. They were the Communicative Approach and Krashen's Comprehensible Input Theory. The growth of the Communicative Approach was associated with the provision of a better theoretical background for a general description of language use as related to extralinguistic contexts and real-life situations. Due to the concept of speech events, language use started to be analyzed as socially and culturally determined activity. Dissatisfying, however, was the finding that meaningful communication does not guarantee that language input can be turned into intake and result in learning formal language features such as elements of morphology or syntax (Han and D'Angelo 2010). What is more, due to the main concern with oral interaction, literacy issues were not of particular interest to the advocates of communicative methodology. The problem of language comprehension as linked to text comprehension and L2 reading development was forcefully tackled by Krashen's Comprehensible Input Theory, which could boast of considerable support from researchers and practitioners before its criticism was sounded. As remarked by Schleppegrell and Colombi (2002, p. 13), very critical of the impact of Krashen's theory on language teaching, its "invisible pedagogy"—immersing learners in meaningful learning from input—suggested ignoring or even advised against explicit teaching of language form. Undoubtedly, the controversies about Krashen's theory have given rise to a reconsideration of some basic issues in understanding L2 reading comprehension processes, and language acquisition.

Much scholarly discussion of the relationship between comprehension and language acquisition that revolved around Krashen's Input Hypothesis, complemented with the Reading Hypothesis, concerned the direct claim that reading is a primary source of comprehensible input stimulating incidental acquisition of target language elements (Grabe and Stoller 1997). Despite its simplicity, attractiveness and the many arguments provided in support of it (cf. Mc Laughlin 1987), the hypothesis was found to be partially false due to the lack of congruity between comprehension and acquisition (Han and D'Angelo 2010). Some researchers (e.g. Sharwood Smith 1986) express the view that decoding text content does not have to result in intake, understood as code learning. As explained by Gass and Selinker (2008), even though some comprehension is necessary for language to be acquired at the syntactic level, comprehension is a very broad phenomenon involving

top-down processing of the learner's world knowledge, whereas contextual clues, which constitute the basis for inferential processes and attending to language form, require bottom-up processing. It is important to note that researchers examining the relationship between reading comprehension and language acquisition have tended to dissociate morphosyntactic and lexical levels of language processing.

Powerful argumentation in support of the distinct nature of comprehension and morphosyntax processing was provided by Lee (1998), who found no significant correlation between the two; it has been proved that L2 learners are able to understand texts with the help of extralinguistic information. Thus, he claims, language form can be acquired only when special attention is paid to it. One way of doing so is by means of enhancing language input with activities that help learners match meaning and form (cf. Izumi 2002; Yoshimura 2006). Similar conclusions were reached by Van Patten (2003, quoted by Young and Nokuma 2009) in his empirical studies, which revealed L2 learners' preference for processing semantic information. His subjects tended to process content words in the input first, and, even in the case of processing morphological elements, they gave priority to the more meaningful ones. Van Patten recommends that special grammar instruction emphasizing form-meaning connection be offered to deal with language features that might cause misunderstanding in reading instruction.

A much more difficult problem concerns the relationship between text comprehension and incidental vocabulary acquisition, also described as vocabulary learning through reading. The Reading Hypothesis, an inherent component of Krashen's Comprehensible Input Hypothesis, maintains that it is the comprehensibility of the text, that is recognizing the meaning of crucial words in utterances, that makes language acquisition effective (Krashen and Terrell 1983, p. 155). Since the 1980s incidental vocabulary acquisition while reading has become the key interest of a large body of research carried out by reading specialists both in L1 and L2. Yet, despite advances in the scholarship, the nature of the interdependence between reading comprehension and incidental vocabulary acquisition has not been adequately accounted for (cf. Hudson 2007; Pulido 2007; Hedgcook and Ferris 2009; Bernhardt 2010). An attempt to probe into the relationship between text comprehension results and vocabulary gains while reading in L2 was made by Chodkiewicz (2001). A large scale empirical study involving 222 advanced Polish learners of English, which showed an average 13.8 % incidental vocabulary gain as measured by a receptive test, did not reveal any significant systematic correlation between reading comprehension and vocabulary acquisition. Although different types of reading tasks helped the subjects get higher comprehension scores, no proportionate growth in incidental vocabulary learning was observed. On the contrary, the subjects reached higher vocabulary gains when working under the no intervention treatment (read only), not while performing tasks that required deeper purposeful processing of content and enhanced their comprehension. The findings of the study undoubtedly point to a very complex interrelationship between vocabulary learning and reading comprehension processes, and to the lack of a causal link between comprehension and vocabulary learning advocated by Krashen's theory.

As already shown, vocabulary learning while normal reading is not an easy issue to examine. Empirical studies have proved that one of the reasons for

difficulties in investigating incidental vocabulary acquisition is the inability to control for the sheer number of variables that influence it. Suffice it to mention the learner's grade/age, level of reading proficiency, purpose for reading, the assessment methods used (few tests are sensitive to moderate gains in vocabulary learning), or text difficulty and frequency of exposure (Chodkiewicz 2000; Hedgcook and Ferris 2009). Attempts at the elucidation of the nature of incidental vocabulary learning as a language acquisition process, as well as the role of attention and awareness in it, have triggered controversy at the theoretical level. Despite this, some agreement on how L2 vocabulary acquisition functions during normal reading has been reached. The first step in learning an unfamiliar word while reading entails noticing it, then its meaning is to be inferred by using all the available contextual clues and attending to the connection between the word's form and meaning. Finally, a particular item enters the learner's lexicon (Pulido 2007).

In order to notice unfamiliar words and to process available contextual clues to infer words' meanings while reading L2 learners have to deploy appropriate strategies. So far a great deal of effort has been devoted to classifying different types of contexts (e.g. general vs. global, external vs. internal) and even to offering detailed taxonomies of contextual clues such as those utilizing familiar expressions, synonyms, comparison or contrast, association, which can be pedagogically useful. However, a fundamental question relating to the quality of contextual clues and efficiency in using them has to be posed. The quality of contextual clues can differ from rich to poor, and, what is more, some clues can prove to be misdirective, while in some other cases contextual clues may be unavailable whatsoever (Chodkiewicz 2000). As regards the efficiency of using contextual information, Stanovich's (1991) integrative-compensatory model of reading holds that good readers do not draw extensively on contextual information because they recognize words in a context-free manner. On the contrary, it is bad readers who tend to use contextual clues frequently to make up for their poor word recognition skills. The compensatory activation of contextual clues while reading automatically diminishes the quality of text comprehension and slows down the reading process.

On balance, as empirically documented, whereas no substantial gains in vocabulary learning from reading can be expected, reading passages are an important input source of vocabulary to be naturally acquired both in L1 and L2, with extensive reading being particularly recommended for L2 settings. Yet, it has to be noted that both the breadth and depth of vocabulary knowledge acquired in such a way is limited, and the effectiveness of the process depends on the many factors mentioned above, including the amount of reading done and the availability of lexical items that carry a significant meaning for the learner (Han and D'Angelo 2010). At the same time, numerous L2 reading studies imply that due to their limitations word meaning inferring strategies should be used with caution. Obvious to any practicing reading teacher is the advantage of employing a range of other well-known explicit strategies to help L2 learners in learning and retaining the target vocabulary, such as providing L1 equivalents, L2 definitions, or glosses (cf. Chodkiewicz 2000; Hedgcook and Ferris 2009).

Considering the characteristics of the meaning-based approach to reading, Han and D'Angelo (2010) recommend that Sharwood Smith's (1986) dual relevance theory of

language acquisition should constitute the basis for developing reading instruction. This means that reading for comprehension (semantic processing) and reading for syntactic processing should be kept apart. To adopt such an approach, teachers will first concentrate on interpreting the meaning of texts with the goal of developing reading efficiency, and then will continue to explore some grammatical features of the text, emphasizing meaning-form connections. At the early stages of reading instruction, one kind of processing can be focused upon at a time. Pedagogical procedures should draw on a combination of strategies helpful in making selected aspects of the input text more salient and ready to be noticed, such as enhancement strategies (e.g. capitalizing, underlying etc.), explicit grammar instruction, or so-called narrow reading, based on reading multiple texts as a way of increasing content-familiarity, recurrence of vocabulary/grammar structures and their saliency (Krashen 1981, quoted by Han and D'Angelo 2010).

4 Knowledge Bases for Reading: Making Up for the Weaknesses of Schema Theory

In the 1980s and 1990s some new insights into understanding how reading comprehension functions were provided by schema-theory due to the consideration of the reader's general world knowledge. The prime goal of the theory was the explanation of the interrelationship between language, comprehension and the reader's topic/world knowledge in text processing. In fact, it was the degree of topic familiarity that was assumed to determine the effectiveness of the reading process and contribute to the reader's knowledge, represented by schemata or conceptual frameworks. The core premise was that new information is accommodated by the reader as a result of its integration with background knowledge—the schemata of world knowledge already accumulated in his/her mind. The reader's knowledge of a given topic was found to be a better predictor of text comprehension than any other measure of reading achievement, and new language aspects appearing in the text were to be linked to the concepts of the reader's background knowledge (Johnson and Pearson 1978).

Due to growing interest in schema theory both on the theoretical and practical grounds, the notion of background knowledge became a focal point. Bernhardt (1991), for instance, took a more elaborate view distinguishing between: (1) local knowledge—used by individuals for everyday purposes, (2) domain-specific knowledge—gained through education and by professionals who reach expertise, and (3) culture-specific knowledge. Moreover, a special kind of linkage was identified between the linguistic level and background knowledge, whose organization in long-term memory depended on the use of words and phrases corresponding to particular topic schemata. While the details of the morphosyntactic system were not taken into consideration, content vocabulary was found essential for understanding a text. Vocabulary work accompanying a reading task was to be topic-oriented and refer to the corresponding schemata (Nagy 1988). Some research studies were carried out to establish how the knowledge of content versus formal schemata affected the L2 reading comprehension process (Carrell 1987).

However, with the emergence of the construction-integrative models of reading, the role of background knowledge as explained by schema theory was cast into doubt. The main criticism concerned the fact that the theory regarded background knowledge as static, pre-existing extratextual knowledge stored in the reader's long term memory, employed in a top-down way, whereas construction-integrative models treat it as belonging to text processing itself, and helpful in creating hierarchical patterns for organizing and upgrading the information gained while reading (Kintsch 2005). The information generated from multiple sources in the text (graphic, syntactic, semantic, rhetorical, pragmatic and thematic) is processed in the reader's working memory and only then is it integrated into his/her knowledge. As demonstrated by the findings of empirical research, unfamiliar passages can be successfully read both by L1 and L2 readers despite the lack of background knowledge, provided they can establish meaning relations for a given text and create a coherent textbase for it. What causes the greatest reading problems for L2 readers is low efficiency in processing lower-level information due to their less fluent lexical and syntactic processing skills or insufficient sociocultural background, which makes it impossible for them to encode all the relevant text properties (Nassaji 2007).

It is important to note that the construction-integrative reading model has separated linguistic knowledge from background (domain-specific) knowledge to treat them as two components contributing differently to reading comprehension (Nassaji 2007): the former affecting the lower text-based level of lexical and syntactic processing, and the latter functioning at a higher level processing of semantic and conceptual information. Thus the acquisition of knowledge as a result of reading, is assumed to take place due to the integration of content from higher level processing of a particular text and the reader's conceptual/prior knowledge.

5 In Search of Principles for Combining Language and Content in Content-Based Teaching

The exploration of the role of language and content in understanding L2 reading development would not be complete without a brief consideration of the ideas that have evolved within content-based teaching. Immersion courses introduced in the 1960s in Canada, the many alternative versions offered in the USA, most often labeled Content-Based (ESL) Instruction or Content-Based Language Learning/Teaching, and Content and Language Integrated Learning (CLIL), officially introduced in 1995 by the Council of Europe, have led to raising the question to what extent content should play a role in the process of language learning/teaching so as to make language instruction 'contextualized' and meaningful (e.g. Brinton et al. 1997; Larsen-Freeman and Freeman 2008; Wesche and Skehan 2002). As a consequence, establishing some common ground for the possibility of balancing the two approaches, that is focusing on language forms and structures and processing informational content of selected materials, still leaving some language aspects to incidental acquisition has started to be sought.

Principled integration of language and content has become the goal of numerous CBI and CLIL paradigms, in which non-language content (basically school or academic subjects) is to be integrated with language work focused on making up for L2 learners' language deficiencies. Reading, representative of literacy skills, has a dominant role to play due to the natural dependence on a variety of written materials selected for content-based courses. Comprehending a text and interpreting its content is a basis for acquiring subject knowledge. It is to be looked upon as language input processed at grammatical, semantic, lexical and discourse levels, and a representative of a particular genre. This section sets out to analyze selected models developed with a view to finding a rationale for integrating language and content to achieve the targeted pedagogic purposes.

It is interesting to point out that one of the earliest ideas of integrating language and content was promoted in Poland by Marton (1978). Although motivated to a large extent by the practical need to make EFL teaching more attractive through textbook contents, the decision to introduce short texts based on knowledge related to school subjects was accounted for with psychological argumentation. Adding some new content suitable for learners' life space was found important for their current needs and aspirations and conducive to their cognitive development. It was argued that EFL learners would appreciate dealing with aspects of disciplinary/general knowledge of biology, geography, physics, or film, music and travelling, etc., most of it being of concern to other school subjects. A series of EFL textbooks for a four-year long course for secondary school learners was supplied with short texts to be presented by teachers in the form of mini-lectures (Szkutnik and Marton 1977). The language of those texts was described as valuable for taking a deeper approach to language use through the categorization of concepts and relations between them (Szkutnik 1979).

An influential language-content integration framework designed by Mohan (1986, 2001) describes its theoretical underpinnings as based on Halliday's (1985) functional theory of language, which defines the semantic potential of language and its social function. Language is not approached primarily as language acquisition but as a medium of learning content/subject matter and culture; that is why its use stretches beyond literacy areas and its basic function is to organize social practice. It is the act of learning that becomes a linguistic process. Defined at the level of discourse by such grammatical categories as classification, rules or evaluation, language can be rendered in a form of description, time, sequence and choice in practice (Mohan 2001). As noted by Colombi and Schleppegrell (2002), written texts, indispensable for the development of advanced literacy skills, characterized by grammar metaphor and a high lexical density, involve learners in an effective use of lexicogrammatical patterns through a range of different tasks that may also require a conscious study of language elements.

The potential of content learning is of central concern to the Cognitive Academic Language Learning Approach, intended for ESL learners, described as limited language proficiency learners, who need guidance in acquiring academic language competence. Working on selected content of school subjects, ESL learners develop their academic language skills with the help of metacognitive, cognitive and socio-affective strategies (O'Malley and Chamot 1990). Yet, their responses to content

processing tasks are to be primarily evaluated in terms of content answers, although becoming familiarized with the properties of academic language, as different from the use of informal language in speech, is also a major objective to accomplish. Teacher assistance is indispensable also due to the fact that learners perform numerous context-reduced academic tasks whose difficulty is increased by the cognitive demands of learning new subject knowledge. The principles of CALLA-based courses have clearly been established in such a way that both content and language aspects can be efficiently benefited from at the course and classroom levels.

A turn towards a more precise rendering of the interdependence between the linguistic component and content teaching was made by Snow et al. (1989, p. 201) in their model for "a conceptual framework for the integration of language and content teaching in second and foreign language classrooms". The researchers acted upon the premise that combining language and content can be beneficial as long as the linguistic aims are divided into *obligatory* and *compatible* ones. Language defined as obligatory for particular content comprises structural items (nouns, verbs, rhetorical devices), functional elements (narration, information, persuasion), as well as strategies to be employed in studying a particular text. On the other hand, compatible language does not have to refer to the aspects of content in question, although the context created by a particular content can be conducive to teaching selected language points. Despite it sounding innovative and appealing, Ellis (2002) finds such a solution difficult to implement, particularly to be followed throughout a multi-part language course. Instead he suggests that content and language components be separated from each other in such a way that the course starts with the communicative component emphasizing content and relying on incidental language acquisition, and only then is the direct study of the language code introduced.

Almost twenty years later, despite Ellis's (2002) criticism of Snow et al. (1989), Gajo (2007) incorporates the concepts of *obligatory* and *compatible* language into his comprehensive CLIL model referring to L2, or even plurilinguistic contexts. The researcher takes an in-depth look at the integration of language and content as dependent on identifying different types of knowledge, which entails both the linguistic and the subject paradigms. By participating in the learning process—the discourse of pedagogic tasks, L2 learners get involved in complex relationships with *language knowledge*, which is remediated through discourse opacity (metalinguistic activities), and *subject knowledge*, which is mediated through discourse density (categorization process). Due to the relationship between linguistic and subject knowledge paradigms, the knowledge coming from the two sources can be negotiated by learning at the discourse level, through classroom interaction. Opaque in its nature, knowledge needs negotiation—some information can be potentially controversial, biased politically or culturally. Plurilinguistic competence of language learners is helpful in problematizing knowledge since the elements of linguistic knowledge and subject knowledge get interwoven, particularly at the level of lexis and discourse.

The development of knowledge can be described by means of three parallel categories in (1) language in language paradigm: *content-obligatory* language, *content-compatible* language and *content-autonomous* language, as well as in (2) language as embedded into the negotiated target content: *content-embedded*

language (linguistic knowledge indispensable for communicating, establishing subject knowledge and subject paradigm), *content-useful* language (indispensable for performing a task or establishing or extending knowledge), and *content-peripheral* language (enhancing general links between language and subject knowledge) (Gajo 2007, p. 570). Gajo's framework looks very elaborate, yet, it has to be treated as an attempt to implement some current ideas in explaining the structure and development of disciplinary knowledge. Of prime importance is also the emphasis on the need for a better conceptualization of the relation between content-language aspects and communicative competence—the key goal pursued in many L2 language classes.

Another recent model, called '4 cs' (Coyle 2007), proposes that in view of language functioning as a communication tool, the learning process should be perceived as comprising content and cognition, as well as communication and culture. What is most crucial is that we move on from the use of language as a linguistic form to using language as representative of function and culture. The language-content relationship is conceptualized as consisting of three dimensions in language functioning: (1) *language of learning*—using a particular kind of language to aid content acquisition, (2) *language for learning*—language to be acquired by learners as well as a way of achieving the goal (e.g. awareness-raising, strategy training, language contextualization, checking understanding, etc.), (3) *language through learning*—activating language learning and thinking through different sociocultural contexts. Coyle's model points to the multidimensional use of language, which is significant for educational settings where content acquisition is one of the main objectives. Her belief that knowledge is created through the activity of a community, gives support to the idea of communal constructivism.

In contrast, the Connections Model (Bigelow et al. 2006) goes in line with O'Malley and Chamot's (1990) thinking already discussed. The model generally takes a similar path in the conceptualization of language-content relationship by introducing the same components as O'Malley and Chamot did, yet they are seen to function somewhat differently. The task for the teacher is to integrate contents (e.g. within a theme-based unit) with language functions depicted through reading and writing, as well as the organization of text structure with the help of strategies. The teacher's decision as to the choice of language functions and text structures to work on can be based on learners' problems, errors or their tendency to avoid some language aspects.

To sum up, some constructive suggestions for integrating language and content developed within content-based instruction, briefly dealt with in this section, have further shown that a rationale for a careful consideration of this issue is still much needed.

6 Conclusions

Despite limitations of space, the paper has made an attempt to demonstrate the importance of the conceptualization of language and content relationship in reading, and how important it is to assign a proper place to the two components in discussing L2

reading development issues. By *language*, with varying consistency though, researchers mean grammar, vocabulary, rhetorical structure and genre, as well as pragmatics. The term *content* is generally referred to text-based processing, but also—what is now more often the case—to knowledge-based reading processes and outcomes, which are closely associated with text meaning and comprehension. Explaining the interdependence between language and content in the process of text comprehension and their relationship to other variables involved in reading (e.g. individual learner differences interests, motivation, or text type) has proved to be equally problematic.

As indicated in this paper, presenting an overall picture of L2/FL reading development issues is a challenging task as different fields of scholarly discussion have to be examined in search of current information concerning text comprehension models, language acquisition and reading comprehension relationships, knowledge-based processing in reading, as well as conceptual frameworks for language-content integration within a range of CBI/CLIL approaches. The inadequacy of the interpretation of the role of background knowledge stemming from the schema theory, for example, could only be recognized, when a competing view of knowledge processing in reading was expounded by the constructive-integrative reading model. Following the growth of sociocultural theory, the consideration of the role of culture and knowledge in reading-based educational activities has helped to reshape the form and function focused view of reading.

As for a principled view of a dual focus on language and content in reading instruction, no consensus has been reached so far. On the one hand, research into reading and language acquisition points to the need of separation between morphosyntax and comprehension for teaching purposes; on the other hand, Coyle's (2007) model, for example, seeks to establish a functional relationship between linguistic and content paradigms involved in classroom discourse, without the exclusion of some explicit consideration of language properties. As argued above, the dual focus on language and content will primarily call for some way of counterbalancing the use of the form-based and content-based facets in reading instruction so that the social side of learning is taken care of. On balance, to be truly updated on L2 reading development/instruction issues one has to be observant of the shifts in views on the reading process, constantly undergoing change and cross-fertilization of ideas coming from different information sources.

References

Bernhardt, E. B. 1991. *Reading development in a second language: Theoretical, empirical, and classroom perspectives*. Norwood, New Jersey: Ablex.

Bernhardt, E. B. 2005. Progress and procrastination in second language reading. *Annual Review of Applied Linguistics*. 25: 133-150.

Bernhardt, E. B. 2010. *Understanding advanced second-language reading*. New York: Routledge.

Bigelow, M., S. Ranney and A. Dahlman 2006. Keeping the language focus in content-based ESL instruction. *TESL Canada Journal* 24: 40-58.

Brinton, D. M., M. A. Snow and M. B. Wesche 1997. *Content-based second language instruction*. Boston: Heinle and Heinle.

Carrell, P. L. 1987. Content and formal schemata in ESL reading. *TESOL Quarterly* 12: 461-481.
Chodkiewicz, H. 2000. *Vocabulary acquisition from the written context: Inferring word meanings by Polish learners of English*. Lublin: Wydawnictwo UMCS.
Chodkiewicz, H. 2001. The acquisition of word meanings while reading in English as a foreign language. In *EUROSLA Yearbook*, eds. S. Foster-Cohen and A. Nizegorodcew, 29-49. Amsterdam – Philadelphia: John Benjamins.
Colombi, M. C. and M. J. Schleppegrell 2002. Theory and practice in the development of advanced literacy. In *Developing advanced literacy in first and second languages*, eds. M. J. Schleppegrell and M. C. Colombi, 1-20. Mahwah, NJ: Lawrence Erlbaum.
Coyle, D. 2007. Content and language integrated learning: Towards a connected research agenda for CLIL pedagogies. *The International Journal of Bilingual Education and Bilingualism* 10: 543-62.
Ellis, R. 2002. Developing a task-based syllabus. *RELC Journal* 34: 64-81.
Fox, E. and P. A. Alexander 2009. Text comprehension: A retrospective, perspective, and prospective. In *Handbook of research on reading comprehension*, eds. S. E. Israel and G. G. Duffy, 227-239. New York: Routledge.
Gajo, L. 2007. Linguistic knowledge and subject knowledge: How does bilingualism contribute to subject development? *The International Journal of Bilingual Education and Bilingualism* 10: 563-581.
Gass, S. and L. Selinker 2008. *Second language acquisition. An introductory course*. (third edition). New York: Routledge.
Grabe, W. 2009. *Reading in a second language: Moving from theory to practice*. Cambridge: Cambridge University Press.
Grabe, W. and F. L. Stoller 1997. Content-based instruction: Research foundations. In *The content-based classroom. Perspectives on integrating language and content,* eds. M. A. Snow, D. M. Brinton, 5-21. White Plains, NY: Longman.
Grabe, W. and F. L. Stoller 2002. *Teaching and researching reading*. Harlow: Pearson Education.
Halliday, M. A. K. 1985. *An introduction to functional grammar*. London: Edward Arnold.
Hedgcock, J. S. and D. R. Ferris 2009. *Teaching readers of English. Students, texts, and contexts.* New York: Routledge.
Han, Z. H. and A. D'Angelo 2010. Balancing between comprehension and acquisition: Proposing a dual approach. In *Second language reading research and instruction: Crossing the boundaries*, eds. Z. H. Han and N. J. Anderson, 173-191. Ann Arbor: The University of Michigan Press.
Hudson, T. 2007. *Teaching second language reading*. Oxford: Oxford University Press.
Izumi, S. 2002. Output, input enhancement, and the noticing hypothesis: An experimental study on ESL revitalization. *Studies in Second Language Acquisition* 24: 541-577.
Johnson, D. D. and P. D. Pearson 1978. *Teaching reading vocabulary*. New York: Holt, Rinehart and Winston.
Kintsch, W. 1998. *Comprehension*. New York: Cambridge University Press.
Kintsch, W. 2005. An overview of top-down and bottom-up effects in comprehension. The CI perspective. *Discourse Processes* 39: 125-128.
Larsen-Freeman, D. and D. Freeman 2008. Language moves: The place of 'foreign' languages in classroom teaching and learning. *Review of Research in Education* 32: 147-186.
Klingner, J. and S. Vaughn 2000. The helping behaviors of fifth graders while using collaborative strategic reading during ESL content classes. *TESOL Quarterly* 34: 69-98.
Krashen, S. 1981. The case for narrow reading. *TESOL Newsletter* 12: 23.
Krashen, S. D. and T. D. Terrrell 1983. *The natural approach.* Oxford: Pergamon Press and Heyward, CA: Alemany Press.
Lee, J. F. 1998. The relationship of verb morphology and second language reading comprehension and input processing. *Modern Language Journal* 82: 33-48.
Linderholm, T., S. Virtue, Y. Tzeng and P. van den Broek 2004. Fluctuations in the availability of information during reading: Capturing cognitive processes using the Landscape Model. *Discourse Processes* 37: 165-186.

Marton, W. 1978. *Dydaktyka języka obcego w szkole średniej. Podejście kognitywne*. Warszawa: Wydawnictwo Naukowe PWN.
Mc Laughlin, B. 1987. *Theories of second language learning*. London: Edward Arnold.
Mohan 1986. *Language and content*. Reading, MA: Addison-Wesley.
Mohan 2001. The second language as a medium of learning. In *English as a second language in the mainstream: Teaching, learning and identity*, ed. B. Mohan, C. Leung and C. Davison, 107-126. Harlow: Longman.
Nassaji, H. 2007. Schema theory and knowledge-based processes in second language reading comprehension: A need for alternative perspectives. *Language Learning* 57: 79-113.
O'Malley, J. M. and A. U. Chamot 1990. *Learning strategies in second language acquisition*. Cambridge: CUP.
Nagy, W. E. 1988. *Teaching vocabulary to improve reading comprehension*. Urbana; IL: National Council of Teachers of English.
Organization for Economic Co-operation and Development (OECD) 2006. *Assessing scientific, reading and mathematical literacy: A framework for PISA 2006*. Paris: OECD.
Pulido, D. 2007. The relationship between text comprehension and second language incidental vocabulary acquisition: A matter of topic familiarity? *Language Learning* 57: 155-199.
Shanahan, C. 2009. Disciplinary comprehension. In *Handbook of research on reading comprehension*, ed. S. E. Israel and G. G. Duffy, 240-260. New York: Routledge.
Sharwood Smith, M. 1986. Comprehension vs. acquisition: Two ways of processing input. *Applied Linguistics* 7: 239-256.
Snow, M. A., M. Met and F. Genesee 1989. A conceptual framework for the integration of language and content in second/foreign language instruction. *TESOL Quarterly* 23: 201-216.
Stanovich, K. E. 1980. Toward an interactive-compensatory model of individual differences in the development of reading fluency. *Reading Research Quarterly* 16: 32-71.
Stanovich, K. E. 1991. Changing models of reading and reading acquisition. In *Learning to read: Basic research and its implication*, eds. L. Rieben and C. A. Perfetti, 19-31. Hillsdale, NJ: Lawrence Erlbaum.
Szkutnik, L. L. and W. Marton 1977. *English? Yes*. Warszawa: Wydawnictwa Szkolne i Pedagogiczne.
Szkutnik, L .L. 1979. *Książka nauczyciela. English through problems*. Warszawa: Wydawnictwa Szkolne i Pedagogiczne.
Wallace, C. 1992. *Reading*. Oxford: Oxford University Press.
Wesche, M. B. and P. Skehan 2002. Communicative, task-based, and content-based instruction. In *The Oxford handbook of applied linguistics*, ed. R. B. Kaplan, 207-228. Oxford: Oxford University Press.
VanPatten, B. 2003. Cognitive characteristics of adult second language learners. In *Teaching languages, literature and cultures. Volume 1: Learning foreign and second languages: Perspectives in research and scholarship,* ed. H. Byrnes, 104-127. New York: Modern Language Association of America.
Yoshimura, F. 2006. Does manipulating foreknowledge of output tasks lead to differences in reading behavior, text comprehension and noticing of language form? *Language Teaching Research* 10: 419-434.
Young, D. and C. K. Nakuma 2009. What don't you understand? Understanding misunderstandings in foreign language reading. In *Crossing languages and research methods. Analyses of adult foreign language reading.* ed. C. Brantmeier, 73-95. Charlotte, NC: Information Age Publishing.

Part II
Research Projects

Inhibitory Control, Working Memory and L2 Interaction

Susan M. Gass, Jennifer N. Behney and Baburhan Uzum

Abstract This study considers how second language (L2) learners' working memory capacities and their abilities to inhibit interfering information relate to their success at learning from conversational interaction. Participants were given a reading span task in English and a Stroop test in English, their first language, and in Italian (L2), and participated in an interactive picture description task in Italian in which they were provided feedback on grammatical gender and number. In addition, the learners completed pretests and posttests. Learners were divided into two groups based on how much they learned from an interactive task. Working memory and inhibition scores were examined for each group. The results showed that the major contributing factor to learning gains was L2 Stroop test scores.

1 Introduction

Over the past 25–30 years, there has been an accumulation of scholarship that argues for the importance of conversational interaction in second language (L2) learning (Wagner-Gough and Hatch 1975; Long 1980, 1996, 2007; Varonis and Gass 1985; Gass and Varonis 1994; Gass 1997, 2003; Mackey 2007; Mackey and Polio 2008). This research has been conducted in contexts that include naturalistic, classroom, and laboratory settings, with results showing a clear relationship between learning and interaction (see Gass and Mackey 2006, 2007, for reviews; Mackey and Goo 2007; Lyster and Saito 2010; Spada and Tomita 2010). Nonetheless, it is also clear that the benefits of interaction do not affect all learners equally. In fact, Gass and Mackey (2006, p. 14) noted that "recent research is now considering the mechanisms involved in interaction and is shifting its focus to an understanding of how interaction works (…) what learner-internal

S. M. Gass (✉) · B. Uzum
Michigan State University, East Lansing, MI, USA
e-mail: gass@msu.edu
J. N. Behney
Youngstown State University, Youngstown, OH, USA

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(cognitive) factors can help to explain differential benefits?". The current study begins from this point and considers two learner internal capacities: working memory capacity and inhibitory control, relating them to language gains following an interactive task.

2 Interaction

The Interaction Hypothesis (Long 1996) emphasizes the important role of *conversational interaction* in learning. During interaction between a nonnative speaker (NNS) and a native speaker (NS) of the L2 or even between two NNSs, one speaker may indicate to the other that he/she has not understood something that was said, or may rephrase the NNS's utterance. As a result of this feedback, a speaker often attempts to rectify the problem through a process referred to as negotiation of meaning. SLA research has shown that interaction is important for language learning because it draws the learner's attention to an error that the learner has made or, put differently, to a discrepancy between his/her utterance and the target form (Schmidt and Frota 1986; Gass and Varonis 1994; Gass 1997). When an exchange takes place between a learner and a NS (or a more proficient speaker), the less proficient learner is provided with the opportunity to notice the difference—or the 'gap'—between his/her utterance (the output) and the target language input that he/she is receiving. As Long notes, "negotiation for meaning, and especially negotiation work that triggers interactional adjustments by the NS or more competent interlocutor, facilitates acquisition because it connects input, internal learner capacities, particularly selective attention, and output in productive ways" (1996, pp. 451–452).

A construct central to the interactionist approach is feedback, particularly, negative feedback, namely, feedback that informs a learner of an error. Negative feedback, which can be explicit or implicit (see Examples 1 and 2), is a means of drawing attention to a problematic utterance/lexical item/pronunciation. Explicit negative feedback occurs when the learner is directly informed that something cannot be said in the way that he/she has said it. Implicit feedback, including recasts (see Nicholas et al. 2001; Long 2007; for reviews), requests for clarification, and confirmation checks all of which can occur as part of the negotiating of meaning between speakers, is an indirect or more subtle way of providing corrective information.

(1) Explicit negative feedback (Ellis et al. 2006, p. 353)
Learner: …He kiss her.
Researcher: Kiss—you need past tense.
Learner: He kissed.

(2) Implicit negative feedback (Ellis et al. 2006, p. 353)
Learner: …. they saw and they follow follow follow him.
Researcher: Followed.
Learner: Followed him and attacked him.

Important to an understanding of the role of feedback is the concept of modified output which can occur following corrective feedback. An example is given in (3).

(3) Modified output following feedback (McDonough 2005, p. 86)
NNS:what happen for the boat?
NS:what?NNS:what's wrong with the boat?

In this example, the NNS produces an error which is followed by feedback ('What?') which appears to indicate that the initial utterance was problematic. The NNS reformulates the initial utterance, producing the correct 'What's wrong with the boat?'

The literature on output and modified output is lengthy, but to briefly summarize, it has been argued (Swain 1985, 1995; Gass 1997, 2003) that producing (modified) output is important to the process of L2 acquisition for a number of reasons: (a) it forces learners to focus on both semantics and morphosyntax (Swain 1985, 1995, 2005), (b) it strengthens existing knowledge representations (Nobuyoshi and Ellis 1993; Gass 1997), (c) it promotes automaticity (De Bot 1996; Gass 1997; Ellis 2005); and (d) it allows learners the opportunity to test hypotheses (Swain 1995, 2005; Gass 1997, 2003; Mackey et al. 2000; Mackey 2002). A notable study is that of McDonough (2005) who investigated the acquisition of English questions. Her study showed that the best predictor of acquisition was the opportunity to modify one's speech.

Gass (1997) proposed a model for the function of feedback in an interactional episode. In this model negative feedback transmitted either through negotiation or through other types of correction may lead to the noticing of the error. At this point the learner searches the input for confirmatory (or disconfirmatory) evidence of the mismatch between his/her interlanguage form and the target form. Thus, not only is interaction important for acquisition, but so is subsequent input.

As many have noted (Robinson 1995; Gass 1997; Schmidt 2001), attention is a central factor in second language research. Long (1996, pp. 451–452), within the context of interaction research, has proposed that selective attention (a learner internal capacity) mediates between input and output. In other words, feedback serves to draw learners' attention to areas of their language that are not native-like. The present study is concerned with the regulation of attention (working memory being one measure and inhibitory control another) and the impact of such regulation on learning.

Despite all of these arguments, the question of why some learners are able to utilize feedback for learning purposes and others are less so remains largely unanswered. Concepts such as attention, enhanced salience, and noticing of form clearly play a role in understanding the benefits of L2 interaction. Individual differences in the capacity that learners have for dedicating attention to information in the input provided in interaction may determine the acquisitional gains that learners receive from interaction. Furthermore, individual differences in learners' abilities to store and process new information (working memory) while blocking distracting information (inhibitory control) may also be related to learners'

abilities to learn from interaction. We turn next to brief discussions of working memory and inhibition, constructs that are central to the current research.

3 Working Memory

We take a view of *working memory* that incorporates both processing and storage functions. A useful definition comes from Miyake and Shah (1999, p. 450): "working memory is those mechanisms or processes that are involved in the control, regulation, and active maintenance of task-relevant information in the service of complex cognition, including novel as well as familiar, skilled tasks". Following work by Baddeley and Hitch (1974), we assume that working memory keeps representations in temporary storage, allowing operations on those representations to take place (Caplan et al. 2007).

Working memory is claimed to be composed of a *central executive*, which controls attention, and two slave systems, the *phonological loop* and the *visuospatial sketchpad*. The phonological loop stores and rehearses verbal information, and the visuospatial sketchpad is responsible for imagery learning (Baddeley 1992). Baddeley (2000) adds yet another system (episodic buffer) which essentially provides temporary storage and is able to bind information together from different sources. Working memory is a limited capacity system which has been measured, inter alia, by span tasks in which participants are required to process a sentence and recall and repeat a series of words or numbers following a set of sentences or string of numbers. The number of items that the participant can accurately recall is taken as the measure of phonological short-term working memory.

Most measures of working memory use a dual-task format combining some memory measure with a processing measure. A common measure is a reading span task (cf. Daneman and Carpenter 1980; Waters and Caplan 1996) that, unlike earlier word and digit span tasks, correlates highly with reading comprehension. In a reading span task, participants have to store information (recall the last word of each sentence) and process information (state whether the sentence was plausible or implausible). By having readers recall the last word from each sentence in sets of increasing numbers of groups of sentences, and state whether each sentence is plausible or implausible, reading span tasks are able to tap into the dual processes of working memory. This trade-off between storing and processing information in working memory results in individual differences in reading comprehension. Reading span tasks have been used widely in L2 working memory studies because inherent to the task is a means to determine if participants are on task and are processing the sentence, rather than merely rehearsing the last word of each sentence for later recall (Long and Prat 2002; Mackey et al. 2002; Juffs 2004; Roberts et al. 2007; Gass and Lee 2011).

The fact of individual variation in second language learning is not new or controversial (Dörnyei 2005). Given that working memory is an important source of individual variation, it seems likely that an understanding of the role of working

memory will lead to an understanding of the nature of learning in general and aptitude, in particular (Miyake and Friedman 1998; Ellis 2001; Skehan 2002). For example, phonological short term memory capacity has been linked to a number of areas of second language learning, most specifically vocabulary and syntax (Papagno and Vallar 1992; Service and Craik 1993; Service and Kohonen 1995; Ellis and Schmidt 1997; Williams and Lovatt 2003 [learning an artificial language]).

Within the context of interaction, the topic of this paper, a learner must notice the feedback given, determine what is relevant, and retain that information long enough to figure out the precise part of language that is being corrected. It stands to reason that those who have the capacity to do this to a greater extent are also those who are more successful at learning. Why some learners are able to focus attention on certain parts of an interaction better than others may be related to their ability to regulate their focus of attention.

Only a few studies have addressed the issue of working memory as it relates to second language learning in the context of interaction. Philp (2003) did not measure working memory capacity directly; however, she does point the way to this area of research. In a study of noticing during interaction, Philp suggested that attentional resources may be at the base of understanding when learners notice differences between their own utterances and those of the target language. In a computer-based study of feedback, Sagarra (2007a), found that working memory capacity predicted learners' ability to benefit from recasts. Sagarra (2007b) found that redundant grammatical information is not processed by low proficiency L2 learners with low working memory capacity (English as an L1; Spanish as an L2).

An important study in this area is one by Mackey et al. (2002) who investigated the relationship of individual differences in verbal working memory, noticing of interactional feedback, and the L2 development of English question formation. In their study, learners (L1 Japanese, L2 English) with lower working memory capacity benefitted immediately from interaction, but the results did not persist on a delayed post test (two weeks after the treatment). On the other hand, those with higher working memory capacity demonstrated more lasting benefits from communicative interaction, as demonstrated in the delayed posttest. One explanation is that learners with higher working memory capacities may better engage in cognitive comparisons between target language forms and their own versions of the forms, impacting processing loads and immediate performance. As Mackey et al. note, "those with high WM took longer to consolidate and make sense of the feedback given them, reflecting change only after an interval" (2002, p. 204). They further argue that perhaps those with high WM capacity were able to take in more data and therefore had more to process and consolidate. Learners with lower working memory capacities, in contrast, may be better equipped to engage in immediate modifications to output, at a potential longer-term cost to comparison, storage, and subsequent retrieval mechanisms. In other words, they could not 'hold on' to the data for any great length of time and, in fact, may not have been engaged in cognitive comparisons (see also Mackey et al. 2010). One could imagine, then, that the emphasis for high-working memory capacity individuals may be on processing, whereas, the emphasis for low-working memory capacity individuals may be on storage.

Directly related to the contents of the current study is one by Mackey et al. (2010) who considered the relationship between modified output and working memory capacity. The database for their study consisted of 42 college-level English speaking learners of Spanish (4th semester). Learners participated in interactive, task-based activities and took a verbal working memory span test. Their results lend credence to the idea of a positive relationship between the production of modified output and working memory capacity. This differs from the Mackey et al. (2002) study in that in the former, they were dealing with learning and delayed learning and in the 2010 study the authors were examining the relationship between WM capacity and production.

As Gass (1997) has pointed out, second language learners are exposed to more input than they can process and thus must have a mechanism that enables them to sort through that input to determine what is (momentarily) relevant and what is not. Working memory capacity may be one such mechanism; a related construct, inhibitory control, may be another. It is to this latter that we turn next.

4 Inhibition

Inhibition refers to the ability to block out interfering stimuli and focus on the task at hand. Inhibition has been measured most frequently[1] using the Stroop test (Stroop 1935), in which participants state the color of the ink/font that a particular word or symbol is written in. This task is made more difficult (or more distracting) by showing the participant a color word (e.g. 'green') written in a color of ink that is incongruent with the word that the participant reads (e.g. the word 'green' written in red ink). The participant must be able to inhibit the distracting semantic stimulus of the lexical item 'green' in order to correctly state that the color of the ink is red. Within this paradigm, reaction times to such incongruent items are longer than reaction times to congruent items (e.g. 'green' written in green ink) or to neutral items (e.g. a symbol such as @ written in red ink).

As Kane and Engle (2003, p. 48) note, "[t]he Stroop task is a mainstay of research concerning selective attention and the external versus executive control of behavior". A number of studies have been conducted using Stroop interference, as a measure of inhibition, in the L2 literature. Zied et al. (2004) demonstrated that older French–Arabic bilinguals have slower reaction times on the Stroop test than younger bilinguals particularly when responding in their nondominant language. Within-language interference is generally stronger than between-language interference, but both within- and between-language interference are found consistently (Chen and Ho 1986; Sumiya and Healy 2004).

[1] We do not mean to imply that the Stroop test is the only measure of inhibition. It is the one we focus on in this study given its prevalence in the literature. Others, such as the cocktail party effect were deemed inappropriate for our level of learner despite the fact that the stimuli are generally quite short.

Lexical access is another area studied through the use of the Stroop test. Brauer (1998) found that low-proficiency level learners access words in the L2 via words in the L1, whereas for more proficient speakers, access via the L1 depended on the similarity of the two languages: access via the L1 was found when languages were similar (e.g. English–German), but not when they were dissimilar (e.g., English–Chinese). La Heij et al. (1990) found that semantically related words resulted in interference but words that were orthographically related to the translation were facilitative. Miller and Kroll (2002) first replicated the La Heij et al. study with Spanish/English bilinguals and then changed the locus of similarity to the L2, that is, providing the distractor in the input language (L2) rather than the language to be translated into. They found that there was little effect of the distractor words in the translation. Finally, Goldfarb and Tzelgov (2007) using a Stroop task with Hebrew learners of English argued that words in the L1 cannot be suppressed or even minimized.

To our knowledge, no studies have been conducted using Stroop interference as a measure related to learning through an interactive task. As noted above, Stroop measures are a way of determining a learner's ability to suppress irrelevant information and focus only on what is relevant. This skill is precisely what is needed in an interactive context.

5 Working Memory and Inhibition

The relationship between working memory and inhibitory control has been established in a range of studies. In general, individuals operating in their L1 who have high working memory capacity are reported to have greater inhibitory control than those with low working memory capacity, as determined through inhibition tasks (Kane and Engle 2003 [goal maintenance][2]; Chiappe and Chiappe 2007 [metaphor interpretation]).

Long and Prat (2002) also found that individual differences in working memory capacity are related to individual differences in inhibition as measured by the Stroop test. Individuals with high working memory capacity as measured through a reading span task demonstrated less interference on the Stroop test when the proportion of incongruent trials was relatively high. Long and Prat interpreted this to mean that high-capacity individuals developed a suppression strategy for inhibiting the distracting stimuli when the incongruent trials were frequent whereas low-capacity individuals showed high levels of interference regardless of whether the incongruent trials were frequent or not.

[2] In two of the five tasks, results differed, but these were tasks in which there were no or few congruent trials. The tasks in the present study included both congruent and incongruent trials and were, therefore, similar to the three tasks that showed that high working memory individuals had better inhibitory control.

Gass and Lee (2011) found that L2 learners of Spanish displayed a negative correlation between L2 Stroop test inhibition scores and L1 reading span working memory capacity scores just as L1 speakers do. In other words, those with high WM scores are better able to inhibit interfering information. Most interestingly, this negative correlation was stronger with more proficient learners (third year Spanish learners) than with less proficient learners (first year Spanish learners), leading them to conclude that proficiency in the L2 plays an important part in the L2 inhibition-working memory capacity relationship.

Thus, it appears that a relationship exists between working memory capacity and inhibitory control such that those with higher working memory scores are better able to inhibit interfering stimuli.

6 Current Study

What is it that accounts for the differential learning effects from interaction? This study considers the relationship between individual differences in: (a) the ability to suppress interfering information and (b) working memory capacity, on the one hand, and L2 developmental gains from conversational interaction, on the other.

As noted above, research has shown that those with higher working memory capacity are better able to inhibit irrelevant information. It is proposed in the current study that those with higher working memory capacity (and those who show fewer interfering effects) are better able to learn from corrective feedback stemming from the conversational interaction. This is so because conversational interaction involves dealing with numerous linguistic stimuli and because feedback on errors involves focusing on the particular errors corrected and ignoring other linguistic stimuli. To do this successfully requires holding the interlocutors' feedback in memory, matching it against one's own interlanguage, and ignoring other stimuli.

The following research questions guided this study:

1. Is learners' working memory capacity as measured by an L1 reading span task related to their ability to learn from conversational interaction?
   Given previous literature that suggests a relationship between working memory capacity and L2 acquisition, we predict a positive relationship.
2. Is learners' ability to suppress interfering information in the L1 and the L2 as measured in the Stroop test related to their ability to learn from conversational interaction?

We predict a positive relationship between an interference measure and L2 learning. We further predict that, as a more direct measure of attentional focus, the relationship will be stronger than the relationship between working memory and learning.

7 Method

7.1 Participants

The participants in this study were 29 university students studying second ($n = 25$) or third ($n = 4$) year Italian at a large Midwestern university in the United States. There were 22 females and 7 males, and their ages ranged between 18 and 22 years. Participants were paid $20 for their time.

All but one of the original learners were native speakers of English. The one NNS of English (a Romanian, in her second year) was removed from the data set before analysis in order to avoid any effects from having the target structure (grammatical gender agreement) in the native language. A second participant was eliminated given that he only had two responses on the posttest. Thus, we were left with 27 participants (21 females and 6 males).

7.2 Target Structure: Agreement

Italian marks both gender (masculine or feminine) and number on adjectives that modify nouns. Most singular masculine nouns end in '-o', most singular feminine nouns end in '-a', most plural masculine nouns end in '-i', and most plural feminine nouns end in '-e'. Some nouns end in '-e' in the singular and '-i' in the plural, and may be either masculine or plural (Bates et al. 1996). Adjectives in Italian generally mark agreement by ending in '-o' (for masculine singular nouns), '-a' (for feminine singular nouns), '-i' (for masculine plural nouns), and '-e' (for feminine plural nouns).[3]

gatto nero
$\text{cat}_{\text{masc.sing.}}$ $\text{black}_{\text{masc.sing.}}$
'black cat'
gatti neri

[3] Some adjectives in Italian have only two forms: The '-e' ending for singular (with both masculine and feminine nouns) and the '-i' ending for plural (with both masculine and feminine nouns).

gatto verde
$\text{cat}_{\text{masc.sing.}}$ $\text{green}_{\text{sing.}}$
'green cat'
gatti verdi
$\text{cat}_{\text{masc.pl.}}$ $\text{green}_{\text{pl.}}$
'green cats'
stella verde
$\text{star}_{\text{fem.sing.}}$ $\text{green}_{\text{sing.}}$
'green star'
stelle verdi
$\text{star}_{\text{fem.pl.}}$ $\text{green}_{\text{pl.}}$
'green stars'

$cat_{masc.pl.}$ $black_{masc.pl.}$
'black cats'
stella rossa
$star_{fem.sing.}$ $red_{fem.sing.}$
'red star'
stelle rosse
$star_{fem.pl.}$ $red_{fem.pl.}$
'red stars'

7.3 Materials

7.3.1 Treatment

The pretest consisted of 35 pairs of picture cards (Card A and Card B). Both cards in each pair contained a picture that represented the same object with different modifiers thereby forcing the participant to mark agreement in gender and number. For example, in one pair Card A contained a yellow star and Card B contained a red star. Each card contained the name of the object written on the back without an article and in the singular form (e.g. 'stella'—'star' in the example just mentioned). We selected words that we felt would be known by the participants at this level of proficiency. However, if the participant was unable to remember how to say the word in Italian, he/she could refer to the back of the card.

The materials used in the treatment (adapted from Leeman 2003) consisted of two copies of two different posters: (a) a scene of a courtyard behind a house and (b) a scene of a living room. A researcher and the participant each had a copy of each poster. These two scenes were used for an interactive picture description task, and the order in which they were used was randomized (i.e. half of the learners received first the courtyard scene and then the living room scene, whereas the other half of the learners received first the living room scene and then the courtyard scene).

The posttest materials consisted of a poster of a living room scene created with Adobe Photoshop CS on an Imac G5 computer. Throughout the living room scene, there were 26 objects to be described with a noun–adjective combination in Italian with two of each object that differed in some way (e.g. a girl with long hair ['capelli lunghi', $hair_{pl.masc.}$ $long_{pl.masc.}$] and a girl with short hair ['capelli corti', $hair_{pl.masc.}$ $short_{pl.masc.}$]).

7.3.2 Stroop Test

The Stroop test used in this study was created using E-Prime 1.0 and was carried out on a Dell PC. The actual test consisted of an L1 test with color words written in English and of an L2 test with color words written in Italian. The words used

in the L1 test were 'red', 'green', and 'blue'; the words used in the L2 test were 'rosso' ('red'), 'verde' ('green'), and 'azzurro' ('blue'). The L1 test and the L2 test each consisted of 87 items: 15 neutral items (@@@@), 36 congruent items in which the color word written on the screen was the same color as the ink/font that the participant had to name (e.g. 'red' written in a red font), and 36 incongruent items in which the color word written on the screen was different from the color of the font that the participant had to name (e.g. 'red' written in a green font). The number key pad on the keyboard was modified for this test. The "1" key was covered with green tape, the "2" key was covered with red tape, and the "3" key was covered with blue tape. Prior to the experiment, six examples were provided. The practice session used six color words (as opposed to the @ symbol); three were congruent and three incongruent. The actual experiment started with the neutral items which were followed by congruent and incongruent items appearing in a randomized fashion. Each item remained on the screen until the learner chose the font color by pressing the appropriate key on the keyboard; items timed out after a maximum of 3000 ms.

7.3.3 Working Memory Task

We used a reading span task to measure working memory capacity. Participants were presented with blocks of 2, 3, 4, and 5 unrelated sentences, originally from the Attention and Working Memory Lab at Georgia Institute of Technology (see Conway et al. 2005). The sentences were followed by a letter.

There were two parts to the task. First, to promote processing, participants had to judge the plausibility of the sentences presented. Each sentence had phrases and clauses at the end so that in cases of implausible sentences, implausibility did not occur until the final two words (see Service et al. 2002). In this way, participants could not determine plausibility early which would have shifted attention away from the processing part of the task.[4] Plausibility was indicated by pushing "No" (the N key) for sentences judged implausible (e.g. 'After final exams are over, we'll take a well-deserved banana') and "Yes" (the Y key) for sentences judged to be plausible (e.g. 'Jim was so tired of studying, he could not read another page').

After giving a plausibility judgment, a letter[5] appeared. Letters were selected pseudo-randomly to avoid phonological similarities among letters within a set. The letters used were monosyllabic letters (cf. La Pointe and Engle 1990). In each set no letters were repeated.

To begin, a fixation cross appeared and remained on the screen for 1000 ms. Next, a sentence of the set appeared on the computer screen and remained on

[4] Plausibility determinations were verified with a pilot test of ten native-English speaking university students who responded to each sentence on a 5-point Likert-scale, where 1 = completely plausible and 5 = completely implausible. The cut-off point for inclusion of sentences was an average rating of <1.8 for plausible sentences and >4.2 for implausible test sentences.

[5] Following the work of Kane et al. (2004), letters were used rather than words as had been done in numerous studies (see also Conway et al. 2005).

the screen until participants indicated plausibility. A letter then appeared which remained on the screen for 2000 ms. The cycle started again with a fixation point. After all the sentences and letters of a set had been presented, a screen appeared which instructed participants to write the letters that they had seen.

Like the Stroop test, the reading span task was created on E-Prime 1.0, and was administered to participants on a Dell PC. The task consisted of 28 English sentences of between 13 and 20 syllables each. All sentences were active sentences and each was between 9 and 16 words (the average number of words in the sentences was 12.36). The sentences were organized into two blocks each of 2, 3, 4, and 5 sentences (2 X 2, 2 X 3, 2 X 4, 2 X 5) for a total of eight blocks (28 sentences). Blocks were randomized. Each sentence appeared on the screen until the participant made a plausibility judgment (if no judgment was made, the sentence disappeared from the screen after 6000 ms).

7.3.4 Procedure

Learners first completed a short biographical questionnaire that asked for basic information on age, gender, native language, and Italian language background before beginning the experimental portion of the study. All participants performed individually all parts including the interactive tasks, the WM task, and both the L1 and L2 Stroop tests. Table 1 describes the design of the study.

7.3.5 Treatment

There were three parts to the interaction part of the study: a pretest, treatment, and posttest. In the first part, learners participated in a picture description task (pretest) using pairs of pictures printed on index cards. The learner was instructed to tell the researcher how the two cards in each pair differed. The researcher did not give any feedback on learners' errors during this pretest. In the following part (treatment), learners took part in an object placement task in which they received corrective feedback from the researcher on gender and number agreement as well as pronunciation and semantics. The researcher and participant were separated by a 15 by 20 inch divider so that they could not see each other's poster. The participant placed small, cut-out objects in different parts of the living room and the courtyard.

Table 1 Procedure

Part 1	Part 2	Part 3	Part 4
Pretest	Treatment	Posttest	Stroop Test
Picture description pairs (10 min)	Object placement task with feedback from the researcher (25 min)	Picture description task (10 min)	Inhibition measure (10 min) Reading span test Working memory measure (15 min)

While placing the objects, the participant told the researcher in Italian what went where so that the researcher placed the objects in the same position on her own poster. Each object had a "match" that was different in some way, so that the participant would have to use a noun–adjective combination in Italian (on which gender and number agreement had to be marked) in order to specify to which of the two objects he/she was referring, for example, 'gatto giallo' [$cat_{sing.masc.}$ $yellow_{sing.masc.}$] and 'gatto piccolo' [$cat_{sing.masc.}$ $small_{sing.masc.}$]).

In the third part (the posttest), learners had a task that was similar to the pretest in content (in that the same nouns and adjectives that had appeared in the pretest were used), but different in design. Learners described a poster on which various objects were scattered around a living room scene. They had to use number and gender agreement to differentiate similar items on the poster (e.g. 'mela rossa' ['red apple'] and 'mele gialle' ['yellow apples']). They were already familiar with the objects as they had received feedback on them during the treatment phase. All three parts were tape recorded and transcribed. The interaction part of the study (including pretest, treatment, and posttest) took approximately 45 min.

7.3.6 Stroop Test

In the Stroop tests (English and Italian), participants saw words on the computer screen and determined what color the word was written in, pressing the appropriate key on the keyboard. While choosing the order, the common way of organizing these three letters ('red', 'green', 'blue') was avoided to prevent familiarity interference. The participants were instructed to press the corresponding key in relation to the color of the font that the word appeared in as quickly and accurately as possible. The participants first received six practice items before completing the L1 test (English) followed by the L2 test (Italian). The Stroop tests took approximately 10 min.

7.3.7 Working Memory Task

The reading span test was conducted only in English following research that showed that a working memory task in the second language at this level of proficiency is not a good indicator of working memory capacity (Gass and Lee 2011) and in line with research in cognitive psychology (e.g. Kane et al. 2004) that suggests a domain general function for working memory and in L2 research that suggests a language-independent function of working memory (Osaka and Osaka 1992; Trofimovich et al. 2007; Mackey et al. 2010). Participants saw blocks of sentences, each sentence of which was followed by a letter. After each sentence, they responded as to the plausibility of that sentence by pressing the "Y" and "N" keys to accept or reject them. At the end of each block they were asked by the researcher to recall all the letters that appeared in that block. They did not use pencil and paper, but said the letters orally; their responses were recorded on a digital

voice recorder and were noted by the researcher. The working memory test took approximately 10 min.

7.4 Analysis

7.4.1 Treatment

The pretest and posttest items were coded according to whether or not participants correctly marked gender agreement between the noun and adjective of each phrase.[6] One point was given for each adjective that was marked with both the correct gender and number. Half a point was given for descriptions that marked the correct number but the wrong gender and for descriptions that marked the correct gender but the wrong number. Half a point was also given for each description in which the participant started to use the incorrect form of the adjective and then corrected him/herself (e.g. gatto$_{masc.sing.}$ piccola$_{fem.sing.}$ piccolo$_{masc.sing.}$, 'small cat'). Descriptions in which the participant self-corrected where the original was correct but the so-called corrected form was incorrect (e.g. stella$_{fem.sing.}$ rossa$_{fem.sing.}$ stella rosso$_{masc.sing.}$, 'red star') received 0.25 points.

In the pretest, there were 32 target items. The number of correct noun–adjective combinations produced by the participant made up the raw pretest score. This score was divided by the number of total noun–adjective combinations produced by the learner to reach an average value representing the learner's pretest performance. The same procedure was used for posttest scores. In order to investigate learners' ability to gain from the conversational interaction, their gain scores were calculated by subtracting pretest scores from posttest scores.

7.4.2 Reading Span

Plausibility judgments were used as a means to engage the learners in processing. Our scoring procedure, partial-credit load scoring (Conway et al. 2005), consists of giving credit for each correct letter in a set regardless of the order of the recalled letters. However, it also includes a zero score when an incorrect plausibility judgment was given. This latter compensated for the fact that some of our participants did not reach the 85 % plausibility criterion recommended by Conway et al. Thus, the total number of points for any individual is 28 (2 blocks of 2 sentences = 4; 2 blocks of 3 sentences = 6; 2 blocks of 4 sentences = 8; 2 blocks of 5 sentences = 10).

[6] Gender and number marked on determiners ('il/la', 'un/una', 'questo/questo' ['this']) were not included in this analysis.

7.4.3 Stroop Test

The data from the Stroop tests were prepared in the following way. The entire first neutral trial was eliminated due to the anomalous nature of the responses. Because we had used real words and not the @ sign on the practice session, participants were apparently 'surprised' by the symbol on the first neutral trial and reacted more slowly than they did in subsequent trials. The means and standard deviations for congruent, neutral, and incongruent items were then calculated for each participant. Any individual response times to items that were more than two standard deviations above or below a participant's mean for that type of item were trimmed to the cutoff value.

We followed the standard method for scoring Stroop tests, namely by operationalizing inhibition as the reaction time of the incongruent trials minus the reaction time of the neutral trials (MacLeod 1991; Kane and Engle 2003). Essentially, the baseline is the reaction time on neutral trials with deviation (reaction time on incongruent trials) being a measure of inhibition. Some individuals had very high standard deviations suggesting responses that most likely involved no processing (standard deviations below the mean) or that they were not on task (standard deviations above the mean). To minimize these possibilities, we eliminated individuals whose average responses were ± 1 standard deviation from the mean; this left us with 20 in the L1 condition and 18 in the L2 condition.

7.4.4 Validation

Before beginning our analysis, we wanted to ensure that the data we obtained were similar to data one would find with native speakers. Kane and Engle (2003) found that high span individuals (i.e. those with higher working memory capacity) were better able to ignore the word information on a Stroop test than lower span individuals. Our results showed the same relationship with the L2 Stroop scores and working memory capacity. A bivariate correlation analysis shows a significant negative correlation between one's working memory score and their L2 Stroop score ($r = -0.439$, $p < 0.01$). Before beginning our analysis, we also determined that there was a relationship between L1 and L2 Stroop scores to ensure that both versions of the Stroop were tapping the same construct. The correlation was 0.58, $p < 0.01$.

8 Results

In order to address our research questions, we first divided our participants into two groups: those who exhibited high gains and those who exhibited low gains following the treatment. We did this by taking the average of all gain scores (0.06) and considered all of the participants above the mean as High Gainers (HG) and all of those below the mean as Low Gainers (LG). This gave us two groups of

14 and 13 respectively[7] with mean scores of 0.20 ($SD = 0.15$) and −0.09 ($SD = 0.13$) respectively. The range for the low gainers was −0.43 to 0.04 and the range for the high gainers was 0.06–0.61. Descriptive statistics for both groups are presented in Table 2; the two groups were significantly different, $t\ (25) = 5.40$, $p = 0.000$, $d = 0.72$.

The first research question addresses the relationship between L2 Italian learners' working memory, as measured by means of an L1 reading span task, and their ability to learn from conversational interaction, as measured by gain scores on the interaction test. We had predicted that there would be a relationship given the literature in existence to date. An independent samples *t* test revealed that there was no significant difference between HG and LG groups regarding their L1 working memory scores, $t\ (25) = 0.76$, $p = 0.227$, $d = -0.29$. These results are presented in Table 3 and Fig. 1. Thus, the first research prediction was not supported.

Our second research question seeks to determine if there is a relationship between learners' ability to learn from interaction and their ability to suppress interfering information in L1 (English) and L2 (Italian) as measured in the Stroop test. We had predicted a positive relationship between our interference measure and L2 learning. We further predicted that, as a more direct measure of attentional focus, the relationship would be stronger than the relationship between working memory and learning.

Table 2 Interaction test gain scores

Groups	N	M	SD
Low gain	13	−0.09	0.13
High gain	14	0.20	0.15

Table 3 L1 working memory scores (min = 0, max = 28)

L1 working memory	N	M	SD
Low gain group	13	19.43	4.16
High gain group	14	20.77	5.00

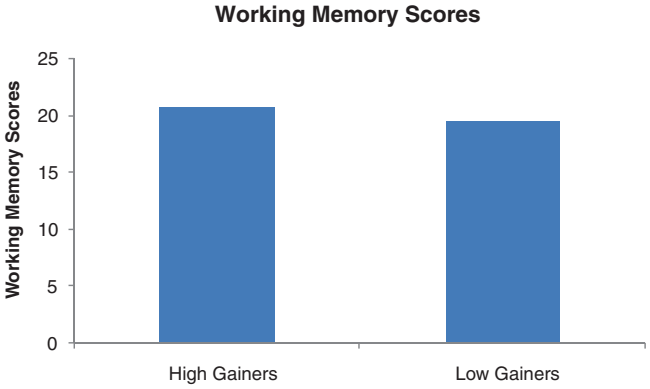

Fig. 1 Working memory scores: high and low gainers

[7] Of the four 3rd year students, two were in the HG group and two were in the LG group.

Table 4 L1 and L2 inhibition scores (the unit of inhibition is the millisecond)

Groups	L1 English			L2 Italian		
	N	M	SD	N	M	SD
Low gain	10	140.96	57.57	9	79.38	81.64
High gain	10	111.38	56.43	9	9.63	69.83

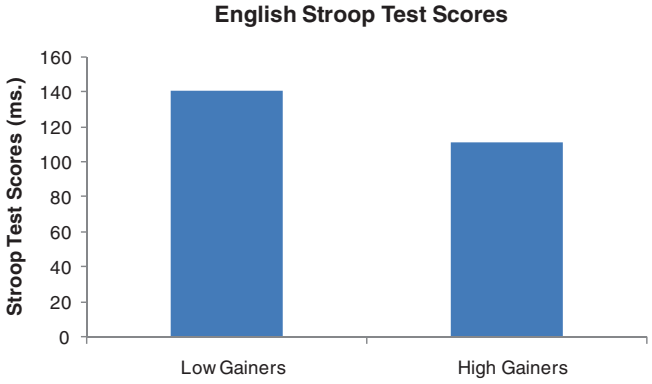

Fig. 2 English stroop scores: high and low gainers

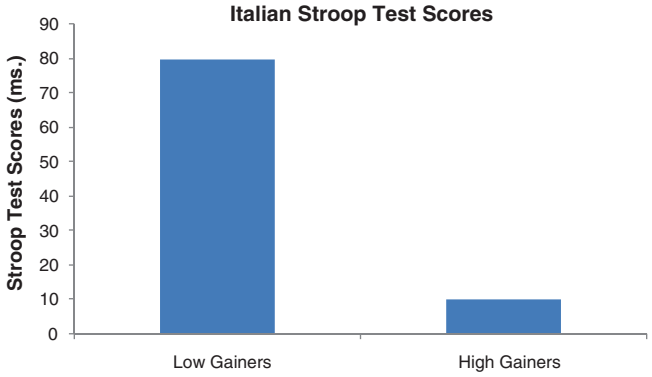

Fig. 3 Italian stroop scores: high and low gainers

In order to investigate learners' inhibitory control and their ability to learn from the conversational interaction, we grouped the learners in relation to their gain scores as noted earlier. As mentioned earlier, to eliminate to the extent possible the possibility that learners were not on task, we calculated the average score across trials for each participant. We then removed each participant on each test whose average was above or below 1 standard deviation from the mean. We felt that this gave us a conservative value that reflected those participants who were on task. This left us with 10 participants in each group for the L1 Stroop analysis and nine

participants in each group for the L2 Stroop analysis. The results are shown in Table 4 and Figs. 2 and 3. For both languages, the difference is in the direction of a higher score (less inhibitory control) for the LG groups. An independent *t*-test yielded significant differences in the L2 inhibition test, $t\ (16) = 1.95$, $p = 0.034$, $d = 0.92$. However, the difference in the L1 inhibition test was not statistically significant, $t\ (18) = 1.16$, $p = 0.13$, $d = 0.52$.

Therefore, in response to this research question, we can conclude that there is a relationship between learners' inhibitory control in L2 Italian, and their ability to learn from conversational interaction. In the L1 English inhibition test, HG and LG groups do not differ from each other and the prediction is not supported. Because there was no difference in the working memory scores between the two groups, the prediction suggesting a stronger relationship between inhibitory control and learning than between working memory and learning is supported for the L2 scores.

9 Discussion

This paper investigated potential contributing factors to learning that takes place in interaction, namely, working memory and inhibitory control. To that end, we considered two groups of learners, those who learned more from interaction and those who learned less from an interactive task and then considered differences between these groups in terms of working memory (based on a reading span task) and inhibitory control (based on a Stroop test). We found no difference in working memory capacity between the two groups. However, with regard to inhibitory control, the high gainers group (those who learned more) had better inhibitory control than the low interacting group on both the English and Italian version with the Italian version being significantly different.

Responding to and utilizing information from a conversation is a complex task with numerous factors at play. Basic issues such as aptitude and motivation, although beyond the scope of this paper, undoubtedly guide learners' participation. But more germane to this study are the cognitive abilities involved with attention and memory. Central to the interaction approach is the need to notice the difference between what a native/proficient speaker of the L2 says and what a learner has said (or believes to be correct). To do this, there has to be a focus of attention and the capacity to retain information in memory long enough to make a comparison. Because so much information is at play during an interaction, the ability to suppress a certain amount of that information is necessary. And, in fact, that is precisely what this study has shown, that is, those learners who were better able to take relevant information from the interaction and integrate it into their developing language system were those who were better able to suppress information, as demonstrated on the Stroop task. This ability is, of course, not unrelated to working memory capacity, nor is it unrelated to one's ability to suppress L1 information, as was mentioned earlier. In fact, Kane and

Engle (2003) point out that both attention and memory are involved in Stroop interference. Similarly, Gass and Lee (2011) propose a model showing the interrelatedness of inhibition, proficiency, and working memory capacity. They argued that there is a bidirectional relationship between an individual's domain general working memory and his/her ability to inhibit information. The current study only considered the first and third of these and did not include proficiency as another variable.

We do not wish to underplay the role of working memory in interaction-based research because isolating information is only one part of what happens in learning. The second part, storing and then using that information to make comparisons is the next part and this, undoubtedly involves working memory capacity. Our study may not have tapped working memory capacity sufficiently since we were dealing with a relatively low-level phenomenon, gender and number agreement. With a more complex phenomenon, there might have been a stronger interplay between inhibitory abilities and working memory capacity.

A central question in interaction research is the determination of what learner characteristics are at play as they receive feedback during interaction. Learners must focus on numerous aspects of a conversation including semantics, morpho-syntax, syntax, and vocabulary. Their task is to suppress irrelevant information and focus on the source of feedback. Furthermore, they need to do this in a second language. The results of this study point to the differential ability of learners to do this. A further question relates to the development of this ability. Our study consisted of learners of an L2 who had had two or three years of language study (an equal number of third year students were in the high and low gain groups). Gass and Lee (2011) investigated different levels of proficiency of learners of Spanish (years 1 and 3) and found that for low proficiency level learners on an L2 Stroop task, there was little processing of language. In other words, learners were able to respond to color by looking only at the color and apparently bypass the word information (color names). One possibility is that our high gainers were not processing language at all, whereas the low gainers were not able to suppress the language information. This is somewhat different than an interpretation that has high gainers processing and suppressing information. If this is correct, it may mean that our high gainers were more strategic in their carrying out of the task and were able to maintain their strategy (ignore word meaning) throughout. This interpretation suggests that those individuals who were able to learn from the interaction were those who were able to be more strategic in their utilization of their L1 inhibitory capacities in their L2.

This study differs from previous L2 studies in that earlier studies typically begin by looking at two groups based on individual differences, for example, high and low working memory groups and attempt to predict interaction behavior on that basis. This study looked at actual learning and from there considered learner characteristics that might have contributed to that learning. Further, this study added the dimension of inhibitory control arguing that it is this skill in the L2 that is what is required to sort through the data in an interaction, or at least the data presented in this study.

10 Limitations and Conclusions

As mentioned above, we designed our study so that we first considered learning and from there considered learner characteristics. But beyond the design issue that differentiated our study from others, there are numerous methodological issues related to working memory tasks that need to be considered in attempting to understand L2 research involving working memory.

Recall that Mackey et al. (2002) found that those with higher working memory capacity showed greater learning on delayed posttests as opposed to those with lower working memory capacity who showed greater evidence of learning on immediate posttests, but not delayed. Our study only had immediate posttests which may have obscured potential long-term benefits.

Another limitation relates to the relatively uniform nature of working memory capacities of our participants (as is the case in many studies using similar populations). Our study was conducted with a relatively homogeneous population of students in university-based Italian classes. There was not a large amount of variation in working memory scores (most were within the 16–26 range). This may have resulted in the lack of significant difference between our two groups of learners. Using a population where the range of scores is more diverse might yield a more conclusive result, at least in terms of the relationship between working memory capacity and learning.

Related to this is the need to consider when working memory may or may not be relevant, as noted earlier. Our grammatical structure did not require much cognitive effort. In other words, we were dealing with a relatively low-level phenomenon, that of agreement. Furthermore, on the posttest, we used nouns where number and gender agreement were for the most part transparent; only three nouns did not have the transparent '-o' or '-a' ending. Of the adjectives, only four ended in '-e' for the singular and '-i' for the plural. Thus, in most cases, the noun and adjectival ending had the same form.[8] In other words, there was little cognitive manipulation required to understand and produce correct agreement. With target language items requiring greater demands on learners, results might have been different.

Other methodological issues relate to the administration and scoring of working memory tests themselves. We will only mention two such issues, although a long and thorough discussion of issues related to working memory can be found in Conway et al. (2005). Leeser and Sunderman (2009) conducted a methodology study focusing on different types of L2 working memory tests (reading span and operation span) and scoring methods. Their findings showed that an understanding of the relationship between working memory tests and sentence processing depends on the type of task involved and how one analyzes the data (including scoring procedures). Thus, it is possible that in this and other L2 studies using working memory, one might find different results depending on how one

[8] This was sometimes complicated by the fact that a participant might use a quasi-synonym to describe an object, as in 'donna grande' (big woman-in the sense of age) for 'donna vecchia' (old woman).

chooses and constructs a working memory test as well as the scoring procedures involved. Related to scoring procedures, Mackey et al. (2010) raise the interesting possibility that predictive results may differ depending on whether one considers processing results (e.g. plausibility judgments) or recall. They argue that using the former as a prerequisite for inclusion may actually obscure results. All of this suggests that using working memory tests is difficult because of the many ways of constructing and scoring them (see Leeser and Sunderman 2009). It may be for this reason that results are not stable across studies. In fact, Mackey et al. (2010, p. 523) suggest "that it might be worthwhile to take a closer look at various aspects of existing WM [working memory] tests and analyze what they are truly measuring in the context of L2 research".

Finally, it must be recognized that, despite its being the 'gold standard' (MacLeod 1992) of attentional measures, the Stroop test relies on visual input, whereas interactional tasks rely on aural stimuli. Although we encourage further research into this relationship, we also point out that Conway et al. (2001) did compare working memory (using an operational span test) and a dichotic-listening task involving the 'cocktail party' effect using participants' names and found a predictive relationship, much as is the case with the Stroop test results. Thus, the ability in the aural channel might not be that different than one's ability in the visual channel although this needs more detailed investigations to determine this relationship.

In sum, this study introduced the variable of inhibitory control into the growing body of L2 interaction-based research. We demonstrated that the ability to inhibit information in the L2 may be one contributing source of a learner's ability to learn from an interactional context. Further research into this construct and its relationship are needed, particularly those where cognitive demands on learners are greater.

References

Baddeley, A. D. 1992. Working memory. *Science* 255: 556-559.

Baddeley, A. D. 2000. The episodic buffer: A new component of working memory? *Trends in Cognitive Science* 4: 417-423.

Baddeley, A. D. and G. J. Hitch. 1974. *Working memory* (Vol. 8). New York: Academic Press.

Bates, E., A. Devescovi, A. Hernandez and L. Pizzamiglio. 1996. Gender priming in Italian. *Perception & Psychophysics* 58: 992-1004.

Brauer, M. 1998. Stroop interference in bilinguals: The role of similarity between the two languages. In *Foreign language learning: Psycholinguistic studies on training and retention*, eds. A. Healy and L. E. J. Bourne, 317-337. Mahwah, NJ: Lawrence Erlbaum.

Caplan, D., G. Waters and G. Dede. 2007. Specialized verbal working memory for language comprehension. In *Variation in working memory*, eds. A. Conway, C. Jarrold, M. Kane, A. Miyake and J. Towse, 272-302. New York: Oxford University Press.

Chen, H. and C. Ho. 1986. Development of Stroop interference in Chinese–English bilinguals. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 12: 397-401.

Chiappe, D. and P. Chiappe. 2007. The role of working memory in metaphor production and comprehension. *Journal of Memory and Language* 5: 172-188.

Conway, A., N. Cowan and M. Bunting. 2001. The cocktail party phenomenon revisted: The importance of working memory capacity. *Psychonomic Bulletin and Review* 8: 331-335.

Conway, A., M. Kane, M. Bunting, D. Hambrick, O. Wilhelm and R. Engle. 2005. Working memory span tasks: A methodological review and user's guide. *Psychonomic Bulletin & Review* 12: 769-786.

Daneman, M. and P. A. Carpenter. 1980. Individual-differences in working memory and reading. *Journal of Verbal Learning and Verbal Behavior* 19: 450-466.

De Bot, K. 1996. The psycholinguistics of the output hypothesis. *Language Learning* 46: 529-555.

Dörnyei, Z. 2005. *The psychology of the language learner: Individual differences in second language acquisition*. Mahwah, NJ: Lawrence Erlbaum.

Ellis, N. 2001. Memory for language. In *Cognition and second language instruction*, ed. P. Robinson, 33-68. Cambridge: Cambridge University Press.

Ellis, N. 2005. At the interface: Dynamic interactions of explicit and implicit language knowledge. *Studies in Second Language Acquisition* 27: 305-352.

Ellis, N. and R. Schmidt. 1997. Morphology and longer distance dependencies: Laboratory research illuminating the A in SLA. *Studies in Second Language Acquisition* 19: 145-171.

Ellis, R., S. Loewen and R. Erlam. 2006. Implicit and explicit corrective feedback and the acquisition of L2 grammar. *Studies in Second Language Acquisition* 28: 339-368.

Gass, S. 1997. *Input, interaction, and the second language learner*. Mahwah, NJ: Lawrence Erlbaum.

Gass, S. 2003. Input and interaction. In *The handbook of second language acquisition*, eds. C. Doughty and M. H. Long, 224-255. Oxford: Basil Blackwell.

Gass, S. and J. Lee. 2011. Working memory capacity, inhibitory control, and proficiency in a second language. In *Modeling bilingualism: From structure to chaos*, eds. M. Schmid and W. Lowie, 59-84. Amsterdam: John Benjamins.

Gass, S. and A. Mackey. 2006. Input, interaction and output: An overview. In *AILA Review*, eds. K. Bardovi-Harlig and Z. Dörnyei, 3-17. Amsterdam: John Benjamins.

Gass, S. and A. Mackey. 2007. Input, interaction, and output in second language acquisition. In *Theories in second language acquisition*, eds. B. VanPatten and J. Williams, 175-199. Mahwah, NJ: Lawrence Erlbaum.

Gass, S. and E. Varonis. 1994. Input, interaction, and second language production. *Studies in Second Language Acquisition* 16: 283-302.

Goldfarb, L. and J. Tzelgov. 2007. The cause of the within-language Stroop superiority effect and its implications. *The Quarterly Journal of Experimental Psychology* 60: 179-185.

Juffs, A. 2004. Representation, processing, and working memory in a second language. *Transactions of the Philological Society* 102: 199-225.

Kane, M. and R. Engle. 2003. Working-memory capacity and the control of attention: The contributions of goal neglect, response competition, and task set to Stroop interference. *Journal of Experimental Psychology: General* 132: 47-70.

Kane, M., D. Hambrick, S. Tuholski, O. Wilhelm, T. Payne and R. Engle. 2004. The generality of working memory capacity: A latent-variable approach to verbal and visuospatial memory span and reasoning. *Journal of Experimental Psychology-General* 133: 189-217.

La Heij, W., E. de Bruyn, E. Elens, R. Hartsuiker, D. Helaha and L. van Schelven. 1990. Orthographic facilitation and categorical interference in a word translation variant of the Stroop task. *Canadian Journal of Psychology* 44: 76-83.

La Pointe, L. and R. Engle. 1990. Simple and complex word spans as measures of working memory capacity. *Journal of Experimental Psychology: Learning, Memory and Cognition* 15: 1118-1133.

Leeman, J. 2003. Recasts and second language development. *Studies in Second Language Acquisition* 25: 37-63.

Leeser, M. and G. Sunderman. 2009. *Methodological issues of working memory tasks for L2 processing research*. Manuscript submitted for publication.

Long, D. and C. Prat. 2002. Working memory and Stroop interference: An individual differences investigation. *Memory & Cognition* 30: 294-301.

Long, M. H. 1980. *Input, interaction and second language acquisition*. Unpublished doctoral dissertation. University of California. Los Angeles.

Long, M. H. 1996. The role of the linguistic environment in second language acquisition. In *Handbook of language acquisition (Vol. 2): Second language acquisition*, eds. W. Ritchie and T. Bhatia, 413-468. New York, NY: Academic Press.

Long, M. H. 2007. *Problems in SLA*. Mahwah, NJ: Lawrence Erlbaum.

Lyster, R. and K. Saito. 2010. Oral feedback in classroom SLA: A metanalysis. *Studies in Second Language Acquisition* 32: 265-302.

Mackey, A. 2002. Beyond production: Learners' perceptions about interactional processes. *International Journal of Educational Research* 37: 379-394.

Mackey, A. 2007. Introduction. The role of conversational interaction in second language acquisition. In *Conversational interaction in second language acquisition: A collection of empirical studies*, ed. A. Mackey, 1-26. Oxford: Oxford University Press.

Mackey, A., R. Adams, C. Stafford and P. Winke. 2010. Exploring the relationship between modified output and working memory capacity. *Language Learning* 60: 501-533.

Mackey, A., S. Gass and K. McDonough. 2000. Learners' perceptions about feedback. *Studies in Second Language Acquisition* 22: 471-497.

Mackey, A. and J. Goo. 2007. Interaction research in SLA: A meta-analysis and research synthesis. In *Conversational interaction in second language acquisition: A collection of empirical studies*, ed. A. Mackey, 407-452. Oxford: Oxford University Press.

Mackey, A., J. Philp, T. Egi, A. Fujii and T. Tatsumi. 2002. Individual differences in working memory, noticing of interactional feedback, and L2 development. In *Individual differences and instructed language learning*. Vol. 1. *Language learning and language teaching.* Vol. 2, ed. P. Robinson, 181-209. Amsterdam: John Benjamins.

Mackey, A. and C. Polio., eds. 2008. *Multiple perspectives on interaction: Second language research in honor of Susan M. Gass*. New York: Routledge.

MacLeod, C. 1991. Half a century of research on the Stroop effect: An integrated review. *Psychological Bulletin* 109: 163-203.

MacLeod, C. 1992. The Stroop task: The "golden standard" of attentional measures. *Journal of Experimental Psychology: General* 121: 12-14.

McDonough, K. 2005. Identifying the impact of negative feedback and learners' responses on ESL question development. *Studies in Second Language Acquisition* 27: 79-103.

Miller, N. and J. Kroll. 2002. Stroop effects in bilingual translation. *Memory & Cognition* 30: 614-628.

Miyake, A. and N. Friedman. 1998. Individual differences in second language proficiency: Working memory as language aptitude. In *Foreign language learning: Psycholinguistic studies on training and retention*, eds. A. Healy and L. Bourne, 339-365. London: Lawrence Erlbaum.

Miyake, A. and P. Shah, eds. 1999. *Models of working memory: Mechanisms of active maintenance and executive control*. Cambridge: Cambridge University Press.

Nicholas, H., P. Lightbown and N. Spada. 2001. Recasts as feedback to language learners. *Language Learning* 51: 719.

Nobuyoshi, J. and R. Ellis. 1993. Focused communication tasks and second language acquisition. *English Language Teaching* 47: 203-210.

Osaka, M. and N. Osaka. 1992. Language-independent working memory as measured by Japanese and English reading span tests. *Bulletin of the Psychonomic Society* 30: 287-289.

Papagno, C. and G. Vallar. 1992. Phonological short-term memory and the learning of novel words: The effect of phonological similarity and item length. *Quarterly Journal of Experimental Psychology* 44A: 47-67.

Philp, J. 2003. Constraints on noticing the gap: Nonnative speakers' noticing of recasts in NS-NNS interaction. *Studies in Second Language Acquisition* 25: 99-126.

Roberts, L., T. Marinis, C. Felser and H. Clahsen. 2007. Antecedent priming at trace positions in children's sentence processing. *Journal of Psycholinguistic Research* 36: 175-188.

Robinson, P. 1995. Attention, memory, and the 'noticing' hypothesis. *Language Learning* 45: 283-331.

Sagarra, N. 2007a. From CALL to face-to-face interaction: The effect of computer-delivered recasts and working memory on L2 development. In *Conversational interaction in second language acquisition: A collection of empirical studies*, ed. A. Mackey, 229-248. Oxford: Oxford University Press.

Sagarra, N. 2007b. Working memory and L2 processing of redundant grammatical forms. In *Understanding second language process*, ed. Z.-H. Han, 133-147. Clevedon: Multilingual Matters.

Schmidt, R. 2001. Attention. In *Cognition and second language instruction*, ed. P. Robinson, 3-32. Cambridge, England: Cambridge University Press.

Schmidt, R. and S. Frota. 1986. Developing basic conversational ability in a second language: A case study of an adult learner of Portuguese. In *Talking to learn: Conversation in second language acquisition*, ed. R. Day, 237-326. Rowley, MA: Newbury House.

Service, E. and F. Craik. 1993. Differences between young and older adults in learning a foreign vocabulary. *Journal of Memory and Language* 32: 608-623.

Service, E. and V. Kohonen. 1995. Is the relation between phonological memory and foreign language learning accounted for by vocabulary acquisition? *Applied Psycholinguistics* 16: 155-172.

Service, E., M. Simola, O. Metsaenheimo and S. Maury. 2002. Bilingual working memory span is affected by language skill. *European Journal of Cognitive Psychology* 14: 383-407.

Skehan, P. 2002. Theorising and updating attitude. In *Individual differences and instructed language learning*, ed. P. Robinson, 69-93. Amsterdam: John Benjamins.

Spada, N. and Y. Tomita. 2010. Interactions between type of instruction and type of language feature: A meta-analysis. *Language Learning* 60: 263-308.

Stroop, J. 1935. Studies of interference in serial verbal reactions. *Journal of Experimental Psychology* 12: 643-662.

Sumiya, H. and A. Healy. 2004. Phonology in the bilingual Stroop effect. *Memory and Cognition* 32: 752-758.

Swain, M. 1985. Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In *Input in second language acquisition*, eds. S. Gass and C. Madden, 235-253. Rowley, MA: Newbury House.

Swain, M. 1995. Three functions of output in second language learning. In *Principle and practice in applied linguistics. Studies in honor of H. G. Widdowson*, eds. G. Cook and B. Seidlhofer, 125-144. Oxford: Oxford University Press.

Swain, M. 2005. The output hypothesis: Theory and research. In *Handbook of research in second language teaching and learning*, ed. E. Hinkel, 471-483. Mahwah, NJ: Lawrence Erlbaum.

Trofimovich, P., A. Ammar and E. Gatbonton. 2007. How effective are recasts? The role of attention, memory, and analytical ability. In *Conversational interaction in second language acquisition: A series of empirical studies*, ed. A. Mackey, 171-195. Oxford: Oxford University Press.

Varonis, E. and S. Gass. 1985. Non–native/non–native conversations: A model for negotiation of meaning. *Applied Linguistics* 6: 71-90.

Wagner–Gough, K. and E. Hatch. 1975. The importance of input in second language acquisition studies. *Language Learning* 25: 297-308.

Waters, G. S. and D. Caplan. 1996. The measurement of verbal working memory capacity and its relation to reading comprehension. *Quarterly Journal of Experimental Psychology: Section A* 49: 51-79.

Williams, J. and P. Lovatt. 2003. Phonological memory and rule learning. *Language Learning* 53: 67-121.

Zied, K. M., A. Phillipe, P. Karine, H.-T. Valerie, A. Ghislaine, R. Arnaud and L. G. Didier. 2004. Bilingualism and adult differences in inhibitory mechanisms: Evidence from a bilingual stroop task. *Brain and Cognition* 54: 254-256.

Second Language Learners' Processing of Idiomatic Expressions: Does Compositionality Matter?

Anna B. Cieślicka

Abstract The *Idiom Decomposition Hypothesis* (Gibbs et al. 1989) states that, depending on compositionality, i.e., the degree to which idiom components contribute to the overall figurative interpretation, idioms will differ with regard to their storage and processing. However, research results concerning processing differences between idioms varying along the dimension of compositionality are mixed and equivocal. The present paper aims to address this controversial issue by exploring the role of compositionality in the course of processing idioms by second language users. The study employed a cross-modal priming technique in which English decomposable and nondecomposable idioms were embedded in sentences (e.g. 'George wanted to *bury the hatchet* soon after Susan left') and presented auditorily via headphones to Polish fluent speakers of English. While participants were listening to the sentence, a target word related figuratively (e.g. FORGIVE) or literally (e.g. AXE) to the idiom was presented on the computer screen for a lexical decision either at the end of the idiom or before the last word of the idiom. Contrary to the predictions of the Idiom Decomposition Hypothesis (Gibbs and Nayak 1989; Gibbs et al. 1989), figurative meanings of decomposable idioms were not available faster than those of nondecomposable idioms. In addition, strong activation was found for literal meanings of idiom constituents, in line with previous L2 processing research (Kecskes 2000; Liontas 2002; Abel 2003).

1 Introduction

Acquiring competence in figurative language is a challenging aspect of the second/foreign (henceforth L2) language learning process (Gairns and Redman 1986; Lattey 1986; Alexander 1987; Zughoul 1991; Cacciari 1993; Irujo 1993; Fernando 1996;

A. B. Cieślicka (✉)
Department of Psychology and Communication, Texas A&M International University, Laredo, TX, USA
e-mail: anna.cieslicka@tamiu.edu

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Kövecses and Szabo 1996; McCarthy 1990; Moon 1998). With reference to competent native language speakers, *figurative competence* subsumes a number of skills, some of which include the ability to infer a meaning of an idiomatic expression from the analysis of its component parts, the ability to understand idiomatic expressions which have undergone syntactic and lexical variations (e.g. 'Not a single bean was spilled'), or to generate new idioms based on applying such variations to the existing ones (Levorato 1993). One would expect that the same type of linguistic awareness is required of L2 learners if they are to be described as figuratively competent in their second language. Indeed, lack of metaphorical competence has been identified as a major reason why second language learners fail to attain native-like fluency (Danesi 1992; Kecskes and Papp 2000). For example, Danesi (1992) claimed that metaphorical competence is inadequate in typical classroom language learners even after 3 or 4 years of foreign language learning and argued that it should be taught just as grammatical and communicative competence. The importance of teaching figurative language competence has been emphasized by a number of researchers (e.g. Lattey 1986; Low 1988; Yorio 1989; Kövecses and Szabo 1996; Lazar 1996; Deignan et al. 1997; Howarth 1998; Boers 2000; Littlemore 2001; Charteris-Black 2002).

One of the most frequent figurative language tropes constituting a crucial component of figurative competence are idioms (see Lazar et al. 1989; Roberts and Kreutz 1994). Traditionally, idioms have been defined as multiword phrases whose figurative meanings are not directly related to the literal meanings of their individual words (Weinreich 1969; Fraser 1970; Katz 1973; Chomsky 1980). For example, the figurative meaning of the idiom 'kick the bucket' is not in any way related to the literal meanings of its individual constituents, 'kick' and 'bucket'. Some approaches have viewed idioms as single linguistic units, stored and processed similarly to long words, with single entries in the mental lexicon. For example, Bobrow and Bell (1973) have proposed that idioms are stored in a special list of idiomatic expressions, or an idiom lexicon, which is separate from the main word lexicon. Along similar lines, Swinney and Cutler's (1979) *Lexical Representation Hypothesis* suggests that idioms are stored in the same way in which morphologically complex words are represented in the mental lexicon. Since accessing idioms does not require the semantic and syntactic processing necessary for a full linguistic analysis, familiar idioms are likely to be comprehended faster than comparable literal expressions. Similarly, the *Direct Access Model* (Gibbs 1980, 1985) suggests that the figurative meaning of an idiomatic phrase is accessed directly from the mental lexicon, well before computing the literal meaning of the expression. Literal meanings may fail to be analyzed at all, especially if the expression is highly familiar and immediately recognized as an idiom.

However, other approaches have claimed that analyzing literal meanings of idiom constituents is an essential aspect of deriving their figurative interpretation. For example, the *Configuration Hypothesis* (Cacciari and Tabossi 1988; Cacciari and Glucksberg 1991) specifically emphasizes the role of literal meanings in constructing idioms' figurative interpretations. The hypothesis postulates a distributed representation of idioms in the mental lexicon, in which idiomatic meaning is associated with a particular configuration of words. Individual words participating in

the idiomatic configuration are the same lexical items which are accessed during literal comprehension. Yet another model capitalizing on the contribution of idioms' component meanings to their overall figurative interpretation is Glucksberg's (1993) *Phrase-Induced Polysemy Model.* The model assumes that constituent words of idiom phrases acquire, through repeated use in figurative contexts, the meanings which are appropriate for the idiomatic phrases in which they occur. For example, the word 'spill' used in the idiom string 'spill the beans' has a default, context-free literal meaning ('being lost from container'), but over time it acquires the idiomatic meaning of 'reveal'. More recent hybrid idiom processing models (e.g. Cutting and Bock 1997; Titone and Connine 1999; Sprenger et al. 2006; Caillies and Butcher 2007) also share the view that idiomatic expressions are processed via the same language mechanisms as literal utterances and that meanings of idiom components are activated in the course of idiom comprehension.

Recent research into the processing of idiomatic expressions has focused on how various idiom characteristics, such as for example, how familiar they are, how predictable they are (i.e. how likely the phrase would be completed idiomatically upon presenting the language user with the first few words of the idiom), or whether they have a plausible literal interpretation (e.g. 'have cold feet', which can denote both the idiomatic meaning of being afraid and the literal meaning of someone's feet being cold versus 'go bananas', which can only be interpreted figuratively) influence their comprehension. The idiom characteristic which has received most attention and sparked much debate in the recent literature is idiom *compositionality*, or *semantic analyzability,* referring to the extent to which idiom constituents contribute to their overall interpretation (cf. Nunberg 1978; Glucksberg 1991; Gibbs 1994). Gibbs et al. have suggested that idioms varying in their compositionality will be stored and processed differently in the mental lexicon, the view known as the *Idiom Decomposition Hypothesis* (Gibbs and Nayak 1989; Gibbs et al. 1989). Gibbs et al. (1989) further proposed that idioms can be classified into three categories of compositionality, namely, *normally decomposable, abnormally decomposable,* and *nondecomposable*. In normally decomposable idiomatic expressions there is a one-to-one semantic relationship between the idiom's words and components of the idiom's meaning, such that idiom constituents share the same semantic fields as their corresponding idiomatic referents. For example, the individual components of 'pop the question' can be viewed as belonging to the same semantic field, or conceptual domain, as their figurative referents 'propose' and 'marriage'. In turn, in *abnormally decomposable* idioms, the referents of the idiom's parts can only be identified metaphorically, as in the idiom 'hit the panic button' in which the act of hitting certain buttons is understood as a conventional metaphor for how people react in extreme circumstances. Similarly, in the idiomatic phrase 'spill the beans', the noun 'beans' relates to the concept of 'secret' only indirectly and metaphorically. Finally, the *semantically nondecomposable* category includes idioms whose figurative meaning cannot be compositionally derived from the words that comprise the string, such as 'chew the fat' or 'kick the bucket', whose individual constituents cannot be viewed as sharing the same semantic domain as their idiomatic definitions 'to talk without purpose' and 'to die'.

The Idiom Decomposition Hypothesis (IDH) further claims that language users normally perform a compositional analysis on idiom constituents in the course of deriving the idiom's figurative meaning. A phrase classification task (reading idiomatic phrases and deciding if they were meaningful in English) conducted by Gibbs et al. (1989) showed that participants took significantly more time to respond to nondecomposable idioms than to decomposable ones. Gibbs et al. suggested that since for decomposable idioms, meanings of individual constituents directly correspond to idioms' figurative senses, compositional analysis of these idioms yields an accurate idiomatic interpretation and facilitates fast recognition. On the other hand, for nondecomposable idioms such a compositional analysis fails to facilitate retrieval of an idiom's figurative interpretation. Since people find it difficult to assign independent meanings to these idioms' individual constituents, they must recover their directly stipulated meanings from the lexicon, which slows down processing.

Subsequent research has found mixed support for the IDH. For example, Titone and Connine (1999) conducted an eye tracking study with idioms varying along compositionality and embedded in sentence contexts biasing either their figurative or literal meanings. The biasing context disambiguating an idiom's interpretation either preceded the idiom (e.g. 'After being ill for months, she finally *kicked the bucket*'), or followed the idiom ('She finally *kicked the bucket*, after being ill for months'). While decomposable idioms were processed comparably quickly in both context-preceding and context-following literal and figurative-biased sentences, nondecomposable idioms were read more slowly when context preceded the idiom. Those results support the IDH by suggesting that it takes longer to read a nondecomposable idiom and integrate its meaning with the preceding context, because such an idiom has non-overlapping idiomatic and literal meanings which compete for selection and incur an extra processing cost. On the other hand, decomposable idioms allow for quick selection of a contextually appropriate meaning, because both meanings—literal and idiomatic—are semantically related. More recently, Caillies and Butcher (2007) presented participants with ambiguous (literally plausible) decomposable and nondecomposable idioms embedded in a neutral context and asked them to make a lexical decision (i.e. decide if a string is a word) on targets related to the figurative meaning of the idiom. The results provided support for the IDH by showing that figurative meanings of decomposable idioms were available sooner than those of nondecomposable ones.

However, the suggestion that decomposable and nondecomposable idioms are processed differently has been challenged by a number of recent studies, which failed to find support for the Idiom Decomposition Hypothesis. In a series of error-elicitation experiments, Cutting and Bock (1997) found no difference between the number of errors elicited by decomposable and nondecomposable idioms. Participants in the study were briefly presented with two idioms and then cued to produce one or the other under time pressure. If nondecomposable idioms are lexicalized, i.e. stored as single units and retrieved holistically, as the IDH would suggest, then such idioms should be less susceptible to the production of idiom blends (e.g. 'shoot the fat' produced after the presentation of 'shoot the breeze—chew the fat') in the error elicitation task than decomposable idioms. A comparable proportion of idiom blends

following decomposable and nondecomposable idioms was obtained in the study, which led the authors to suggest that both idiom types are stored and processed identically (see also Sprenger et al. 2006). A similar conclusion was offered by Tabossi et al. (2008) who ran an idiom compositionality rating task and found that people's intuitions about compositionality of idioms were consistent only for a very restricted set of idiomatic expressions. Despite following the original idiom decomposability rating conducted by Gibbs and Nayak (1989), the study showed that the proportion of agreement among the participants in the classification of idioms into decomposable and nondecomposable was close to chance. Tabossi et al. (2008) concluded that compositionality does not affect idiom processing and that the psychological status of decomposable and nondecomposable idioms is identical. These controversial findings concerning the role of compositionality in idiom processing have motivated the research described in the present paper, which is an attempt to investigate whether idiom compositionality affects second language learners' idiom processing. Additional motivation for the current study was paucity of research into the comprehension of idioms by L2 learners during on-line figurative language processing.

2 L2 Idiom Processing

While numerous studies have explored the processing of idioms by monolingual language users, surprisingly little psycholinguistic research has been undertaken into the acquisition and processing of idiomatic expressions by second language learners and on-line aspects of L2 idiom comprehension. Gibbs (1995) suggested that second language learners learn idioms in a rote manner, by establishing arbitrary links between idiom forms and their figurative meanings. Agreeing with the idea that idioms must be memorized like other forms of fixed expressions, Glucksberg (2001) emphasized cultural-specific knowledge involved in learning idioms. Other researchers have focused on the role of proficiency in determining figurative language processing strategies employed by less and more advanced language learners (e.g. Matlock and Heredia 2002).

A number of studies have shown that literal analysis of L2 idioms plays a particularly important role in retrieving their figurative interpretation. For example, Liontas (2002) argued that lexical access of individual words is an obligatory step in L2 idiom processing, even if an idiom is highly familiar and well-established in the mental lexicon. Similarly obligatory are syntactic, semantic, and pragmatic analyses, which take place every time an L2 idiom is comprehended, irrespective of whether the idiom is presented in isolation or embedded in a rich disambiguating context. To verify those predictions, Liontas conducted a study into the strategies employed by L2 learners when comprehending idiomatic expressions. In the study, L2 learners were presented with idioms and asked to write down their reading strategies, thought processes and image creation during the processing of each phrase. Analysis of participants' metacognitive protocols revealed that translation was the most common strategy employed by learners to interpret idiomatic phrases, which suggests a

crucial role of a literal analysis of idiom meanings during the comprehension and interpretation of L2 idioms. Along the same lines, Kecskes (2000) suggested that L2 learners rely on literal meanings of figurative utterances and on their L1 conceptual system when producing and comprehending figurative phrases to compensate for gaps in their L2 metaphorical competence. The prominence of literal meanings of L2 idioms in the course of their processing by second language learners was recently shown in a divided visual field study by Cieślicka and Heredia (2011). In the study, L2 idioms (e.g. 'The debating president *kept an ace up his sleeve*') were presented centrally on the computer screen, one word at a time, followed by figuratively (e.g. GAIN) or literally (e.g. SHIRT) related targets presented in the right or left visual field for the lexical decision. Strong literal activation was found for L2 idioms, which provides further support for the claim that literal meanings enjoy a special status in the course of L2 idiom comprehension (see also Cieślicka 2006, 2007).

It appears from this brief overview of L2 idiom literature that L2 learners tend to rely on literal meanings of idiom constituents in the course of processing L2 idioms. Literal meanings of L2 idioms indeed appear more salient (prominent and having priority in lexical access, see the *Graded Salience Hypothesis*; Giora 1997, 1999, 2002, 2003) than figurative meanings. This literal salience strategy employed by L2 learners might carry important processing implications for idioms varying along the dimension of compositionality. Whereas for decomposable idioms, literal meanings of idiom constituents substantially contribute to the overall figurative interpretation, literal analysis of idiom parts is of no use for the processing of nondecomposable idioms. A number of studies concerning idiom compositionality have been carried out in the monolingual processing literature, but research into the role of idiom decomposability in processing L2 idioms is very limited. Abel (2003) conducted a decomposability rating study with German speakers of English. The study showed that L2 speakers tended to rate nondecomposable idioms as decomposable, in that they assigned individual constituents of noncompositional idiomatic phrases with meanings which supposedly actively contribute to the idioms' overall figurative interpretation. The role of compositionality in L2 idiom processing was also investigated by Cieślicka (2006), who asked a group of Polish advanced learners of English to paraphrase, explain, and assess the degree of semantic analyzability of a set of English idiomatic phrases. Participants' responses revealed predominantly literal-meaning-based strategies, irrespective of the degree of idiom decomposability, suggesting that L2 users routinely engage in a compositional analysis of idiom constituent words, focusing their interpretation on the literal properties of the persons, actions, or events denoted by an idiom's literal meaning.

3 Rationale and Purpose for the Present Study

Given the controversial results obtained in the monolingual literature with regard to the role of compositionality in idiom processing and scarcity of L2 idiom processing studies, the purpose of the experiment described here was to

examine the status of idiom compositionality in the course of processing idioms by second language learners. More specifically, it aimed at testing predictions of the Idiom Decomposition Hypothesis (IDH), under which decomposable idioms should be processed faster than nondecomposable ones. It employed a cross-modal lexical priming paradigm, in which visual targets are displayed on the computer screen simultaneously with the auditorily presented material. The visual targets can be either related or unrelated to the auditory input and they can be displayed at different times during the auditory presentation. In the current study, English decomposable and nondecomposable idioms were embedded in sentences (e.g. 'George wanted to *bury the hatchet* soon after Susan left') and presented auditorily via headphones. While participants were listening to the sentence, a target word related figuratively (e.g. FORGIVE) or literally (e.g. AXE) to the idiom was presented on the computer screen for a lexical decision. The word was presented either at the penultimate position, that is, at the end of the penultimate word in the idiom (e.g. after 'the' in the idiom 'bury the* hatchet') or at the offset position, i.e. at the end of the idiom (e.g. after 'hatchet' in the idiom 'bury the hatchet*'). Differences in participants' reaction times (RTs) to decide that the targets are words in each of the two possible positions were taken to reflect the state of activation of the idiomatic and literal meanings at various points during idiom processing. If, in line with predictions of the IDH, decomposable idioms are understood faster than nondecomposable ones, then more facilitation (i.e. faster recognition and shorter reaction times) should be obtained for figurative targets following decomposable idioms than nondecomposable ones.

Since some researchers have suggested that L2 learners learn idioms in a rote fashion (e.g. Gibbs 1995; Glucksberg 2001), meanings of L2 idioms could be lexicalized, that is, stored as big lexical chunks in the mental lexicon and retrieved as whole units. If this is the case then upon hearing the first few words of the idiom, the phrase could potentially be recognized as idiomatic and retrieved even before the whole of the idiom has been heard. If this scenario is true, figurative meanings of idioms could already be available and hence facilitated at the penultimate position. This was the rationale behind presenting a target at the penultimate position, in addition to having it displayed at idiom offset. In addition, given the special status of literal meanings in the course of L2 idiom processing documented in the previous literature (e.g. Kecskes 2000; Liontas 2002; Abel 2003; Cieślicka 2006, 2007), substantial activation of literally related meanings might be expected. Those possibilities have been formulated as the following research questions: (1) Will figurative meanings of decomposable idioms become available faster than those of nondecomposable idioms, i.e. will there be more priming for figurative targets displayed with decomposable than nondecomposable idioms? (2) Will any facilitation for literal or figurative targets be available already at the penultimate position? Will this vary as a function of idiom compositionality? (3) Will there be overall more facilitation for literal meanings than figurative meanings, in line with the special role of literal meanings in L2 idiom processing demonstrated earlier?

4 Method

4.1 Participants

The participants were 40 fluent Polish speakers of English (average age 23.5; range 22–25); all of them graduate students at the School of English, Adam Mickiewicz University, Poznań, Poland. They were proficient in English, as determined by a general proficiency examination which they all passed a few months prior to participating in the study and whose level corresponds to the *English Proficiency Examination*, as defined by the University of Cambridge Local Examinations Syndicate, or to Level C2 (Proficient Speaker—Mastery) within the *Common European framework of reference for languages*. All participants were dominant in Polish and they all learned English in a formal classroom setting.

4.2 Materials

The experimental materials consisted of 40 idioms, which were selected from descriptive norms for English idiomatic expressions developed by Titone and Connine (1994b). The idioms were normed on their familiarity (i.e. how well known their meaning is), literality (i.e. plausibility of their literal meaning), decomposability, and transparency (i.e. the degree to which it is possible to infer idiom's figurative meaning from its literal analysis or the mental image it evokes). The norming study was conducted with eighty fluent Polish speakers of English, whose language background and level of proficiency in English were comparable to those of the participants in the study. The instructions for familiarity rating asked participants to judge how well they know the meaning of the idiom on a scale of 1–7, where 1 = completely unfamiliar/never heard before to 7 = very well known. In the literality rating task, participants were provided with examples of idioms which have a plausible literal interpretation, such as 'sit on the fence', and idioms which could only be used figuratively, such as 'trip the light fantastic', and asked to rate the degree to which each idiom has a plausible literal meaning on a scale ranging from 1 ("having no plausible literal interpretation") to 7 ("having a very plausible literal interpretation"). The decomposability rating task instructed participants to assess the degree to which there is a one-to-one correspondence between idiom constituents and their figurative meanings in such a way that components of each idiom contribute individually to the overall figurative meaning of the idiom. An example of a semantically decomposable idiom was provided, where the word 'pop' in the idiom 'pop the question' corresponds to the figurative sense of 'utter' and the word 'question' refers to 'marriage proposal'. An example of a nondecomposable idiom was provided, in which no such systematic correspondence between idiom constituents and its figurative meaning can be identified (e.g. 'kick the bucket # die'). Participants saw each idiom paired with its

definition (e.g. 'skate on thin ice' = 'engage in risky behavior') and were asked to assess idiom decomposability on a 1–7 scale, with 1 = nondecomposable and 7 = decomposable. For the transparency rating task idioms were likewise paired with their definitions. The instructions asked participants to evaluate the degree to which it is possible to infer the figurative meaning of the idiom from a literal analysis of its component words or from the mental image that it evokes. An example of a transparent idiom, such as 'turn back the clock', was provided, where it is obvious from analyzing the idiom literally that if a person tries to turn back the clock, they want to go back in time to something that existed in the past. An example of a non-transparent (opaque) idiom was provided as well, such as 'shoot the breeze', where neither evoking a mental image nor analyzing the idiom literally could help a person unfamiliar with the idiom infer its meaning 'talk about idle things'.

Idioms selected for the experiment were all highly familiar ($M = 6.3$, range 5.7–7). Twenty decomposable idioms were selected ($M = 5.70$, range 4.9–6.8) and twenty nondecomposable idioms ($M = 1.60$, range 1.0–3.1). As is typical for decomposability and transparency ratings, which tend to overlap, decomposable idioms had high transparency ratings ($M = 5.9$, range 5.0–6.8), whereas nondecomposable idioms were all rated as opaque ($M = 1.7$, range 1.0–2.8). Literality ratings for decomposable idioms ranged from 3.4 to 5.7 ($M = 4.2$), whereas literality ratings for nondecomposable idioms ranged from 3.1 to 5.9 ($M = 4.0$). This difference was not statistically significant ($p > 0.05$).

Each idiom was then embedded in a neutral sentence, whose beginning did not make readers anticipate the upcoming idiom string (e.g. 'Sophia was hoping to *tie the knot* in the summer'). Next, for each idiom two pairs of target words were prepared, one of which was related to the figurative meaning of the idiom (e.g. MARRY) and another to the literal meaning of the last word of the idiom (e.g. ROPE). The target words were elicited in another norming task, where forty fluent Polish speakers of English were presented with a list of idioms and asked to provide a word that captures its figurative meaning (e.g. 'kick the bucket-die'), whereas another group of forty participants was asked to provide a word that was a semantic associate to the last word of the idiom (e.g. 'kick the bucket-water'). The most frequent figurative and literal responses were chosen as stimulus targets. Each literal and figurative target was paired with its control (unrelated) target, in order to obtain the baseline condition. Controls were matched on frequency, orthographic complexity, length, concreteness, and imageability with the critical targets (MRC Psycholinguistic Database). Examples of idiomatic sentences employed in the experiment, along with their figurative, literal, and control targets are presented in Table 1.

In addition to the forty idiomatic sentences, 80 nonidiomatic filler sentences were constructed. Twenty of those filler sentences were paired with word targets and the remaining 60 were paired with nonword targets. The nonword targets were orthographically legal and pronounceable and they were created by altering one or two letters of a word of a moderate frequency (e.g. SMAPS). The forty idiomatic and 80 filler sentences were recorded by a male native speaker of English and

Table 1 Example stimuli for the experiment

Idiom type	Example	Figurative target	Control	Literal target	Control
Nondecomposable	The young student *had cold feet* about giving the presentation	NERVOUS	PLEASANT	TOES	TOLL
	Kate was upset that her goldfish *kicked the bucket* since she had him a long time	DIE	LIE	WATER	WINDOW
Decomposable	She knew that she was *playing with fire* but she couldn't stop herself from secretly meeting Harry	RISK	SEAT	HEAT	SWEET
	Susanne didn't need to *waste her breath* to make excuses for her absence	SPEAK	WISH	AIR	ACT

digitized at 22.05 kHz. Subsequently, the sentences were programmed as sound files into a computer using the E-Prime (1.1) psychology software tool.

The sentences were presented auditorily over the headphones, whereas the word and nonword targets were displayed visually on the computer screen. The literal, figurative, and control targets were displayed at two positions:

(1) the penultimate position, i.e., before the last word of the idiom, e.g. 'The young student had cold * [NERVOUS] feet about giving the presentation'.
(2) the offset position, i.e., after the last word of the idiom, e.g. 'The young student had cold feet* [NERVOUS] about giving the presentation'.

Word and nonword targets for the filler sentences were displayed in such a way as to cover the entire range of positions within filler sentences (i.e. beginning, middle, and end). In order to fully counterbalance stimulus presentation, eight lists were created, such that each list contained and idiom paired with: (1) a figurative target displayed at the penultimate position (e.g. 'The young student had cold * [NERVOUS] feet about giving the presentation'), (2) its matched control displayed at the penultimate position (e.g. 'The young student had cold * [PLEASANT] feet about giving the presentation'), (3) a figurative target displayed at the offset position (e.g. 'The young student had cold feet* [NERVOUS] about giving the presentation'), (4) its matched control displayed at the offset position (e.g. 'The young student had cold feet* [PLEASANT] about giving the presentation'), (5) a literal target displayed

at the penultimate position (e.g. 'The young student had cold* [TOES] feet about giving the presentation'), (6) its matched control displayed at the penultimate position (e.g. 'The young student had cold* [TOLL] feet about giving the presentation'), (7) a literal target displayed at the offset position (e.g. 'The young student had cold feet* [TOES] about giving the presentation'), (8) its matched control displayed at the offset position (e.g. 'The young student had cold feet* [TOLL] about giving the presentation'). Each list contained 120 auditory sentences (40 idiomatic and 80 nonidiomatic filler sentences), which were paired with a set of 120 visual targets. The auditory sentences were paired with the visual targets in such a way that 40 idioms were paired with 10 figurative, 10 literal and 20 control targets (10 of which were controls for figurative and 10 controls for literal targets), counterbalanced with regard to the position of target word display (penultimate or offset), whereas 80 nonidiomatic filler sentences were paired with 20 filler word targets and 60 nonword targets. The filler sentences and their accompanying word and nonword targets were identical across lists. Thus, on any one trial each participant had a 50 % chance of seeing a word versus a nonword target and a 33 % chance of hearing an idiomatic versus a nonidiomatic filler sentence. The type of idiom factor (decomposable vs. nondecomposable), the type of target (figurative vs. literal vs. control), and the position of target display (penultimate vs. offset) were treated as within-participants factors.

4.3 Procedure

The experiment was prepared and run on *E-Prime Software* (version 1.1) in a quiet testing room. The order of trials within each list was randomized for each person. Participants were randomly assigned to one of the eight lists and run individually in sessions that lasted approximately 30 min. Instructions explained that participants would have to listen to sentences presented auditorily and would need to attend to strings of letters presented visually in order to decide, as quickly and accurately as possible, if the presented strings make up a legitimate English word. A GO/NO GO procedure was employed, in which YES decisions were made by pressing any key on the keyboard with an index finger of the dominant hand, whereas NO decisions by withholding a response. Participants were warned that a comprehension check would follow the session and encouraged to pay close attention to the auditorily presented sentences. The practice block of 10 trials was provided first, followed by further feedback and clarification. The experiment proper included two pauses, the first of which occurred after the first 60 sentences and the second after the further 30 sentences. The length of the pause was controlled by participants who could resume the experiment by pressing the space bar whenever they were ready. A 5 s interval separated the presentation of each auditory sentence. On each trial, a focusing signal (a cross) was displayed in the center of the computer screen to ensure that participants were ready for the critical target. The targets, presented in Verdana (18 points), remained on the screen for 1500 ms and their display was terminated

when participants pressed the key for the lexical decision response. A comprehension check followed the session, in which participants were presented with a list of sentences and asked to mark those sentences which they remembered hearing during the experiment. In addition, the participants were presented with a complete list of idiomatic expressions that occurred in the experiment and asked to identify those idioms that they were not familiar with. Data pertaining to the idioms not known to the participants (8 %) were subsequently removed from further analysis.

5 Results

First, performance on the comprehension test was examined. The mean of correct recognitions was 76 %, so no participant data needed to be removed due to low accuracy (the 75 % accuracy threshold was set). Error rates for each participant were next examined for evidence of a speed-accuracy trade-off. The lexical decision criterion of 85 % correct was set (cf. Titone and Connine 1994a). No participants failed to reach the 85 % threshold, with the majority reaching the rate of over 96 % of accurate responses. Analysis of the error rates reported for the three target types revealed that highly comparable error rates were obtained for literal (3.9 %), figurative (4 %), and control targets (3.95 %). Since the error rate was highly similar for all target types, no further analysis was performed on the error data. Incorrect responses were removed from further analysis. Next, reaction times exceeding two times the standard deviation from the subject means (per target type condition) were excluded from the set of valid responses. Outliers accounted for 1.6 % of all the responses and they were approximately equally distributed across conditions. A three-way Analysis of Variance was conducted, with Idiom Type (Decomposable vs. Nondecomposable), Target Type (Figurative vs. Literal vs. Control), and Position of Target Display (Penultimate vs. Offset) as within-participant variables. A modified Bonferroni procedure was used for planned comparisons, which tested the significance of lexical priming for targets accompanying decomposable and nondecomposable idioms. A main effect of Target Type was found by both participants and items, F_1 (2, 37) = 9.35, $p < 0.0001$; F_2 (2, 38) = 6.99, $p < 0.01$. In addition, there was a significant two-way interaction between Idiom Type and Target Type in both participant and item analyses; F_1 (2, 37) = 12.54, $p < 0.0001$; F_2 (2, 74) = 7.63, $p < 0.05$; and a significant three-way Idiom Type by Position by Target Type interaction; F_1 (2, 37) = 3.76, $p < 0.05$; F_2 (2, 72) = 3.60, $p < 0.05$. In addition, an item analysis revealed a significant two-way Position by Target Type interaction; F_2 (2, 74) = 5.02, $p < 0.05$. Mean Reaction Times (RTs) and priming effects, obtained by subtracting mean RT for a given target type from mean RT for its corresponding control, are summarized in Table 2.

As can be seen from Table 2, decomposable idioms elicited significant priming for literal targets at both the penultimate (the priming effect of 74 ms, $p < 0.005$) and offset positions (81 ms; $p < 0.001$). On the other hand, figurative meanings were not available yet, either at idiom offset or at the penultimate position.

Table 2 Mean RTs and priming effects (in bold) for literal and figurative targets as a function of position (penultimate and offset) and idiom type (decomposable vs. nondecomposable)

Target type	Decomposable idioms		Nondecomposable idioms	
	Penultimate	Offset	Penultimate	Offset
Literal	634 (113) **74****	639 (152) **81****	735 (190) **−37**	668 (171) **86****
Figurative	741 (215) **−33**	743 (256) **−23**	692 (154) **5**	670 (162) **84****

Standard deviations (SDs) are provided in parentheses
Note *$p < 0.05$
**$p < 0.01$; two-tailed

A different pattern of priming was obtained for nondecomposable idioms, where both figurative (the priming effect of 84 ms; $p < 0.001$) and literal meanings (86 ms; $p < 0.001$) were primed significantly, but only at the offset position. Those data are inconsistent with predictions of the Idiom Decomposition Hypothesis, under which figurative meanings of decomposable idioms should be available faster than those of nondecomposable idioms. The data also do not support results of Caillies and Butcher's (2007) study, in which figurative meanings of decomposable idioms were primed immediately at idiom offset. Lack of priming for figurative meanings of decomposable idioms at either penultimate or offset positions might be reflective of the competition between salient literal meanings of those idioms and their less salient figurative meanings. Since literal meanings of the constituents of decomposable idioms considerably overlap with their figurative senses, the activation of salient literal meanings might be very strong and might prevent any priming effects for meanings related to the figurative interpretation of the whole phrase.

In an effort to explain those disparities, a close re-analysis of the idiom stimuli was undertaken. As in Caillies and Butcher's study, the idioms were controlled for familiarity and literality. However, they varied with regard to their predictability, the dimension which was likewise not controlled for in Caillies and Butcher's experiment. Based on descriptive norms for the English idiomatic expressions (Titone and Connine 1994a), the idioms employed in the present study were labeled as high- or low-predictable. Ten of the idioms used in the study turned out to be high-predictable, in that their predictability rating was between 0.50 and 1.00 (on the scale from 0.00 to 1.00), whereas the remaining 30 were low-predictable, with ratings ranging between 0.00 and 0.25. Since all the decomposable idioms fell into the low-predictable category, it was very likely that the obtained differences between both idiom types were not so much the function of idiom decomposability, but rather resulted from their varying predictability. On this reasoning, faster availability of the figurative meanings of nondecomposable idioms might have resulted from the fact that half of those idioms were high-predictable and so their figurative meanings might have become available faster for processing. On the other hand, since all of the semantically decomposable idioms were low-predictable, their figurative meanings were not yet active at idiom offset, in line with findings from the idiom processing literature which has shown the effect of predictability on the activation of idiom's figurative meanings (see Cacciari and Tabossi 1988; Titone and Connine 1994a).

Table 3 Mean RTs and priming effects (in bold) for literal and figurative targets as a function of position (penultimate and offset) and idiom predictability (high-predictable vs. low-predictable)

Target type	High-predictable idioms		Low-predictable idioms	
	Penultimate offset		Penultimate	Offset
Literal	726 (184) **−23**	682 (135) **88****	670 (156) **32**	644 (168) **81****
Figurative	705 (139) **−2**	649 (156) **121****	719 (202) **−15**	727 (232) **−2**

Standard deviations (SDs) are provided in parentheses
Note $^{*}p < 0.05$
$^{**}p < 0.01$; two-tailed

In order to explore the effect of predictability on the activation of idiom figurative meaning, another analysis of variance was conducted, with Idiom Predictability (High-Predictable vs. Low-Predictable), Target Type (Figurative vs. Literal vs. Control), and Position of Target Display (Penultimate vs. Offset) as within-participant variables. A main effect was found for Target Type; F_1 (2, 38) = 4.94, $p < 0.01$; F_2 (2, 39) = 6.30, $p < 0.05$; by both participants and items. In addition, Position by Target Type interaction was found to be significant across participants and items; F_1 (2, 33) = 5.10, $p < 0.01$; F_2 (2, 39) = 4.79, $p < 0.05$; and the interaction between Predictability and Target Type turned out significant in the participant analysis, F_1 (2, 38) = 4.50, $p < 0.05$. Mean RTs obtained for literal and figurative targets displayed at penultimate and offset positions of high- and low-predictable idioms are summarized in Table 3.

As can be seen from Table 3, predictability had a significant impact on the availability of the idiom's figurative meaning. Whereas in low-predictable idioms, figurative meanings failed to be activated altogether, with only literal meaning facilitated at idiom offset (the priming effect of 81 ms, $p < 0.01$), high-predictable idioms elicited substantial priming for figurative targets displayed at idiom offset (121 ms, $p < 0.0001$). In addition, facilitation was found for literal targets at the offset of high-predictable idioms (88 ms, $p < 0.01$). Those results clearly point to the significance of the dimension of idiom predictability in determining the availability of idiom's figurative meanings. They also cast into doubt the validity of the claim that it is the dimension of decomposability alone that accounts for the demonstrated faster availability of figurative meanings of nondecomposable idioms.

To further see whether compositionality per se would affect idiom processing if the dimension of predictability was controlled for, additional analyses were conducted on the data. Since all of the decomposable idioms were low-predictable, whereas half of the nondecomposable idioms were high-predictable and half were low-predictable, the data pertaining to high-predictable idioms were eliminated. This ensured that the data set included idioms identical in terms of their predictability (low-predictable) and that the idioms only varied with regard to their compositionality. The relevant statistics are summarized in Table 4.

The data in Table 4 pertaining to nondecomposable idioms clearly differ from the analysis summarized earlier (see Table 3). Figurative meanings of nondecomposable idioms failed to be facilitated at the penultimate position and they were

Table 4 Mean RTs and priming effects (in bold) for literal and figurative targets as a function of position (penultimate and offset) and idiom type (decomposable vs. nondecomposable) with all idioms controlled on the dimension of predictability

Target type	Decomposable idioms		Nondecomposable idioms	
	Penultimate	Offset	Penultimate	Offset
Literal	634 (113) **74****	639 (152) **81****	741 (171) **−49**	654 (167) **82****
Figurative	741 (215) **−33**	743 (256) **−23**	679 (162) **13**	694 (176) **42**

Standard deviations (SDs) are provided in parentheses
Note $^{*}p < 0.05$
$^{**}p < 0.01$; two-tailed

also not significantly primed at the idiom offset ($p = 0.14$). Only literal meanings were primed at the end of nondecomposable idioms (82 ms, $p < 0.01$) and at both the penultimate (74 ms, $p < 0.01$) and offset positions (81 ms, $p < 0.01$) of decomposable idioms. Faster availability of figurative meanings of nondecomposable idioms obtained earlier was thus related to the higher predictability of some of the idioms in the stimulus set. Matching idioms on predictability eliminated any processing differences between them at the offset position. The results thus obtained are still incompatible with the IDH, as figurative meanings of neither decomposable nor nondecomposable idioms were available at idiom offset. Presumably, with processing low-predictable idioms in a second language, more time is needed to retrieve their figurative meanings from the mental lexicon.

6 Conclusions

The cross-modal priming experiment described here was carried out in order to explore possible processing differences between decomposable and nondecomposable idioms in the course of their comprehension by L2 learners. Three Research Questions were formulated. The first aimed at verifying predictions of the Idiom Decomposition Hypothesis concerning faster availability of figurative meanings of decomposable, as compared to nondecomposable idioms. The second question focused on the possibility that second language idioms are lexicalized, or stored as long words in the mental lexicon. Finding facilitation for figurative meanings displayed at the penultimate position of the idioms would provide support for such a possibility since it would indicate that, upon hearing the first few words of the idiom, the phrase is recognized as idiomatic and retrieved from memory as a whole chunk even before the complete idiom has been presented. Finally, the study aimed to see whether the literal processing priority, demonstrated in earlier L2 idiom research, would be present in the pattern of results obtained here.

With regard to Research Question (1), the study failed to find support for the IDH. Initial analysis of the idioms revealed that, contrary to the IDH, it was figurative meanings of nondecomposable, rather than decomposable idioms that were

available at idiom offset. However, a post hoc analysis of the stimulus materials matched on predictability and differing solely in the degree of their compositionality failed to show any processing differences between decomposable and nondecomposable idioms. For both idiom types, no figurative activation was found at either penultimate or offset positions. Only literal targets were facilitated when displayed at the offset, regardless of idiom compositionality. Those results are clearly incompatible with the IDH, which postulates processing differences between both idiom types. In addition, reanalysis of the idioms grouped according to their predictability showed that for high-predictable idioms, figurative meanings were indeed substantially facilitated and available at idiom offset, whereas figurative meanings of low-predictable idioms were not primed at all. Since all of the decomposable idioms employed in the study were low-predictable, with half of the nondecomposable idioms high-predictable and half low-predictable, faster availability of figurative meanings of nondecomposable idioms obtained in the initial analysis might have been caused not by compositionality per se, but by the varying predictability. This possibility was confirmed in a subsequent reanalysis, in which the stimulus set was matched on predictability and which failed to reveal any differences between decomposable and nondecomposable idioms.

The results reported here are consistent with a number of recent studies (e.g. Cutting and Bock 1997; Libben and Titone 2008; Tabossi et al. 2008) which have failed to find any processing differences between decomposable and nondecomposable idioms and challenged the claim that both idiom types differ systematically in their storage and processing. Instead, the results point to the relevance of other factors in modulating idiom processing patterns and are thus consistent with Libben and Titone (2008) who postulate a multidetermined, constraint-satisfaction process of idiom comprehension. On this view, a number of constraints, such as idiom familiarity, compositionality, frequency of words making up the idiomatic phrase, or idiom literal plausibility interact in a temporally dynamic way affecting the ongoing idiom processing. The current study has shown the relevance of predictability in determining the availability of the idiom's figurative meaning. Idiom predictability refers to the "probability of completing an incomplete phrase idiomatically" (Titone and Connine 1994b, p. 252) and constitutes the major determinant of idiom recognition in the *Configuration Hypothesis* (Cacciari and Tabossi 1988; Tabossi et al. 2005; Tabossi et al. 2009; Fanari et al. 2010). While high-predictable idioms are expressions that are quickly recognized as having a figurative meaning, low-predictable idioms cannot be recognized as idiomatic before the whole idiom string has been processed. To provide an example, upon encountering the fragment 'to sweep under the…' the language user is likely to complete the phrase idiomatically with 'carpet', even before reaching the end of the sentence. On the other hand, when coming across 'to pass the…' the language user would not very likely predict that the missing word is 'buck', as there can be a potentially infinite number of things that one might pass. In such low-predictable idioms, the last word must be accessed in order for the idiom to be recognized as a figurative phrase.

The dimension of idiom predictability has been found to significantly affect the time course of activation of literal and idiomatic meanings of the idiom string

during its comprehension. For example, a cross-modal priming study conducted by Cacciari and Tabossi (1988) showed that when processing high-predictable idioms, only their figurative meanings were activated by the time the last word of an idiomatic string was encountered. On the other hand, with low-predictable idioms, only the literal meaning was found to be active at the end of the idiom. This suggests that figurative meanings of high-predictable idioms may be accessed faster, obviating the need for further literal analysis of idiom constituents. On the other hand, for low-predictable idioms the language processing mechanism analyzes the whole string literally before its figurative interpretation may emerge. A similar pattern of results was demonstrated in the study carried out by Titone and Connine (1994a), where predictability was found to influence the activation of figurative and literal meanings of an idiom during its comprehension. The results reported in the present paper are largely consistent with predictions of the Configuration Hypothesis concerning the influence of the dimension of predictability on idiom processing. Similar to the results reported by Cacciari and Tabossi (1988), figurative meanings were only available at the offset of high- as opposed to low-predictable idioms. However, contrary to Cacciari and Tabossi's results, literal meanings were found to be active not only at the offset of low-predictable, but also at the offset of high-predictable idioms. This strong activation of literal meanings of idiom parts might be related to the literal salience likely to obtain in the course of L2 idiom processing and is directly related to our Research Question (3).

With regard to Research Question (3), the current data provide strong support for salience of literal meanings in the course of L2 idiom processing demonstrated in earlier research (cf. Kecskes 2000; Liontas 2002; Abel 2003; Cieślicka 2006, 2010; Cieślicka and Heredia 2011). Literal meanings were significantly activated at idiom offset, irrespective of whether the idioms were decomposable or nondecomposable and high- or low-predictable. Availability of literal meanings at the offset of high-predictable idioms whose figurative interpretation has already been activated indeed points to the special status of literal meanings of idiom constituents in the course of their processing by L2 learners. It is also inconsistent with this claim of the Configuration Hypothesis which postulates termination of literal analysis when the figurative interpretation of the idiom becomes activated (Tabossi and Zardon 1993, 1995; Tabossi et al. 2005). Rather, it extends and supports the findings that literal processing does not terminate upon retrieval of the figurative meaning (e.g. Colombo 1993; Peterson and Burgess 1993; Titone and Connine 1994a, 1999).

As far as Research Question (2) is concerned, no support was found for the possibility that figurative meanings of idioms become activated before the whole of the idiom string has been presented. No facilitation was obtained for figurative targets displayed at the penultimate position of either idiom type. The only activation shown before the idiom ended was that of literally related targets, which were primed when displayed at the penultimate position of decomposable idioms. This result might be related to the fact that literal meanings of parts of decomposable idioms substantially contribute to the overall figurative interpretation and they might therefore be more significantly activated than when processing

nondecomposable idioms. Lack of priming for figurative meanings of idioms at the penultimate position should not however be viewed as an argument against the possibility that L2 idioms might be lexicalized in storage and retrieved as whole units upon recognition. It might have simply been too early for the figurative meaning to be sufficiently activated, especially given the salience of literal meanings in L2 idiom processing. The language processing mechanism might need more time to suppress literal meanings before the figurative interpretation emerges as more prominent in this dynamic competition. This suggestion is in line with the results obtained by Colombo (1993) who demonstrated that literal meanings of idiom constituents are always constructed in the course of idiom comprehension and remain active even in figurative biasing contexts. In one experiment, Colombo had her participants listen to sentences containing idiomatic expressions and make lexical decisions on target words presented visually at the offset of the idiom string. The target words were either related to the literal meaning of the last word of the idiom or to the figurative interpretation of the idiom. The priming effect for the figuratively related target words turned out to be smaller than that for literally related targets, independent of the influence of context. The current results are compatible with the view that literal analysis of idiom constituents is an essential L2 idiom processing strategy that is undertaken even when the idiom has a well-established and highly lexicalized meaning in the mental lexicon. Retrieval of this lexicalized meaning is bound to take longer than automatically initiated literal processing of idiom components, whose literal meanings are saliently coded in the mental lexicon.

All in all, the current study has failed to provide support for the claim that idiom decomposability as such affects on-line processes of L2 idiom comprehension. Instead, it suggests that a number of factors converge on determining the patterns of literal and figurative meaning activation during idiom processing. Some of such factors shown to affect idiom processing are their literal plausibility (Mueller and Gibbs 1987; Popiel and McRae 1988; Cronk and Schweigert 1992; Colombo 1993; Cronk et al. 1993; Titone and Connine 1994a), familiarity (e.g. Reagan 1987; Schweigert and Moates 1988; Schweigert 1991; Cronk and Schweigert 1992; Cronk et al. 1993; Flores d'Arcais 1993; Titone and Connine 1994a; Forrester 1995; Libben and Titone 2008), or predictability (e.g. Cacciari and Tabossi 1988; Flores d'Arcais 1993; Tabossi and Zardon 1993, 1995; Titone and Connine 1994a; Tabossi et al. 2005). Lack of control for some of those factors might have contributed to the controversial results obtained in the previous literature exploring the role of compositionality. For example, Caillies and Butcher (2007) failed to control for the dimension of idiom predictability which was shown in the current study to significantly modulate the pattern of figurative and literal meaning facilitation. Whereas the majority of the studies investigating idiom compositionality have controlled for some dimensions of idiom variability, for example syntactic structure (Cutting and Bock 1997; Sprenger et al. 2006), literal plausibility or familiarity (e.g. Titone and Connine 1999; Caillies and Butcher 2007; Tabossi et al. 2008), other idiom characteristics, such as predictability, are not mentioned in those studies. The fact that decomposable and nondecomposable

idioms employed in the current research were not originally matched on predictability is likewise a major weakness of the study. While a post hoc analysis conducted after eliminating high-predictable idioms did allow for isolating the dimension of decomposability, the idioms thus matched were all low-predictable. A fully crossed design should be conducted in the future with half of both the decomposable and nondecomposable idioms being high-predictable and another half low-predictable. Such a design would allow exploring the modulating effect of the interaction between predictability and decomposability.

Stressing the importance of a dynamic interaction of the various idiom characteristics in affecting how they are processed, Libben and Titone (2008) suggested that the dimension of compositionality may be more useful as a post-access interpretative strategy, for example when language users are engaged in off-line (metalinguistic) tasks or when they are faced with less familiar idioms. Compositional analysis was indeed shown to be a useful interpretative strategy adopted by children and adults dealing with poorly known or unknown idiomatic phrases (e.g. Levorato and Cacciari 1992, 1999; Cacciari 1993; Flores d'Arcais 1993; Cacciari and Levorato 1998; Cain et al. 2005). This strategy is particularly relevant for second language learners who are likely to resort to literal analysis of idiom constituents when trying to understand less well-known idiomatic phrases (e.g. Liontas 2002; Abel 2003). More studies are needed in order to fully explore how compositionality interacts with other idiom characteristics in the course of on-line figurative processing by second language learners.

References

Abel, B. 2003. English idioms in the first language and second language lexicon: A dual representation approach. *Second Language Research* 19: 329-358.

Alexander, R. J. 1987. Problems in understanding and teaching idiomaticity in English. *Anglistik und Englischunterricht* 32: 105-122.

Bobrow, S. A. and S. M. Bell. 1973. On catching on to idiomatic expressions. *Memory and Cognition* 1: 342-346.

Boers, F. 2000. Metaphor awareness and vocabulary retention. *Applied Linguistics* 21: 553-571.

Cacciari, C. 1993. The place of idioms in literal and metaphorical world. In *Idioms: Processing, structure, and interpretation*, eds. C. Cacciari and P. Tabossi, 27-56. Hillsdale, NJ: Lawrence Erlbaum Associates.

Cacciari, C. and S. Glucksberg. 1991. Understanding idiomatic expressions: The contribution of word meanings. In *Understanding word and sentence*, ed. G. B. Simpson, 217-240. Amsterdam, Netherlands: North-Holland.

Cacciari, C. and M. C. Levorato. 1998. The effect of semantic analyzability of idioms in metalinguistic tasks. *Metaphor and Symbol* 13: 159-177.

Cacciari, C. and P. Tabossi. 1988. The comprehension of idioms. *Journal of Memory and Language* 27: 668-683.

Caillies, S. and K. Butcher. 2007. Processing of idiomatic expressions: Evidence for a new hybrid view. *Metaphor and Symbol* 22: 79-108.

Cain, K., J. Oakhill and K. Lemmon. 2005. The relation between children's reading comprehension level and their comprehension of idioms. *Journal of Experimental Child Psychology* 90: 65-87.

Charteris-Black, J. 2002. Second language figurative proficiency: A comparative study of Malay and English. *Applied Linguistics* 23: 104-133.

Chomsky, N. 1980. *Rules and representations.* New York: Columbia Univeristy Press.
Cieślicka, A. 2006. Literal salience in on-line processing of idiomatic expressions by L2 speakers. *Second Language Research* 22: 115-144.
Cieślicka, A. 2007. Language experience and fixed expressions: Differences in the salience status of literal and figurative meanings of L1 and L2 idioms. In *Collocations and idioms 1: Papers from the First Nordic Conference on Syntactic Freezes, Joensuu, Finland, May 19-20*, eds. M. Nenonen and S. Niemi, 55-70. Joensuu: Joensuu University Press.
Cieślicka, A. 2010. Formulaic language in L2: Storage, retrieval and production of idioms by second language learners In *Cognitive processing in second language acquisition: Inside the learner's mind,* eds. M. Pütz and L. Sicola, 149-168. Amsterdam – Philadelphia: John Benjamins.
Cieślicka, A. B. and R. R. Heredia. 2011. Hemispheric asymmetries in processing L1 and L2 idioms: Effects of salience and context. *Brain and Language* 116: 136-150.
Colombo, L. 1993. The comprehension of ambiguous idioms in context. In *Idioms: Processing, structure, and interpretation,* eds. C. Cacciari and P. Tabossi, 163-200. Hillsdale, NJ: Lawrence Erlbaum.
Cronk, B. C., S. D. Lima and W. A. Schweigert. 1993. Idioms in sentences: Effects of frequency, literalness, and familiarity. *Journal of Psycholinguistic Research* 22: 59-81.
Cronk, B. C. and W. A. Schweigert. 1992. The comprehension of idioms: The effects of familiarity, literalness, and usage. *Applied Psycholinguistics* 13: 131-146.
Cutting, J. C. and K. Bock. 1997. That's the way the cookie bounces: Syntactic and semantic components of experimentally elicited idiom blends. *Memory and Cognition* 25: 57-71.
Danesi, M. 1992. Metaphorical competence in second language acquisition and second language teaching: The neglected dimension. In *Georgetown University Round Table on languages and linguistics,* ed. J. E. Alatis, 489-500. Washington, DC: Georgetown University Press.
Deignan, A., D. Gabryś and A. Solska. 1997. Teaching English metaphors using cross-linguistic awareness-raising activities. *ELT Journal* 51: 352-360.
Fanari, R., C. Cacciari and P. Tabossi. 2010. The role of idiom length and context in spoken idiom comprehension. *European Journal of Cognitive Psychology* 22: 321-334.
Fernando, C. 1996. *Idioms and idiomaticity*. Oxford: Oxford University Press.
Flores d'Arcais, G. B. 1993. The comprehension and semantic interpretation of idioms. In *Idioms: Processing, structure, and interpretation,* eds. C. Cacciari and P. Tabossi, 79-98. Hillsdale, NJ: Lawrence Erlbaum.
Forrester, M. A. 1995. Tropic implicature and context in the comprehension of idiomatic phrases. *Journal of Psycholinguistic Research* 24: 1-22.
Fraser, B. 1970. Idioms within a tranformational grammar. *Foundations of Language* 6: 22-42.
Gairns, R. and S. Redman. 1986. *Working with words: A guide to teaching and learning vocabulary*. Cambridge: Cambridge University Press.
Gibbs, R. W. 1980. Spilling the beans on understanding and memory for idioms in conversation. *Memory and Cognition* 8: 149-156.
Gibbs, R. W. 1985. On the process of understanding idioms. *Journal of Psycholinguistic Research* 14: 465-472.
Gibbs, R. W. 1994. *The poetics of mind: Figurative thought, language, and understanding.* Cambridge: Cambridge University Press.
Gibbs, R. W. 1995. Idiomaticity and human cognition. In *Idioms: Structural and psychological perspectives,* eds. M. Everaert, E.-J. v. d. Linden, A. Schenk and R. Schreuder, 97-116. Hillsdale, NJ: Lawrence Erlbaum.
Gibbs, R. W. and N. P. Nayak. 1989. Psycholinguistic studies on the syntactic behavior of idioms. *Cognitive Psychology* 21: 100-138.
Gibbs, R. W., N. P. Nayak and C. Cutting. 1989. How to kick the bucket and not decompose: Analyzability and idiom processing. *Journal of Memory and Language* 28: 576-593.
Giora, R. 1997. Understanding figurative and literal language: The graded salience hypothesis. *Cognitive Linguistics* 8: 183-206.

Giora, R. 1999. On the priority of salient meanings: Studies of literal and figurative language. *Journal of Pragmatics* 31: 919-929.
Giora, R. 2002. Literal vs. figurative language: Different or equal? *Journal of Pragmatics* 34: 487-506.
Giora, R. 2003. *On our mind: Salience, context, and figurative language.* Oxford: Oxford University Press.
Glucksberg, S. 1991. Beyond literal meanings: The psychology of allusion. *Psychological Science* 2: 146-152.
Glucksberg, S. 1993. Idiom meanings and allusional content. In *Idioms: Processing, structure, and interpretation,* eds. C. Cacciari and P. Tabossi, 3-26. Hillsdale, NJ: Lawrence Erlbaum.
Glucksberg, S. 2001. *Understanding figurative language: From metaphors to idioms.* New York: Oxford University Press.
Howarth, P. 1998. Phraseology and second language proficiency. *Applied Linguistics* 19: 24-44.
Irujo, S. 1993. Steering clear: Avoidance in the production of idioms. *International Review of Applied Linguistics* 21: 205-219.
Katz, J. J. 1973. Compositionality, idiomaticity and lexical substitution. In *A fest shrift for Morris Halle*, ed. S. R. Anderson and P. Kiparsky, 357-376. New York: Holt, Reinhart and Winston.
Kecskes, I. 2000. A cognitive-pragmatic approach to situation-bound uterrances. *Journal of Pragmatics* 32: 605-625.
Kecskes, I. and T. Papp. 2000. Metaphorical competence in trilingual language production. In *English in Europe: The acquisition of a third language,* eds. J. Cenoz and U. Jessner, 99-120. Clevedon: Multilingual Matters.
Kövecses, Z. and P. Szabo. 1996. Idioms: A view from cognitive semantics. *Applied Linguistics* 17: 326-355.
Lattey, E. 1986. Pragmatic classification of idioms as an aid for the language learner. *IRAL* 24: 217-233.
Lazar, G. 1996. Using figurative language to expand students' vocabulary. *English Language Teaching Journal* 50: 43-51.
Lazar, R. T., G. A. Warr-Leeper, C. B. Nicholson and S. Johnson. 1989. Elementary school teachers' use of multiple meaning expressions. *Language, Speech, and Hearing Services in Schools* 20: 420-430.
Levorato, M. C. 1993. The acquisition of idioms and the development of figurative competence. In *Idioms: Processing, structure, and interpretation,* eds. C. Cacciari and P. Tabossi, 101-128. Hillsdale, NJ: Lawrence Erlbaum.
Levorato, M. C. and C. Cacciari. 1992. Children's comprehension and production of idioms: The role of context and familiarity. *Journal of Child Language* 19: 415-433.
Levorato, M. C. and C. Cacciari. 1999. Idiom comprehension in children: Are the effects of semantic analyzability and context separable? *European Journal of Cognitive Psychology* 11: 51-66.
Libben, M. R. and D. A. Titone. 2008. The multidetermined nature of idiom processing. *Memory and Cognition* 36: 1103-1121.
Liontas, J. 2002. Context and idiom understanding in second languages. In *EUROSLA Yearbook,* eds. S. H. Foster-Cohen, T. Ruthenberg and M. L. Poschen, 155-185. Amsterdam: John Benjamins Publishing Company.
Littlemore, J. 2001. Metaphoric competence: A language learning strength of students with a holistic cognitive style? *TESOL Quarterly* 35: 459-491.
Low, G. D. 1988. On teaching metaphor. *Applied Linguistics* 9: 125-147.
Matlock, T. and R. R. Heredia. 2002. Understanding phrasal verbs in monoliguals and bilinguals. In *Bilingual sentence processing,* eds. R. R. Heredia and J. Altarriba, 251-274. Amsterdam: Elsevier.
McCarthy, M. 1990. *Vocabulary.* Oxford: Oxford University Press.
Moon, R. 1998. *Fixed expressions and idioms in English: A corpus-based approach*. Oxford: Oxford University Press.

Mueller, R. A. G. and R. W. Gibbs. 1987. Processing idioms with multiple meanings. *Journal of Psycholinguistic Research* 16: 63-81.

Nunberg, G. 1978. *The pragmatics of reference.* Bloomington, Indiana Linguistic Club.

Peterson, R. R. and C. Burgess. 1993. Syntactic and semantic processing during idiom comprehension: Neurolinguistic and psycholinguistic dissociations. In *Idioms: Processing, structure, and interpretation,* eds. C. Cacciari and P. Tabossi, 201-225. Hillsdale, NI: Erlbaum.

Popiel, S. J. and K. McRae. 1988. The figurative and literal senses of idioms, or all idioms are not used equally. *Journal of Psycholinguistic Research* 17: 475-487.

Reagan, R. T. 1987. The syntax of English idioms: Can the dog be put on? *Journal of Psycholinguistic Research* 16: 417-441.

Roberts, R. M. and R. J. Kreuz. 1994. Why do people use figurative language? *Psychological Science* 5: 159-163.

Schweigert, W. A. 1991. The muddy waters of idiom comprehension. *Journal of Psycholinguistic Research* 20: 305-314.

Schweigert, W. A. and D. R. Moates. 1988. Familiar idiom comprehension. *Journal of Psycholinguistic Research* 17: 281-296.

Sprenger, S. A., W. J. M. Levelt and G. Kempen. 2006. Lexical access during the production of idiomatic phrases. *Journal of Memory and Language* 54: 161-184.

Swinney, D. A. and A. Cutler. 1979. The access and processing of idiomatic expressions. *Journal of Verbal Learning and Verbal Behavior* 18: 523-534.

Tabossi, P., R. Fanari and K. Wolf. 2005. Spoken idiom recognition: Meaning retrieval and word expectancy. *Journal of Psycholinguistic Research* 34: 465-495.

Tabossi, P., R. Fanari and K. Wolf. 2008. Processing idiomatic expressions: Effects of semantic compositionality. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 34: 313-327.

Tabossi, P., R. Fanari and K. Wolf. 2009. Why are idioms recognized fast? *Metaphor and Cognition* 37: 529-540.

Tabossi, P., and F. Zardon. 1993. The activation of idiomatic meaning in spoken language comprehension. In *Idioms: Processing, structure, and interpretation,* eds. C. Cacciari and P. Tabossi, 145-162. Hillsdale, NJ: Lawrence Erlbaum Associates.

Tabossi, P., and F. Zardon. 1995. The activation of idiomatic meaning. In *Idioms: Structural and psychological perspectives*, eds. M. Everaert, E.-J. v. d. Linden, A. Schenk and R. Schreuder, 273-282. Hillsdale, NJ: Lawrence Erlbaum Associates.

Titone, D. A., and C. M. Connine. 1994a. Comprehension of idiomatic expressions: Effects of predictability and literality. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 20: 1126-1138.

Titone, D. A. and C. M. Connine. 1994b. Descriptive norms for 171 idiomatic expressions: Familiarity, compositionality, predictability, and literality. *Metaphor and Symbolic Activity* 9: 247-270.

Titone, D. A. and C. M. Connine. 1999. On the compositional and noncompositional nature of idiomatic expressions. *Journal of Pragmatics* 31: 1655-1674.

Weinreich, U. 1969. Problems in the analysis of idioms. In *Substance and structure of language,* ed. J. Puhvel, 23-81. Los Angeles: University of California Press.

Yorio, C.A. 1989. Idiomaticity as an indicator of second language proficiency. In *Bilingualism across lifespan: Aspects of acquisition, maturity, and loss,* eds. K. Hyltenstam and L. K. Obler, 55-72. Cambridge: Cambridge University Press.

Zughoul, M.R. 1991. Lexical choice: Towards writing problematic word lists. *IRAL* 29: 45-60.

The Relationship Between Impulsive/ Reflective Cognitive Style and Success in Grammar Acquisition in English as a Foreign Language

Anna Michońska-Stadnik

Abstract In the process of learning a second language and the acquisition of its grammar it is the amount of time devoted to the analysis of a particular problem and a potential number of occurring errors that seem to be crucial for the full understanding of the issue. For that reason, it is the *impulsivity/reflectivity* variable that deserves attention due to its superficial obviousness, which in fact turns out to be misleading. *Conceptual tempo* is the term used interchangeably with impulsivity/reflectivity (I/R) in order to define the variable of the cognitive style being responsible for decision-making while approaching a grammar task. Within this distinction, it is the notion of time and the number of incorrect responses before reaching the correct one on which the emphasis is placed. The aim of this chapter is to report on a study conducted to validate the claim that there exists a systematic relationship between the impulsive/reflective style and success in grammar acquisition. Presumably, due to the fact that I/R is a commonsense term, it tends to lead to intuitive assumptions as regards foreign language grammar processing. It is usually stated that reflective learners tend to be slower at approaching a task, but accurate, whereas impulsive learners need less time for an answer but tend to make more mistakes as a result of their rapid guesses. The time factor relates to the conceptual tempo, and thus this notion is of primary interest to this chapter.

1 Introduction

As studies in second language acquisition (SLA) flourished, attention was drawn to human individual differences in learning that diversify students in their success in second/foreign language attainment. These individual variables are embraced

A. Michońska-Stadnik (✉)
University of Wrocław, Wrocław, Poland
e-mail: michsta@uni.wroc.pl

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not only within applied linguistics, but are primarily related to such disciplines as psychology, sociology, psycholinguistics and sociolinguistics. One of the subfields of general psychology that attracted the greatest amount of attention in the 1960s is cognitive psychology, which aims at accounting for the mental processes employed by humans to internalize information (Kellogg 1995). Although those mental processes are universal for all human beings, they are represented in a different manner, depending on individual differences. It is the *cognitive style* that in fact balances on the border of cognition and personality (Gass and Selinker 2008).

Cognitive style as such has received a great amount of interest among scholars. It owes its recognition due to the fact that "it determines the ways of cognitive functioning that are selected from a range of others by an individual and adjusted to one's needs" (Matczak 1982, p. 10) (translation mine). Therefore, it is cognitive style and, in particular, one of its dichotomies, namely *impulsivity/reflectivity* (I/R), that is going to be the focus of discussion in this chapter as it can aid the understanding of learning processes.

The I/R distinction was first proposed by Kagan (1966), and the term is used interchangeably with *conceptual tempo*, which embraces the idea of the time spent on completing a task. Kagan's observations were made on the basis of his work with children. However, more recent studies (e.g. Ehrman and Leaver 2003) show that the I/R variable is responsible for differences among adults as well. Therefore, such a division can serve as a tool for the interpretation of one's potential success or failure in learning tasks.

In order to identify what determines success in second language acquisition/learning, it should be realized that there is a substantial difference between naturalistic and instructed processes in this respect. Both are influenced by a variety of factors, individual learner differences among them, but instructed learning appears to be more strongly affected. Individuals acquiring a second language in a naturalistic environment have a better chance for successful attainment whereas the results of formal instruction may be determined by language aptitude, motivation, age, personality, and cognitive style. In classroom conditions the style of impulsivity/reflectivity may appear to be especially significant. As far as SLA and the I/R dimension is concerned, only a few studies have been conducted, and they have concerned reading comprehension. As regards recent research, again, there have been only a few attempts at a more detailed and extended analysis of the I/R dichotomy and its influence on language learning in general (e.g. Jamieson 1992).

The aim of this chapter is to either confirm or reject the claim that there is a systematic relationship between impulsive/reflective style and learners' success in grammar acquisition. Furthermore, it may be interesting to observe which of the two styles facilitates the acquisition of this language subsystem. Presumably, due to the fact that I/R is a commonsense term, which is encountered on numerous occasions throughout the lifespan, it tends to lead to intuitive assumptions in terms of assessing the abilities of reflective or impulsive learners. It is usually assumed that reflective learners are slower at approaching a task, but accurate, they superficially seem to exceed impulsive learners that need less time for an answer, but

tend to make more mistakes as a result of their rapid guesses (see Kagan 1966). The research reported in this chapter attempted to validate this claim.

2 The Impulsivity/Reflectivity Dimension

This section will deal in more detail with I/R dimension, that is what is understood by the notion, how it affects human cognitive functioning and what instruments are used to measure this dichotomy. Subsequently, I/R will be viewed in terms of its implications for the learning process, where the characteristic features represented by reflective and impulsive learners will be provided respectively, with particular emphasis being placed on the differences in cognitive mechanisms applied while processing a task.

I/R is defined as a dimension of cognitive style that is responsible for information processing determined by the degree to which an individual tends to reflect on the potential accuracy of one of the alternatives provided by means of hypothesizing and evaluating this hypothesis (Kagan 1966). What is crucial here is the time taken by one to respond, which in the literature (e.g. Matczak 1982) is defined as *latency* and *accuracy* that here is referred to as the number of errors made while hypothesizing. Generally speaking, I/R is a basis for dividing individuals into impulsive, who reach decisions quickly and spontaneously, which in turn entails a number of incorrect responses, and reflective who, in contrast, make fewer mistakes as a result of taking more time before providing the response. Jamieson (1992) states that not all of the subjects can be classified according to I/R dichotomy. Statistically, it is on average two thirds of the subjects who are classified either as impulsive and labeled as *fast-inaccurate* or as reflective being labeled as *slow-accurate.* The remaining group falls within the division into *slow-inaccurate* and *fast-accurate*, which seems contradictory to the mainstream dichotomy. The understanding of I/R functioning within the cognitive domain seems to be crucial with regard to its implications for the learning process that involves a great number of cognitive operations. According to Matczak (1992, p. 37), reflectivity can be associated with "active, directed and controlled search for the information, whereas impulsivity with passive reception of the information" (translation mine).

The instruments that are applied to measure I/R are based on the subject's use of perception. It is mostly visual perception, but in some tests tactile perception is used as well. With regard to I/R emergence in situations where the subject is confronted with a number of competing hypotheses and is expected to opt for the correct one, the instruments are constructed in the manner of providing the subject with a relatively high level of uncertainty about the actual correctness of one of the alternatives. The aim of the tests constructed to measure I/R is to provide perceptual tasks which contain the main object that serves as a pattern, and a range of misleading similar objects to choose from. The instrument commonly used in studies on I/R is Kagan's (1966) *Matching Familiar Figures Test* (MFFT), which requires subjects to select one object that matches a standard shape from the range

of alternatives. There are some other testing instruments, such as the *Delayed Recall of Designs Test* (DRT). DRT, analogically to MFFT, involves visual perception, however, these two differ in the task material as MFFT consists of graphic representations of commonly known objects and DRT comprises geometrical figures.

The establishment of I/R seems to be important from the methodological perspective, as it is known that impulsive learners benefit from inductive instruction, whereas deductive instruction is described as more beneficial for reflective learners. With that in mind, the knowledge of learners' I/R should aid teachers in modifying their teaching methods as well as in selecting teaching materials so that both reflective and impulsive individuals could benefit from the lesson.

Although it is assumed that reflective individuals have a tendency to make fewer mistakes, which seemingly contributes to their success in the acquisition of grammar, a language subsystem that requires a great amount of attention and accuracy, it is arguable whether it really happens this way. Grammar acquisition involves numerous complex cognitive processes, the functioning of which is the result of human cognitive abilities. Therefore, it can be assumed that impulsive learners, despite making a great number of mistakes, are not only able to arrive at the correct function of a particular grammatical item faster, but also to internalize it permanently. This results from the fact that they manifest an inclination towards going through the same problematic area a number of times by means of the trial and error method, which has been confirmed by Kagan's (1966) and Matczak's (1982) observations of eye movements. As a result, it can be assumed that through such repetitions the neural connections in the brain can be established quicker and more permanently in impulsive learners, which eventually leads to stable knowledge. Notwithstanding this claim, impulsivity is still presented in rather a negative manner in the literature as a less desirable human property. It is always compared to reflectivity that is presented in a favorable light. Numerous studies conducted on I/R and its relationship with the learning process reveal the advantage of reflective learners over impulsive ones in different learning tasks, such as reading comprehension or a general English test (e.g. Jamieson 1992). Still, it should be noted that, with regard to the holistic processing mode, impulsive individuals are far better at tests requiring spatial orientation and at tasks in which the actual level of difficulty is not presented to them (Włodarski 1998).

3 Beyond the I/R: Fast-Accuracy and Slow-Inaccuracy

As has already been mentioned in the section above, numerous research findings indicate that there is always a certain number of subjects who do not fall within the I/R category. Initially, those subjects were ignored and immediately excluded from further study after the results of the MFFT had been obtained. Only after the two separate additional variations had been noted for the first time, attention was allocated to them as well. According to the results obtained from research

conducted in that field, it seems that the variable which contributes most to the overall success in numerous cognitive tasks, including learning, is fast-accuracy. Individuals who are fast-accurate not only respond faster, but also make fewer or at least the same number of mistakes as reflective ones. Therefore, in the literature, this group has been marked as significantly more efficient than any other.

In contrast, slow-inaccurate subjects are described as inefficient with regard their long latency and a greater number of mistakes made. In this respect, it should be noted that individuals cannot always be divided only according to the I/R dichotomy. Although fast-accuracy/slow-inaccuracy division constitutes only approximately a third of all of the subjects (e.g. Jamieson 1992), it should not be neglected while conducting a study. The appearance of this additional dichotomy could perhaps be attributed to the inadequacy of the MFFT itself.

4 I/R and Ultimate Attainment in Second Language Learning

With respect to the studies mentioned in this chapter, it seems obvious to state that reflective conceptual tempo facilitates the learning process and produces better overall results. What is of the main interest in this chapter is second language learning, in particular grammar learning, which may be affected either by impulsive or reflective tempo. It should be noted here that learning a second language grammar requires fairly complex cognitive processing. Since the I/R dichotomy stresses the importance of two variables: latency and the number of errors, the relationship between these two and grammar learning should be thoroughly analyzed.

Conceptual tempo has already been studied with reference to SLA, but only a few studies have been conducted. One of them investigated reading comprehension where reflectivity turned out to be more beneficial (Kagan 1966). Another and more recent study focused upon the overall success in SLA among reflective and impulsive learners, where neither reflective nor impulsive subjects' results were of significance. However, only the test scores of fast-accurate learners proved to be correlated with their conceptual tempo (Jamieson 1992). There have been hardly any attempts to investigate the relationship between I/R and second language grammar learning whatsoever. Although final conclusions will be drawn at the end of this chapter, after the analysis of the conducted research, an attempt will be made now at predicting the overall success in SLA by the reflective and impulsive learners, respectively.

It can be assumed, then, that reflective learners will achieve better results on those aspects of language where receptive skills come into play. This claim can be supported by their analytical processes employed—their higher rate of discrimination is likely to facilitate listening comprehension, and the higher rate of transfer is likely to facilitate the acquisition of strategies useful while learning the language. Also their developed metacognition is likely to help apply previously acquired knowledge, including strategies, to a number of situational contexts. The

latter as well as their more developed sorting and recall will facilitate vocabulary retention. As far as speaking and writing are concerned, it is impulsive learners who are predicted to be better. Reflectivity is connected with self-restraint and insufficient creativity, which hinders language use necessary for productive skills. Reflective learners, when compared with their impulsive peers, will prove to be more accurate on speaking and writing tasks, but less fluent at the same time. When it comes to grammar, more developed inductive reasoning or hypotheses formulation and testing contribute to the acquisition of new items. The capability of discriminating proves to be helpful in learning contrasted items, such as, for example, the Present Simple Tense and the Present Continuous Tense. With regard to the analytical and sequential processing mode represented by reflective learners, the process of grammar learning seems to be more effective than in impulsive learners. However, it should be indicated that although reflective learners are able to acquire grammatical rules to a greater degree, they become too hesitant when it comes to production. In the case of impulsive learners, it is a global or holistic processing mode that seems to be dominant. This aspect of cognitive functioning tends to rely on intuitive predictions rather than analysis. In consequence, it can be assumed that intuitive thinking will facilitate the use of newly acquired grammatical structures, without the fear of being incorrect. Such number of incorrect trials before reaching the correct response can serve as a stimulus that will eventually facilitate the retention of the correct form that, in turn, will be used with no hesitancy later on. Moreover, impulsivity will prove to be more beneficial in situations where a learner is provided with a fully formulated grammar rule, as this is likely to be acquired and used later on in numerous contexts, probably in some of them incorrectly, until it is eventually internalized and used correctly by means of intuition, induced by global thinking.

5 I/R and Preferences for Grammar Instruction

When it comes to grammar, for many students it is the most problematic area of any language. In second language learning it can be observed on a regular basis that learning a grammatical rule and understanding it well is very often not reflected in free, spontaneous communication. While learning a second language, lexis and pronunciation can be equally mastered by means of systematic study and practice. Learning grammar requires substantial involvement of cognitive processes and is usually marked by the emergence of mistakes. With respect to the above, namely the fact that second language grammar learning is based on mental operations, it seems to be essential to consider the cognitive differences represented by impulsive and reflective learners.

Generally, it is assumed that the type of grammatical instruction plays a crucial role for individuals who represent a particular cognitive style. Taking into account numerous differences in cognitive functioning manifested by impulsive and reflective individuals discussed in the previous section, it can be assumed that impulsive

and reflective learners manifest certain preferences as regards the type of grammar instruction. Therefore, the reflective cognitive style creates favorable conditions for analytical and discriminative thinking, which seemingly can contribute to successful learning aided by inductive instruction since such instruction does not provide the learner directly with the rule. By contrast, inductive instruction imposes on the learner the necessity of observing, noticing and drawing logical conclusions in order to discover the rule. Therefore, on the one hand, it can be speculated that inductive grammar instruction can contribute to the learning process among reflective individuals. On the other hand, however, this is not entirely true since an abundance of instances without clearly presented rules in advance can distort the linear pattern of thinking in reflective individuals, causing hastiness and confusion. In fact, it is deductive grammar instruction that is more beneficial for reflective learners as it follows the linear and ordered pattern of structure presentation. Deductive instruction is based more on the presentation of pure grammatical forms, where the meaningful context is provided once the rule has been presented explicitly. Moreover, the presentation of those forms is based on formal explanations, where the use of grammatical terms is essential. For that reason, in deductive instruction analysis and sequential thinking is required. Since reflective learners manifest preferences for having the new material clearly presented and explained to them as well as for being provided with the pattern of new linguistic structures to analyze and follow, it is deductive instruction towards which they seem to be more inclined. What is more, due to the fact that reflective learners represent an ordered and sequential processing mode, inductive instruction that concentrates not only on the grammatical form itself but also on the meaning of the accompanying context can cause potential distraction and confusion among reflective individuals.

As far as impulsive individuals and their preferences for grammar instruction are concerned, again, it can apparently be assumed that it is deductive instruction that may be of greater advantage rather than inductive teaching. Namely, impulsive learners manifest a holistic or global processing mode and, by the same token, they lack the ability to analyze and discriminate. Moreover, impulsive learners are cognitively less mature, when compared to their reflective peers. With this respect, it could be assumed that since deductive instruction provides learners with overt explanation of a particular structure, it is easier for them to memorize the rule. In fact, it is just the opposite. With regard to the fact that impulsive learners, similarly to field-dependent ones, manifest a tendency to rely heavily on the context and they need practical examples with the actual use of the structure in order to learn it, it is inductive instruction that is more beneficial for them. The presentation of grammatical structures by means of deductive instruction requires a great deal of attention and the ability to apply the formally explained rule to actual communication, which becomes unfeasible in the case of impulsive learners who lack the above abilities. Instead, inductive instruction offers numerous examples that provide learners with clues of how to formulate the rule. The accompanying meaningful context enables impulsive learners to realize the actual need to know a structure since it is to be used in further communication. What is more, inductive

instruction provides opportunities for learning a structure by means of practicing it with the use of the trial and error technique which is frequently employed by impulsive students in their learning process.

To conclude, reflective and impulsive learners represent certain characteristic features of cognitive functioning that affect their process of learning. Therefore, these two groups of learners manifest different preferences for grammar instruction. As far as reflective and impulsive learners are concerned, it is either deductive or inductive instruction that plays a crucial role in their learning of second language grammar. Since deductive instruction explicitly presents new grammatical forms as well as it requires analytical, sequential and discriminative processing mode, it seems to contribute to successful grammar learning among reflective individuals. Conversely, inductive instruction provides learners with contextual presentation of grammar forms by means of multiple communicatively meaningful examples, and allows holistic thinking as well as moderate cognitive immaturity. It may be supposed, then, that impulsive learners are more likely to benefit from it. It should also be noted that between the two extreme positions of each cognitive style there are individuals who cannot be unambiguously classified as either impulsive or reflective ones. Therefore, within this division, it is fast-accurate and slow-inaccurate individuals and their preferences for grammar instruction that have to be observed as well. In the case of the former, both types of grammar instruction, that is inductive and deductive ones are of benefit, whereas in the case of the latter, neither deductive nor inductive instruction contributes to successful grammar acquisition. This is also due to the fact that fast-accurate learners manifest all the favorable features of cognitive functioning that are present in reflective and impulsive individuals, whereas slow-inaccurate learners demonstrate all the adverse features that reflect their unsuccessful learning.

6 Description of the Research

In view of the theoretical considerations presented in the previous parts of this chapter, an empirical study was planned that aimed at investigating the relationship between second language grammar learning and impulsivity/reflectivity as a dichotomy of cognitive style. The main objective of the study was to investigate whether there is a systematic relationship between the impulsive/reflective style and success in grammar learning in English as a foreign language. It was assumed that if the collected data proved that there is a positive correlation between conceptual tempo and second language grammar attainment, the research would also aim at establishing which of these styles enhances the process. Additionally, if some of the subjects fell within neither the impulsive nor reflective category, they would be analyzed in terms of fast-accuracy and slow-inaccuracy. Furthermore, if a positive correlation appeared between the two variables, it would imply the necessity of taking into account the students' individual differences and adjusting the choice of the teaching techniques and materials to the students' individual needs to facilitate their acquisition of grammar.

A group of thirty first-grade secondary-school students at an intermediate level of English participated in the study. They were all sixteen-year-old male and female learners. Due to the fact that the subjects were under age, their parents or guardians had been asked for permission to include the teenagers into the research procedure. The subjects were spread in different first grades of the same school and thus were taught by two different teachers. The researcher herself was not teaching any of the groups. The treatment lasted 4 months.

The research had been planned as primary and quantitative. There were four types of variables to be considered. The independent variable was the cognitive style of reflectivity vs. impulsivity as measured by the Matching Familiar Figures Test (MFFT). The subjects were assigned to the respectable groups according to the nominal scale. The dependent variable was the achievement in English grammar as measured by a grammar test prepared by the researcher on the basis of the material covered during the four months the experiment lasted. The students' progress was compared on the basis of the interval scale. The control variable was the students' level of English—intermediate. The research project, though it was planned as quantitative, could not be qualified as a typical experiment due to the fact that there was no control group. Both groups, that is the reflective and impulsive learners, underwent a certain treatment, and consequently, the study can be regarded as pre-experimental.

As was already mentioned in the previous paragraph, one of the instruments used in the research was the MFFT. It is a standardized instrument designed to measure the impulsivity/reflectivity dimension. The test was designed by Kagan (1966) and, initially, there were three versions of this instrument (Matczak 1992). The version used in this particular research (Makara 2009) is the F version that has become standardized and adopted by researchers investigating conceptual tempo. Initially, this version was intended to measure impulsivity/reflectivity among children aged six to twelve. However, as Matczak (1992, p. 27) claims, "numerous studies including the ones conducted in Poland are indicative of its usefulness and adequacy among older learners, including adults" (translation mine). In the study described here the Polish version of MFFT was used.

The MFFT is a psychological test and can be carried out only by a professional psychologist. The test consists of twelve tasks preceded by two practice tasks. Each task consists of one picture of an object and six options to choose from and match to the standard picture. Five of those options differ from the standard picture by one detail only, and only one option constitutes the actual match. The standard picture is located centrally on a page, which is presented horizontally to an individual. The options are distributed horizontally in two rows on a separate page, below the page with the standard picture. The level of difficulty raises slightly along with the tasks. However, the tasks are not complex and the pictures are based on commonly known images. The tasks require neither the involvement of the more advanced cognitive processes nor long-term memory. MFFT records two variables: *latency*, that is the time taken by an individual before providing the answer to each of the tasks, and *accuracy*, that is the number of incorrect responses before providing the correct one. In order to diagnose one's conceptual tempo, that is either impulsive or reflective one, the two variables, latency and

accuracy, have to correlate negatively, i.e. the longer the time for completing the task, the fewer mistakes, and the shorter the time, the more mistakes. Due to copyright laws, the original version of the test can be found in Matczak (1992).

The other instrument used in the study was a grammar test, which consists of five activities of various form. There were fifty questions in the test, and it contained thirty multiple-choice items, four gap-filling items, five sentence transformations, five sentence corrections and six word formations. The test had been piloted on three individuals at an intermediate level of English and its adequacy for that particular level was confirmed. The time allotted to completing the test was 45 min. The variety of forms included in the test reflected the forms of grammar presentations used in the course of the four-month treatment.

As far as the research procedure is concerned, the investigation started with administering the MFFT in order to classify the subjects according to the impulsivity/reflectivity variable. The test was carried out by the school psychologist and each student was tested individually. With regard to the school timetable and lesson organization, it was unfeasible to test all the participants on one day, as two regular groups of students were involved. The time devoted to one subject depended on the time spent on solving the tasks by each individual. Some of the subjects were tested within 5 min, whereas others within 15 min. The subjects were allowed to take as much time as they wanted to find the correct answer. If the answer was still incorrect, they were provided with some feedback from the psychologist, followed by further instructions to continue searching.

After establishing the subjects' conceptual tempo, the treatment started. As was already indicated, the study lasted 4 months. At the beginning, the subjects were tested on their knowledge of grammar by means of test one. Over the following four months the subjects were taught by their teachers. What was essential, however, was the fact that the students who were classified as impulsive, received mostly inductive grammar instruction, and the students who were classified as reflective received mostly deductive grammar instruction (see the previous section for individual preferences for grammar presentation). The students' regular teachers took special care that it was in fact the case and the researcher herself visited the lessons once a week. At the end of the study, the second grammar test was distributed to determine the students' progress in grammar and to find out if there existed any significant differences between the impulsive and reflective students. The following research hypotheses were formulated:

- H_0: There is no relationship between the reflective/impulsive cognitive style and the students' progress in English grammar.
- H_1: There is a systematic relationship between the reflective/impulsive cognitive style and students' progress in grammar (two-tailed hypothesis).

If H_1 is confirmed, then two other directional hypotheses can be formulated:

- H_2: Learners with the impulsive style are more successful in grammar learning when they follow inductive instruction.
- H_3: Learners with the reflective style are more successful in grammar learning when they follow deductive instruction.

7 Findings and Discussion

On the basis of the MFFT, the subjects were classified according to the values of average response time and the number of mistakes appropriate for their age group, that is 15–17 years of age. Matczak's (1992, p. 47) classification suggests that the average response time for extremely impulsive individuals is <8 s and 8.1–11.5 s for moderately impulsive ones. The number of mistakes is >7 for the former group and 5–7 for the latter. Likewise, the average response time for moderately reflective people is 11.6–16.5 s and >16.5 s for extremely reflective, with the number of mistakes being 3–4 for the former and <3 for the latter group. The subjects whose average values were outside these limits were classified as either fast-accurate or slow-inaccurate. Since the research group comprised only thirty subjects, the researcher decided to analyze their scores only in terms of the impulsivity/reflectivity and fast-accuracy/slow-inaccuracy dimensions without taking into account the moderate values. Thus, the research group consisted of thirteen subjects who were classified as reflective, nine subjects who were classified as impulsive, as well as five fast-accurate and three slow-inaccurate individuals. Table 1 presents the whole group together with the mean results of the two grammar tests. The correlation coefficients (Pearson *r*) were calculated for the two grammar tests in each group of subjects respectively, with the results being shown in Table 2.

As far as the results of the grammar tests are concerned, it can be seen from Table 1 that the mean on the second test was lower than the mean on the first test in each of the two groups. This came as a surprise and disappointment, since it seems that no progress in grammar had been made. Such an outcome, however, may be due to the difficulty level of the grammar test number two. The largest decline in results could be observed in the group of fast-accurate learners, whereas the smallest in the group of slow-inaccurate individuals. These results seem run counter to the general assumption that fast-accurate are the best learners. As can be observed, the slow-inaccurate students obtained comparable results on the

Table 1 Mean results of the two grammar tests and their standard deviation (SD)

Cognitive style	Mean (test 1)	Mean (test 2)	SD (test 1)	SD (test 2)
Fast-accurate	35.40	28.60	7.06	9.07
Reflective	31.23	28.77	6.37	8.01
Impulsive	34.44	31.89	5.57	7.36
Slow-inaccurate	28.33	26.00	15.18	8.72

Table 2 Correlation coefficients of the two grammar tests in groups with different cognitive styles

Cognitive style	r
Fast-accurate	0.50
Reflective	0.80
Impulsive	0.86
Slow-inaccurate	0.85

second grammar test to those of their reflective and impulsive peers. Nevertheless, it should be emphasized that such an interpretation should be accepted with caution as there were only three students in the slow-inaccurate group. While looking at the standard deviation for both tests in all the groups of students, it can be seen that impulsive learners can be regarded as the most homogeneous group because their standard deviations were the lowest. The least homogeneous group were slow-inaccurate students, although the results could have been distorted by the small number of learners in this particular sample.

The correlation coefficient tabulated for both grammar tests in each group of learners assumed the alpha decision level at $p < 0.05$, allowing for the degree of freedom of $N-2$ for the non-directional hypothesis. The values of Pearson *r* for reflective and impulsive learners, being both higher than the critical values, indicate a significant positive relationship between the results of the two grammar tests in these groups. In other words, the results of the tests were comparable as far as the individual participants are concerned.

In order to check whether the impulsivity/reflectivity dichotomy affects the process of second language grammar learning, a *t* test suitable for two groups of different sizes was conducted. Its purpose was to establish to what extent the difference in the mean results on the grammar test number two between the reflective and impulsive learners was statistically significant. As was already stated, the impulsive students obtained higher mean results than their reflective counterparts (31.89 as compared to 28.77). The critical value for *t* at $\alpha < 0.05$, at $df = 20$ for the two-tailed hypothesis equaled 2.086. The observed value for *t* equaled 1.18, which means that there was no significant difference between the test results of the reflective and impulsive learners. It can be assumed, then, that H_0 should be accepted. Consequently, no further analysis was carried out and the results of the fast-accurate and slow-inaccurate subjects were not taken into account.

8 Conclusions

The obtained results, though disappointing for the researcher, confirmed that impulsivity/reflectivity as a dichotomy of cognitive style does not really affect success in learning second language grammar. In other words, the fact that there are both reflective and impulsive students in the classroom does not have to be given much consideration since attainment will be comparable in the two groups, provided that appropriate grammar instruction is applied, deductive and inductive, respectively.

However, the research findings serve as a basis for indentifying some factors which could have potentially distorted the results at least to some degree. Firstly, the grammar tests were not standardized but designed by the researcher herself. The second test represented a higher level of difficulty, as the researcher had assumed that after 4 months of grammar instruction the learners could cope with a more advanced level, but this assumption turned out to be wrong. Secondly,

the study was conducted in a public secondary school where some limitations on the research procedure were imposed by the principal. Namely, the results of the tests were supposed to be graded by the students' regular teachers, which could have caused a higher level of anxiety. Thirdly, the two samples of reflective and impulsive students were not large enough, which could have considerably affected the statistical outcomes of the study. Finally, it would be interesting to observe if the same or similar results would be obtained were the students given grammar instruction opposite to their presumed cognitive preferences. Despite these limitations, the research project, though small in scope, offered some new insights into the role of cognitive style differences in achieving success in instructed second language learning.

References

Ehrman, M. and B. Leaver. 2003. Cognitive styles in the service of language learning. *System* 31: 393-415.

Gass, S. and L. Selinker. 2008. *Second language acquisition. An introductory course.* (third edition). New York and London: Routledge.

Jamieson, J. 1992. The cognitive style of reflection/impulsivity and field independence/dependence and ESL success. *Modern Language Journal* 76: 491-501.

Kagan, J. 1966. Reflection/impulsivity: The generality and dynamics of conceptual tempo. *Journal of Abnormal Psychology* 71: 17-24.

Kellogg, T. R. 1995. *Cognitive psychology.* London, New Delhi: SAGE Publications.

Makara, S. 2009. The relationship between impulsive/reflective cognitive style and success in grammar acquisition in English as a foreign language. Unpublished M.A. Thesis. Institute of English Studies, University of Wrocław.

Matczak, A. 1982. *Style poznawcze. Rola indywidualnych preferencji.* Warszawa: Wydawnictwo Naukowe PWN.

Matczak, A. 1992. *Test Porównywania Znanych Kształtów (MFF) J. Kagana.* Warszawa: Pracownia Testów Psychologicznych Polskiego Towarzystwa Psychologicznego.

Włodarski, Z. 1998. *Psychologia uczenia się.* Warszawa: Wydawnictwo Naukowe PWN.

The Appeal of the Teaching Method in the Postmethod Era: The Motivation of Adult EFL Course Participants

Anna Niżegorodcew

Abstract This chapter describes a small scale survey study on the motivation of adult ELT course participants. The motivation of two groups of course participants of two private language schools was compared as far as three considerations are concerned: why the participants had joined ELT courses, why they had chosen School A or B, and why they continued their courses in those schools. On the basis of the results of the survey, it seems that the decisive factor in the success of the courses in School A is a high level of motivation of those who join them, combined with a well-advertised method of EFL teaching based on the Audio-Lingual Method and having very little to do with authentic communication in English. The paradox is that the course participants approved of the method. The conclusion reached on the basis of the survey makes us realise that in spite of the disillusionment with foreign language teaching methods, including the Communicative Approach, a well-advertised and implemented teaching method may be appealing because it does not require much cognitive effort from course participants, giving them an impression that they will be able to speak real English very soon.

1 Introduction

In our paper (Jodłowiec and Niżegorodcew 2008) we claimed, following Kumaravadivelu (2001, 2003, 2006), that the second/foreign language (L2) teaching profession is heading towards a postmethod era, in which "the vision of the creation of the panaceum method seems not only unrealistic but also incongruent with the modern conception of foreign language teaching" [this author's translation] (2008, p. 15). Instead of one method, Kumaravadivelu proposes three *macrostrategies* (general principles) for L2 teaching: *particularity, possibility* and *practicality*. They refer, on the one hand, to the sociocultural context of L2 teaching and specific conditions of the teaching/learning process in particular countries and cultures (*particularity*),

A. Niżegorodcew (✉)
Jagiellonian University, Kraków, Poland
e-mail: annanizegorodcew@gmail.com

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as well as to the identities of L2 teachers and learners (*possibility*), and, on the other hand, to the close relationship between L2 teachers' classroom practice and teaching theory (*practicality*).

From the perspective of practical L2 teaching, however, it must be admitted that the developments in L2 teaching theory are not necessarily informed by various school practices, and the latter do not always follow recent L2 teaching theory. Our claims have been formulated in an academic setting, on the basis of academic papers (Jodłowiec and Niżegorodcew 2008), without taking into account various Polish L2 classroom practices in state and private language schools. Those are primarily based, in the case of the state sector, on the L2 teaching policies laid out by the Ministry of National Education and the pressure of school leaving examinations, and, in the case of the private sector, on the policy of numerous private L2 schools in Poland, which organise and teach EFL courses for children and adults. Those school practices may have very little in common with the developments in the field of L2 teaching theory.

Some language schools advertise their teaching as based on efficient *EFL teaching methods*, which will guarantee learners' success in acquiring English and in passing well-known EFL exams. Those claims about special and unique EFL teaching methods made me wonder, first, what the advertised methods involved and, secondly, what kind of motivation their participants had, that is, why they chose those particular courses and not others. The third, and the most interesting question about the real efficiency of the advertised courses, is beyond the scope of this small research project.[1]

2 Disillusionment with the Communicative Approach and Recent Developments in EFL Methodology

The last generally approved method which seemed to be a panacea for all the problems faced by L2 teachers and learners was the Communicative Approach, dating back to the 1970s of the twentieth century in the west of Europe. After the socio-political changes of 1989, it was immediately transferred to Polish new EFL teacher training colleges and state schools. The Communicative Approach seemed to be a fortunate alternative to the Audio-Lingual Method, which had been criticised for its limitations in the development of the skills allowing for spontaneous EFL production.

However, very soon after the introduction of the Communicative Approach into the educational policies of European and non-European countries, both EFL theorists and practitioners grew skeptical about the possibility of the application of

[1] Rokita (2007), for example, offers insights concerning the methods of teaching and the efficiency of Helen Doron EFL courses for young learners. Lipińska-Derlikowska (2008), in turn, provides an analysis of the effectiveness of the courses conducted by Callan School of English.

this approach in the EFL classrooms worldwide (cf. Swan 1985a, b; O'Neill 1991; Niżegorodcew 1995). It seems that the most serious problem with its successful implementation was the superficial character of language practice in the so-called communicative activities, which did not develop either English language fluency or accuracy. Let me quote what I wrote 18 years ago:

> EFL learners are usually given more freedom and responsibility than they are able to take. Their foreign language proficiency is generally at a low level and they are not accustomed to taking an active part in learning. They are divided into small groups or pairs in which they are supposed to work on a task, before they have been equipped with necessary linguistic and sociolinguistic resources. (…) Teachers have been made to believe that learners themselves possess sufficient foreign language resources, which can be activated by merely engaging them in communicative activities (Niżegorodcew 1995, p. 276).

At best, the Communicative Approach developed superficial interlanguage fluency, at worst learners became completely demotivated after years of learning English without any observable progress.

The reasons for such a state of affairs seem to lie in the incompatibility of unrealistic theoretical assumptions and their classroom implementation in very different settings. The Communicative Approach was created in target language countries for multilingual students of English as a second language, who were taught by native professionals. The method was aimed to develop English language skills through communication rather than communicative skills through English (cf. Widdowson 1978). When the Communicative Approach was applied on a mass scale to teaching EFL in state schools in monolingual countries with very different educational traditions from the British or American ones, frequently by inadequately qualified non-native teachers, a failure to teach and learn English successfully and, consequently, disillusionment with the Communicative Approach were inevitable.

The consequences of the disillusionment with the globally approved method of EFL teaching has led to a number of new developments in EFL methodology, although without attempts to find another panacea method. On the one hand, the Communicative Approach evolved into Task-Based Language Teaching/Learning, in which learners are supposed to become more autonomous and self-directed in using English while performing various tasks, e.g. projects. On the other hand, it has been discovered that EFL learning may be successfully combined with other school subjects in Content and Language-Integrated Teaching/Learning. Both approaches have been supported by modern information and communication technologies (ICT) in what has been called Computer-Assisted Language Teaching/Learning (CALT/CALL), e.g. in the use of blogs, wikis and webquests, as well as by the *Common European framework of reference* in the assessment and self-assessment of L2 proficiency, e.g. in *European language portfolios* designed for different ages and proficiency levels. All those methodological developments are congruent with Kumaravadivelu's (2001, 2003, 2006) macrostrategies for L2 teaching, that is particularity, possibility and practicality.

Those current approaches have at least three things in common: they take the local socio-cultural contexts of EFL teaching and learning into account, they draw

on the functions of English as a modern lingua franca and they use recent technological developments. Thus, what is required of learners is awareness of their own culture, openness to communication with the representatives of other cultures, and an ability to draw on all the available linguistic and technological resources. On the other hand, new EFL teaching and learning approaches place rather heavy cognitive and motivational demands on teachers and students, who may not be prepared, either cognitively or affectively, to engage in autonomous language learning and may search for other, simpler approaches. In consequence, in spite of the aforementioned developments in EFL teaching and learning, gradually replacing the inefficient Communicative Approach, wide interest in the courses which advertise a single, definite and optimal *method* of EFL teaching show that popular beliefs in the existence of a simple way to learn L2 are deeply rooted.

3 The Case Study: The Motivation of Adult EFL Course Participants

3.1 The Aim of the Study

The case study presented in this chapter was aimed at researching the motivation of adult participants of EFL courses in a private school which advertises itself as teaching English by the fastest and the most efficient *method* (further called School A). My main goal was to find out if the theoretically questionable concept of *a method of L2 teaching* is still sufficiently popular and appealing in practice to convince adult people to join and to continue a course following a definite *method*. I also compared the motivation of EFL course participants in School A with the motivation of EFL course participants in another private language school in the same area (further called School B), which does not advertise itself with reference to an EFL teaching method but it offers subsidised language courses.[2]

3.2 The Survey

In order to assess the participants' motivation, I designed a short motivation survey. It was anonymous, it was in written Polish and it consisted of three parts. In the first part, I asked the participants about the reasons why they had enrolled in an English course. The second part of the survey inquired about the reasons why the respondents had joined that particular school of English, and finally, after a few months of learning, I asked the participants why they continued their courses in

[2] In order to avoid unintended advertising, the identity of the schools is not disclosed.

that school, considering the fact that it was possible to discontinue them. The answers were given by underlining all the options applying to the respondents from among those provided in a list. Additionally, the course participants were requested to indicate if the reasons they had underlined were essential for them or only additional.[3]

3.3 The Participants

All the participants were adults; 52 came from School A and 56 from School B. Out of the 52 participants from School A, 44 answered Part III of the survey concerning the reasons for continuing the course in that school. Only 25 subjects from School B provided answers to that part of the survey. In both schools, the subjects belonged to a few different groups at the beginner, false beginner and pre-intermediate level. The survey was administered for the first time soon after the start of the courses and for the second time a couple of months later. No other data about the subjects are available.

3.4 Results of the Survey and Discussion

The results of this small research are very interesting and they clearly indicate that people keep searching for an optimal *method* of EFL teaching and a school which advertises itself as providing such a method is likely to become popular. This is the case with School A. School B is also popular but for a different reason—it offers subsidised courses of English.

The question which can be answered with reference to Table 1 concerns the type and intensity of the initial motivation of the participants in both schools. Let us compare answers b., d., e., f. and i. in Table 1. The subjects who had joined English courses in School A had much higher external (instrumental) as well as internal (intrinsic) motivation than those in School B. They expressed a desire to be able to communicate in English and to work or study abroad (instrumental motivation), but they also enjoyed the English language itself (intrinsic motivation). On the other hand, the levels of general motivation to learn English because of its popularity as a world language and the awareness that English is necessary nowadays for work and for education were equally high in both schools (answers a. and h.). It seems then that individuals with higher levels of motivation to learn English chose School A which offered them a more definitive way of learning by advertising its special *method*.

[3] The translated version of the instrument is included in the Appendix.

Table 1 Percentages of answers given in Part I: *why did you join a course of English?*

Answers	School A	School B
	N = 52	N = 56
a. Because English is the most popular world language	78	78
b. Because it is embarrassing nowadays to be ignorant in English	61	51
c. Because I like English	51	46
d. Because I like English songs, films, computer programmes, etc	48	37
e. Because I would like to communicate in English with friends who do not speak Polish (face-to-face or through the Internet)	71	55
f. Because I would like to read and write in English, including e-mail communication	71	48
g. Because I would like to pass an exam in the English language	50	46
h. Because I need English in my work or in my studies	80	78
i. Because I would like to work or study abroad	53	37

Table 2 Percentages of answers given in Part II: *why did you join this particular school of English?*

Answers	School A	School B
	N = 52	N = 56
a. Because of the price of the course	44	96
b. Because of the location of the course	55	48
c. Because of the course timetable	73	37
d. Because of the native speaker teachers	82	23
e. Because of friends' opinions	63	26
f. Because of the method used in this school	92	19

Table 2 shows the percentages of answers that the subjects gave to the questions about what they had valued in EFL courses in Schools A and B when they decided to join them. School B conducted EFL courses which were subsidised and, in consequence, nearly all the participants from that school had joined the courses because of their low price (answer a.). Conversely, the main incentive for the participants from School A was the advertised *method* of teaching English (answer f.). It involved "conversation-based" teaching, "qualified native speaker teachers" and "small groups". It also promised "success in passing a Cambridge University exam" and "the quickest results in language acquisition".[4]

[4] Phrases used in an information leaflet about School A.

The participants from School A were more determined than those from School B to find English courses which would suit their purposes, they asked for their friends' opinions (answer e.), they looked for the courses conducted at the most suitable time (answer c.), and they were particularly attracted to School A by its native speaker teachers, who they believed would teach them authentic English. The percentages of the answers in School B show that its participants were less inquisitive before joining the course (answer e.), much less concerned about the method of teaching English (answer f.), and less interested in native teachers in their chosen school (answer d.) than the subjects in School A. Answers f. and d. in Table 2 are particularly striking. This is because in School A 92 % of the respondents had joined their course because of the *method* of teaching (versus 19 % in School B). Similarly, native speaker teachers were one of the reasons for joining the course for 82 % of the participants in School A (versus 23 % in School B). Such findings are congruent with the aforementioned results in Part I of the survey, which indicates that those who joined courses in School A had higher levels of motivation to learn English than the students in School B.

I did not receive a sufficient number of answers in Part III of the survey from School B to be able to compare the two groups in a reliable way. Therefore, let me only focus on two clusters of reasons perceived as the most essential by the participants in continuing learning English. In School B, the participants perceived the teachers' nice approach to students as the most important reason for continuing their learning English (answer f.). They also appreciated the teaching techniques, including the teachers' use of English only, the quick pace of classes, and interesting exercises and tasks (answers b, c and d). Finally, they were satisfied that they were able to say something in English after a couple of months of studying (answer i.). In School A, the participants continuing the course were mostly motivated by their teachers' teaching techniques, including their use of authentic English only (answers b. and e.). They were also satisfied that they could say something in English and that they met with affable people in their groups (answers g. and i.). What seems significant is the high percentage of answers in the j. category, which indicates that the necessity to learn English in a short period of time was one of the main sustaining motives in the groups continuing learning English in School A. In the answers given in the survey there were no indications of disillusionment with the advertised method. However, the percentage of those who were motivated by "interesting exercises and tasks" in School A was visibly lower than that in School B (54 % vs. 72 %), even taking into account the smaller number of respondents from School B in Part III (Table 3).

3.5 Observation of Demonstration Classes in School A

I observed two demonstration classes in School A to be able to assess the method of teaching used in the school. The classes were attended by 15 adults, both young and older ones, 10 men and 5 women. Each class lasted 50 min and was taught by a different native-speaker teacher. The teachers must have received very clear guidelines

Table 3 Percentages of answers given in Part III: *what makes you continue learning English in this school?*

Answers	School A N = 44	School B N = 25
a. I have paid for a longer period of time	47	40
b. The way of teaching, including my teacher using only English	88	76
c. A quick and suitable pace of the classes	68	76
d. Interesting exercises and tasks	54	72
e. My teacher using authentic English	90	60
f. My teacher's nice approach to the students	75	92
g. Meeting a nice and well-integrated group of participants	81	60
h. The enjoyment I feel while using English	65	52
i. The satisfaction I feel that I am able to say something in English	86	76
j. The need to acquire English in a short period of time	84	52

how to teach since they both followed the same principles and used the same teaching techniques and materials. The method resembled very closely the principles and techniques of the classical Audio-Lingual Method (cf. Larsen-Freeman 2000, pp. 35–51). The teachers practised structures ('It's a…', 'What's this?'), they demonstrated objects ('It's a table', 'The pencil is short') and they constantly drilled grammatical patterns, making the participants repeat after them. The pace of the drills was fast and the teachers always demonstrated a given pattern by repeating it twice. One of the teachers spoke some Polish, and when he was asked in Polish about the meaning of some of the English words he used, he answered in Polish "at this time it's not important to understand, only repetition is important". The teachers did not respond to any additional remarks in English made by more proficient participants. Neither did they introduce additional vocabulary other than the words that were apparently prescribed for the structural practice in that particular unit, even if the produced sentences did not sound quite correct in English, e.g. "The floor is long", "The table is short". The teachers corrected learners' pronunciation and intonation and constantly praised the participants ("Good!", "It's OK!"). The teaching materials (demonstration pictures) looked very old fashioned, in particular the pictures showing a traditional British family and the phrases used to introduce them ('Mr Brown', 'Mrs Brown', 'Miss Brown' and 'Master Brown').

After the demonstration classes I had a short talk with the two teachers and asked the participants to write their comments about the classes. The teachers were native speakers of American English and they said that the method of teaching used in School A required them to use the British variety, to teach the structures and vocabulary assigned by the teaching units and to follow the assigned teaching techniques. They did not want to comment on my remark that 'Master Brown' was hardly used in contemporary English. A few participants of the demonstration classes expressed their appreciation for the method of teaching they experienced because, according to them, it was easier to remember words and phrases that were repeated in such a way, the method laid emphasis on speaking and could prepare them to talk in English. Nobody disapproved of the method. One person thought that it was difficult to assess a method of teaching only after the first classes. One of the respondents remarked that it was apparent that some of the participants did not understand what the repeated words meant. Another person wrote that he/she had joined the school because no other method worked with them. Some people added that the method had been recommended to them as an effective way of learning English.

4 Conclusion

As was assumed on the basis of the popularity of School A, it appeals to its potential students through its *method* of teaching. The method, however, is not a new and original development of the recent advances in EFL teaching but it draws on the method preceding the Communicative Approach, that is, the Audio-Lingual Method. As has been said before, the method was popular in the 1950s and 1960s, first of all in the United States. In the 1960s, it was also propagated to some extent in Poland, although it was also criticised for its lack of efficiency in developing free communication (cf. Marton 1972).

From what is known about the effectiveness of the Audio-Lingual Method (cf. Richards and Rodgers 2001), the method can develop accurate pronunciation and intonation, as well as basic grammatical structures in the target language. It is not efficient, however, in transferring the drilled speaking habits into spontaneous communication since it neglects the teaching of vocabulary and the development of pragmalinguistic skills. What was paradoxical in the survey results is the respondents' conviction that the language they were learning with the help of the method used in School A was authentic English or, in other words, the language used in everyday communication by native speakers.

It can be concluded that the method used in School A may be easier for less autonomous and less educated learners because it is totally teacher-centered and it does not require much cognitive effort from the participants. Among contemporary EFL teaching and learning approaches, which stress learner autonomy and self-directed learning, the method utilised in School A places all the responsibility on the teacher, letting learners believe that by repeating and memorising language patterns they will be able to speak real English. It can be speculated that for those

who have little time and need clear guidance in language learning, the method may be useful, particularly at the beginning stages. On the basis of the results of the survey, it seems that the decisive factor in the success of the courses in School A was a high level of motivation of those who joined them, combined with a well-advertised method of EFL teaching based on the Audio-Lingual Method. It remains to be seen, however, if the English language taught in School A will enable the participants to communicate in the real world in authentic English.

Appendix

A Translated Version of the Survey Used in the Study

1. Why did you join an English course?

Please underline all the reasons for signing up for the course which apply to you, stating as well whether they were essential or additional:

a. Because English is the most popular world language	*essential*	*additional*
b. Because it is embarrassing nowadays to be ignorant in English	*essential*	*additional*
c. Because I like English	*essential*	*additional*
d. Because I like English songs, films, computer programmes, etc	*essential*	*additional*
e. Because I would like to communicate in English with friends who do not speak Polish (face-to-face or through the Internet)	*essential*	*additional*
f. Because I would like to read and write in English, including e-mail communication	*essential*	*additional*
g. Because I would like to pass an exam in the English language	*essential*	*additional*
h. Because I need English in my work or in my studies	*essential*	*additional*
i. Because I would like to work or study abroad	*essential*	*additional*
j. Because of another reason?		

2. Why did you join this particular School of English?

Please underline all the reasons for choosing the school which apply to you, stating as well whether they were essential or additional:

a. Because of the price of the course	*essential*	*additional*
b. Because of the location of the course	*essential*	*additional*
c. Because of the course time table	*essential*	*additional*
d. Because of the native speaker teachers	*essential*	*additional*
e. Because of friends' opinions	*essential*	*additional*
f. Because of the method used in this school	*essential*	*additional*
g. Because of another reason?		

3. What makes you continue learning English in this school?

Please underline all the reasons for continuing learning English in this school which apply to you, stating as well whether they were essential or additional:

a. I have paid for a longer period of time	*essential*	*additional*
b. The way of teaching, including my teacher's using only English	*essential*	*additional*
c. A quick and suitable pace of the classes	*essential*	*additional*
d. Interesting exercises and tasks	*essential*	*additional*
e. My teacher's using authentic English	*essential*	*additional*
f. My teacher's nice approach to the students	*essential*	*additional*
g. Meeting a nice and well-integrated group of participants	*essential*	*additional*
h. The enjoyment I feel while using English	*essential*	*additional*
i. The satisfaction I feel that I am able to say something in English	*essential*	*additional*
j. The necessity to acquire English in a short period of time	*essential*	*additional*
k. Something else?		

References

Jodłowiec, M. and A. Niżegorodcew, A. 2008. W stronę post-metodycznej dydaktyki języków obcych. In *W stronę nowoczesnego nau-czania języków obcych*, eds. M. Jodłowiec and A. Niżegorodcew, 15-21. Kraków: Tertium.

Kumaravadivelu, B. 2001. Toward a postmethod pedagogy. *TESOL Quarterly* 35: 537-560.

Kumaravadivelu, B. 2003. *Beyond methods: Macrostrategies for language teaching.* New Haven: Yale University Press.

Kumaravadivelu, B. 2006. TESOL methods: Changing tracks, challenging trends. *TESOL Quarterly* 40: 59-81.

Larsen-Freeman, D. 2000. *Techniques and principles in language teaching.* (second edition). Oxford: Oxford University Press.

Lipińska-Derlikowska, M. 2008. A glottodidactic evaluation of the Callan method, an alternative method of teaching English as a foreign language. Unpublished doctoral dissertation. Institute of English, Warsaw University.

Marton, W. 1972. *Nowe horyzonty nauczania języków obcych.*. Warszawa: Państwowe Zakłady Wydawnictw Szkolnych.

Niżegorodcew, A. 1995. The communicative approach in the Polish context: Strengths and weaknesses. In *Studies in English and American literature and language*, eds. I. Przemecka and Z. Mazur, 271-278. Kraków: Universitas.

O'Neill, R. 1991. The plausible myth of learner-centredness: or the importance of doing ordinary things well. *ELT Journal* 45: 293-304.

Richards, J. and T. Rodgers. 2001. *Approaches and methods in language teaching*. (second edition). Cambridge: Cambridge University Press.

Rokita, J. 2007. *L2 lexical development in early L2 acquisition.* Kraków: Wydawnictwo Akademii Pedagogicznej.

Swan, M. 1985a. A critical look at the Communicative Approach (1). *ELT Journal* 39: 2-12.

Swan, M. 1985b. A critical look at the Communicative Approach (2). *ELT Journal* 39: 76-87.

Widdowson, H. 1978. *Teaching language as communication.* Oxford: Oxford University Press.

The Folk Linguistics of Language Teaching and Learning

Michael D. Pasquale and Dennis R. Preston

Abstract This chapter reports on an ongoing ethnographic study of folk beliefs about language teaching and learning among 108 teachers and learners of nine languages at secondary and university levels in the United States. Folk linguistics (e.g. Niedzielski and Preston 2003) emphasizes, among other things, the need for an understanding of beliefs in all areas of applied linguistics, suggesting that intervention is always improved when language professionals know the often strongly held beliefs of non-linguists and the folk theories that underlie such beliefs. Scholars such as Kalaja (2003) have pointed to the need for such research in language teaching and learning in particular. After these data were acquired, we prepared a topical outline and developed a taxonomy based on it. The details of that taxonomy with sample interpretations of respondent comment are the main focus of this chapter. The major factors discussed by the respondents were categorized as: (1) psycholinguistic, (2) structural linguistic, (3) instructional, and (4) rationales and outcomes. We believe this macrotaxonomy reflects actual concerns and beliefs teachers and students hold and are ones most deserving of more detailed investigation.

1 Introduction

This chapter reports on an ongoing ethnographic study of folk beliefs about language teaching and learning among teachers and learners of languages at secondary and university levels in the United States. Folk linguistics (e.g. Niedzielski and Preston 2003) emphasizes, among other things, the need for an understanding of beliefs in all areas of applied linguistics, suggesting that intervention is always improved when language professionals know the often

M. D. Pasquale (✉)
Cornerstone University, Grand Rapids, US
e-mail: michael.pasquale@cornerstone.edu

D. R. Preston
Oklahoma State University, Stillwater, US
e-mail: dennis.preston@okstate.edu

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strongly held beliefs of nonlinguists and even the folk theories of language which underlie such beliefs. Scholars such as Kalaja (e.g. 2003) have pointed to the need for such research in language teaching and learning in particular.

First, we wanted to know what language learners believe about their task. We cannot assume that all learners have a uniform set of beliefs, even if they are from the same cultural background. But we do know that beliefs about language, including language teaching and learning, are very powerful and have the potential to disrupt or even derail the process. Second, we also cannot make the assumption that all teachers share the same beliefs as their students or even one another. The main goal of this project is to understand what learners and teachers believe about language teaching and learning.

We have oriented our study within a discoursal framework, both for collecting and analyzing the data (e.g. Preston 1994). First, we will describe our quantitative work, which seeks to develop a taxonomy of belief by reporting the areas of interest elaborated on and raised by our respondents. Second, however, since other studies of folk belief have relied heavily on discourse analytic and culturally contextualized approaches (e.g. Barcelos 1995) that suggest that folk belief is a dynamic process, a discourse approach has been suggested as way that may reveal insights into respondents' reasoning rather than only into what might be considered more fixed notions of belief (e.g. Kalaja 1995). We will, therefore, delve into the qualitative aspects of our study, which focuses on discourse-based pragmatic analysis of the respondents' utterances. We believe in particular that the search for presupposed material in these conversations will be especially rewarding, since what is presupposed is assumed by speakers to be shared and agreed-on knowledge and should take us deeper into beliefs about language teaching and learning than what is asserted. For example, Stalnaker says that presuppositions, "(…) are what is taken by the speaker to be the *common ground* of the participants in the conversation, which is treated as their *common knowledge* or *mutual knowledge*" (1978, p. 320, emphasis in the original). We will also look beyond formal pragmatics to include other interpretations of what might be implied in these data, using such tools as argument analysis, as developed in Schiffrin (1985, 1987) and Preston (1994) to show the positions, supports, and (often imagined) disputes from a (often imaginary) respondent.

2 Materials and Methods

We interviewed 108 teachers and learners of eight languages at secondary and university levels along with those who had not studied a foreign language. The interviews were done in 1998 at a large Northern US university and in secondary schools in the adjacent city. Figure 1 shows the numbers of respondents at each level and for each language. Not surprisingly, there were a greater number of students studying Spanish than any of the other languages represented.

Much folk linguistic research differs from traditional chapter-and-pencil attitude measurements (e.g. Horwitz 1995) by focusing on discoursal data, and that is

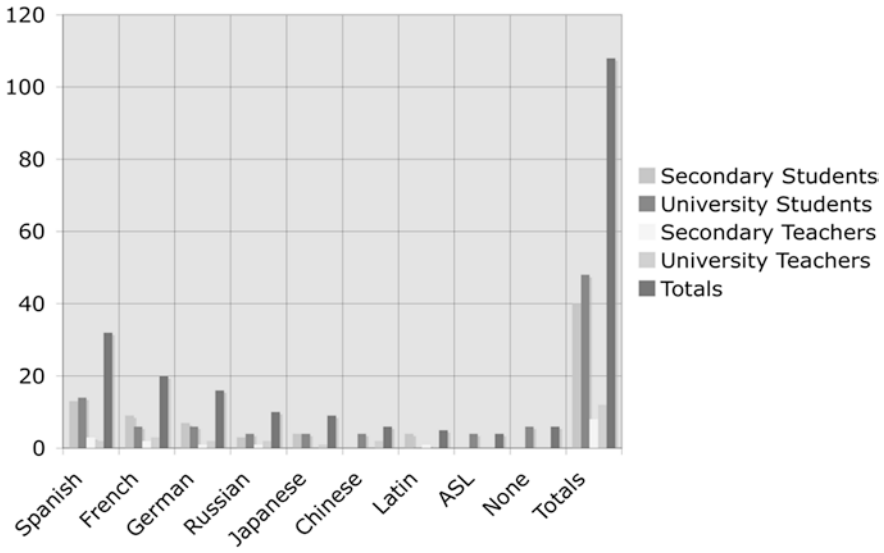

Fig. 1 Level, language, and status of respondents

the approach taken here. We interviewed respondents by engaging them in conversations on a wide variety of topics relevant to their experiences as language teachers and learners, allowing them to explore extensively topics we suggested or, even more importantly, ones they brought up themselves. In developing the interview protocol several major categories and subcategories were developed and several more were added as a result of respondent interest. The details of that final taxonomy are the main focus of this chapter. The major factors that we predicted the respondents would discuss were: (1) psycholinguistic, (2) structural linguistic, (3) instructional, and (4) rationales and outcomes (Fig. 2).

After collecting basic demographic data, including language use background, the interviewers, both experienced linguists and language teachers and learners themselves, followed the outline of the topics shown in Fig. 2 in eliciting tape-recorded data. Although they went through all these categories in roughly the order presented here with each interviewee, they did not interrupt or redirect respondents who chose to elaborate on these themes or introduce new categories of their own.

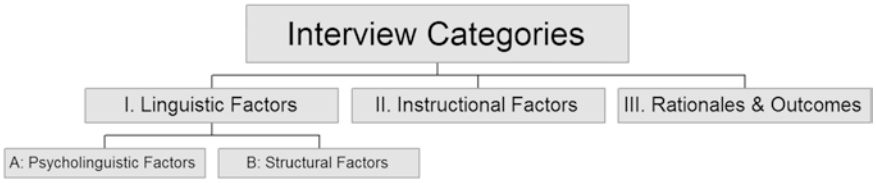

Fig. 2 Interview categories

In several cases, pairs of respondents were interviewed, and their interactions proved especially valuable. In what follows, we discuss the major subcategories for each of these more general ones and give examples of respondent data for several.

3 Results

3.1 Quantitative Results: A Folk Linguistic Taxonomy

3.1.1 Major Category I: Linguistic Factors

Psycholinguistic Factors

Linguistic factors were separated into psycholinguistic and structural factors. Psycholinguistic factors were furthermore divided into the following: 'inherent' (e.g. "Do students have an advantage in learning a FL with high intelligence and/or special talent?"), 'applied' (e.g. "Does high effort alone determine success as a FL student?"), 'demographic' (e.g. "Do younger learners have an advantage in learning a FL?" "Is there a difference between girls and boys in language acquisition?"), 'acquired' (e.g. "How does motivation play into learning a FL?" "Does prior knowledge of grammar give a FL student an advantage?"), and 'input' (e.g. "Does immersion help in learning a FL? Does explicit grammar instruction aid FL learning?"). (Fig. 3)

Under the subcategory 'inherent -> intelligence', for example, we asked such questions as the following.

I = Interviewer, J = University French Instructor
I: Do you think students have to be really smart to learn a foreign language?
J: Define smart
I: Very intelligent-
J: High IQ test?
I: Yeah—do you think that plays into learning a foreign language-
J: **No—I think that seventy-five percent of it is effort**.

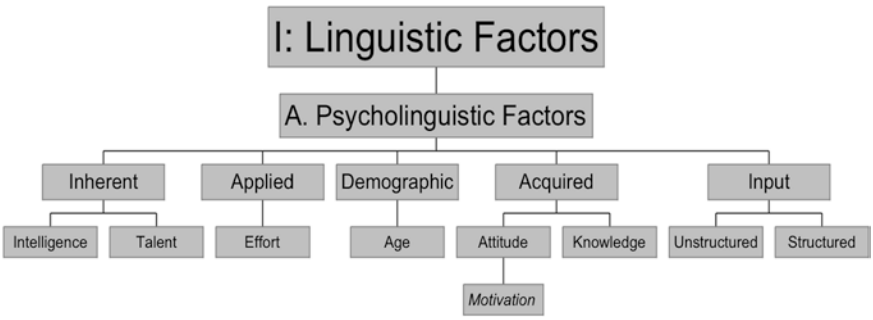

Fig. 3 Psycholinguistic factors

Although this French teacher does not think that intelligence plays a big role in FL learning and that effort has more of an impact, it is important to note that "High IQ test" was specified by the respondent as the type of intelligence under discussion. In the next example, a student also downplays intelligence, but stresses the role of motivation ('acquired -> attitude -> motivation').

I = Interviewer, V = 3rd year High School Spanish student
I: Do you necessarily need to be really intelligent in order to do well in a foreign language class?
V: I don't think—it's how intelligent you are, =I think it's like how (coughs) I think it's more um -- like -- how much you want to learn. **If you really want to learn the language, you'll work harder, but if you're just like 'Oh I'm taking this class because I have to' you know, they won't really want to—learn.**

In the 'inherent' subcategory, we also wanted to see whether there was a belief in a special talent for foreign languages:

I = Interviewer, P = High School Latin Teacher, K = High School French Teacher
I: Do you find that some people have a special talent for learning foreign languages?
P: I think so. I think some people do
K: I do too. I think it's like—any area. I mean I think there are kids that are more talented for math—and kids that are more talented for—you know, literature. **I think there are kids that ar- have more of a talent for foreign language. I don't think they're all created equal.**

In the 'demographic' subcategory, we were interested in knowing if students and teachers believe that there is an advantage in learning a language earlier in life rather than late. This German teacher agrees with the idea that there is an advantage to an earlier start.

C = High School German Teacher
C: **I think the younger we can start—the easier they pick it up**. They seem to almost—uh—First of all they seem to have a lot of interest in a foreign language, um—they like to copy—you:—they like to: uh play at it, and they seem to be very proud as far as producing a foreign language. Um:—they seem to remember it—much easier. … Their mind seems to be uncluttered.

SLA researchers are interested in the role prior knowledge plays a role in language acquisition (e.g. DeKeyser 2005), and this is reflected in our 'acquired' -> 'knowledge' subcategory. What do our respondents say?

I = Interviewer, J = University French Instructor
I: Do you think it helps to know the grammar of English when learning another language
J: I would have to say not so much … it isn't essential to learning a second language, but does it help? If you're in a hurry—yeah … I think it does. **If you're learning out of a book and it's explained that way I think it helps knowing what those things are. If you're just thrown into a second language immersion setting I think it would help but not as much.**

This French teacher does not think an overt knowledge of grammar plays much of a role for students learning a FL. The context of learning would be important though (e.g. self-learning from a textbook vs. learning by immersion) and indicates the importance of the subcategory 'input', one we added after our interviews.

Structural Factors

The second category refers to the structural factors of vocabulary, pronunciation, morphology, syntax, semantics, pragmatics, and modality. One key aspect in each of thee categories is how different the L1 is from the L2 (Fig. 4).

Vocabulary and pronunciation were especially prominent for both teachers and students. For example, the following Spanish student talks about the first:

T = University Spanish Student
T: **The easiest for me was like always vocab**, but then putting it with all the rules and stuff, you know, it's harder.

"Rules and stuff," however, suggests that morphology and syntax are also prominent issues, but pronunciation is perhaps more so, for both learners and teachers. For example, this Spanish student thinks that some languages are harder to pronounce than others and is particularly suspicious of German and its "thick and heavy" accent.

I = Instructor, A = University Spanish student
I: Do you think that some foreign languages are harder to learn than others?
A: **Like I just think the sounds of like like German, I think just sounds like it's really -- like the pronunciation of words is really kind of—you know—like thick, like heavy, like I don't know. I couldn't do that…**

Some respondents focused specifically on word order and grammatical categories. This German teacher has the following to say about teaching grammar in class.

C = High School German teacher
C: **Obviously when you- you teach a foreign language, you have to go through what is a subject, what is a—verb, and you have to go through the whole—spectrum, because they don't know what a preposition is…**

This German teacher believes that the explicit teaching of grammatical categories is a necessary part of teaching the language and that students need a metalinguistic knowledge of the syntax, but not everyone agreed that such knowledge of the language is efficacious. This response also illustrates how multiple items in our taxonomy were often triggered; although the explicit reference here is to word order ('syntax') we also classified such responses under 'input -> explicit' in 'psycholinguistic factors'.

We did not talk with a lot of advanced students, which may explain why we did not hear so much about such pragmatic features as politeness, conversational

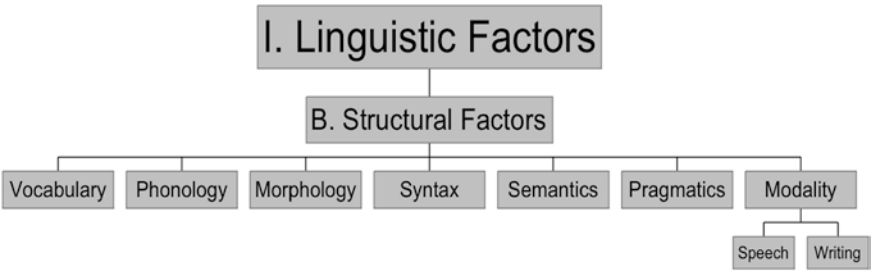

Fig. 4 Structural factors

moves, and discourse markers. This example is from a University French instructor talking about French culture.

B = University French Instructor
You ca- can't teach it [i.e., the culture] like—like um—like being there- y- you have to be there to really understand it.=I could tell you about—Quebec culture until I'm blue in the face, but—you won't- you'd say "Oh, that's interesting. Oh, that's interesting." An::d, you know, **it's not really relevant to you, not really—um: just kind of like trivia,—and it is kind of just put it in the back if you remember it at all, and when you're there and you experience it, you start realizing, wow, you know, they do it this way.=Why? I wonder why…**

This French teacher believes that students can better "connect the dots" when learning the language within the culture, suggesting that instruction in pragmatics is not worth much—you have to be there.

3.1.2 Major Category II: Instruction

Our next major category relates to instruction. The subcategories are 'organization' (e.g. the syllabus), 'Teacher' (e.g. how a teacher teaches a class and what a teacher is supposed to do—error correction, facilitate, etc.), 'activities' (e.g. what kinds of classwork and homework are effective), and 'Course materials' (e.g. textbooks and other class materials such as videos, computer programs) (Fig. 5).

In this example a high school Russian student explains what she likes about how her Russian class is organized. We see that she appreciates a diversity of tasks and likes how the teacher uses different teaching methods.

L = High School Russian student
L: Then with Russian,—he just makes it fun. Like a-- we're not always constantly doing book work, you know. And it's not always just—him speaking and—lecturing to us. But, you know, **he does like different things that- like we watch movies, like cultural movies and stuff**.

We also wondered what students and teachers perceived to be the role of a teacher. Are teachers to be information givers, instructors, guides, etc.?

T = High School Spanish student
T: [Responding to a question about whether a teacher's use of the second language exclusively would be a good strategy] **As far as uh speaking only that language—in there, that'd be—quite a bit harder.** You know, because—even though you know I'm in my third

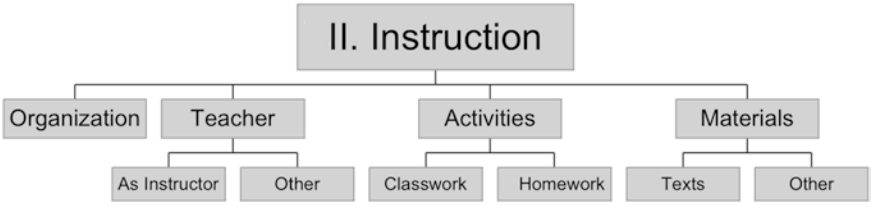

Fig. 5 Instruction

semester of Spanish, and you know she- ( ) somebody starts speaking Spanish to me in full sentences, and **I have tr- I have trouble comprehending.**

Some teachers are trained to use the L2 exclusively in class, but this student does not like it. He wants more L1 support. There are other roles that teachers play as well as the techniques they employ. What is the role of a teacher in a foreign language classroom?

D = University Spanish Instructor
D: **I think the role of the teacher in the second language classroom is to facilitate communication between the students.** And what I mean by that isn't sort of to hover over all the students and correct them when they make a mistake. In fact, one of the hardest things to do is not correct them. I think it's more important to get them to start producing the language and working with it, and then over the course of time they're gradually going to correct their own errors, which is the best possible scenario we could ever hope for.

This Spanish teacher sees the role of a teacher as a facilitator and not as a major error corrector, but this German student has a different view. This student believes that a major classroom strategy is for teachers to instill good habits in their students. These two examples highlight our interest in teacher and student expectations diverging.

M = High School German student
M: I think, **I also think that (hhh) one of the most important functions of a foreign language teacher is to slap you on the back side of the head when you say it th- the wrong way and then to say it the right way for you.** Um cause one of the worst—one of the hardest things to undo in a foreign language is when you learn it wrong.

Finally, in this general category, we were also interested in what students and teachers thought of such classroom materials as textbooks and the media. As the excerpt below shows, attractive media obviously outdo blackboard "whoop-de-doop" in effective teaching.

Y = High School French student
Y: Yeah. It [the use of flash cards, cartoons, etc…] helps, yeah. It- cause I mean it draws your attention to something, I mean if they go and write up on the board whoop-de-doo you know it's written up on the board you can write it down in your notes, but **it doesn't stick in your mind. Whereas if they put it out with a stupid cartoon or something, you remember that stupid cartoon**.

3.1.3 Major Category III: Rationale and Outcomes

This major category covers the reasons why students should or do take foreign languages and what the possible benefits or outcomes of learning a FL are. The categories are 'cultural appreciation' (e.g. students take a language to learn more about another culture), 'heritage language' (e.g. students take a language to learn more about their own heritage), 'political gains and losses' (e.g. should North Americans become bilingual?), and 'economic Gains and losses' (e.g. do students gain more earning power through knowing another language?) (Fig. 6).

First, we wanted to see what students and teachers thought were the reasons why students should learn a second language. This Spanish teacher, along with many others, stressed the benefits of cultural appreciation.

M = High School Spanish teacher
M: **It [the study of culture] makes them understand—other culture—to h- help them understand their own.** I always stress the- not only just the similarities but the differences also. That we are different at the same time we are also similar.

There were also many comments about political reasons for learning other languages. A key idea shared by students and teachers is that not learning a FL is a dangerous thing since it promotes linguistic imperialism or just makes us people in the US look bad. This Spanish instructor provides a good example.

I = Interviewer, D = University Spanish instructor
I: Is that a dangerous viewpoint? [The idea that since the rest of the world is learning English so quickly, Americans don't need to learn foreign languages]
D: **Yes I think it's a very provincial, very uh xenophobic even perspective to have**.

Economic benefits were also given as reasons why students should learn a second language. This student believes that learning a foreign language is the key to economic success or at least some help in getting a job.

I = Interviewer, J = High School Spanish student
I: Do you think it's good to know a foreign language?
J: **Yes. Specially today an:—with all the jobs and stuff—You definitely need to know another language**.

We have a great deal more work to do with these data from just a quantitative point of view. We would like to know, for example, which language, teacher, and student subgroups are more likely to mention and/or respond to categories and which subgroups, especially students and teachers, hold opposite beliefs. We are also interested in subgroup comparison with current professional models of SLA and FL instruction, although, in keeping with folk linguistics investigations in general (e.g. Niedzielski and Preston 2003), we do not do so to show necessarily the incorrectness of folk belief. This work has already allowed us to add details to our taxonomy that were not there in the beginning: 'input' in 'psycholinguistic factors' and 'modality' in 'structural factors' and illustrates the value of talk with the folk.

3.2 Qualitative Results: Discourse Analysis

In what follows we want to focus on the second, qualitative, approach we take to these data. In the first example, Dave, a university-level Spanish instructor is asked if the topic of culture should be covered in a language class.

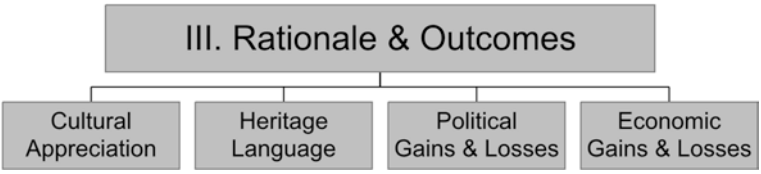

Fig. 6 Rationale and outcomes

I = interviewer, D = University Spanish Instructor
I: Do you believe that culture should be taught along with the language?
Dave: Yes; absolutely. Because if you don't, what are you teaching?- Y—You're teaching very rudimentary grammatical structures that—are frankly quite boring. I mean- I think that the focus of any second language program should be to get the student to be able to communicate in the foreign language setting,-in a foreign country. In that context. (I: Uh huh) Not just be able to whip off "Oh you conjugate this this way and that that way." (I: Uh huh.)

We look first at some presuppositional factors of what our respondents say. When Dave asks: "If you don't [teach language and culture], what are you teaching?" and answers himself that "You're teaching very rudimentary grammatical structures," we can extract a presupposition about language course content: It is either 'cultural and grammatical' or only 'grammatical' by means of the suggestion that 'counterfactual conditionals' involve presuppositions (e.g. Levinson 1983, p. 184). Dave's presupposition is that, if culture is not included in language instruction, the only other content would be the 'frankly boring' rudimentary grammatical structure (that he very clearly seems not too keen on).

I: Do you believe that culture should be taught along with the language? [*Presupposes that "culture" can be separated from "language."*]
Dave: [*Does not deny I's presupposition*] …if you don't [*teach culture along with the language*] … you're teaching [*only*] … rudimentary grammatical structures…

We have classified Dave's presupposition as an example of 'Instruction -> Organization' in our taxonomy since it identifies the two organizations that he believes are possible in language instruction—culture and grammar or grammar alone.

We could also analyze this passage using argument analysis (c.f. Schiffrin 1985, 1987; Preston 1994) to show the positions, supports, and (imagined) disputes that Dave deals with. We follow here the style of analysis used for conversational (not rhetorical) argument, since the latter strikes us as more appropriate for carefully planned discourse. Here we believe that Dave 'imagines' a hearer ('adversary') who might not believe that culture should be added to grammar (or that 'grammar is boring'). Here is the argument he constructs, using the terms 'position', 'support' and 'dispute'.

I: Presupposes the position that "culture" can be separated from "language."
Dave:

1. Takes the position that culture should be included in language teaching (POS 1), which, can be construed as a dispute of the position that languages should be taught 'without culture'.
2. Supports POS 1 by saying that teaching grammar is boring (SUP 1) (and, recall, presupposes that teaching grammar is the only alternative to teaching culture and grammar).
3. Supports POS 1 further by saying that the aim of language teaching is communicative (SUP 2).

Although Dave's position simply takes one side of I's question, he feels the need to support it, and does so by pointing out the 'boring' nature of grammar (with surely all the demotivating implications that that carries) and by stressing the communicative goals of language teaching, which, presumably, he feels cannot be met unless 'culture' is made a part of the instruction.

Although argument analyses may seem tedious (or even self-evident), more complex ones than these will highlight the presuppositions involved in complex interactions (and recall that many of our conversations are not one-on-one). Perhaps more importantly, they shed light on other features of the data, in this case, interesting discourse markers. For example, such data are rich in details that may add important and subtle dimensions of meaning. Here, the discourse markers 'I think' and 'I mean' and the modifier 'frankly' carry clues to the speaker's intent and, in our opinion, are clearly related to the fact that he has constructed an argument with an imaginary conversational adversary who might not believe that culture should be included in the classroom. Consider first 'frankly'. Why does an interlocutor need to reassure a listener that he or she is being 'frank'. 'Frankly' serves, in such instances, as a marker that what we are about to say may not be pleasing to (agreed on, believed by, etc.…) all, but that it needs to be said and will be said. After being 'frank', however, Dave softens his comments with two hedges: 'I mean' and 'I think'. This distances him from his opinion to a certain extent and removes the possibility that his interlocutor could accuse him of being pig-headed or overbearing. All this is perhaps even more interesting since Dave's opponent is not there.

So we have seen, at least in exemplary bits that we have examined in greater detail, that the pragmatics of conversation—presuppositions, genre structure (e.g. argument), and discourse markers—provide us with interpretive subtlety in our search for individual and group beliefs in the area. We believe that a great deal more of this sort of analysis will be rewarding.

4 Conclusions

After only a superficial analysis of the interviews and a comparison of the categories shared by the respondents, we saw a need to edit our taxonomy so as to have a more authentically folk taxonomy of learning and teaching of foreign languages. As we continue to delve into more of the data, we may need to adjust the taxonomy further.

Even this quick look at the data reveals considerable diversity of opinion, both conflict between teacher and student beliefs, and those between folk opinion and the prevailing or 'received' linguistic/pedagogical scholarship. We believe that the knowledge of folk beliefs and attitudes will help arm practitioners in many areas of applied linguistics: first, by allowing practitioners to take beliefs into consideration in teacher training, syllabus design, materials preparation, and the like; second, by allowing teachers to assess an act on such belief in the conduct of their art; third, by treating folk belief with respect. Are some folk opinions 'correct', perhaps particularly as regards individual learning styles? We will continue to mine these data in two ways: first, by quantifying or weighting those opinions which are most widely held and discussed, and second, by more deeply analyzing those common opinions to try to determine their basis in general folk linguistic beliefs about language and learning.

Surely already one can see that there is diverse opinion about all the elements of the taxonomy among the respondents as well as between the respondents and

academic beliefs. We hope that this is the sort of folk linguistics which will arm practitioners in the many branches of applied linguistics with the sort of information that makes their task easier by having knowledge of the beliefs and attitudes of their clients, beliefs that, in spite of a lack of expert knowledge, are very strongly held.

References

Barcelos, A. M. 1995. A cultura de aprender lingua estrangeira (inglés) de alunos de Letras. MA thesis: UNICAMP, University of Campinas, Brazil.

DeKeyser, R. 2005. Implicit and explicit learning. *Handbook of second language acquisition*, eds. C. J. Doughty and M. H. Long, 313-348. Oxford: Wiley-Blackwell.

Horwitz, E. K. 1995. Using student beliefs about language learning and teaching in the foreign language methods course. *Foreign Language Annals* 18: 333-340.

Kalaja, P. 1995. Student beliefs (or metacognitive knowledge) about SLA reconsidered. *International Journal of Applied Linguistics* 5: 191-204.

Kalaja, P. 2003. Research on students' beliefs about SLA within a discursive approach. In *Beliefs about SLA: New research approaches*, eds. P. Kalaja and A. M. Ferreira Barcelos, 87-108. Dordrecht: Kluwer.

Levinson, S. C. 1983. *Pragmatics*. Cambridge: Cambridge University Press.

Niedzielski, N. and D. R. Preston. 2003. *Folk linguistics*. Berlin: Mouton de Gruyter.

Preston, D. R. 1994. Content-oriented discourse analysis and folk linguistics. *Language Sciences* 16: 285-330.

Schiffrin, D. 1985. Everyday argument: the organization of diversity in talk. In *Handbook of discourse analysis, Vol. 3: Discourse and dialogues*, ed. T. Van Dijk, 35-46. London: Academic Press.

Schiffrin, D. 1987. *Discourse markers.* Cambridge: Cambridge University Press.

Stalnaker, R. 1978. Assertion, In *Syntax and semantics 9: Pragmatics*, ed. P. Cole, 315-322. New York: Academic Press.

Part III
Classroom Applications

Methods in Language Teaching: Do We Still Need Them?

Krystyna Droździał-Szelest

Abstract The present article focuses on the concept of a language teaching method, considered by many the most crucial notion in language education. Methods have had a long history in language teaching due to the widespread belief that it is possible to establish a set of procedures (= a method) which, when implemented in an expert way in the classroom, would inevitably lead to successful language learning. Therefore, many generations of teachers have found the notion attractive, turning to it in the hope of finding solutions to problems they encounter in everyday teaching. Additionally, for many teachers, especially novices, the concept of a method provided a safe frame of reference. However, with different methods coming into fashion, gaining and losing favor, it became apparent with time that none of the methods proposed could guarantee success for all learners. It is hardly surprising then, that the end of the twentieth century witnessed a move away from methods, at least at the theoretical level, and the beginning of the so-called post-method era in language education. As there has been quite a lot of confusion and misunderstanding surrounding language teaching methods, the aim of this article is to reexamine their role in contemporary language education.

1 Introduction

It is difficult, if not impossible, to envisage any serious discussion on language teaching today without references being made to the concept of a *method*. For many years the concept was considered fundamental due to a popular belief that it was possible to establish a direct link between the learners' achievements in the target language and the method used by the teacher in the classroom. In other words, it can be said that for a considerable period of time language teaching methods were at the heart of language teaching methodology, they were perceived as frameworks for classroom practice, providing teachers both with theoretical

K. Droździał-Szelest (✉)
Faculty of English, Adam Mickiewicz University, Al. Niepodleglosci 4,
61-874 Poznan, Poland
e-mail: krysiad@wa.amu.edu.pl; krysiad@amu.edu.pl

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foundations and guidelines for teaching, which, if strictly adhered to, would result in successful development of the target language competence of all learners.

The history of language education, as depicted by various authors, appears as a succession of different methods, with each new method making claims to have found a solution to the problems the profession was struggling with. It can be said without much exaggeration that over the centuries the quest has been going on for the best/perfect method of language teaching, the method that would make it possible for all learners to succeed in their endeavor, independent of the learning/teaching circumstances. The quest (or as some would say, the preoccupation with methods) became stronger in the twentieth century, especially in its second half, when a lot of new, more modern and, supposedly, more effective methods came into being, supplanting their seemingly discredited or simply outdated predecessors (cf. Titone 1968; Howatt and Widdowson 2004). Much throughout its earlier history (prior to the twentieth century) foreign language teaching had been rather limited in scope, with languages being taught almost exclusively by means of the so called *traditional* or *classical methods*, deriving directly from the teaching of classical languages (i.e. Greek and Latin). The new methods that appeared later on can be interpreted as a response to and a result of changing demands on language education, generated in turn by the changing circumstances (e.g. social, economic, political or educational), on the one hand, and changes in relevant theories (i.e. of the nature of language and of language learning), on the other (cf. Stern 1983, p. 452, 471; Richards and Rodgers 2001, p. 3). There seems, however, to be yet another important reason behind the changes, pointed out by Widdowson, who perceives emerging methods as different ways of addressing two fundamental questions in language pedagogy: one of them relating to the definition of purpose, i.e. "what kind of language knowledge or ability constitutes the goals that learners are to achieve at the end of the course", and the other concerning the process of learning, "(…) what kind of student activity is effective as the means to that end". In his opinion, "the history of English language teaching can be seen as a succession of different ways of conceptualizing purpose and process, and crucially, how they relate to each other" (2004, p. 353). His views echo the ones voiced by Richards and Rodgers who stated that "changes in language teaching methods throughout history have reflected recognition of changes in the kind of proficiency learners need" (2001, p. 3).

It was not until the second half of the twentieth century, with its already mentioned spectacular abundance of a range of methodological proposals, that the so-called 'method-consciousness' developed (cf. Titone 1968, p. 4). Accordingly, the new proposals were given a warm welcome by many, but also continued to be viewed with skepticism, especially as the new methods, based on scientific theories of language and established learning theories, claimed universality and promised success irrespective of other factors. Hence, the 1960s of the last century witnessed a number of large scale studies conducted to compare the efficacy of the new methods in relation to more traditional ways of teaching as well as to find out which of the methods proposed was the most effective, 'the best'. The methods were studied, described, classified, and compared in terms of their

proclaimed superiority over other methods. They were at the heart of language teaching, with language educators attempting to solve the problems of language teaching and learning by focusing their attention solely on the concept of a method (cf. Stern 1983). Such an increased interest in as well as high expectations connected with language teaching methods, however, soon led to some problems with the 'method' construct itself. Since the end of the twentieth century in particular, there have been quite a lot of controversies surrounding the concept, with both theorists and practitioners recognizing some of its inherent problems. As a result, methods have been widely criticized, their decline or even death has been proclaimed, at least at the theoretical level, and many researchers have come with some new solutions. With so much confusion and misunderstanding surrounding the concept of a *method*, the rationale behind this paper is to re-examine the notion from the point of view of its usefulness for the language teaching profession today. The paper will examine such issues as the rationale behind the idea of the quest for the best method, problems with the definition of a method, as well as alternatives to this concept. The purpose of the following discussion is to answer the question whether there is still a place for methods in language education, and if so, what we need them for.

2 The Method Era: The Quest for the 'Best Method'

As has been stated in the introduction, throughout much of its history language teaching was conceptualized in terms of language teaching methods (cf. Kelly 1969) or even "dominated by the 'method' construct" (Ellis 1992, p. 4). The belief that the teaching method was the most important factor (Allwright and Bailey (1991, p. xvii) and that "improvements in language teaching will result from improvements in the quality of methods, and, that ultimately an effective language teaching method will be developed" (Richards 1990, p. 35) was common both among academics and practicing teachers (see also Nunan 1991).

Together with the growing interest in languages in the second half of the twentieth century, the need to improve language teaching became urgent and the quest for the 'best' method began. It is the period from the 1950s to the 1980s that is believed to have been the most active as far as methods are concerned. It witnessed the emergence of a number of methods, some of which were recognized practically all over the world (e.g. the Audio-Lingual method and Communicative Language Teaching), whereas others were rather limited in their reception and use (e.g. the Silent Way, Community Language Learning, Total Physical Response, the Natural Approach) (cf. Larsen-Freeman 2000; Richards and Rodgers 2001). The new methods, based on the findings of modern linguistics and psychology of the times rather than being "conventional routines", based on the experience or "the so-called 'common sense' of the individual teacher" (Titone 1968, p. 97), claimed superiority over traditional methods and promised success for all learners, irrespective of the context of instruction. In the 1970s there was a lot of confidence

in those new, scientifically-based methods, and, accordingly, teacher training was dominated by a "prescriptive approach", manifesting itself in trying to answer the question "which of the major competing methods" novice teachers should follow (Allwright and Bailey 1991, p. 7). Initially, it was expected that an answer to this question would be found in the analyses of the major teaching methods. It was with this purpose that a number of research projects were carried out, among them the famous Pennsylvania project and Scherer and Wertheimer's study, both comparing the effectiveness of the Audio-Lingual method with the more traditional ways of teaching. In both cases, the results turned out to be inconclusive and disappointing; the researchers did not find any significant differences pointing to a superiority of either method. Additionally, as Allwright and Bailey report, the results of the Pennsylvania study were "personally traumatic to the project staff", who expected "a clear superiority for the audiolingualism, but instead found no significant differences on several measures, and superiority of the traditional method on traditional measures of reading skill" (1991, p. xvii, 7). What is more, a number of other studies (e.g. the GUME project) provided similar inconclusive results, leading researchers to a conclusion that global methodological prescriptions do not make sense, since "no one single method could be superior to other methods in an absolute way" (1991, p. 9).

However, some other studies carried out at that time, did show significant differences in the results obtained, thus pointing to methodology is an important factor. Summing up his review of available research on methods, Hammerly concludes that the studies showed that "what is emphasized is learned best" (i.e. in a study comparing the effectiveness of the audio-lingual method against traditional (grammar-translation) method, the audio-lingual students "were markedly superior in listening and speaking", whereas the traditional students were superior in reading and writing, and additionally, translation) (1982, pp. 635–638). At the same time, the studies comparing the effectiveness of methods "have shown little or no difference in the results obtained with different methods" (1982, p. 218) In general, it did not seem to matter which method was used. Thus, as Allwright and Bailey suggest, methods do matter, but only to the extent that they make "a real difference to what actually happens in the classroom" (1991, p. vii). It seems only apt to end this part of the discussion with the following quotation: "the quest for the perfect teaching method seems to have been a vain one, and, in the light of the fact that learners of languages vary in so many ways and are affected by so many social and psychological factors, it seems to have been doomed from the very start" (Toney 1983, p. 352).

It comes as no surprise that together with the disappointment resulting from the studies testing the efficacy of different methods a move away from the methods concept could be observed together with their importance being degraded. At the same time, however, the studies drew attention to some problems inherent in the concept itself as well as some important issues related to its understanding and applications in the classroom context. As Hammerly points out, the studies themselves suffered from serious flaws, as they did not take into consideration the fact that teachers involved in the experiments did not actually follow the classroom procedures they

were supposed to adhere to; additionally, they seemed to rely on common teaching practice (1982, p. 218; 1985). According to some early studies even teachers specifically trained in the use of a particular method in the classroom applied a range of tasks and activities going beyond the method in question (Nunan 1991, p. 3). An attempt to explain the problems involved in language teaching methods was undertaken by Kumaravadivelu (2006) who refers to what he calls *the myth of method*. In his opinion, over the years a number of views have been formulated which, together with the ambiguous use of the term 'method', eventually led to the disillusionment with the concept and the gradual decline of methods. Among those, the following seem to be of importance (Kumaravadivelu 2006, pp. 162–168):

1. "there is a best method out there ready and waiting to be discovered";
2. "method constitutes the organizing principle for language teaching"—it can be used to cater to various learning and teaching needs, wants and situations;
3. "method has a universal and ahistorical value"—it can be used anywhere and everywhere; founded on "idealized concepts geared towards idealized contexts", methods are removed from classroom reality (a one-size-fits-all approach);
4. "theorists conceive knowledge, and teachers consume knowledge"—there exists a noticeable division between theory and practice, with teachers ("an underprivileged class of practitioners") following blindly what has been offered by theorists ("a privileged class").

Another crucial issue concerns the lack of agreement among researchers as to what constitutes *the best method*. Over the years there have been some noticeable changes in the way the concept has been perceived. For instance, Titone (1968, p. 111) believes that in order to really progress in language teaching we need methods "derived from (1) a scientific linguistic and anthropological analysis of language in general and of the specific language to be taught, (2) a psychological analysis of the process of second-language learning, (3) a definition of the specific objectives to be attained by a particular course of language study, and (4) the results of both a general theory of teaching experience and experimentation in foreign language teaching (historical and experimental dimensions)".

In trying to answer the question whether there actually is 'the best method', Hammerly refers to Stevick (1976) in whose opinion different language teaching methods can produce good results, as there is something good in most methods. What also needs to be emphasized, however, is the role of "highly qualified teachers" (1982, p. 269) who, while following the method's principles, are at the same time able to take on-the-spot decisions based on a careful analysis of their classrooms. Hammerly believes that under such circumstances "it is neither practical nor necessary to talk about a single, one and only best method" because "all methods must fit specific goals"; thus "(…) the best method for any set of goals is that method which most successfully reaches the agreed-upon goals" (1982, p. 270). He explains further that as there are certain general goals that must be reached by all the students, and certain general learner characteristics, "logic tells us that there must be a best way whereby most students can attain those goals. There may

be several good ways, but only one best way, and this best way is most likely to be one that combines the best that other ways have to offer" (1982, p. 270). In his book he specifies the characteristics that such a method should have (1982: 270–71, 641–644). These are further elaborated upon in his other publication (e.g. Hammerly 1985).

Prabhu (1990, pp. 161–176), on the other hand, claims that there is no such a thing as the best method and offers three possible ways to explain this statement, based on a broad interpretation of the term *method*:

- different methods are best for different teaching contexts;
- all methods are partially true or valid;
- the notion of good and bad methods is itself misguided

As far as the *no best method option* is concerned, Prabhu is convinced that "(…) we have no adequate notion of what 'best' might mean"; thus, in his view, the very notions of 'good' and 'bad' need to be redefined first. He goes on to explain that by the best method he means "the method that yields the best results in terms of learning outcomes", and, accordingly, "teaching methods should be judged by the amount of learning they can lead to, in a given period of time" (1990, p. 168). This, in turn, would require detailed comparisons of methods together with a careful quantification of learning outcomes, which are only achievable as a result of well-designed, controlled experiments. Such objective evaluation, in his opinion, is unfortunately, difficult to implement. He is against regarding professional efforts "as a search for the best method which, when found, will replace all other methods" and advocates looking at teaching as an "activity whose value depends centrally on whether it is informed or uninformed by the teacher's sense of plausibility" (to what degree it is 'real' or mechanical). In this sense, "a method is seen simply as a highly developed and highly articulated sense of plausibility, with a certain power to influence other specialists' or teachers' perceptions. Perhaps the best method varies from one teacher to another, but only in the sense that it is best for each teacher to operate with his or her own sense of plausibility at any given time" (1990, p. 175).

As can be seen from the above discussion, the large scale research studies carried out in the second half of the twentieth century, focused mainly on the search for the best method. At the same time, however, they provided both researchers and practitioners with valid information concerning the concept of a method and its practical applications.

3 The Concept of a *Method* in Language Teaching: Definitions and Problems

As has already been pointed out, the method debate, although inconclusive and disappointing in itself, brought into focus some important issues related to the concept of the method as well as its understanding. As Kumaravadivelu explains, the

word *method* derives from a Greek word *methodos* and it means "a series of steps leading towards a conceived goal", "a planned way of doing something" (2006, p. 162). In the field of language teaching, together with an increased interest in language teaching methods, there appeared a need to clarify different terms and concepts, especially as the research results pointed to some serious problems with the way that the construct was understood and used. Richards and Rodgers note that in the past, when "linguists and language specialists sought to improve the quality of language teaching (…), they often did so by referring to general principles and theories concerning how languages are learned, how knowledge of language is represented and organized in memory, or how language itself is structured" (2001, p. 18). Accordingly, "in describing methods, the difference between a philosophy of language teaching at the level of theory and principles, and a set of derived procedures for teaching a language, is central" (2001, p. 19). As a result, the concept of a method cannot be considered in isolation from other concepts crucial to understanding the relationships between different levels of language teaching.

One of the first attempts to establish a sound theoretical framework clarifying the difference between the existing notions, specifying the relationships with the theory and its applications in the classroom as well as introducing some order came from Anthony, who in 1963 proposed his own 'pedagogical filing system' with three basic terms, namely *approach, method*, and *technique* (Allen and Campbell 1972, p. 5). The three terms were hierarchically arranged, meaning that "*techniques* carry out a *method* which is consistent with an *approach*" (ibid.). Anthony perceived an *approach* as "a set of correlative assumptions dealing with the nature of language and the nature of language teaching and learning"; "it states a point of view, a philosophy, an article of faith", and "(…) it is often unarguable except in terms of the effectiveness of the methods which grew out of it" (1972, p. 5). A *method* means for Anthony "an overall plan for the orderly presentation of language material, no part of which contradicts, and all of which is based upon, the selected *approach*. An *approach* is axiomatic, a *method* is procedural" (1972, p. 6). As it is elaborated later on, a *method* "is the sum and structure of the selection, gradation, and characteristic pedagogy which is carried out on the basis of certain axioms which form the underlying approach" (Anthony and Norris 1972, p. 41). Within an approach there can be many methods; for instance, within the aural-oral approach such methods as *mim-mem* and *pattern practice* are used.[1] As far as the notion of a *technique* is concerned, it is described as "a particular trick, stratagem, or contrivance used to accomplish an immediate objective", that is to say that "technique is the level at which classroom procedures are described" (Richards and Rodgers 2001, p. 19). *Techniques* are implementational in that they "actually take place in a classroom". Again, "*techniques* must be consistent with a method, and therefore in harmony with an approach as well" (2001, p. 19).

As was explained, the reasons for methods constantly coming and going "do not lie in the failure of any particular set of techniques", but "(…) are rather to be found

[1] *Mim-mem* and *pattern practice* would be considered techniques by other methodologists.

in the shifts in linguistic, psychological and pedagogical concepts which in turn cause corresponding shifts in notions of what it means to acquire, teach, or learn a language" (Anthony and Norris 1972, p. 40). In other words, "[m]ethods (…) are shaped by many different theories, and the popularity of a method may depend on the popularity of any of these theories" (1972, p. 41). Anthony did not consider his framework as final, leaving some room for 'desirable modifications and refinements'.

Some disagreement over Anthony's definition can be found in the literature and, although it eventually seemed to have withstood the test of time, it came under strong criticism from different sources. Richards and Rodgers, for instance, believe that it "fails to give sufficient attention to the nature of a method itself" (2001, p. 20), as it does not specify the roles of teachers and learners or the role of instructional materials. Additionally, it does not explain how an approach is put into practice in a method or how method and technique are related. Thus, they revised and extended the model, focusing primarily on the notions of method and technique. In their framework "approach and method are treated at the level of *design*, that level in which objectives, syllabus and content are determined, and at which the roles of teachers, learners, and instructional materials are specified"; whereas the level of implementation (i.e. *technique* in Anthony's model) is referred to as *procedure*, the term which they consider "slightly more comprehensive" (2001, p. 20). They comment that "[t]hus, a method is theoretically related to an approach, is organizationally determined by a design, and is practically realized in procedure". *Approach*, following Anthony, "refers to theories about the nature of language and language learning that serve as the source of practices and principles in language teaching" (2001, p. 20). Approaches, contrary to methods, are more flexible and therefore "they allow for individual interpretations and application. They can be revised and updated over time" (2001, p. 245). Methods, on the other hand, are "relatively fixed in time and there is generally little scope for individual interpretation", "they are learned through training", and "the teacher's role is to follow the method and apply it precisely according to the rules. (…) A method (…) refers to a specific instructional design or system based on a particular theory of language and language learning. It contains detailed specifications of content, roles of teachers and learners, and teaching procedures and techniques. (…) Compared to approaches, methods tend to have a relatively short shelf-life. Because they are often linked to very specific claims and to prescribed practices, they tend to fall out of failure as these practices become unfashionable or discredited" (2001, p. 245). Summing up, Richards and Rodgers define a method as an "umbrella term for the specification and interrelation of theory and practice" (that is redefined approaches, designs and procedures) (1982, p. 154, quoted after Brown 1994a, p. 48).

In the literature on language teaching some other definitions of the notion of method can be found; however, some of them do not refer to the relationship with other crucial concepts. For obvious reasons, only some of those definitions will be presented here. To start with, Hammerly defines a method as "a set of procedures and techniques that agree with basic assumptions about the nature of language and the purpose and process of second language learning, that deal with such matters as selection and gradation of second language rules and elements, the presentation

of teaching materials and the nature of practice, and that aim at the development of linguistic, communicative, and cultural competence" (1982, p. 218). Later on he adds that "a method is any of the sets of teaching procedures that follow an approach, each method's procedures being based on numerous specific assumptions that are in harmony with the assumption(s) of the approach. (…) A method is practical and specific, whereas an approach is philosophical and general" (1985, p. 12). According to Hammerly, an *approach* is "a general pedagogical orientation based on one or few assumptions related to an explicit or implicit theory" (1985, p. 112), referring to such examples as an oral approach or a linguistic approach. In his understanding, a *method* is "any of the sets of teaching procedures that follow from an approach, each method's procedures being based on numerous specific assumptions that are in harmony with the assumption(s) of the approach" (1985, p. 113). Therefore, an approach can serve as a basis for a number of methods, and the methods can make use of different procedures in the classroom, provided they are not contradictory with the assumptions of the approach. Stern believes that a method, "however ill-defined it may be", is a 'theory' of language teaching "which has resulted from practical and theoretical discussions in a given historical context. It usually implies and sometimes overtly expresses certain objectives, and a particular view of language; it makes assumptions about the language learner; and underlying it are certain beliefs about the nature of the language learning process. It also expresses a view of language teaching by emphasizing certain aspects of teaching as crucial to successful learning" (1983, pp. 452–453). Methods "have constituted theories of language teaching derived partly from practical experience, intuition, and inventiveness, partly from social, political, and educational needs, and partly from theoretical considerations; but they have never been systematically stated as coherent theories of language teaching and learning nor have they been critically verified by empirical experience, except in a few recent cases" (1983, p. 473). It is because of the inadequacy of the concept of a method that "a conviction has gradually spread that language teaching cannot be satisfactorily conceptualized in terms of teaching method alone" (1983, p. 474). In his opinion, it is not always clear what constitutes a particular method, just as the term 'method' is not unequivocal (1983, p. 452). Prabhu (1990, p. 162), in turn, uses the term *method* "inclusively to refer both to a set of activities to be carried out in the classroom and to the theory, belief or plausible concept that informs these activities". Finally, Larsen-Freeman (2000, p. xii), following the *Dictionary of language teaching and applied linguistics* (1992), refers to a method as "a way of teaching a language which is based on systematic principles and procedures". All of this shows that the definitions are many and varied, and although they overlap at times, they obviously point to some problems with the understanding of the concept.

According to Brown, Richards and Rodgers made an important contribution to a better understanding of the concept of method by (a) specifying "the necessary elements of language teaching 'designs' that had been neglected" (i.e. objectives, syllabus, activities, learner and teacher roles, and the role of instructional materials), and (b) by drawing attention to some previously overlooked weaknesses of methods (e.g. methods being too restrictive, too pre-programmed, and too 'pre-packaged', by

assuming that the teachers' actions in the classroom can be translated into a set of procedures that would be suitable with different learners in a variety of contexts) (1994a, p. 49). Thus, even though Richards and Rodgers' reformulation of the concept of method was 'soundly conceived', it was not accepted by the professional community. As Brown (1994a, p. 49) explains, "what they would like us to call 'method' is more comfortably referred to (…) as methodology". What is more, the terminology that is used in the literature on the subject seems more reflective of Anthony's terms, although some changes have been introduced.

Other researchers introduce similar distinctions, contributing to further problems with the concept of method. For instance, Richards (1990, p. 11) distinguishes between *methods* and *methodology*, where the former notion refers to "activities, tasks, and learning experiences selected by the teacher to achieve learning, and how these are used within the teaching/learning process". *Methodology* has a theoretical basis in the teacher's assumptions about language and second/foreign language learning, teacher and learner roles, and learning activities and instructional materials. As such, it is not "something fixed, a set of rigid principles and procedures that the teacher must conform to" (1990, p. 35); it is an exploratory process that the teacher engages in every time s/he enters the language classroom. Such a process, by nature, must be dynamic and creative, which makes it different from situations in which teachers have to follow certain models, i.e. methods, which they have been with during teacher training programmes.

Kumaravadivelu (2006, pp. 83–84) draws attention to some problems with the term *method*, as we use it to refer to two different elements of language teaching: *methods as proposed by theorists*, and *methods as practiced by teachers*. Classroom research clearly shows that even teachers who claim to follow a particular method do not actually adhere to the basic principles associated with it. He uses the label *method* to refer to "the established methods conceptualized and constructed by experts in the field", and *methodology* "to refer to what practicing teachers actually do in the classroom to achieve their stated or unstated teaching objectives" (2006, p. 84). With reference to teachers, Kumaravadivelu reports some facts from research which illustrate some problems that teachers have with understanding the concept and implementing it in practice. These are as follows (2006, p. 166):

- teachers who claim to follow a particular method do not conform to its theoretical principles and classroom procedures at all;
- teachers who claim to follow different methods often use the same classroom procedures;
- teachers who claim to follow the same method often use different procedures; and
- teachers develop and follow in their classroom a carefully crafted sequence of activities not necessarily associated with any particular method.

At this point, it is necessary to point out that nowadays teachers seem to no longer believe that a single theory or a single method will be of help in confronting the challenges of everyday teaching. Thus, they rely on their own intuition and practical knowledge in trying to decide what will or will not work in their teaching

context. In fact, there seems to be quite a big difference between what the theorists say and what teachers practice in their classrooms.

Unfortunately, problems with language teaching methods are not limited to teachers only; they are more numerous and include the following:

1. It is not always clear what constitutes a particular method (Stern 1983).
2. Methods represent a relatively fixed combination of language teaching beliefs (Stern 1983; Richards and Rodgers 2001).
3. Methods present "a pre-determined, packaged deal for teachers that incorporates a static view of teaching" (Richards 1990, p. 37).
4. They are prescriptive – teachers have to accept the claims or underlying theories and apply them to their practice; thus, good teaching is regarded as a correct use of the method and its principles and techniques; learners are treated as passive recipients of the method (Brown 2002).
5. They are characterized by overemphasis on single aspects as the central issue of language teaching and learning (Stern 1983).
6. All methods make assumptions about the learner and ways of learning which have not been tested against the realities of actual teaching.
7. Generally, methods are quite distinctive at the early, beginning stages of a language course and rather indistinguishable from each other at later stages (Brown 2002).
8. It was once thought that methods can be empirically tested by scientific quantification to determine which one is 'best'; however it is difficult to implement (Prabhu 1990).
9. Methods may be culturally inappropriate; a method that is suitable in one part of the world may not be culturally acceptable/appropriate in another (e.g. problems with learner-centred methods in some countries/educational systems) (Larsen-Freeman 1999).
10. They reflect a negative view of teachers as the ones "who cannot be trusted to teach well" when left on their own (Richards 1990, p. 37).
11. The method concept is prescriptive, as it gives prescription to classroom behaviors rather than analyzing what is happening in language classrooms; deskilling of the teacher's role (Pennycook 1989, p. 610).

The discussion of methods and method-related problems undertaken above provides a number of arguments against viewing methods as a central concept in language teaching. It also provides an explanation why attempts have been made in language teaching to move away from the concept of a method.

4 Alternative Methods or Alternatives to Methods?

Together with the realization that there has never been and there will never be a perfect method, various researchers offered solutions trying to break away with the concept. While it is undeniable that the greatest number of alternatives to methods

appeared at the end of the twentieth century, it has to be acknowledged at the same time that such attempts had been made much earlier. One of the most obvious options almost readily available was *eclecticism,* which was advocated by a number of specialists in the field. To start with, one of the proponents of eclectic language teaching was Palmer (1964, quoted by Titone 1968, p. 110), who, referring to language teaching methods said: "(…) the eclectic approach will say 'find the right stone to kill the right bird' and it is advisable to kill one bird with more than one stone".

In a similar vein, Rivers (1981, quoted in Stern 1983, p. 478) recommended an eclectic approach for practical reasons. As she explained, language teachers "faced with the daily task of helping students to learn a new language cannot afford the luxury of complete dedication to each new method or approach that comes into vogue". Furthermore, she believed that eclectics try "to absorb the best techniques of all the well-known language-teaching methods into their classroom procedures, using them for the purposes for which they are most appropriate". In other words, she perceived such an approach as keeping in line with the intuitions of many practicing teachers.

Another well-known methodologist, Hammerly (1982), was convinced that in spite of the growing dissatisfaction with language teaching methods, improvement in language teaching could still come from modification of successful *eclectic* methods. As mentioned elsewhere, he viewed methods as an important variable in language teaching, since, contrary to other factors which are beyond control of teachers, classroom methodology is actually amenable to change in a way that can effect success in language learning. He voiced an opinion that "the 'ideal' method of language teaching would be one that would take all facts into account, borrow the best that existing and former methods have to offer, add innovations as needed, and combine all of this into a harmonious new whole in agreement with a sound comprehensive theory and adapted to the characteristics of the learners, to program goals, and to learning conditions" (1985, p. 165, cf. p. 4). He specifies the characteristics that such a method should have (1982, pp. 270–271, 641–644) and elaborates upon them in a subsequent publication (Hammerly 1985). One of them states that such a method "would be *eclectic*, incorporating the best from various methods and approaches and combining thee elements into a harmonious and effective whole". It is his contention that "enlightened eclecticism is the only reasonable way out of the present profusion of conflicting methodologies" (1982, p. 271). The method proposed by Hammerly is called the *C.A.B. Method* (but also CA-OB, see Hammerly 1985)—where C stands for *Cognitive* (or actually *Cognitive habit formation*), A—for *Audiolingual* (but also *Audiolingual-visual/Audio-Oral*), and B for *Bilingual*, referring to the main characteristic features of the method (cf. Hammerly 1982, pp. 640–641, 1985, p. 166). As Hammerly explains, his method, being an eclectic method, "includes every type of good teaching that is not in conflict with its basic principles. It is thus the opposite of special or exclusive methods that attempt to teach second languages by relying primarily on a single procedure". On the contrary, it is a "developing system, with room for new procedures and improvements as they prove themselves effective". However, there also comes a warning that "the concept of enlightened eclecticism excludes

the haphazard putting together of any group of procedures that do not harmonize" (1982, p. 641; see also Hammerly 1985, pp. 171–187). The method is not "proposed as something ready-made and available, but rather in the hope that at least some members of our profession will want to fully develop it and try it" (1982, p. 644).

Other methodologists advocate a similar approach to methods, which is referred to as *pluralism*. For instance, Larsen-Freeman (2000), contrary to the popular view that individual methods can be either suitable or unsuitable for a particular context, and that different methods belong to different contexts, believes that there is some value to each method and that different methods, or parts of methods should be made use of in the same context. In her opinion (2000, p. 187):

> (…) teachers need to inquire into their practice. They need to reflect on what they do and why they do it, and need to be open to learning about the practices and research of others. They need to interact with others, and need to try new practices in order to continually search for or devise the best method they can for who they are, who their students are, and the conditions and context of their teaching.

In consequence, teachers subscribing to the pluralistic view of methods are encouraged to pick and choose from among the existing methods to create "their own blend" for a particular context. Such a practice is also known as *eclecticism.* It is crucial for teachers to remember, however, that techniques which combine into a coherent method have to be chosen in "a principled manner", which means that the process of picking and choosing is not random, but takes place in accordance with a certain consistent philosophy of teaching and learning that teachers follow. Hence, we talk about *principled eclecticism,* involving conscious reasoning on the part of the teacher (Larsen-Freeman 2000, p. 183). As Larsen-Freeman (1987, p. 7) comments, "(…) it is not uncommon for teachers today to practice a principled *eclecticism,* combining techniques and principles from various methods in a carefully reasoned manner". She goes on to say that it is not possible "to consistently demonstrate the superiority of one method over another, for all teachers and all students, under all possible circumstances" and that "teaching is a matter of making informed choices. (…) Whereas once teachers could be trained in one way of teaching, now they must be educated to choose among the options that exist" (1987, p. 9).

Eclectic teaching is not the only manifestation of a shift in language pedagogy away from the single method concept as the main approach to language teaching. Stern is convinced that abandoning this concept is a step in the right direction "to overcome the narrowness, rigidities, and imbalances which have resulted from conceptualizing language teaching purely or mainly through the concept of method" (1983, p. 477). His contribution is an attempt to develop a broad conceptual framework for language teaching by putting forward a concept of *teaching strategy*. His claim is that "it is analytically more effective, and pedagogically more flexible to operate with the broader concept of *teaching strategy* under which can be subsumed a large number of specified *teaching techniques* (1983, p. 505).[2]

[2] Stern (1992, p. 277) reserves the term *strategy* for "broad intentional action", viewing teaching strategies "as part of the policy level" in his framework (cf. Figure I.2). *Techniques* refer to "more specific behaviors, operations, procedures, and activities", relating to the practical action level.

He perceives strategies as "deriving from the three crucial issues in language learning, (…) "labeled L1-L2 connection, the code-communication dilemma, and the explicit-implicit option" (1983, p. 505). As a result, we end up with six major strategies, representing three dimensions:

(a) the *intralingual-crosslingual* (*intracultural-crosscultural) dimensions*, concerning the use or non-use of L1 in L2 learning;
(b) the *objective-subjective* (*analytical-experiential*) *dimension*, resulting from the code-communication dilemma; it concerns the possibility of treating the target language and culture as either codes that can be studied and mastered or as something to experience subjectively through communication;
(c) the *explicit-implicit dimension*, relating to techniques which encourage the learner either to adopt a cognitive approach to the new language (learning) or to employ techniques which encourage more intuitive absorption of language, i.e. acquisition (Stern 1983, pp. 505–507).

The three strategies constitute an attempt to conceptualize language teaching in more general educational terms, and, according to Stern, make it possible to analyze language teaching in a more comprehensive way and relate it to other basic concepts, as well as to other areas of educational activity (see also Stern 1992).

Strategies also constitute the basis of yet another framework. Commenting on teacher training programmes, Marton (1988, p. xiv) argues that such programmes should provide trainees with some form of firm theoretical scaffolding or general schema, which will help them to plan their teaching at the beginning of their careers and to interpret their experiences in a principled and coherent way". On the basis of many years of experience with teacher training and observation he suggests that such a schema "should be directly related to the central issue in language pedagogy, that is to the question how to make teaching so efficient that it would promote only genuine and successful learning experiences" (1988, p. xiv). In other words, it is necessary to identify the possible options, i.e. learning procedures,[3] leading to a successful development of L2 competence. According to the researcher, three such basic options are possible, that is "listening to or reading texts in the target language with comprehension; attempting to communicate via this language; or reproducing, reconstructing, and transforming model texts in the L2" (1988, p. xiv). The three options can be promoted by three basic teaching strategies[4]: *receptive, communicative,* and *reconstructive*; additionally, it is possible to combine the three strategies, with the various combinations resulting in a

[3] The procedures, according to Marton, "are derived from a set of correlative assumptions concerning the nature of language, the nature of second language development, and the functions of language teaching" (1988, p. 2).

[4] Marton defines a language teaching strategy "as a globally conceived set of pedagogical procedures imposing a definite learning strategy on the learner directly leading to the development of competence in the target language" (1988, p. 2). Language teaching strategies are directly linked with the idea of success in gaining a practical command of the target language.

fourth strategy, namely the *eclectic*[5] one. As far as the effectiveness of the strategies is concerned, Marton explains that none of the strategies is superior to or more effective than the others. Furthermore, such effectiveness should be considered in relation to two sets of variables, namely *learner* and *contextual factors*, which means that under given circumstances only one of those strategies may be considered as the most effective. It is Marton's belief that these four strategies represent the basic options in language pedagogy and form the kind of theoretical framework which can help the language teacher to find his or her own direction.

Yet another solution, although not so different from the ones above, was the idea to conceptualize language teaching in terms of some general principles of learning. One of the supporters of such an approach has been Brown (1994a), known at the same time as one of the staunchest critics of methods. Brown has long claimed that teachers should operate at the level of some "general principles of good language teaching and learning". Such an approach is the only feasible one in situations where the teacher is faced with a multiplicity of language teaching contexts and purposes, as well as a diversity of student needs, learning variables and the like. Hence, general principles, derived from research and observation, should be at the base of the teaching practice of every teacher, the practice which will cater for the goals and purposes of learning of his or her students (cf. Brown 1994b; 2002, pp. 12–13). According to Brown, the ten "principled maxims or "rules" for good language learning can focus teachers on sound classroom practices" (2002, p. 17). As he comments, "[a]s teachers and teacher trainees develop and carry out classroom techniques, they can benefit by grounding everything they do in well-established principles of language learning and teaching. In doing so they will be less likely to bring a pre-packaged – and possibly ineffective – method to bear, and more likely to be directly responsive to their students' purposes and goals" (2002, p. 17). The principles can be summed up under the following headings: *automaticity, meaningful learning, the anticipation of reward, intrinsic motivation, strategic investment, language ego, self-confidence, risk-taking, the language culture connection, the native language effect, interlanguage, and communicative competence*.[6] As can be seen, the principles reflect "widely accepted theoretical assumptions about second language acquisition" which are central to "most language acquisition contexts" (2002, p. 12).

Principles are also at the heart of teaching practice advocated by Bailey (1996, cited in Richards and Rodgers 2001, p. 251), who offers the following guidelines for language teachers:

- Engage all learners in the lesson.
- Make learners, and not the teacher, the focus of the lesson.
- Provide maximum opportunities for student participation.
- Develop learner responsibility.

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[5] In this instance by eclectic use of the strategies is meant not their simultaneous application, but the possibility of combining them in a consecutive manner.

[6] For a discussion and a complete list of principles see Brown (1994a, 2000).

- Be tolerant of learners' mistakes.
- Develop learners' confidence.
- Teach learning strategies.
- Respond to learners' difficulties and build on them.
- Use a maximum amount of student-to-student activities.
- Promote cooperation among learners.
- Practice both accuracy and fluency.
- Address learners' needs and interests

Yet another proposal comes from Rodgers (2000, pp. 2–3), who put forth ten scenarios, which, in his view, may "individually and collectively, shape the teaching of second languages in the next decades of this new millennium". These include, among others, *teacher/learner collaboration in the language classroom*, *method synergistics* (Rodgers' idea of dealing with the limitations posed by different language teaching methods), *curriculum developmentalism, content basics,* or *multiintelligensia, strategopedia*. In his opinion, the profession will simply witness "the carrying on and refinement of current trends", rather than a dramatic pendulum swing (2000, p. 3).

Kumaravadivelu offers still another proposal, yet not so much different from the one put forward by Rodgers (2000). He sees *post-method pedagogy* as characterised by "a search for an alternative to method, rather than an alternative method" (2003, p. 33). He proposes a *macrostrategic framework* which is supposed to guide teachers in their classroom practice. The framework includes the following macrostrategies (Kumaravadivelu 2003, pp. 39–40):

– Maximize learning opportunities.
– Minimize perceptual mismatches.
– Facilitate negotiated interaction.
– Promote learner autonomy.
– Foster language awareness.
– Activate intuitive heuristics.
– Contextualize linguistic input.
– Integrate language skills.
– Ensure social relevance.
– Raise cultural consciousness.

Kumaravadivelu elucidates that the insights for the above framework are drawn from current theoretical, empirical, and experiential knowledge which have their sources in classroom-oriented research. He believes that a pedagogic framework must emerge from classroom experience and experimentation, although it should not be confined to such a source. It is important to remember, however, that the available classroom research findings provide a substantial body of data which cannot be neglected when establishing a frame of reference. The framework is by no means obligatory; however, it can be used by teachers as a basis for designing their own strategies, matching the requirements of their own teaching context.

The alternatives to methods discussed in this section are a testimony to some important changes taking place in foreign language education, as they offer a number of new options to language teachers. The question remains, however, whether teachers are prepared to deal with them in their teaching practice.

5 Language Teaching Methods in Language Teacher Education

As it transpires from the discussion above, over the last few decades the ELT profession, at least at the theoretical level, has undergone quite a number of changes as far as the concept of a method is concerned. Not only has the search for the best method been given up, but also, as a result of disappointing research results, the value of methods has been undermined. Various researchers have pointed to numerous problems and limitations related to the concept itself, postulating moving away from the methods era to the postmethod condition. Yet, the question remains whether abandoning methods altogether is a justified decision, and whether, perhaps there can be still the place for them in broadly conceived language education.

It seems that in spite of all the criticism directed at them at the theoretical level, methods are still considered valid not only by practitioners, but also by a number of theorists. Hammerly, for instance, has always perceived methods as an important variable in language teaching, as, in his opinion, contrary to most other factors decisive about success or failure which are beyond the control of the teacher (e.g. intelligence, aptitude), "classroom methodology is what actually can be changed to effect success in language learning" (1982, p. 218). In spite of his harsh criticism of methods, Nunan (1991, p. 248) also believes that there are aspects of methods which "might be usefully incorporated into one's classroom practice". He points out, however, that teachers need to take into consideration the purposes for which the target language will be used and the functions it will fulfil, as they decide about which classroom techniques and procedures should be used. Thus, he emphasizes the importance of knowing about and understanding of methods and their goals in order to be able to use them expertly in the classroom.

On the basis of what has been said so far, a claim can be made that methods are still valid as far as the preparation of language teachers is concerned. Richards and Rodgers (2001, p.16), for instance, believe that the study of methods should constitute an important part of teacher preparation programmes, giving the following reasons:

- The study of approaches and methods provides teachers with a view of how the field of language teaching has evolved.
- Approaches and methods can be studied not as prescriptions for how to teach but as a source of well used practices, which teachers can adapt or implement based on their own needs;

- Experience in using different approaches and methods can provide teachers with basic teaching skills that they can later add to or supplement as they develop teaching experience.

Among the undisputable advantages of studying methods, Richards and Rodgers (2001, p. 246) list the following:

- they solve beginning teachers' problems in that they offer them ready-made decisions as to what to teach and how to do that;
- "method enthusiasts create together a professional community with a common purpose, ideology, and vernacular" where they can share ideas and experiences;
- methods can serve as "a rich source of activities, some of which can be adapted or adopted regardless of one's own ideology:
- they offer to the novice teachers "the reassurance of a detailed set of steps to follow in the classroom".

As Richards and Rodgers (2001, p. 250) emphasize, approaches and methods have always been crucial in language education and for that very reason they believe that both teachers and students should become familiar with them as major tools of the trade. Approaches as well as methods are based on knowledge and experience of generations of teachers and other participants of the language learning/language teaching process, and, as such, they should constitute the foundations on which language teaching should be based. It is believed that the knowledge of/about methods and approaches would help future teachers:

- to learn how to use different approaches and methods and understand when they might be useful;
- to understand some of the issues and controversies that characterize the history of language teaching;
- to participate in language learning experiences based on different approaches and methods as a basis for reflection and comparison;
- to be aware of the rich set of activity resources available to the imaginative teacher;
- to appreciate how theory and practice can be linked from a variety of different perspectives.

Additionally, training in particular methods, with their sets of fixed techniques and procedures may be essential for novice teachers to aid them in conducting lessons with confidence because at the beginning teaching seems to consist mostly of using techniques and procedures suggested by specialists. They are more tangible than strategies, principles, scenarios or macrostrategies in that they offer a concrete range of activities ready to be used in the classroom. This view is confirmed by Bell (2003, 2007) who claims that although the notion of method no longer has a place in the thinking of applied linguists, it does play an important role in the way teachers think and it still remains an apt description of what teachers do in their classrooms. On the basis of the results of research conducted among language teachers, Bell (2007) concludes that that most of them think of methods in terms of techniques which realize a set of principles or goals and they are

open to any method that would provide them with practical solutions to problems they encounter in their particular teaching context. The knowledge of methods is equated with a set of options which make it possible to respond in an adequate way to the requirements of specific classroom contexts; it is crucial to teacher growth and development as it constitutes a source of options and a basis for *eclecticism* in the classroom.

The postmethod era, therefore, need not imply the end of methods but rather an understanding of the limitations of the notion of method as it is narrowly defined and a desire to go beyond those limitations. Methods are far from being dead; they provide a basis for building one's own teaching. Larsen-Freeman (1999) warns the language teaching profession against being blinded by the criticism of methods which may result in the failure to see "their invaluable contribution to teacher education and continuing development". For her a method "is a constellation of thought-in-action links", and, as such, it serves the purpose of getting people to think about why they do what they do. In language teaching we need to understand reasons for doing something in the classroom, so that we can choose and match the techniques at our disposal according to the needs and goals of our students.

Likewise, Richards and Rodgers believe that generally, "(…) teachers and trainers need to be able to use approaches and methods flexibly and creatively, based on their own judgement and experience. In the process they should be encouraged to transform and adapt the methods they use to make them their own" (2001, p. 250). In their view, "an approach or a predetermined method, with its associated activities, principles and techniques, may be an essential starting point for an inexperienced teacher" (2001, p. 250). Richards and Rodgers further emphasize the need on the part of teachers to develop their own personal approach to teaching and the crucial role of personal beliefs and principles in developing such an approach. In the process, it is necessary for teachers to understand their own position with reference to the following (2001, p. 251):

- their role in the classroom;
- the nature of effective teaching and learning;
- the difficulties learners face and how these can be addressed;
- successful learning activities;
- the structure of an effective lesson.

Summing up the discussion on the usefulness and value of language teaching methods, it is useful at this point to refer to Prabhu in whose opinion there may be a factor more basic than the choice between methods, namely "teachers subjective understanding of the teaching they do". Prabhu believes that "teachers need to operate with some personal conceptualization of how their teaching leads to desired learning", i.e. they need to develop "a personal sense of plausibility" (1990, p. 172) which may vary from one teacher to another, may be more or less fully formed, more or less consciously considered or articulated. When it is engaged, it means that the teacher is involved and the teaching is not mechanical; what is more, it is productive. What seems important it to look at teaching as an

"activity whose value depends centrally on whether it is informed or uninformed by the teacher's sense of plausibility" (to what degree it is 'real' or mechanical). In this sense, "a method is seen simply as a highly developed and highly articulated sense of plausibility, with a certain power to influence other specialists' or teachers' perceptions. Perhaps the best method varies from one teacher to another, but only in the sense that it is best for each teacher to operate with his or her own sense of plausibility at any given time" (1990, p. 172).

6 Conclusions

Clearly, effective language teaching depends on teachers who have a high degree of professional expertise and knowledge. In their teaching practice, they are expected to draw on their knowledge of the subject matter, their knowledge of and about the learners, and their knowledge of and about teaching. They need to be able to explain their choices, judgements and actions in their classrooms with reasoned arguments. They need to understand that they are not just consumers of other people's theories, materials, and the like, but that they are actually capable of making valuable contributions. As follows from the discussion above, the knowledge about language teaching methods and being able to implement them in the classroom is vital in developing one's personal approach to teaching, an approach in which teachers do not just follow recipes, but use their own methods shaped by their understanding of what happens in the classroom.

References

Allwright, D. and K. M. Bailey. 1991. *Focus on the language classroom: An introduction to classroom research for language teachers.* Cambridge: Cambridge University Press.

Anthony, E. M. 1963. Approach, method and technique. *English Language Teaching* 17: 63-67. (Reprinted in *Teaching English as a second language*, eds. H. B. Allen and R. N. Campbell, 1972, 4-8. New York: McGraw-Hill).

Anthony, E. M. and W. E. Norris. 1972. Method in language teaching, In *Readings on English as a second language*, ed. K. Croft, 39-48. Cambridge, MA: Winthrop Publishers.

Bailey, K. M. 1996. The best laid plans: Teachers' in-class decisions to depart from their lesson plans. In *Voices from the language classroom*, eds. K. M. Bailey and D. Nunan, 15-40. Cambridge: Cambridge University Press.

Bell, D. M. 2003. Method and postmethod: Are they really so incompatible? *TESOL Quarterly* 37: 325-336.

Bell, D. M. 2007. Do teachers think that methods are dead? *ELT Journal* 61: 135-143.

Brown, H. D. 1994a. *Teaching by principles: Interactive language teaching methodology*. New York: Prentice Hall Regents.

Brown, H. D. 1994b. *Principles of language learning and teaching.* Englewood Cliffs, NJ: Prentice Hall.

Brown, H. D. 2000. *Principles of language learning and teaching.* (fourth edition). Harlow: Pearson Education.

Brown, H. D. 2002. English language teaching in the 'post-method' era: Toward better diagnosis, treatment and assessment. In *Methodology in language teaching: An anthology of current practice*, eds. J. C. Richards and W. A. Renandya, 9-18. Cambridge: Cambridge University Press.

Ellis, R. 1992. *Second language acquisition and language pedagogy*. Clevedon: Multilingual Matters.

Hammerly, H. 1982. *Synthesis in second language teaching.* Blaine, WA: Second Language Publications.

Hammerly, H. 1985. *An integrated theory of language teaching and its practical consequences*. Blaine, WA: Second Language Publications.

Howatt, A. P. R. and H. G. Widdowson. 2004. *A history of English language teaching*. (second edition). Oxford: Oxford University Press.

Kelly, L.G. 1969. *25 centuries of language teaching*. Rowley, MA: Newbury House Publishers.

Kumaradivelu, B. 2003. *Beyond methods: Macrostrategies for language teaching.* New Haven/ London: Yale University Press.

Kumaravadivelu, B. 2006. *Understanding language teaching.* Mahwah, NJ: Lawrence Erlbaum.

Larsen-Freeman, D. 1987. From unity to diversity: Twenty-five years of language-teaching methodology. *English Teaching Forum* 24: 2-10.

Larsen-Freeman, D. 1999. On the appropriateness of language teaching methods in language and development. (http://www.languages.ait.th/hanoi_proceedings/larsen-freeman.htm).

Larsen-Freeman, D. 2000. *Techniques and principles in language teaching*. (second edition). Oxford: Oxford University Press.

Marton, W. 1988. *Methods in English language teaching. Frameworks and options.* Hemel Hempstead: Prentice Hall.

Nunan, D. 1991. *Language teaching methodology.* New York: Prentice Hall.

Palmer, H. E. 1964. *The principles of language-study.* London: Oxford University Press.

Pennycook, A. 1989. The concept of method, interested knowledge, and politics of language teaching. *TESOL Quarterly* 23: 589-618.

Prabhu, N.S. 1990. There is no best method – why? *TESOL Quarterly* 24: 161-176.

Richards, J. C. 1990. *The language teaching matrix.* Cambridge: Cambridge University Press.

Richards, J. C. and T. S. Rodgers. 2001. *Approaches and methods in language teaching*. (second edition). Cambridge: Cambridge University Press.

Rodgers, T. 2000. Methodology in the new millennium. *English Teaching Forum* 38: 2-13.

Stern, H. H. 1983. *Fundamental concepts of language teaching.* Oxford: Oxford University Press.

Stern, H. H. 1992. *Issues and options in language teaching.* Oxford: Oxford University Press.

Stevick, E.W. 1976. *Memory, meaning and method.* Rowley, MA: Newbury House Publishers.

Titone, R. 1968. *Teaching foreign languages. An historical sketch.* Washington, DC: Georgetown University Press.

Toney, T. 1983.Guides for language learners. *English Language Teaching Journal* 37: 352-358.

Widdowson, H.G. 2004. A perspective on recent trends. In *A history of English language teaching*. (second edition), eds. A. P. R. Howatt and H. G. Widdowson, 353-372. Oxford: Oxford University Press.

Principles of Instructed Language Learning Revisited: Guidelines for Effective Grammar Teaching in the Foreign Language Classroom

Mirosław Pawlak

Abstract Although there is now a consensus that grammar instruction is facilitative or even necessary in some situations, questions remain as to how it should most beneficially be conducted, with answers to these questions hinging to a large extent upon the contexts in which form-focused instruction takes place. In fact, theorists and researches have put forward a number of principles that should guide practitioners in teaching formal aspects of language, but many of those proposals are general in nature, they are not sufficiently comprehensive and detailed to inform everyday instruction, or they include solutions which may be of questionable utility in foreign language contexts, where limited in- and out-of-class exposure as well as educational traditions dictate that points of grammar are systematically covered. The present chapter represents an attempt to fill this unfortunate gap by offering a tentative model of grammar teaching in the foreign language classroom, which comprises principles that, on the one hand, are grounded in research findings but, on the other, are sensitive to the specificity of this setting.

1 Introduction

There is a consensus that successful instructed second and foreign language learning has to necessarily entail preoccupation with all the target language (TL) skills and subsystems, even if some of them happen to be emphasized to a greater extent than others. This is because it is clear that, in order to effectively get their messages across, learners have to master a number of grammatical structures, gain a productive and receptive command of a considerable store of lexical items,

M. Pawlak (✉)
Adam Mickiewicz University, Kalisz, ul. Nowy Świat 28-30, 62-800 Kalisz, Poland
e-mail: pawlakmi@amu.edu.pl

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understand and be able to produce intelligibly segmental and suprasegmental pronunciation features, as well as to become acquainted with a range of sociopragmatic and pragmalinguistic elements, let alone the fact that all these components of linguistic knowledge have to be applied in real-time communication where the basic skills of speaking, listening, reading and writing are often intertwined in intricate and sometimes unpredictable ways. This being said, it should be pointed out that in the majority of publications in the field of second language acquisition (SLA), this concept is associated, in a more or less explicit way, with the teaching of grammar (cf. Ellis 2001, 2005a; Pawlak 2006; Spada 1997; Ellis 2008, Nassaji and Fotos 2011; Ortega 2010, 2011; Spada 2011), or, to use a more inclusive and current label, *form-focused instruction* (FFI), which can be rather broadly defined as "(…) any planned or incidental instructional activity that is intended to induce language learners to pay attention to linguistic form" (Ellis 2001, pp. 1–2). In addition, most of the research in the domain of SLA has been directed at exploring the effects of different types of pedagogic intervention on the acquisition of different aspects of syntax and morphology, at the very outset, in rather general terms with an eye to determining the impact of formal instruction on language development, and, more recently, with respect to the efficacy of specific instructional options (e.g. explicit vs. implicit, output-oriented vs. input-based) on the acquisition of particular TL features in terms of explicit knowledge (i.e. conscious, declarative, typically available only in controlled processing) and implicit knowledge (subconscious, procedural, available in automatic, real-time processing) (Spada 1997; Ellis 2001, 2006, 2008; Norris and Ortega 2001; Pawlak 2006; Larsen-Freeman 2010; Nassaji and Fotos 2011).

Although the findings of these studies have produced compelling evidence that FFI is effective in helping learners use the targeted features accurately, not only on tests but also in more or less spontaneous communication and that such gains are in most cases maintained over time, numerous questions remain regarding the ways in which grammar teaching should most beneficially be conducted. These are related, among others, to such issues as the place of grammar in the syllabus, with more specific questions concerning the selection of the items to be taught as well as the timing, duration and intensity of such intervention, the organization of foreign language lessons, with the key problem revolving around the integration of form and meaning, and the choice of instructional options that can be drawn upon to direct learners' attention to the formal aspects of the target language (cf. Ellis 2001, 2006; Larsen-Freeman 2003; Pawlak 2006, 2007; Nassaji and Fotos 2011; Spada 2011). The aim of the present chapter is to disentangle some of these thorny issues with reference to language education in the foreign language context, namely such in which learners have scarce opportunities for access to the TL on a daily basis, and to propose tentative guidelines for effective grammar teaching in such a setting. To this end, at the beginning the choices that are available to teachers when providing FFI will be outlined, both with respect to what could be referred to as instructional macrooptions (i.e. syllabus choice and lesson design) and instructional microoptions (i.e. specific techniques and procedures). This will be followed by the discussion of the principles of instructed language acquisition

in general and form-focused instruction in particular that have been put forth by theorists and researchers. In the last part of the chapter, an attempt will be made to subject such proposals to scrutiny, taking into account the constraints of foreign language contexts, and to offer a provisional model of teaching grammar, adopting as a point of reference a set of principles put forward by Marton (2003).

2 Instructional Options in Teaching Grammar

The choices that practitioners have at their disposal when introducing grammar structures can be conceptualized in a number of ways, but in the present section they will be discussed with respect to the distinction between *instructional macrooptions*, or higher-level methodological choices related to the type of the syllabus followed, which determines to a considerable extent the selection of the TL features taught, and the competing alternatives in planning, organizing and conducting grammar-based lessons and lesson sequences, and *instructional microoptions*, connected with the various techniques and procedures that can be applied in the teaching of points of grammar (cf. Pawlak 2006). The two sets of options are discussed in more detail in the following subsections.

2.1 Instructional Macrooptions

The first thing that should be considered is the choice of content that will be introduced in language lessons as well as the sequencing of this content over a particular period of time, or what is commonly referred to as the *type of the syllabus* that will be followed (cf. Breen 2001; Johnson 2001). It is possible to distinguish different types of syllabi, such as, for example, formal, structural, grammatical, lexical, notional-functional, skills-based, task-based, as well as process (Breen 2001; Robinson 2010), with a considerable overlap between some of these labels. The key question, though, is whether determining the units of instruction and arranging them in some kind of succession is predicated on the assumption that learners should be systematically familiarized with some preselected TL forms or, rather, whether they should be provided with ample opportunities to use the language for the attainment of communicative goals, having their attention drawn only to those features that turn out be problematic in the course of such interactions. This dilemma is aptly summarized by Robinson (2010, p. 294), who points out that "(…) the most fundamental issue for syllabus design (…) is the following: Is the L2 best learned explicitly, by understanding and practicing a series of formal units of language, however characterized, or is it best learned incidentally from exposure to the L2 during communicative activities and tasks". In other words, the most fundamental is the choice between what Wilkins (1976) labels *synthetic* and *analytic syllabi*, and what Long and Crooks

(1992) refer to as *Type A* and *Type B syllabi*, or such that are based on the division of language into discrete units (e.g. structures, notions, functions, situations) and their gradual presentation with little respect to learner need, and such that shy away from such preselection and are created in the process of interactions in which learners participate in the performance of communicative tasks and the problems they encounter, respectively.

Looking at the discussion of such issues in the contemporary SLA literature, in practice, the issue boils down to the choice between the *structural syllabus* and the *task-based syllabus*, or, as will be argued later in the present chapter, an adept integration of the two. As regards the former, also known as *grammatical* or *formal syllabus*, which is by far the most popular in the majority of foreign language contexts and figures prominently in modern coursebooks, it consists of a list of grammatical items which are arranged in the order in which they are to be introduced and practiced. The criteria which are the most frequently taken into account in the process of constructing such a syllabus include frequency, simplicity, regularity, utility, grouping, L1-L2 similarity or teachability (cf. Johnson 2001; Larsen-Freeman 2010), and, in accordance with the view that second language acquisition is a gradual process that occurs in fits and starts, it is partial and incomplete, it is now customary for it to be *cyclical* or *spiral*, which means that once specific structures have been introduced, they are revisited on several occasions, new aspects of form, meaning and use being introduced each time this happens (cf. Ellis 1997). The main problem with this type of syllabus is that it is external to the learner in the sense that, being based upon rational rather than psycholinguistic or empirical criteria, it ignores the stage of interlanguage development of the learner and the processing operations that he or she is capable of performing at this stage (cf. Pienemann 1998), with the effect that it is of little immediate relevance to the growth of implicit knowledge which is subject to such constraints. As Larsen-Freeman (2010, p. 53) writes, "(…) it has also been established that there are naturally occurring developmental sequences, and U-shaped learning curves, backsliding and restructuring, which would seem to argue against any such overall principled sequencing of grammar structures in instruction". On the other hand, however, form-focused instruction is hypothesized to accelerate movement through developmental stages, it may have a priming effect, with its benefits becoming tangible at a later time, it may facilitate the noticing of non-salient features in the input (Lightbown 1998; Larsen-Freeman 2003, 2010; Pawlak 2006), and, as was noted in the introduction to this chapter, there is mounting empirical evidence that such intervention works for many learners, even if their developmental stage is difficult to establish. In addition, given the fact that learners in one class may vary widely in terms of psycholinguistic readiness and it is often impossible to determine their exact place on the interlanguage continuum, reliance on a structural syllabus may often be seen as a practical necessity, as it at least ensures systematic coverage of all the main points of grammar.

According to some SLA theorists and researchers (Long 2007; Willis and Willis 2007; Norris 2010; Robinson 2010, 2011), the major problems involved in matching instruction to the learner's internal syllabus can be ameliorated by

embracing a *task-based syllabus*, where "[t]arget tasks (…) are units of real-world activity involving language use identified on the basis of a needs analysis (….), subsequently broken down into simpler versions, which are presented in order of increasing complexity, so as eventually to approximate the full complexity of the target task demands" (Robinson 2010, p. 301). In other words, it is not predetermined linguistic units of one kind or another, such as grammar structures, lexical units or functions and notions, that constitute the building blocks of the syllabus but, rather, pedagogic tasks, or "(…) naturalistic units which then have to be operated upon, and broken down by the learner, with acquisitional processes then engaging with the input that has been received" (Skehan 1998, p. 97). The rationale for the adoption of such an analytical syllabus is related to the fact that it is believed to be more compatible with the microprocesses (i.e. attention, noticing, cognitive comparison) and macroprocesses (i.e. internalization of input, mapping, analysis and restructuring) of language learning (Doughty 2001). This is because research has shown that formal instruction may be powerless to change the natural sequences of acquisition of specific TL features (e.g. Ellis 1989), language acquisition occurs in a gradual, non-linear and cumulative way rather than immediate, linear and additive manner (e.g. Kellerman 1985), and the acquisition of particular forms is subject to psycholinguistic constraints (e.g. Pienemann 1989). In addition, it has been argued that a task-based syllabus is superior to a structural one as it emphasizes learner engagement in the process of acquisition, enables teachers to respond to individual needs (cf. Ellis 2003), and ensures the availability of authentic language in the classroom, such that has not been impoverished by means of simplification at the linguistic and functional level (cf. Long 2000). Although the *procedural syllabus* (Prabhu 1987), which can be regarded as a precursor of the present-day task-based syllabi, was complemented with a non-interventionist approach excluding all forms of grammar teaching and error correction, the theoretical, empirical and practical considerations alluded to in the introduction to this chapter have led to the realization that attention to TL forms should be part and parcel of task-based instruction. In consequence, the major concern has been indentifying the ways in which this goal can be accomplished without compromising the primary focus on meaning. Among others, specialists have proposed such solutions as incidental focus on form (Long 1991; Long and Robinson 1998; see the discussion below), manipulating task design features to engineer a variable focus on fluency, accuracy or complexity (Skehan 1998), setting up productive and receptive focused communication tasks (i.e. such that require the use of the targeted feature; see below) (Ellis 2003), intervening in direct ways in task performance (Samuda 2001), incorporating more or less explicit language focus activities into pre-task or post-task stages (Willis 1996), or creating a grammar checklist to ensure attention to items that, for a variety of reasons, are unlikely to arise naturally in classroom interaction (Larsen-Freeman 2003).

Moving on to issues involved in planning, organizing and conducting grammar-based language lessons and lesson sequences, it is should first be pointed out that the emphasis on formal aspects of the target language is bound to differ from one

class to another, with some of them focusing almost in their entirety on introducing and practicing preselected points of grammar, others dealing with linguistic features in the context of communicative tasks, either before or after they are performed, and others yet only drawing learners' attention to grammar structures that turn out to be highly problematic and stand in the way of successful meaning and message conveyance. Although it is possible to discuss a number of very specific ways in which such lessons can be organized, as the case might be with different variants of the PPP or the framework for designing task-based lessons put forth by Willis (1996), such a detailed coverage is beyond the scope of the present chapter. For this reason, the main point of reference here will be the division of different types of FFI into *focus on forms*, *planned focus on form* and *incidental focus on form*, which was proposed by Ellis (2001) and appears to be perfectly suited to the description of the various lesson formats which include different manifestations of grammar instruction, irrespective of the amount of time that can be allotted to it.

As regards *focus on forms*, which is without doubt the most common way of organizing language lessons, particularly those devoted to grammar, in foreign language contexts, it involves the preselection of a linguistic feature to be taught in accordance with the structural syllabus, the inclusion of activities and tasks ensuring an intensive focus on this feature (i.e. it is bound to appear multiple times in a given lesson), and learners' cognizance that form rather than meaning is the main concern of the pedagogic agenda. The most typical format of a class based on the focus-on-forms approach is the *presentation – practice – production procedure*, typically referred to as the PPP, which Skehan (1998, p. 94) describes as "(…) probably still the commonest teaching approach when judged on a world-wide basis', mainly due to the fact that it is easy to implement, it allows rather unproblematic evaluation of instructional goals, and it demonstrates power relationships in the classroom. As Ur (2011, p. 514), explains, in such a lesson "a new grammatical structure is presented and explained, it is then practiced and finally students are expected to produce it in their spoken and written discourse". To give an example, learners could be asked to read a text containing numerous instances of the present and past tense form of passive voice and provided with a rule concerning its form, meaning and use, then be instructed to perform a number of controlled practice activities, such as gap-filling, transformation and translation exercises, and, in the last stage, requested to apply the structure in a more spontaneous way by, for example, describing famous buildings or places. It should also be added that the PPP procedure is usually associated with a single lesson and that the free production stage is often insufficiently emphasized or fails to be included at all, both of which phenomena can be viewed as detrimental as they diminish the effectiveness of FFI. Although the PPP can come in many guises and can be implemented in a variety of ways (see Pawlak 2006, for discussion), all of them have come in for considerable criticism which is in fact similar to that leveled at the reliance on a structural syllabus and mainly concerns the lack of regard for the existence of the orders and sequences of acquisition which constrain the development of implicit knowledge.

Both *planned focus on form* and *incidental focus on form* share the key assumption that learners should have their attention directed at linguistic features as they are preoccupied with the performance of communicative tasks and thus are mainly concerned with the conveyance of meaning, with the main difference between the two approaches lying in the ways in which the grammatical structures are selected for intervention and the frequency with which they are likely to occur in a lesson. In the case of *planned focus of form*, similarly to *focus on forms*, the targeted feature is preselected in advance and its distribution in a particular class is also intensive, as students have multiple opportunities to attend to it, but such a choice is not based on a structural syllabus and is dictated by learner need, with the effect that a specific TL form is addressed because it is a source of learning difficulty or is responsible for the occurrence of persistent errors. Moreover, in theory at least, "(…) the attention to form occurs in interaction where the primary focus is on meaning (…) [and] learners are not made aware that a specific form is being targeted and thus are expected to function primarily as 'language users' rather than 'learners' (…)" (Ellis et al. 2002, p. 421). One way in which planned focus on form can be accomplished is through designing *receptive* and *productive focused communication tasks* (see Sect. 2.2), which require the processing of the TL feature for their successful completion, as the case might be with *input enrichment activities*, where the salience of a specific item is highlighted through increased frequency (i.e. input flood) or some kind of manipulation of its written or oral form (i.e. input enhancement), or *output-based communicative activities* in which the structure has to be produced in a meaningful context for a solution to be reached, respectively. It is also possible to enhance the salience of the targeted form methodologically by the provision of corrective feedback (CF) in response to a specific category of errors (e.g. those involving the use of the past simple tense), which, again, can be *input-based* (e.g. recasting) or *output-oriented* (e.g. a prompt) (see Sect. 2.2 for discussion of different CF techniques). As for *incidental focus on form*, it also occurs in the course of communicative tasks, but it is not planned in advance, either through design or methodology, with the effect that a variety of TL features can be targeted in the same lesson, some of them perhaps only once, which makes the intervention extensive in nature. This type of FFI can be *reactive*, when the teacher reacts to errors committed by students, or *preemptive*, in which case a query is raised about a particular item that is seen as problematic, even though no error has occurred in the production of the form or message comprehension (cf. Ellis 2001). In both cases, a shift of attention from meaning to form can originate with the teacher or learners (i.e. an inaccuracy can be fixed by the teacher, the student who erred, or a peer, and a query about a linguistic item can be both teacher- or student-initiated), it can be triggered by a problem of communication or a problem of form (i.e. an attempt to ward off a communication breakdown or to ensure high quality of the TL produced), and such pedagogic intervention can differ with respect to its complexity or directness (e.g. an error can be corrected by means of an implicit recast or lead to a lengthy explanation, sometimes couched in metalinguistic terminology).

2.2 Instructional Microoptions

The specific techniques and procedures that can be employed in introducing and practicing grammar structures, or what has been referred to above as *instructional microoptions*, can be classified in numerous ways, some of which are more comprehensive, detailed and inclusive than others. Attempts to propose taxonomies of options in form-focused instruction have been undertaken, among others, by Doughty and Williams (1998), Ellis et al. (2002), Williams (2005) and Loewen (2011), who confine their divisions to different variants of focus on form, or situations in which a shift of attention to target language features occurs during meaning and message conveyance, as well as Ellis (1997, 1998, 2005a, 2010), Pawlak (2006), and Nassaji and Fotos (2011), who adopt a much broader perspective and include in their divisions instructional options representative of both focus on form and focus on forms (see Pawlak 2012a, for discussion). Since an in-depth presentation of all of these classifications is neither feasible in this limited space nor warranted by the purposes of the present chapter, the discussion in this section will revolve around the taxonomy proposed by Ellis (2005a), with the caveat that it has been in some cases augmented with insights yielded by some of the other divisions mentioned above. The taxonomy is composed of the following five main categories:

(1) *explicit instruction*, which aims to get learners to pay deliberate attention to the targeted linguistic features with the purpose of understanding them, a pedagogical intervention which mainly results in the development of explicit knowledge of rules; such instruction can be *didactic* or *discovery*, or *deductive* and *inductive* in character, with learners either being provided with rules which they subsequently have to apply or deriving these rules from target language data; obviously, there are many more specific decisions that have to be made within both approaches, since, for example, deduction may or may not rely on metalanguage, crosslinguistic comparisons or the use of the mother tongue, whereas induction may involve reliance on various types of input, ranging from single sentences to corpus-derived data, and require learners to act upon such data in a variety of ways;
(2) *implicit instruction*, which is intended to help learners to figure out how a particular TL feature works without awareness; instruction of this kind involves *input enrichment* and can entail the provision of *non-enhanced input*, in which case learners are requested to memorize some L2 data containing the targeted feature or are provided with written and spoken texts seeded with instances of this feature (i.e. *input flood*), as well as reliance on *enhanced input*, where the grammatical structure being the focus of intervention is highlighted in some way in speech (e.g. through added stress) or writing (e.g. by means of italics, bolding or color) in order to induce the noticing of form-meaning mappings (i.e. *input enhancement*);
(3) *structured input*, in which case instruction is largely *comprehension-based* and learners are supplied with second language data which have been specifically

designed to induce the noticing of a particular linguistic feature and which can only be comprehended if this feature is successfully processed; the rationale for this type of instruction is based on the assumption that learners should be assisted in changing their default L1-based processing strategies so that they can better attend to the less salient and semantically redundant elements of the TL system (VanPatten 1996, 2002); this can be accomplished though *processing instruction*, where learners are first explicitly informed about what to pay attention to and then asked to perform a number of *referential* (i.e. the choice of the correct answer depends on whether the targeted item has been understood) and *affective* (i.e. learners process some information about the real world by expressing an opinion, belief or attitude) *structured input activities* (VanPatten 2002), as well as reliance upon *interpretation tasks*, in which students also work on a sequence of activities which allow them to attend to form-meaning-function mappings, notice non-salient TL features, and engage in the processes of cognitive comparison and noticing the gap (Ellis 1995);

(4) *production practice*, where students are required to engage in the production of the TL feature in speech or writing with the expectation that such production will be error-free; FFI of this kind can take the form of *controlled practice*, in which case learners work on *text-manipulation activities* (cf. Ellis 1997), which involve the provision of sentences or utterances that have to be manipulated in limited ways (e.g. gap-filling, paraphrasing, translation of the part containing the targeted form), and *functional practice*, where learners are asked to perform *text-creation activities* (Ellis 1997), in which they produce their own sentences or utterances containing the targeted linguistic feature in some kind of situational context (e.g. a role play in which the present perfect has to be employed, or a narrative that calls for the use of the past simple and past progressive); functional practice can also be implemented through the use of *focused communication tasks* (Ellis 2003), which necessitate the use of the targeted structure for successful completion, and, although some researchers would insist that learners should not be made aware of the pedagogical focus of such tasks, this condition is in most cases impossible to be met in practice, which makes them almost indistinguishable from text-creation activities (cf. Pawlak 2006, 2012a); of course, many tasks fall somewhere in between and they can be placed at various points of the continuum from task-manipulation to task-creation;

(5) *negative feedback*, which involves the correction of learners' errors as they are trying to produce the targeted feature in speech and writing; such corrective feedback can differ with respect to the level of explicitness and the requirement for output production and self-correction (cf. Sheen and Ellis 2011; Pawlak 2012a); thus, it is possible to make a distinction between *explicit feedback*, which makes it clear to the learner that an error has been made (e.g. metalinguistic comment or direct correction) and *implicit feedback*, where the correct form is provided but the commission of the error is not explicitly indicated and the learner may, but does not have to, be cognizant of the corrective force of the teacher's response (e.g. a recast, or corrective reformulation of the erroneous utterance which does not change its meaning, or, to a somewhat lesser extent,

a request for clarification), as well as *input-providing feedback*¸ which supplies the correct form, but does not call for output modifications (e.g. a recast) and *output-prompting feedback*, in which case the corrective move places the onus on the learner to attempt self-repair (e.g. the use of prompts which can take the form of clarification requests, elicitations, repetitions or metalinguistic cues).

Two important caveats need to be made at this point regarding the effectiveness and use of the instructional microoptions listed above. In the first place, as Ellis (2005a, p. 719) comments at the close of his discussion of the techniques and procedures that can be used in teaching grammar, "[i]t should be clear from this account of the research that has investigated the relative effectiveness of different options for focus-on-forms instruction that any conclusions must be tentative". This is mainly because the available research findings are far from conclusive, with the effect that it is not always possible to say with any certainty that a particular instructional option is superior to another. For example, while it could be argued that explicit instruction is superior to implicit instruction, deduction is more beneficial than induction, explicit correction works better than implicit correction, and output-oriented CF is likely to contribute to interlanguage development more than input-based feedback, it should at all times be kept in mind that the other option is also effective in each case and much depends as well on the characteristics of the learners, the inherent features of the targeted form and the context in which the pedagogic intervention takes place. Secondly, although researchers are primarily interested in examining the effects of specific instructional options, teaching on a daily basis involves the use of a combination of such options with the purpose of enhancing the likelihood that the pedagogic goals envisaged for a given lesson are met. In other words, rather than relying only on explicit instruction, structured input or production practice, which would be a sign of allegiance to one theoretical position or another, teachers are bound to fall back on an amalgam of instructional options to ensure that learners are in fact mastering the structure they are being taught.

3 Principles of Instructed Second Language Learning

An attempt to spell out the principles that should be adhered in order to ensure the efficacy of instructed second language acquisition, or, to be more precise, grammar teaching, have been put forward by a number of theorists and researchers, with some of them being rather general and others much more specific. Mitchell (2000), for instance, argues that effective grammar instruction should be planned and systematic as well as motivated by a strategic vision of the desired outcomes, but, at the same time, it should be 'rough-tuned' so as to benefit learners at different stages of interlanguage development. She accepts the use of learners' mother tongue in teaching points of grammar, at least with beginners, and recommends that FFI should take place frequently in small doses, with provisions being made

for ensuring redundancy in the treatment of the targeted features and their systematic reinforcement throughout the program. With respect to the techniques and procedures aimed at introducing and practicing TL items, Mitchell contends that the development of active, articulated knowledge of grammar calls for the use of text-based, problem-solving grammar activities as well as the provision of active CF and elicitation. Finally, she emphasizes the importance of embedding grammar instruction in meaning-oriented activities and tasks so that students can immediately apply the forms they have been taught in unplanned, real-time performance, which, it can be assumed, is expected to aid the development of not only explicit, declarative, but also, more importantly perhaps, implicit, procedural second language knowledge.

Larsen-Freeman (2003), in turn, approaches this issue by discussing the what, when, why and how and to whom of grammar teaching, questions which are related to the target, timing, reasons for, techniques and procedures, as well as the recipients of such a pedagogic intervention. When it comes the first of these, she takes the stance that grammar instruction should not be confined to developing a static body of knowledge about rules and exceptions to these rules, but, rather, it should also acknowledge the fact that grammar is "(…) a dynamic process in which forms have meanings and uses in a rational, discursive, interconnected and open system" (2003, p. 142). This implies that this subsystem should be regarded and taught as yet another language skill, or what she refers to as *grammaring*, understood as the ability to use grammar structures not only accurately, but also meaningfully and appropriately, as well as indicating that it is of pivotal importance to raise learners' awareness of the reasons why rules operate and to adopt a more organic and holistic rather than purely linear and atomistic view of how the knowledge of grammar develops. With respect to the timing of instruction, she points out that "it is (…) students' learning that should guide the teaching rather than vice versa" (2003, p. 145). This might involve opting for a *responsive approach,* in which teachers capitalize on teachable moments by drawing learners' attention to a specific TL features (e.g. through the provision of feedback), a *proactive approach*, where activities are designed which necessitate the use of structures that would otherwise be unlikely to come up in classroom interaction (e.g. focused communication tasks), *the use of a grammar checklist*, which enables the teacher to ascertain that all the key points of grammar have been covered, the adoption of a *selective focus*, which allows skipping structures which appear in the coursebook (e.g. when students are already familiar with them), as well as *horizontal planning*, which is based on the assumption that the best solution is to adopt a cyclical or spiral syllabus (see above) as well as to spread the three phases of the PPP sequence over a sequence of lessons. As to the choice of instructional techniques and procedures, Larsen-Freeman (2003) emphasizes the need for an explicit focus on the form, meaning and use of structures, which might entail the application of consciousness-raising activities, output-oriented practice tasks and the provision of CF, but also postulates the use of activities intended to foster explicit grammaring (e.g. highlighting the problematic structures in a text, having students engage in text-based computer-mediated communication), promoting

engagement on the part of learners (e.g. making modifications to the task in hand), or familiarizing them with tools that will help them discover how grammar works (e.g. getting students to observe how the TL is used on an everyday basis and to form hypotheses in this respect). Last but not least, she makes it clear that the decisions related to teaching grammar should be informed by the characteristics of the learners, such as their age, which is bound to affect the types of activities employed, or learning style, since, for example, not all learners might be equally comfortable with deduction or induction.

Another set of principles of instructed language acquisition has been proposed by Ellis (2005b), who bases them on the latest findings of research in this area. They are as follows: (1) instruction needs to ensure that learners are provided with the opportunity to master a broad repertoire of formulaic expressions as well as a rule-based competence, as this will ensure the development of the fluency, accuracy and complexity of TL output (cf. Skehan 1998; Foster 2001), a key caveat being that teaching rules should be avoided with beginners (Ellis 2002), (2) the intervention has to proceed in such a way that learners focus primarily on meaning, understood mainly as pragmatic meaning, which entails the use of the TL with the purpose of attaining genuine communicative goals, such as those embodied in performing communicative tasks, (3) opportunities should be created for learners to focus on the formal aspects of TL, which is in line with the claim that acquisition cannot be successful without attention to form; this can be achieved through isolated grammar lessons, reliance on focused communication tasks that require comprehending, processing or using the targeted linguistic features, as well as opportunities for strategic and online planning (cf. Yuan and Ellis 2003) or the provision of corrective feedback (Pawlak 2012a), (4) instruction should primarily cater to the development of implicit knowledge, while not neglecting explicit knowledge, because, although the former underlies spontaneous performance, according to some theories (e.g. DeKeyser 1998, 2001, 2003), the latter can be automatized to such an extent that it can serve as a basis for producing utterances in real time, (5) instruction has to take into account learners' internal, or built-in, syllabus, or, in other words, respect the orders and sequences of acquisition that have been identified by researchers, which entails embracing the zero grammar option or some form of a task-based syllabus, (6) learners should be provided with extensive exposure to TL input, since access to positive evidence can be viewed as one of the necessary, albeit insufficient, conditions for acquisition (cf. Gass 2003); this task can be accomplished through maximizing the use of the TL inside the classroom and creating opportunities for copious exposure to it outside school, (7) instruction should ensure that learners are engaged in output production, as this is likely to enhance the quality of the input they are supplied with, ensure syntactic rather than only semantic processing, allow hypothesis testing, foster the automatization of second language knowledge, contribute to the development of discourse skills, ensure the occurrence of topics that are of interest to students, and furnish learners with auto-input that can be used in restructuring their interlanguage system (cf. Swain 1995; Ellis 2003; Swain 2005), (8) learners should be encouraged to interact in the TL, with such interaction involving

attention to form, allowing the expression of personal meanings, necessitating performance beyond the current level of competence, and creating a variety of contexts for language use (cf. Johnson 1995), (9) FFI should take heed of individual learner differences, particularly those related to aptitude and motivation, variables that are believed to be of crucial importance in determining the outcomes of acquisition, and (10) the assessment of second language proficiency should entail not only controlled output, which is still most often the case, but also free production, which can be regarded as a more valid manifestation of learners' implicit knowledge.

The issue of effective grammar instruction is also tackled by Batstone and Ellis (2009), who discuss it in terms of aiding learners in creating appropriate connections between target language forms and the meanings these forms convey, proposing three interrelated principles which can help teachers to achieve this goal. The first is the *given-to-new principle*, according to which the existing schematic knowledge should be exploited in learning new things about grammar, as the case might be when learners have their attention directed at a TL feature that is used to express a particular meaning, or they are made aware of the fact that a structure they know can signal other meanings than the one they are already familiar with (e.g. the use of the present simple not only for habitual actions but also for historical events). The second is the *awareness principle*, which states that it is necessary to raise learners' awareness of particular form-meaning mappings, which is in line with Schmidt's (2001, p. 30) claim that although implicit learning is possible, "people learn about the things they attend to and do not learn much about the things they do not attend to". This might involve directing learners' attention to grammatical items that are not salient enough in the input (e.g. the third person 's', the past tense 'ed', or articles), so that the known does not obstruct access to the unknown, ensuring that students understand how meanings are encoded in the forms they notice, and helping them gain greater control over their knowledge of grammar structures by creating abundant opportunities for monitoring the accuracy, appropriacy and precision of their TL production. The third is the *real-operating conditions principle*, which draws upon the premises of Skill-Learning Theory (e.g. Johnson 1996; DeKeyser 1998, 2001, 2007) and Sociocultural Theory (e.g. Lantolf 2006), or, more precisely, concept-based instruction (Lantolf and Johnson 2007), positing that effective grammar instruction must involve tasks that require learners to employ the linguistic features taught in spontaneous communication in which their limited attentional resources have to be mainly allocated to meaning rather than form and where they can receive feedback on their inaccurate uses of the targeted structure. In the view of Batstone and Ellis (2009, p. 203), the strength of such an approach is that the principles are not grounded in one theory proposing a particular model of grammar instruction but in fact underlie a number of such theories, since "[i]t may be a fruitless exercise to try to demonstrate that one model has greater merit than another".

An attempt to formulate a set of general guidelines for successful teaching and learning of grammar in the language classroom has also been made by Nassaji and Fotos (2011), who make the following points in this respect: (1) not all grammar

forms and structures respond equally to instruction, which is related to the fact that some of them may be less salient in the input than others (cf. Doughty 2003), the existence of developmental sequences and learners' internal syllabus (cf. Pienemann 1989, 1998; Ellis 2005b), and the impact of individual learner differences, such as aptitude, motivation, personality, etc. (cf. Dörnyei 2006), (2) successful instruction is multifaceted, which involves the adoption of a multidimensional curriculum (cf. Stern 1992), or such that places emphasis on both the formal aspects of language and copious opportunities for communicative language use, encouraging interpretation and production of authentic discourse inside and outside the classroom, (3) theory and research can only provide proposals that can be tested and examined in language classrooms, not final solutions, which indicates that although classroom practice should be informed by research findings, specific solutions cannot be uncritically accepted and implemented but, rather, their utility should be carefully appraised in particular contexts, (4) teachers should be eclectic in their instructional approach, or, as Nassaji and Fotos (2011, p. 139) elucidate, "(…) they should choose and synthesize the best elements, principles and activities of different approaches to grammar teaching to attain success", with the important caveat that this should be done in a principled manner, and (5) teachers are not agents to learn and apply methods, but professional decision-makers, a so-much-needed reminder that, as Richards and Lockhart (1996, p. 78) insightfully commented, "(…) teaching is essentially a thinking process", and, therefore, teachers must be reflective practitioners who are capable of selecting instructional options that are best suited to the attainment of specific pedagogic goals.

4 Towards a Model of Grammar Teaching in the Foreign Language Classroom

Although the principles outlined in the previous section have their merits and some of them can without doubt considerably contribute to enhancing the effectiveness of grammar teaching regardless of the specific context in which it occurs, it seems that none of these proposals can be adopted in its entirety as a basis for successful instruction in the foreign language classroom, with all of its constraints and realities. For one thing, most of them (e.g. Mitchell 2000; Ellis 2005b; Batstone and Ellis 2009; Nassaji and Fotos 2011) are rather general in nature and offer little concrete guidance on how teaching grammar structures should in fact be planned and implemented with respect to the choice of the syllabus, the format of grammar-based lessons or the application of specific techniques and procedures, not to mention the fact that they by and large neglect such issues as the place of the mother tongue, the need for metalanguage, or the role of educational resources, or at best touch on them only in passing. Somewhat related to this lack of specificity is the fact that none of these proposals can be regarded as holistic, because important aspects of grammar instruction are addressed by some of them but ignored by others, good examples being the criteria for choosing the TL features for intervention,

the contribution of rule-based and exemplar-based competence, or questions connected with the assessment of implicit and explicit knowledge of grammar. What is the most problematic, however, is the feasibility, utility and effectiveness of some of the concrete solutions offered in the foreign language context, where in- and out-of-class access to the TL is often scarce, an explicit focus on grammar is an integral part of deeply-seated educational traditions, and a rather traditional approach to teaching this subsystem is evident in most coursebooks and additional materials. In such a situation, it would be injudicious to recommend, for instance, that a structural syllabus should be supplanted with a task-based syllabus (cf. Larsen-Freeman 2003; Ellis 2005b), a systematic coverage of the main points of grammar should be abandoned in favor of incidental focus on form or a grammar checklist (cf. Larsen-Freeman 2003), or that form-focused instruction should be avoided in the case of beginners who should first master a wide range of formulaic expressions (cf. Ellis 2005b).

All of these inadequacies and shortcomings point to the need for elaborating a model of effective grammar instruction in the foreign language classroom that would, on the one hand, be sufficiently comprehensive, holistic and specific, and, on the other, take into consideration the distinctive features of language education in such a context when offering guidelines for everyday classroom practice derived from the relevant research findings. A suitable point of departure for such a model seems to be a proposal put forward Marton (2003), who specifies *six organizing principles*, which can be regarded as *general strategies for teaching grammar*, as well as *five executive principles*, which constitute a coherent set of interrelated techniques and procedures. The general assumptions are as follows: (1) grammar instruction should be deliberate and systematic, (2) it must be directed at the forms, meanings and functions (uses) of particular structures, (3) it should enable the use of the targeted linguistic forms in planned (i.e. controlled) as opposed to unplanned (i.e. spontaneous) discourse, (4) it is not supposed to respect developmental sequences, (5) learners' mother tongue should be viewed as an ally in teaching grammar, and (6) form-focused instruction ought to consist of a logically arranged sequence of classroom procedures and activities. When it comes to the executive principles, Marton (2003) argues that effective grammar teaching must comprise the following stages:

(1) fostering the processes of noticing the targeted structure and establishing form-meaning-use mappings, thereby catering to the development of declarative knowledge (e.g. learners could be asked to find all the instances of the form in a text and explain each of its uses);
(2) allowing the proceduralization of declarative knowledge through various types of output practice, with the qualification that learners should be supplied with ample time to reflect on the activities performed (e.g. putting verbs in brackets in the correct form, translation exercises, fairly highly structured role plays, etc.);
(3) stimulating the automatization of the procedural knowledge developed in comprehension and production practice, with the main emphasis being placed on fluency, albeit not to the complete detriment of accuracy (e.g. text-based reconstructive activities, text-based role plays, etc.);

(4) providing learners with corrective feedback at all stages of the sequence, with induced or prompted self-correction being seen as the most beneficial form of such intervention;
(5) systematically revising the grammar structures previously introduced with the purpose of fostering system learning and ensuring sustained IL development, which involves the use of techniques and procedures reflective of those employed in the first three stages.

On the whole, these principles are commendable because, taken together, they constitute a pedagogic proposal that is cogent, comprehensive and, most importantly perhaps, reflective of the realities of a typical foreign language context, all of which makes it a perfect candidate for an extension into a full-fledged model of grammar teaching of the kind mentioned above. It should also be noted that, although Marton's (2003) guidelines deviate in some important respects from those discussed in the preceding section, the most important differences being related to little concern with the existence of developmental sequences or the need to practice the structures taught under real-operating conditions, there are also many areas in which they echo the recommendations of other theorists and researchers, as is the case, for example, with the role of awareness-raising, the importance of proceduralization and automatization, or the necessity of systematic revisions. Obviously, the proposal is not without its limitations, the most serious of which seems to be, in the opinion of the present author, the assumption that grammar instruction should in the main focus on enabling learners to use the targeted features in planned discourse rather than spontaneous communication, as this would be tantamount to neglecting the development of implicit knowledge that underlies the conveyance of meanings and messages in real life. Even if we assume, as DeKeyser (2003, 2010) and DeKeyser and Juffs (2005) do, that implicit knowledge may be hard to come by for older classroom learners and thus the primary goal should be the development of highly automatized explicit knowledge which might be as effective in attaining communicative goals, it is not clear how learners can be expected to reach such a high level of automaticity without having many opportunities to employ the targeted forms under real-operating conditions, which is possible thanks to the use of text-creation activities as well as focused and unfocused communication tasks (see Sect. 2.2), accompanied by adept provision of corrective feedback. Another shortcoming is related to the fact that, similarly to the principles outlined above, the proposal provides a blueprint for how successful grammar instruction should proceed, but does little in the way of spelling out the specifics of such instruction that teachers have to decide in the classroom on a daily basis.

This having been said, the time has come to outline the main tenets of what the present author envisages as a model of effective grammar instruction in the foreign language context, a proposal which integrates some of the recommendations discussed earlier, but at the same time takes issue with others, and is informed by the latest research findings. The principles are as follows (Pawlak 2006, 2007, 2012a):

(1) deliberate and systematic FFI is indispensable if students are expected to go beyond basic communicative ability and become capable of conveying their messages in a way that is not only comprehensible, but also accurate, precise and appropriate;
(2) the structural component has to be complemented with a substantial meaning-focused module, as this would foster the development not only of implicit, but also explicit TL knowledge, or at least ensure adequate automatization of the former to such an extent that in can be successfully employed in spontaneous communication;
(3) although FFI should aim at the development of both explicit and implicit knowledge, it should not be guided by the orders and sequences of acquisition, as our knowledge in this area is scant, their existence is not reflected in most teaching materials, and it is unfeasible to gauge learners' developmental readiness in a classroom setting, let alone accommodate the differences in this respect;
(4) instruction should focus on the structural, semantic and pragmatic dimensions of the targeted features so that learners may attend to and notice the relevant form-meaning-function mappings;
(5) teaching should not be confined to developing the rule-based system and it should also aim at the mastery of formulaic expressions incorporating the targeted feature;
(6) it is necessary to emphasize both the structural and communicative components from the very beginning, with the former being prominent in the initial stages and the latter gradually coming to the fore as students become more proficient, perhaps to the extent that advanced learners will mainly have their attention drawn to problematic features as they are engaged in spontaneous communication (i.e. incidental focus on form);
(7) a structural syllabus rather than a task-based one should provide the main basis for the selection of the instructional targets, which, of course, does not mean that elements of task-based instruction cannot be introduced at any time, either to provide learners with opportunities to apply grammar structures in real time (e.g. focused communication tasks) or to address problematic areas (e.g. the provision of corrective feedback);
(8) it is necessary to opt for a cyclical variant of the structural syllabus so that the targeted forms are regularly revisited, as this primes the acquisition of features that learners are not developmentally ready to integrate into the implicit knowledge store, an approach that is espoused by most coursebooks but can also involve remedial instruction;
(9) the implementation of grammar-based lessons may involve reliance on both planned and intensive focus on forms designs, usually based on the PPP sequence, and planned or incidental focus on form options, such as those used in the weak and strong variants of task-based instruction;
(10) when the PPP procedure is employed, teachers should ensure that all the three phases are amply emphasized and none is neglected or omitted, with the effect that students are not only familiarized with relevant rules and asked to use them in controlled, text-manipulation activities, but they are also

afforded copious opportunities to employ the TL features in real time by performing text-creation or focused communication tasks;

(11) given the fact that the growth and automatization of explicit and implicit knowledge requires multiple opportunities to process the targeted structure in comprehension and production, the PPP paradigm should be seen in terms of lesson sequences rather than isolated classes; this requirement applies in particular to its free-production component which could in fact be viewed as a sequence of planned focus on form lessons in its own right, where such implicit instructional microoptions as input enrichment, focused communication tasks, and various forms of corrective feedback could be used;

(12) the introduction of grammar structures can be based on both deduction and induction, and involve, for example, the use of the mother tongue, metalanguage, corpus-derived data or consciousness-raising activities, depending on the inherent properties of the TL feature, the amount of time available, learner characteristics, or pedagogic goals;

(13) a range of output-based and input-oriented instructional microoptions can be utilized to help learners gain greater control of the targeted structure, with the important caveat that text-manipulation activities primarily cater to the mastery of explicit knowledge whereas text-creation activities, focused communication tasks, different types of input enrichment, or the provision of feedback during meaning and message conveyance aid the automatization of implicit knowledge;

(14) the provision of corrective feedback should be regarded as an important option in FFI, with the qualification that error correction which occurs in the course of controlled exercises primarily contributes to the growth of explicit knowledge, whereas feedback on inaccuracies in communicative language use may also trigger the development and automatization of implicit knowledge, particularly in situations when it is immediate but unobtrusive, it is focused and intensive, and students are cognizant of its target;

(15) the selection of specific techniques and procedures should take account of learners' command of the TL feature in terms of explicit and implicit knowledge as well as the influence of individual learner differences, although it has to be admitted that both of these goals are bound to pose a formidable challenge;

(16) the choice of methodological microoptions and macrooptions must be informed by the distinctive features of the educational context, with the effect that some techniques or procedures that may have been shown to produce the desired outcomes may be hard to use in classroom practice, a good case in point being input enrichment, the beneficial effects of which require its application over a long period, a luxury that can hardly be afforded when instruction is limited to several hours a week;

(17) an important status should be conferred to review classes which may, as is typically the case, primarily rely on the performance of diverse text-manipulation activities, but might just as well be conducted with the aim of reinforcing form-meaning mappings through the inclusion of focused communication tasks and providing students with CF on their spontaneous performance;

(18) the coursebook should not be regarded as a straitjacket and it should not be slavishly followed, but, rather, some grammar structures can be omitted, others added, and the sequence of presentation can be modified depending on a particular group of learners;
(19) the effectiveness of grammar instruction can be considerably enhanced with the use of additional materials and resources, with information and computer technology being particularly expedient in this respect;
(20) whenever feasible, an attempt should be made to evaluate both explicit and implicit knowledge of grammatical structures, which means that discrete-point tests based on selected- and limited-response items should be complemented with extended-response, or free-production tasks, and attention should be paid to learners' use of the targeted features in spontaneous performance in classroom interaction;
(21) teachers need to be realistic in their expectations of the effects of FFI and they should be able to judge whether learner output is reflective of implicit or explicit knowledge, and to determine the extent to which it manifests reliance on rote-learnt formulae or a rule-based system, as such awareness will help making strategic decisions about the need for further intervention and the choice of the most suitable instructional options;
(22) an attempt should be made to foster learner autonomy in learning and using grammar by training students in the use of appropriate grammar learning strategies (cf. Pawlak 2012b), as this holds the promise that they will not forget what they have been taught and seek other ways of developing and automatizing implicit and explicit knowledge.

Even though these principles constitute a detailed, coherent and comprehensive model of grammar instruction in foreign language classrooms, it should be emphasized that they are not meant as prescriptions that should be followed under all circumstances but, rather, as, what Stenhouse (1975) would call provisional specifications that teachers have to experiment with in their own classrooms. This is because, as Nassaji and Fotos (2011, pp. 140–141) thoughtfully comment, "(…) experience is the best teacher. (…) Through experience the interface between theory and practice becomes evident, and a better understanding of one's teaching practice develops. As teachers work with combinations of various instructional options, they develop a vision of what works and what does not work for them as well as how to amend or modify practice to increase their effectiveness". Another qualification is that these recommendations are surely not foolproof and need to be constantly updated and improved upon on the basis of new research findings, particularly those emanating from contexts for which such guidelines are intended. Given the paucity of empirical evidence in some of the key areas that the model touches upon (e.g. the impact of individual differences, comparisons of the effectiveness of combinations of different microoptions, the contribution of grammar learning strategies), which is especially evident in foreign language contexts, there is an urgent need to embark on such studies as this is bound to contribute to greater effectiveness of grammar instruction.

References

Batstone, R. and R. Ellis. 2009. Principled grammar teaching. *System* 37: 194-204.

Breen, M. P. 2001. Syllabus design. In *The Cambridge guide to teaching English to speakers of other languages*, eds. R. Carter and D. Nunan, 151-159. Cambridge: Cambridge University Press.

DeKeyser, R. M. 1998. Beyond focus on form: Cognitive perspectives on learning and practicing second language grammar. In *Focus on form in classroom second language acquisition*, eds. C. J. Doughty and J. Williams, 42-63. Cambridge: Cambridge University Press.

DeKeyser, R. M. 2001. Automaticity and automatization. In *Cognition and second language instruction*, ed. P. Robinson, 125-151. Cambridge: Cambridge University Press.

DeKeyser, R. M. 2003. Implicit and explicit learning. In *The handbook of second language acquisition*, eds. C. J. Doughty and M. H. Long, 313-348. Oxford: Blackwell.

DeKeyser, R. M. 2007. Conclusion: The future of practice. In *Practice in a second language: Perspectives from applied linguistics and cognitive psychology.* Cambridge: Cambridge University Press, ed. R. M. DeKeyser, 287-304. Cambridge: Cambridge University Press.

DeKeyser, R. M. 2010. Cognitive-psychological processes in second language learning In *The handbook of language teaching*, eds. M. H. Long and C. J. Doughty, 119-138. Oxford: Wiley-Blackwell.

DeKeyser, R. M. and A. Juffs. 2005. Cognitive considerations in L2 learning. In *Handbook of research in second language teaching and learning*, ed. E. Hinkel, 437-454. Mahwah, NJ: Lawrence Erlbaum.

Doughty, C. J. 2001. Cognitive underpinnings of focus on form. In *Cognition and second language instruction*, ed. P. Robinson, 206-257. Cambridge: Cambridge University Press.

Doughty. C. J. 2003. Instructed SLA: Constraints, compensation and enhancement. In *The handbook of second language acquisition*, eds. C. J. Doughty and M. H. Long, 256-310. Oxford: Blackwell.

Doughty, C. J. and J. Williams. 1998. In *Focus on form in classroom second language acquisition*, eds. C. J. Doughty and J. Williams, 197-261. Cambridge: Cambridge University Press.

Dörnyei, Z. 2006. Individual differences in second language acquisition. *AILA Review* 19: 42-68.

Ellis, R. 1989. Are classroom and naturalistic acquisition the same? A study of the classroom acquisition of German word order rules. *Studies in Second Language Acquisition* 11: 305-328.

Ellis, R. 1995. Interpretation tasks for grammar teaching. *TESOL Quarterly* 29: 87-105.

Ellis, R. 1997. *SLA research and language teaching*. Oxford: Oxford University Press.

Ellis, R. 1998. Teaching and research: Options in grammar teaching. *TESOL Quarterly* 32: 39-60.

Ellis, R. 2003. *Task-based language learning and teaching*. Oxford: Oxford University Press.

Ellis, R. 2001. Introduction: Investigating form-focused instruction. In *Form-focused instruction and second language learning*, ed. R. Ellis, 1-46. Oxford: Blackwell.

Ellis, R. 2002. The place of grammar instruction in the second/foreign language curriculum. In *New perspectives on grammar teaching in second language* classrooms, eds. E. Hinkel and F. Fotos, 17-34. Mahwah, NJ: Lawrence Erlbaum.

Ellis, R. 2005a. Instructed language learning and task-based teaching. In *Handbook of research in second language teaching and learning*, ed. E. Hinkel, 713-728. Mahwah, NJ: Lawrence Erlbaum.

Ellis, R. 2005b. Principles of instructed language learning. *System* 33: 209-224.

Ellis, R. 2006. Current issues in the teaching of grammar: An SLA perspective. *TESOL Quarterly* 40: 83-107.

Ellis, R. 2008. *The study of second language acquisition.* (second edition). Oxford: Oxford University Press.

Ellis, R. 2010. Explicit form-focused instruction and second language acquisition. In *The handbook of educational linguistics*, eds. B. Spolsky and F. M. Hult, 437-455. Oxford: Wiley-Blackwell.

Ellis, R., H. Basturkmen and S. Loewen. 2002. Doing focus on form. *System* 30: 419-432.
Foster, P. 2001. Rules and routines: A consideration of their role in task-based language production of native and non-native speakers. In *Language tasks: Teaching, learning and testing*, eds. M. Bygate, P. Skehan and M. Swain, 75-97. London: Longman.
Gass, S. M. 2003. Input and interaction. In *The handbook of second language acquisition*, eds. C. J. Doughty and M. H. Long, 224-255. Oxford: Blackwell.
Johnson, K. 1995. *Understanding communication in second language classrooms*. Cambridge: Cambridge University Press.
Johnson, K. 1996. *Language teaching and skill-learning*. Oxford: Blackwell.
Johnson, K. 2001. *An introduction to foreign language learning and teaching*. Harlow: Pearson Education.
Kellerman, E. 1985. Input and second language acquisition theory. In *Input in second language acquisition*, eds. S. M. Gass and C. G. Madden, 345-353. Rowley, MA: Newbury House.
Lantolf, J. P. 2006. Sociocultural Theory and L2: State of the art. *Studies in Second Language Acquisition* 28: 67-109.
Lantolf, J. P. and K. Johnson. 2007. Extending Firth and Wagner's (1997) ontological perspective to L2 classroom praxis and teacher education. *Modern Language Journal* 91: 877-892.
Larsen-Freeman, D. 2003. *Teaching language: From grammar to grammaring.* Boston: Thomson & Heinle.
Larsen-Freeman, D. 2010. Teaching and testing grammar. In *The handbook of language teaching*, eds. M. H. Long and C. J. Doughty, 519-542. Oxford: Wiley-Blackwell.
Lightbown, P. M. 1998. The importance of timing in focus on form. In *Focus on form in classroom second language acquisition*, eds. C. J. Doughty and J. Williams, 177-196. Cambridge: Cambridge University Press.
Loewen, S. 2011. Focus on form. *Handbook of research in second language teaching and learning. Volume II*, ed. E. Hinkel, 577-592. New York and London: Routledge.
Long, M. H. 2000. Focus on form in task-based language teaching. In *Language policy and pedagogy. Essays in honor of Ronald Walton*, eds. R. Lambert and E. Shohamy, 181-196. Amsterdam: John Benjamins.
Long, M. H. 1991. Focus on form: A design feature in language teaching methodology. In *Foreign language research in cross-cultural perspective*, eds. K. de Bot, R. Ginsberg and C. Kramsch, 39-52. Amsterdam: John Benjamins.
Long, M. H. 2007. *Problems in SLA*. Mahwah, NJ: Lawrence Erlbaum.
Long, M. H. and G. Crookes. 1992. Three approaches to task-based syllabus design. *TESOL Quarterly* 26: 27-56.
Long, M. H. and P. Robinson. 1998. Focus on form: Theory, research and practice. In *Focus on form in classroom second language acquisition*, eds. C. J. Doughty and J. Williams, 15-41. Cambridge: Cambridge University Press.
Marton, W. 2003. A maximum-efficiency model for the teaching of L2 grammar in a foreign language, non-intensive context. Paper presented during the 34th Poznań Linguistic Meeting, Poznań, May 1st-3rd.
Mitchell, R. 2000. Applied linguistics and evidence-based classroom practice: The case of foreign language grammar pedagogy. *Applied Linguistics* 21: 281-303.
Nassaji, H. and S. Fotos. 2011. *Teaching grammar in second language classrooms: Integrating form-focused instruction in communicative context.* London and New York.
Norris, J. M. 2010. Task-based teaching and testing. In *The handbook of language teaching*, eds. M. H. Long and C. J. Doughty, 578-594. Oxford: Wiley-Blackwell.
Norris, J. M. and L. Ortega. 2001. Does type of instruction make a difference? Substantive findings from a meta-analytic review. In *Form-focused instruction and second language learning*, ed. R. Ellis, 157-213. Oxford: Blackwell Publishers.
Ortega, L. 2010. Sequences and processes in language learning. In *The handbook of language teaching*, eds. M. H. Long and C. J. Doughty, 81-105. Oxford: Wiley-Blackwell.
Ortega, L. 2011. Second language acquisition. In *The Routledge handbook of applied linguistics*, ed. J. Simpson, 171-184. London and New York: Routledge.

Pawlak, M. 2006. *The place of form-focused instruction in the foreign language classroom.* Poznań – Kalisz: Adam Mickiewicz University Press.
Pawlak, M. 2007. An overview of focus on form in language teaching. In *Exploring focus on form in language teaching. Special issue of Studies in Pedagogy and Fine Arts*, ed. M. Pawlak, 5-26. Poznań – Kalisz: Adam Mickiewicz University Press.
Pawlak, M. 2012a. *Error correction in the foreign language classroom: Reconsidering the issues.* Poznań – Kalisz – Konin. Adam Mickiewicz University and State School of Higher Professional Education in Konin Press.
Pawlak, M. 2012b. Grammar learning strategies: State of the art. In *Learning and teaching English: Insights from research*. eds. L. Pedrazzini and A. Nava, 69-90. Monza-Milano: Polimetrica.
Pienemann, M. 1989. Is language teachable? Psycholinguistic experiments and hypotheses. *Applied Linguistics* 10: 52-79.
Pienemann, M. 1998. *Language processing and second language development*: Processability theory. Philadelphia: John Benjamins.
Prabhu, N. S. 1987. *Second language pedagogy*. Oxford: Oxford University Press.
Richards, J. C. and C. Lockhart. 1996. *Reflective teaching in second language classrooms.* Cambridge: Cambridge University Press.
Robinson, P. 2010. Syllabus design. In *The handbook of language teaching*, eds. M. H. Long and C. J. Doughty, 294-310. Oxford: Wiley-Blackwell.
Robinson, P. 2011. Task-based language learning: A review of issues. *Language Learning* 61. Supplement 1: 1-36.
Samuda, V. 2001. Guiding relationships between form and meaning during task performance: The role of the teacher. In *Researching pedagogic tasks*: *Second language learning, teaching and testing*, eds. M. Bygate, P. Skehan and M. Swain, 119-140. Harlow: Pearson Education.
Schmidt, R. 2001. Attention. In *Cognition and second language instruction*, ed. P. Robinson, 3-32. Cambridge: Cambridge University Press.
Sheen, Y. and R. Ellis. 2011. Corrective feedback in language teaching. In *Handbook of research in second language teaching and learning. Volume II*, ed. E. Hinkel, 593-610. New York and London: Routledge.
Skehan, P. 1998. *A cognitive approach to language learning*. Oxford: Oxford University Press.
Spada, N. 1997. Form-focused instruction and second language acquisition: A review of classroom and laboratory research. *Language Teaching Abstracts* 30: 73-87.
Spada, N. 2011. Beyond form-focused instruction: Reflections on past, present and future research. *Language Teaching* 44: 225-236.
Stenhouse, L. 1975. *An introduction to curriculum research and development*. London: Heinemann.
Stern, H. H. 1992. *Issues and options in language teaching.* Oxford: Oxford University Press.
Swain, M. 1995. Three functions of output in second language learning. In *Principles and practice in applied linguistics. Studies in honor of H. G. Widdowson*, eds. G. Cook and B. Seidlhofer, 125-144. Oxford: Oxford University Press.
Swain, M. 2005. The output hypothesis: Theory and research. In *Handbook of research in second language teaching and learning*, ed. E. Hinkel, 471-483. Mahwah, NJ: Lawrence Erlbaum.
Ur, P. 2011. Grammar teaching. In *Handbook of research in second language teaching and learning. Volume II*, ed. E. Hinkel, 507-522. New York and London: Routledge.
VanPatten, B. 1996. *Input processing and grammar instruction*. Norwood, NJ: Ablex Publishing Corporation.
VanPatten, B. 2002. Processing instruction: An update. *Language Learning* 52: 755-804.
Wilkins, D. 1976. *Notional syllabuses*. Oxford: Oxford University Press.
Williams, J. 2005. Form-focused instruction. In *Handbook of research in second language teaching and learning*, ed. E. Hinkel, 671-691. Mahwah, NJ: Lawrence Erlbaum.
Willis, D. and J. Willis. 2007. *Doing task-based teaching*. Oxford: Oxford University Press.
Willis, J. 1996. *A framework for task-based learning.* Harlow: Longman.
Yuan, F. and R. Ellis. 2003. The effects of pre-task planning and on-line planning on fluency, complexity and accuracy in L2 oral production. *Applied Linguistics* 24: 1-27.

Using Simulations to Develop Intercultural Communication Competence in an EFL Methodology Seminar

Teresa Siek-Piskozub

Abstract One of the most recent concerns of foreign language pedagogy is the intercultural communication competence (henceforth ICC), which has been recognised as its major objective. Drawing on the research form (inter) cultural studies, formal documents motivating foreign language teaching attach great importance to developing ICC. Different approaches are recommended and studied empirically. This chapter aims at sharing observations stemming from the implementation of simulations on ICC issues in a seminar devoted to constructivism in language education, offered to prospective English as a foreign language teachers at two Polish universities. The analysis of the observed impact of the use of simulations is preceded by a discussion of the theoretical underpinnings of ICC development.

1 Introduction

The turn of the twentieth and twenty first centuries is marked with a growing emphasis on the need for a re-examination of foreign language (FL) education to answer the challenges of globalisation. Unprecedented human mobility and international cooperation have resulted in meetings of representatives of different cultures, a fact which cannot be ignored, as cultural misunderstandings bring about mutual incomprehension. This has spelt a shift from the communicative approach in FL education to an intercultural one. Whereas the former aims at a native-like communicative competence, the latter advocates the development of an intercultural speaker (e.g. Byram 1997). Intercultural communication competence (ICC), although variously interpreted by different theorists, is characterised by an underlying assumption that it helps to understand and overcome cultural discrepancies (e.g. Corbett 2003). Byram (1997) analyses four aspects of intercultural communication and is of the opinion that they can be hypothetically acquired by means of experience and reflection, which would bring FL education closer to the

T. Siek-Piskozub (✉)
Faculty of English, Adam Mickiewicz University, Poznań, Poland
e-mail: piskozub@amu.edu.pl

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acquisition of one's own culture. The latter knowledge is acquired in the process of primary (within a family) and secondary (in an educational setting) socialisation. It is through these processes that a person acquires conscious and unconscious information about the workings of the mother culture as well as others. However, the knowledge of other cultures is relational, as posited by Byram, since it is usually acquired within one's own group and often presented in contrast to it. The present author considers simulation to be a technique which can help develop ICC in its four dimensions in the context of teaching foreign languages. This article reports on the experience of using selected simulations from the education pack *All different all equal* (Brander et al. 1995) with students of English philology, prospective teachers of a foreign language, during their seminar devoted to constructivism.

2 What is ICC?

Intercultural communication competence encompasses attitudes, knowledge and skills at the interface between several cultural areas, including the students' own values and worldviews and those of a target language country. Although ICC is inseparable from language teaching, linguists and methodologists did not begin to consider it as a major facet of language instruction until recently. It is a concept which developed from the existing bases in applied linguistics, i.e. communicative competence, as defined by applied linguists and crosscultural/intercultural competence. On the one hand, it continues the tradition of communicative language teaching through its reference to language-related aspects of communication, such as linguistic, discourse and socio-cultural components of language competence relevant to the context (see e.g. Bachman 1990; CEFR 2001). On the other, however, it is against instrumental or superficial use of the language. It focuses more on establishing harmonious relationships with people from foreign cultures (see e.g. Corbett 2003).

The importance of ICC has grown in language education together with the expansion of human mobility and the development of new technologies which have stimulated intercultural communication. Byram (1997) has proposed a framework of ICC, which comprises skills, attitudes and competences necessary in interactions where the target language is a primary means of communication. His framework is based on a modification of Van Ek (1986) objectives for FL learning. He has refined van Ek's model by replacing the native speaker with the intercultural speaker. Byram also emphasises an important difference between people travelling to foreign countries: their reasons for travel and their length of stay. He distinguishes between 'a tourist', who usually comes to visit a country for a short period and for relaxation purposes, and 'a soujourner', who is an immigrant or a political refuge from his home country. The context for the first group can be more easily recognised, but for the latter group it is more varied. While for tourists intercultural interaction may be an enriching experience, for 'soujournes' it is a matter of survival in the country, although they also get a chance to "be educated acquiring the capacity to critique and improve their own and other's conditions" (Byram 1997, p. 2).

The more distinct the cultures, the more problems may occur. Thus, ICC development has both an individual and social dimension. It is based on the needs of an individual person, as well as the needs stemming from belonging to a particular culture, which may be radically different from the foreign culture. Byram (1997, p. 23) also refers to the educational policies of particular countries, which may provide educational standards which specify what needs to be acquired in terms of knowledge, skills and attitudes. He concludes that FLT is always context-dependent and so the nature of ICC is also context-dependent.

Byram (1997, p. 35) posits that it is easier to decentre from one's own culture and to relativise one's own beliefs, meanings and behaviours when they are compared with those of others. And so one needs to have a knowledge of one's own culture, as well as that related to the target culture and its social groups. One also needs a knowledge related to the process of interaction both at an individual and social level. While cultural competence related to one's own culture depends on primary and secondary socialisations, contrasting the home culture with the target culture is necessary for developing ICC. This is often referred to as the process of *tertiary socialisation*. Byram (1997, pp. 33–34) also sees success in intercultural communication in the appropriate attitudinal factors of interlocutors, such as an ability to accept criticism and a willingness to accept the fact that one can be perceived as a representative of a given culture through the prism of stereotypes and prejudice. He emphasises the need to develop curiosity and openness, as well as a readiness to suspend such judgmental attitudes.

Researchers disagree as to what should be emphasised first in the process of instruction. While Mikułowski-Pomorski (2006) recommends a focus on the similarities instead of the differences between interacting cultures to reduce barriers, Barna (1998, p. 173) finds it fundamental to deal with culture-specific differences referred to as *stumbling blocks.* They are ethnocentrism, preconceptions and stereotypes, high anxiety, assumption of similarities instead of differences, as well as language and non-verbal misinterpretations.

3 Formal Bases for an Intercultural Approach in Foreign Language Teaching

The intercultural approach to FL education aims at developing ICC, as characterised above. Several internationally recognised documents accept the need to develop ICC. One such document is the *Common European framework of references for languages* (*CEFR*) (Council of Europe 2001). *CEFR* takes into account the cultural context in which communicative acts take place and emphasises that an individual interacts within a given social milieu forming a multitude of relationships with other individuals. *CEFR* states that a foreign language learner does "not simply acquire two distinct, unrelated ways of acting and communicating. The language learner becomes *plurilingual* and develops interculturality" (Council of Europe 2001, p. 43). The intercultural skills in the *CEFR*'s model are present

both in the specified learner's *general competencies* and in the *language-related ones*. For instance, intercultural awareness is articulated as the necessity to be able to compare and contrast the target and the mother cultures. Learners' intercultural know-how should contribute to their ability to act as mediators between cultures by explaining differences between them. The existential competence of the learner is built, i.e. an ability to reconcile cultural diversities. Furthermore, sociolinguistic competence denotes the knowledge of the different ways a language can be used within a foreign country. All these contribute to the development of ICC.

CEFR is widely recognised within the European Union and serves as a basis for defining national standards for FL education. The Council of Europe, through its European Centre for Modern Languages (ECML), situated in Graz, assists language educators in implementing effective teaching strategies. Its activities are intended not only for FL teachers but also for coursebook authors, researchers, teacher trainers, education policy makers and experts in new technologies. One of the meetings of international organisations concluded with the Graz Declaration 2010, which acknowledges intercultural communication together with social cohesion, democratic citizenship and economic prosperity as the most important aims in building a more humane and inclusive Europe (Graz 2010, pp. 1–2).

Another document which emphasises the importance of developing ICC is UNESCO's *Action plan for* 2010–2011 (2010). It calls for many actions promoting intercultural dialogue, such as integrating intercultural dialogue and cultural diversity into national policies, promoting the diversity of cultural expressions, languages, and multilingualism, the dialogue of cultures and civilisations, and a culture of peace, promoting interreligious dialogue as an important component of intercultural dialogue, as well as integrating intercultural dialogue as a part of quality education in curricula and learning materials. In an attempt to popularise these ideas, UNESCO chose the year 2010 as the International Year of the Rapprochement of Cultures (UNESCO 2009).

What stems from these documents is the objective of teaching languages for intercultural communication. FL speakers become intercultural mediators and FL teaching should prepare them to assume such roles through appropriate training. Thus, FL teachers should be prepared to achieve such goals. The role of the cultural mediator holds particularly true for English as a foreign language (EFL) users, due to the fact that English has the status of a modern *lingua franca* which has become denationalised, as each speaker uses its version filtered through his/her own cultural experience (Crystal 2003). In effect, it is much more common to communicate with speakers of different cultural backgrounds through the means of this language in non-English environments.

4 Approaches to ICC Development

There is no one recommended approach to the development of ICC. Researchers interested in ICC may apply an *ethnographic approach*, i.e. look at different cultures in their working and at the dialogue between them. The dialogic nature of

cultural experiences was emphasised by Bakhtin (1981). However, some educators are of the opinion that the ethnographic approach may also be used by FL learners. This implies having an opportunity to observe the target culture (Corbett 2003, p. 105). EFL speakers are often involved in intercultural dialogues, e.g. during their exchange programmes with other schools, or private visits to a foreign country. It is believed that they may benefit from them if they are prepared to make their own judgments and comparisons to interpret the cultural information. Factual knowledge, which FL learners may receive in their training, may help them to move one step further, i.e. to raise their cultural awareness (Bandura 2007, p. 71). Bandura (2007) suggests that such discoveries can be put down in learners journals. Nevertheless, such intercultural encounters are still a limited experience for the majority of learners, although some researchers (e.g. Corbett 2003, p. 116) recommend training learners in living "an ethnographic life". Like researchers, FL learners could study cultural artefacts available through the Internet, the mass media, literature, etc. Another technique stemming from this approach is known as *cultural incidents* or *cultural assimilators* (see e.g. Bandura 2007, p. 49; Aleksandrowicz-Pędich 2009, p. 137). In activities of this kind learners are confronted with short narratives in which intercultural misunderstandings are described and learners are expected to reflect on their sources and possible outcomes. To this end, they are presented with the cultural background of the conflict. Still another approach often applied in FL education is a *comparative one*. In this case, learners look for similarities and differences between the cultures in question. However, many educationists rightly point out that we tend to perceive a foreign culture through the lens of our own. Learners need to be carefully scaffolded by their teacher; otherwise this may lead to stereotyping (Zawadzka 2004, p. 215; Bandura 2007, p. 77).

Many educationists stress the importance of everyday experience in the target culture in developing ICC. Teaching by applying elements of learning by doing is referred to as *experiential learning*. This experience needs to be consciously processed, i.e. it must not only involve learning, but also evaluation and reflection upon the experience. As a result, FL learners may question and doubt their earlier convictions and attempt to construe new meanings somewhere on the border between their own and the newly encountered meaning. This is what Kramsch (1993, p. 13) termed assuming 'a third place'. Experiential learning may involve different techniques (see e.g. Kohenen et al. 2001), simulation being one of them. This is the technique that was used in developing aspects of ICC with students of English philology at two universities in Poland during their seminars devoted to constructivism in language education.

5 Background to the Study

Students, prospective teachers of EFL from two tertiary education institutions in Poland, participated in a seminar devoted to constructivism. The seminar was a part of an EFL MA programme. Its goal was to develop learners' awareness of

constructivist philosophy and the ways it has affected educational systems in general and foreign language education in particular. To this end, the participants read selected literature on the topic and gave an interactive presentation on a selected issue in class. The presentations concerned, for example, constructivism as epistemology of knowledge, psychological constructivism versus social constructivism, constructivist approaches to FL education (e.g. concepts of language competence, learner autonomy, task-based teaching, project work, *European language portfolio*, etc.).

Apart from giving a presentation, the participants prepared team projects on the topic of the co-evolution of educational and socio-political systems. Besides, each participant had to run a workshop on the use of techniques in line with constructivist thought pertaining to ICC. They could choose ideas from a collection of activities available in the education pack *All different all equal. Education pack: Ideas, resources, methods and activities for intercultural education with young people and adults* (Brander et al. 1995), published by the Council of Europe. The pack was also available on the website of Human Rights. They could modify the content or the structure of the activity from the pack to adjust it to the classroom context or the Polish environment if they wished. The topics were varied from 'Making the news', 'Media bias' to 'Guess who's coming to dinner' or 'Labels'. The reason behind introducing the team projects and the workshops run by the students was to raise their awareness of the process of meaning making, and give them practice in using interactive techniques in the classroom from both the learners' and the teachers' perspective. Besides, although their own interaction skills in the target language were well developed (C1 to C2 in terms of *CEFR*), they needed to practice their ICC skills, i.e. to negotiate between representatives of different philosophies, ethnic groups, or those having different beliefs, etc. in sensitive situations, i.e. potentially involving conflicts between the individuals.

The majority of the activities selected by the course participants took the form of simulation. Simulation is an example of a *ludic strategy*, i.e. such based on the spirit of play involving the 'let's pretend' principle (Siek-Piskozub 1996). The value of the ludic strategy and all the ludic techniques lies in the fact that it is both a learning and teaching strategy, although the goals of the learners and teachers may be different. While learners participate in the activity for the fun that results from winning, solving a problem, successful interaction, etc., the teacher attempts to achieve some educational goals dependent on the type of technique chosen, e.g. make students practice their communication skills, develop fluency or accuracy in structure or word choice, or raise their awareness of some issues (Siek-Piskozub 2001).

Simulation is a well established technique which is particularly useful for vocational training (Tansey 1969). Its three-phase structure (i.e. preparation, simulation proper, follow-up) allows formal instruction, interactive participation in solving a problem, as well as further work arising from the situation simulated, such as reporting on the simulation, discussing the solutions. It also provides an opportunity for feedback both on the content and the language substance. Additionally, this particular seminar presented an opportunity for prospective teachers to assume

the role of the teacher during the three phases of simulation, whereas the tutor got involved in the later part of the follow-up phase, commenting on some of the ideas or raising some additional questions pertaining to the conflict situation, in other words concentrating on the ICC components.

6 Observations from the Study

Some observations from the course have been discussed in other publications referring to different phenomena (e.g. Siek-Piskozub and Strugielska 2007; Strugielska and Siek-Piskozub 2008). In this case, the focus will be on the objectives referring to ICC and the value of implementing simulation for its development.

The collection of activities available from the education pack was met with interest by the participants. At the beginning of the course, they studied the pack available from the library and made a commitment to a technique from the collection, so that different students would not choose the same activity. The students discovered that the pack was also available on the website of Human Rights along with other similar collections. As a result, they decided to choose ideas from the other collections as well. This was evidence of the active role played by the course participants in making decisions on the content of classroom interactions, a step forward in developing learner autonomy, which is in line with the constructivist paradigm. For prospective teachers this would be an important skill.

The simulations were well-prepared by the student-teachers, i.e. the ones who chose the activity and implemented it among their peers in class. They came prepared with role-cards, typewritten and sometimes even entirely written by them, as the original ideas often had to be remodelled due to the lower number of participants in our class than that prescribed in the pack, or the different cultural context of the simulation, etc. For example, in the two groups from the two educational institutions the simulation on 'Guess who is coming for dinner?' (p. 87), based on the film of the same name, 'the other' was different—in one group it was a boyfriend from a different ethnic and religious background, and in the other a man in a wheelchair. Thus, they showed the ability to identify potential candidates for discrimination, an important aspect of intercultural awareness. The student-teachers brought the props necessary for their simulations (e.g. old newspapers and magazines, crayons, scissors, glue). The introductory phase was well thought through, as their explanations were clear; sometimes they would introduce/activate specific vocabulary related to a context, for example to media studies.

Once the simulation proper was implemented, the student-teachers circulated around the groups, if it was based on group work, provided support to the students when a problem with comprehension of what was to happen next appeared. They also took good control of timing, on the one hand, trying to keep the activity within assigned time limits, but, on the other, allowing a slower group to complete their assignment within reasonably extended time and suggesting to the others what they could be doing in the meantime. In the follow-up phase,

the student-teachers led discussions on the issues simulated. They first asked individuals/groups about their experience, such as their observations, the feelings evoked while acting out the simulation and conclusions they drew from this experience. It is at that point that the tutor would step in and ask further questions pertaining to the students' own observations and experiences with problematic areas.

Looking at the activities from the perspective of the student-participant, one could observe real interest and involvement in the activity. Each class member was trying to introduce something into the simulation to find a solution or express his/her real opinion even if sometimes these opinions were stereotypical. There were then vital discussions among the students. For example, in the simulation 'Sharing discrimination' (p. 157) they drew on their own experiences of being rejected in some contexts. This enabled them to understand that in some situations everyone can become 'the other'. Sometimes such situations resulted in the students' heightened awareness that the feeling of being rejected was a result of misunderstanding. For example, when asked to report on their personal experiences of the feeling of being rejected or excluded, a female student reported that she always felt like that when she was standing in a group of male colleagues and another male would approach them. He would then shake hands with all the males and ignore her. Other girls confirmed the experience and so did the boys. However, they explained that it was because they tried to stick to the convention that it was the female who should show willingness to proffer her hand to a male and so they simply did not want to impose themselves. They were surprised to learn that their female colleagues felt as if they were excluding them from the group. This exchange was a good introduction to the topic of possible crosscultural misunderstandings and triggered reports by other students of incidents of misunderstandings known to them and discussion on the way we could try to negotiate such situations.

In one of the simulations the students were supposed to take sides on difficult issues ('Where do you stand?', p. 177). Flip charts with a minus sign (−), a plus sign (+) and a question mark (?) between them were placed on the wall. The student-teacher prepared a list of controversial statements (e.g. "Some races are less diligent than others") and the participants took sides moving to the appropriate sign (+ if they agreed, − if they disagreed, ? if they had no opinion). Next, those who had clear opinions had to justify their stance. After that the 'no opinion' students had to move to one of the two opposing signs. They also had to explain their decision. They were allowed to stay under no opinion sign; however, this time they had to explain why. Other students could also change their minds if their colleagues' arguments were convincing and should provide justification for their decision. This happened on some occasions.

Another simulation, entitled 'Labels' (p. 108), helped to see the effects of stereotyping. It was based on the observation that, if we, even subconsciously, label someone, which is something that teachers often do, soon s/he would behave accordingly. The student-teacher had to prepare sticky labels for their peers and place them on their forehead, so that the group, but not the person in question, could see them. Then the participants became a group of classmates planning a joint event for the week-end and sharing responsibility for this. During the

brainstorming session they made suggestions as to what they could do together and who would be responsible for the preparations at different stages. Soon, as a tutor performing the role of the observer, I could see that the ideas of members with the labels 'witty', 'intelligent' or 'smart' were met with interest, sometimes even applause, while those with 'irresponsible', 'stupid', 'clumsy' were met with neglect, doubts or even criticisms. The students with negative labels soon began to behave as less socially accepted members—they stopped giving advice or would not offer help or take responsibility for preparation of the event. I also observed their loss of interest in the activity as such. Later in the follow-up phase individuals had to guess their own labels and all of them did this well, although there may have been differences in adjectives used, e.g. 'smart' could be recognised as 'intelligent'. While reporting on their feelings during the activity, the ones with positive labels confessed that it was a good feeling to be treated as a popular and wise person and this feeling further stimulated them to get involved in the activity even more, to propose more ideas, to assume responsibility for some preparatory work, etc. The opposite was true about the negatively labelled participants. They also recognised their negative labelling because of the ways others treated them. What is more, although they knew that it was a simulation based on 'let's pretend' they really felt bad when their ideas were rejected or when others would not even listen to them. They also confirmed that at some point they switched off from what was happening in class. The discussion that followed concentrated on the contexts in which such stereotypes could be damaging to people, at school, in the work-place or in the community.

7 Conclusions

Communication among representatives of different backgrounds is always challenging, even within a seemingly mono-cultural society as in Poland. We have a tendency to assume that our point of view is shared by others, that it is 'natural' or 'appropriate'. Experiencing situations in which people can safely express their opinions under a mask of someone else but at the same time learn the points of view of others, in the safe environment of a classroom with a tutor moderating possible conflicts, is a good way to make young people aware of the way stereotypes are formed, how they in turn may effect members of society and lead, at least, to misunderstandings, and, at most, to fear of others and even hatred. Practicing communication in the target language on sensitive topics under the scheme of simulation helps the development of ICC. Learners become aware of different contexts which challenge mutual understanding, learn to cope with feelings of uncertainty, develop curiosity in the opinions and feelings of others and, as a result, become more open to 'otherness' realising that sometimes they themselves may be perceived as 'the other'. They also develop the skills of negotiation. Discussions on sensitive topics seem to be less effective, as young people often do not want to share their opinions with their teacher. Sometimes, as research shows

(e.g. Bielecka 2006), they are even reluctant to express them in the presence of their peers for fear of losing face. In play-like situations, among peers who in due course become better acquainted, when they realise that they are not the only ones to have some opinions and yet at the same time not everyone agrees with them, language learners become more sensitive to sensitive issues, they try to understand the others' points of view and find words which will not hurt them. Such an open approach to communication in the target language is needed to develop ICC. My experience has also shown that ICC can be an additional target of various language-related classes and not only the ones designed specifically to develop ICC.

References

Aleksandrowicz-Pędich, L. 2009. Skuteczność przygotowania studenta filologii angielskiej do roli mediatora kulturowego. In *Kształcenie językowe w szkolnictwie wyższym*. ed. H. Komorowska, 133-149. Warszawa: Academica.

Bachman, L. F. 1990. *Fundamental considerations in language testing*. New York: Oxford University Press.

Bakhtin, M. 1981. *The dialogical imagination*. Austin: University of Texas Press.

Bandura, E. 2007. *Nauczyciel jako mediator kulturowy*. Kraków: Tertium.

Brander, P., C. Cardens, R. Comes, M. Taylor and J. de Vicente Ahd. 1995. *All different all equal. Education pack: Ideas, resources, methods and activities for intercultural education with young people and adults.* Strasbourg: Council of Europe.

Barna, L. M. 1998. Stumbling blocks in intercultural communication. In *Basic concepts of intercultural communication*. ed. M. J. Bennett, 173-190. Yarmouth, Maine: Intercultural Press.

Bielecka, M. 2006. Personalizacja treści pozajęzykowych na zajęciach praktycznych z języka niemieckiego. Unpublished Ph.D. dissertation. Institute of Applied Linguistics, Adam Mickiewicz University.

Byram, M. 1997. *Teaching and assessing intercultural communicative competence*. Clevedon: Multilingual Matters.

Council of Europe 2001. *Common European framework of references for languages: Learning, teaching, assessment*. Cambridge: Cambridge University Press.

Corbett, J. 2003. *An intercultural approach to English language teaching*. Clevedon: Multilingual Matters.

Graz Declaration on language education (2010) (http://www2.ecml.at/Portals/1/documents/PNF/leaflet-PNF-EN-full.pdf, accessed 2 September 2010).

Crystal, D. 2003. *English as a global language*. Cambridge: Cambridge University Press.

Kohenen, V., R. Jaatinen, P. Kaikonen and J. Lehtovaara. 2001. *Experiential learning in foreign language education*. Harlow: Pearson Education.

Kramsch, C. 1993. *Context and culture in language teaching*. Oxford: Oxford University Press.

Mikułowski-Pomorski, J. 2006. *Jak narody porozumiewają się ze sobą w komunikacji międzykulturowej i komunikowaniu medialnym*. Kraków: Universitas.

Siek-Piskozub, T. 1996. Simulation in ESP. In *Selected papers from the 1st CER conference of the FIPLV*. eds I. Pýchová and L. Vibiralová, 95-106. Ostrava: Filozofická fakulta Ostravské university.

Siek-Piskozub, T. 2001. *Uczyć się bawiąc. Strategia ludyczna na lekcji języka obcego*. Warszawa: Wydawnictwo Naukowe PWN.

Siek-Piskozub, T. and A. Strugielska 2007. Jak kształcić nauczyciela autonomicznego? Historia pewnego seminarium. In *Dydaktyka języków obcych na początku XXI wieku*. eds. M. Jodłowiec and A. Niżegorodcew, 337-348. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.

Strugielska, A. and T. Siek-Piskozub. 2008. Conceptual metaphors as a reflection of personal experience in education. In *Metaphor and cognition*. eds. Z. Wąsik and T. Komendziński, 117-132. Frankfurt am Main: Peter Lang.

Tansey, P. J. and D. W. Unwin 1969. *Simulation and gaming in education*. London: Methuen Educational Ltd.

UNESCO 2009. *Approved programme and budget 2010–2011*. 35C/5. Paris: UNESCO.

UNESCO 2010. *Action plan for celebration of the International Year for the Rapprochement of Cultures in 2010*. (http://unesdoc.unesco.org/images/0018/001848/18433e.pdf, accessed 4 July 2010).

Van Ek, J. A. 1986. *Objectives for foreign language learning*. Vol. I *Scope*. Strasbourg: Council of Europe.

Zawadzka, E. 2004. *Nauczyciele języków obcych w dobie przemian*. Kraków: Impuls.

Metalinguistic Relativity and the Personal Pronoun Paradigm

Roger Berry

Abstract This chapter looks at the personal pronoun paradigm, particularly as it is applied in pedagogic descriptions of English. It examines the numerous deficiencies of this model, and criticizes the way it obliges practitioners to ignore other factors and dimensions, in particular the extensive use of personal pronouns for generic reference. The concept of *metalinguistic relativity*, whereby descriptions are forced into a metalinguistic straightjacket inherited from the past, is applied to this situation. This chapter argues that if grammar teaching is to have any role in the language classroom, then more accurate and appropriate descriptions are needed.

1 Introduction

In his 1988 book, *Methods in English language teaching: Frameworks and options*, Marton made the following comment: "[f]rom observation of explicit teaching of L2 grammar in many educational institutions in many countries of the world it seems that on the whole grammar is taught very badly" (1988, p. 118). Later on, he identified a number of common faults in teaching grammar, including (1988, p. 121):

- poorly planned presentations of new rules;
- use of over-complex metalinguistic formulations;
- poor selection of exercise techniques;
- a lack of transfer activities.

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R. Berry (✉)
Lingnan University, Lingnan, Hong Kong
e-mail: rogerb@ln.edu.hk

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In a 1999 paper I elaborated on this, extending the focus beyond the classroom to take in the whole process of pedagogic grammar, that is, the activities that take place outside the classroom (such as the devising of syllabuses, tests, pedagogic grammar books, etc.) as well those inside. One of the seven 'sins' that I identified in the process is 'getting the facts wrong'. Obviously, we can hardly expect any explicit teaching of form to be effective if learners receive incorrect or misleading information. In that paper I pointed a finger at the excessive simplification involved in some rules of thumb (e.g. the equation of 'unless' with 'if not') (Berry 1999, pp. 33–34), where there seems to be a failure to consult authoritative descriptions.[1] In a 1994 article I investigated such grammatical misconceptions and found them to be extensive among university students.

In this chapter, however, I would like to deal with a problem of greater proportions that can lead to inappropriate pedagogic representations of grammar. This is where we lack an adequate descriptive framework to account for an area of grammar, or, rather, where an inadequate framework has been forced on us. This can affect not only pedagogic accounts but also descriptive ones, but while the latter may qualify this inadequacy the former rarely do. As an example, I will take the personal pronoun paradigm and argue that it is a straightjacket hampering our awareness of the nature and use of personal pronouns and that other words, uses and models need to be considered. This critical examination constitutes most of the rest of the chapter.

2 The Personal Pronoun Paradigm

The personal pronoun paradigm (henceforth PPP), is the dominant model in English Language Teaching for understanding these important and frequent words. It is usually represented visually in the shape of a table with rows and columns for person and number, and sometimes gender and case. It features in most grammars, descriptive as well as pedagogic, e.g. Huddleston and Pullum (2005, p. 102), *Collins Cobuild English grammar* (2011, p. 30), Biber et al. (1999, p. 328), Carter and McCarthy (2006, p. 376), or Leech et al. (2009, p. 387). This is not an issue for teachers alone. In an informal survey of a group of first-year undergraduates at my university, I found that approximately two-thirds were familiar with the paradigm, a familiarity they had clearly picked up during their previous schooling.

Table 1 shows the basic paradigm, as it usually presented in grammars (though it may be rotated 90°), with the axes allocated to the traditional categories of number and person. Some grammars include other dimensions such as case (see below—in fact, some grammars have two versions, the basic and extended).

[1] 'Unless' has for long been identified as having an idea of exclusivity to it, of excluding other possibilities; thus it could be equated with 'if not + only' (see Berry 1994).

3 Deconstructing the Paradigm

There are numerous problems with the table presented above, which necessitate the taking apart of the paradigm.

3.1 Design Problems

Table 1 illustrates the first problem with the basic pattern: the fact that three forms are to be found in the cell for third person singular. In other words, there is a further category, gender, which, however, only applies in one case. To take it into account, we should adapt the table as follows, adding a row (Table 2):

Table 1 The basic personal pronoun paradigm

	First	Second	Third
Singular	I	You	He, she, it
Plural	We	You	They

Table 2 An adapted version of the basic pronouns paradigm

	First	Second	Third		
			Masculine	Feminine	Neuter
Singular	I	You	He	She	It
Plural	We	You	They	They	They

However, this is not entirely satisfactory; we now have 'they' in three boxes. So we can simplify as follows in Table 3:

Table 3 A simplified version of the basic pronouns paradigm

	First	Second	Third		
			Masculine	Feminine	Neuter
Singular	I	You	He	She	It
Plural	We	You	They		

If we accept that the three cells for 'they' should be merged, then we should follow this up by conflating the two for 'you', even though it is in a different dimension, as illustrated in Table 4. This is the version of the paradigm that is found in the *Collins Cobuild English Grammar* (2011, p. 30), though it is rotated.

Table 4 Further simplification of the basic pronouns paradigm

	First	Second	Third
Singular	I	You	He, she, it
Plural	We		They

Table 5 An extended version of the basic pronouns paradigm

	Singular			Plural		
	First	Second	Third	First	Second	Third
Subjective	I	You	He, she, it	We	You	They
Objective	Me	You	Him, her, it	Us	You	Them
Possessive determiner	My	Your	His, her, its	Our	Your	Their
Possessive pronoun	Mine	Yours	His, hers, its (?)	Ours	Yours	Theirs
Reflexive pronoun	Myself	Yourself	Himself, herself, itself	Ourselves	Yourselves	Themselves

There are further dimensions that are sometimes included or placed in a separate table. Swan (1995, p. 434), for example, does not give the above paradigm (presumably because he feels it is self-evident for EFL learners) but does give one that covers the objective case. This can be extended into a table that covers all the so-called *central pronouns* (Table 5).

Setting aside the issue that this table includes forms which are not pronouns—the possessive determiners (not possessive *adjectives*)—there are a number of problems with this. Several distinctions are neutralized (e.g. between 'you' as subjective and objective, 'her' as objective and possessive); and it is inefficient and repetitive ('you', etc. is included twice because of the different reflexive pronouns). Then there is the potential gap for the third person singular possessive pronoun (can we say, speaking of a dog, 'this bone is its'?). Of course, the basic problem is that we are trying to represent something physically in two dimensions that in fact has more. Thus, one can argue about the actual form that the models should take. However, there are several deeper issues.

3.2 Conceptual Problems

There are a number of issues that relate to the basic parameters of the paradigm. Each of the three principal above-mentioned categories, although long established, can be called into question. *Number*, for example, is not always a clear-cut category, with pronouns as with nouns. We have already seen that it is neutralized in the second person in English, but there are more serious problems with the first person. The table suggests that 'we' is the plural of 'I', but logic suggests that a plural first-person is almost a physical impossibility. Indeed, 'we' nearly always involves a person other than the speaker.[2] 'We' usually indicates a combination of first and second person (the so-called *inclusive 'we'*):

(1) Last week we looked at the verb. Now let's consider the noun.

or first and third person (*exclusive 'we'*):

[2] Two situations that come to mind where 'we' does equal 'I + I' is where identical twins might be speaking the same words at the same time, or where a group of people are reading an oath together: 'We do solemnly declare…'.

(2) We went to the mountains this summer. What did you do?

Some languages encode this distinction lexically; in English 'let's' can only be interpreted inclusively.

In notional terms, *person* is likewise not a straightforward concept. The third person is a very different beast from the second and first, since it is outside the act of communication, whereas the first and second persons are deictic in nature. And as regards *gender*, to call 'it' a *personal* pronoun is a misnomer, since by definition it does not refer to persons (and very often refers to nothing in particular, personal or otherwise).

3.3 Incompleteness

A number of other standard forms should be considered for addition to the paradigm; at least one other pronoun ('one') should be recognized, as an indefinite equivalent of 'it', as in

(3) Just because you want a new car it doesn't mean you can just buy one.

(see below for another pronominal use of 'one'). Another possible member of the class of personal pronouns will be considered later.

3.4 Non-standard Forms

Non-standard forms are completely ignored in the paradigm, in particular second person forms such as 'tha', 'yous(e)', 'y'all', 'you guys', which either maintain or reintroduce a singular/plural distinction, as shown in Tables 6 and 7.

Indeed, to my mind 'you guys' could be taught as a standard, though informal, second-person plural pronoun. Though originating in the USA, it seems to have gained acceptance in the UK as well as elsewhere. And though written as two

Table 6 Non-standard pronouns for the singular

	First	Second	Third
Singular	I	Tha (plus thee, etc.)	He, she, it
Plural	We	You	They

Table 7 Non-standard pronouns for the plural

	First	Second	Third
Singular	I	You	He, she, it
Plural	We	Youse/y'all you guys	They

words, which apparently function as the determiner and head of a noun phrase, it is a single unit in terms of stress (always on the first syllable) and reference (it can refer to a group of females as well as males). It will be interesting to see if 'you' starts to be displaced as a plural form.

3.5 Other Uses

It is not only 'new' forms that are excluded by the paradigm. It also prevents learners and teachers from accepting other uses of already-included words which do not fit, most noticeably the use of 'they' as an indefinite singular third-person pronoun. The reader is invited to fill in this gap:

(4) Anyone can see that, can't _____?

An obvious first choice might be 'he' but this founders on the grounds of sexism; the person could be female. To avoid this 'he or she' might be advocated, but this sounds impossibly awkward. 'S/he' is impossible to pronounce and is apparently very rare even in writing nowadays. The common answer, of course, is 'they'. Though it may appear illogical, it is very common in informal English and is of some antiquity.

To rectify this situation we can propose another modification to the table, to include the category of (in)definiteness for the third person (and adding 'one', as mentioned above, with the further category of animateness distinguishing it from 'they'), as illustrated in Table 8.

Table 8 The pronoun paradigm including the category of (in)definiteness

	First	Second	Third	
			Definite	Indefinite
Singular	I	You	He, she, it	They, one
Plural	We	You	They	

Taking this 'logic' a step further, we are forced to confront another possible form. Again the reader is asked to fill in a gap:

(5) Anyone who doesn't want to surrender could always shoot _____?

We can run through the corresponding possibilities for 'they' above with the same objections: 'himself', 'himself or herself'. There is also 'themselves', but this does not work because 'anyone' is singular. One answer which follows the logic of 'they' as above is 'themselves'. I found 26 examples of it in the British National Corpus:

(6) You won't be the first man or woman who gets themself involved in a holiday romance.

So it would appear to be gaining acceptance (notwithstanding the attempts of my word-processing programme to correct it automatically to 'themselves').

3.6 Another System

A final problem with the paradigm is that it distracts attention from an equally important alternative system, namely that for generic reference (using 'we', 'you', 'they', 'one'), as opposed to the specific reference of the preceding discussion, as in this example:

(7) It's awful when you can't remember someone's name.

Table 9 shows the possibilities, with further examples.

Table 9 Generic use of pronouns

One	Formal	*One must be careful with fire-arms*
We	All-inclusive (solidarity with speaker)	*We now live in a global villages*
You	Involving listener/reader	(See above)
They	Referring to authorities	*Regardless of what you say, they 'll still get you*

Wales (1996) points out that all plural personal pronouns in English can have generic reference, a fact that is largely ignored: "[a]lthough the so-called 'indefinite' or generic' uses of the pronouns 'we' and 'you' as well as 'they' are exceedingly common in speech (…), they tend to be but briefly described or, more surprisingly, not mentioned at all by grammarians" (1996, p. 45). Wales further claims that the generic/specific distinction is crucial to an understanding of personal pronouns in English, more so than the traditional paradigm built around number and person would suggest. In fact, the generic use of 'we' has attracted a lot of attention in the last 20 years in critical discourse analysis because of its ideological implications (e.g. Fairclough 1989; Pennycook 1994; Flowerdew 1996, 1997). However, generic 'you' does not receive the same attention. The next section looks at it in some detail as an example of how the PPP can distort grammatical accounts.

4 Generic 'You'

In grammatical accounts that I have examined the second person pronoun in English is unfailingly introduced as referring to the addressee(s) in discourse. However, it has long been known that it can also function as informal equivalent of 'one' to refer to people in general. Dictionaries for native speakers and learners, as well as scientific grammars (e.g. Quirk et al. 1985; Biber et al. 1999; Huddleston and Pullum 2002) account for it, though not at great length (cf. Wales' quote above). According to Siewierska, in this use (she calls it *impersonal*) the addressee "is directly invited to imagine himself in the situation or event expressed by the speaker and thus share in the world-view being presented or entertained" (2004, p. 212). She gives the following example:

(8) You add the eggs to the butter, not the other way round (2004, p. 11).

In order to see how it is treated in pedagogic accounts I carried out a survey of various types of book (Berry 2009):

- pedagogic grammars (more extensive ones): all eight mentioned this use;
- introductory student textbooks on grammar: two out of six mentioned it;
- grammar courses for teachers: none out of four mentioned it.

There seems to be a divide between first and the latter two categories; courses—either for teachers or university students—do not mention generic 'you'. But there are strong arguments to suggest they should. Here are some aspects of generic *you* reported in Berry (2009):

- It has been around for a long time. According to the *Oxford English Dictionary*, it is first attested in 1577.
- It is very frequent. In a sample from *Collins Cobuild Wordbanks Online*, 33 out of 100 lines for 'you' clearly had generic reference. Given the overall frequency of 'you' in English, it is obviously an important phenomenon.
- Second person pronouns are used generically in many languages, though not as frequently as English (and may be influenced by English) (Siewierska 2004).
- Generic and specific 'you' may be confused, as in this conversation (Wales 1996, p. 79):

(9) A: Friends can be two-faced.
B: What do you mean?
A: The way they talk about you.
B: Me?
A: No, me!

Or in this translation from Cantonese of a witness's response in a court of law in Hong Kong (reported to me by a friend):

(10) You could say that.

which was understood by the court as meaning 'That is an acceptable thing to say', i.e. agreeing with the question, when the witness actually meant 'You (the barrister) could say that (but not me).', i.e. it is specific. Cantonese does have a generic use of the second person pronoun, but its use is rare.

- It is not an informal equivalent of 'one', as some grammars claim; it is found in formal circumstances and can co-occur with it:

(11) If you consider, for example, the plan of the Cistercian monasteries … (Carter and McCarthy 2006, p. 286) (from an academic text)
(12) I don't feel that one can ever be a therapist to somebody that you are closely involved with emotionally (Wales 1996, p. 81).

- Reference can be to the first person rather than generic, as in this example:

(13) It wasn't a bad life. You got up at seven… (Quirk et al. 1985:354)

Chalker (1990, p. 437) in fact classifies this as a distinct, self-referential, use of 'you', as in this question and answer exchange:

(14) A: Did you enjoy living on a boat?
B: Well you got used to it.

However, these two examples still seem to fit Siewierska's definition of the addressee being invited to imagine himself in the situation.

- Reference can be to no one living (though again it fits Siewierska's definition):

(15) Indeed, until September 1942 you were more likely to die if you were a British civilian than if you were in the armed forces (from a book on popular history).

- Specific and generic 'you' can co-occur in the same sentence. I found two delightful examples of this in Pete McCarthy's travelogue of Irish bars, *McCarthy's Bar*. In the first the writer is told by the woman of the house where he is to stay:

(16) Sure, ye can see ye've never done a hard day's work in your life (2000, p. 36).

In the second, the manager calls after two drunken tourists who are leaving a hotel:

(17) You can tell you're not Irish (2000, p. 368).

- Generic 'you' can occur (coreferentially) in both parts of a question and answer exchange. I found this example in John Updike's *Terrorist*; the would-be terrorist is being questioned by his 'mentor':

(18) The shaikh went on, "In a war, if the soldier besides you falls…do you run and hide, or do you march on, into the guns of the enemy?"

"You march on" (2006, p. 271)

5 Metalinguistic Relativity

In a 2010 book I used this term to refer to the idea of the straightjacket that is imposed on descriptive grammars by the past; it parallels the concept of linguistic relativity. In the former, the claim is that the language-view of grammarians is conditioned by their metalanguage (Berry 2010, p. 65). In the latter, the claim is that the world-view of language-users is conditioned by their language. Though in the book I was more interested in how it affects terminology, the concept also applies to any facet of language description: models, rules and, of course, paradigms.

The concept itself is not novel, of course. Many have commented unfavourably on the straightjacket imposed by metalanguage, whether those concerned with linguistic theory, for example Harris's (1998) complaint that the whole of linguistic history has been distorted by the concepts that we inherited from the ancient Greeks, or, on a more practical level, those complaining of a lack of terminology for the areas they wish to focus on in teaching, e.g. Lock and Tsui (2000), or in teacher education, e.g. Walsh (2003).

The PPP is a case in point. It has survived almost unscathed from the times of the Ancient Romans and Greeks (for whose languages it may well have been appropriate), even though it is manifestly inappropriate for the languages to which it is now applied. One only needs to think of the formal/informal distinction embodied in the T and V second-person pronouns of most European languages, but see Siewierska (2004) for a host of other dimensions that affect the personal pronouns of the world's languages.

At issue is not just whether the particular paradigm for a language is appropriately conceived, but also whether the entire concept of a paradigm is appropriate in linguistic description. Do we use paradigms unquestioningly merely because that is the way we have always done it? Surely some degree of skepticism is warranted whenever such a simple, formal grammatical presentation is used, if only because the pragmatic facts, the 'situation on the ground', may be more complicated. There may be situations where a paradigm has some validity, but in the description of a morphologically analytic language such as English, where inflections are few, patterns are incomplete and distinctions are neutralized, one can indeed argue that the concept of a paradigm itself is of dubious value, at least if used alone. However, having said this, the PPP for English is probably with us for some time to come; it is ingrained in our collective pedagogic consciousness, just like the misconceived rules alluded to above (Berry 1994). Terms are likewise hard to dislodge even when they are patently inappropriate, for example, *past participle* (Berry 2010, pp. 47–48).[3]

6 Pedagogical Implications

Having deconstructed the personal paradigm we can ask: is it possible to reconstruct it? The answer is 'probably no'; there are too many categories (i.e. dimensions) if the table form is to be accurate and comprehensive. And personal (and central) pronouns are not neat and do not behave as the paradigmatic grammarian would wish.

We also have to ask if the tables given above are of any use to learners. Of the two main choices, that for the central pronouns in general (Table 5) probably gives more information that learners need; it can be shorn of the categorial headings for person, number and case (which are hardly necessary terms or concepts for learners, apart from the idea of the third-person '-s'). This gives a slightly revised version, represented in Table 10, which might be useful for reference, rather than for foregrounding in teaching. A further column could be added for generic 'one', etc. (something done by Leech et al. 2009, p. 387 for the basic version).

Of course, this only shows the formal links between pronouns (and then it is still not a perfect paradigm, as the question mark and slashes show). So a useful supplement would be a list of the separate pronouns with their individual uses and

[3] There is nothing 'past' about the concept that this term refers to.

Table 10 A revised version of the pronoun paradigm

Subjective	I	You	He	She	It	We	They
Objective	Me	You	Him	Her	It	Us	Them
Possessive determiner	My	Your	His	Her	Its	Our	Their
Possessive pronoun	Mine	Yours	His	Hers	Its (?)	Ours	Theirs
Reflexive pronoun	Myself	Yourself/ yourselves	Himself	Herself	Itself	Ourselves	Themself/ themselves

attributes. Something like this is found in Carter and McCarthy (2006, p. 376). Of course, such information will not be needed by learners in every case.

What to say to learners about some of the novel forms or uses that I have described above? Advanced learners who have been exposed to a fair amount of English will probably be conscious of the use of 'you guys' (and they may not need to be told that it is a personal pronoun). They will also possibly be intuitively aware of the use of 'they' for indefinite singular reference, but they may be reluctant to use it or accept it as correct; however, they should not be. And I have found a distinct lack of awareness in all levels of learners over the indefinite use of 'one'. A limited amount of formal instruction may speed up learners' recognition and use of these items. And it may prevent situations such as that described above, where a supposedly proficient court interpreter confused the two uses of generic *you*. As for 'themselves', I am not sure that it is ready for the big stage yet.

7 Conclusion

Of Marton's (1988) four common faults in grammar teaching mentioned in the introduction to this paper, the first two have some bearing on this discussion:

- poorly planned presentations of new rules;
- use of over-complex metalinguistic formulations.

The first is relevant (if we can be allowed to add other pedagogical formulation to rules) because it applies to the PPP; this is a classic example of a poor pedagogic formulation that does not fit the facts. The second is relevant because it does not apply; quite the reverse, because, if anything, the metalinguistic formulation in the PPP has been over-simplified, and has been assumed to be all that learners need to know about the personal pronouns in English. Some simplification is necessary, of course; there is no time to tell the learners everything, nor is everything amenable to intelligible presentation. However, one of the reasons why grammar teaching has had is detractors is surely that it has been done badly, and one of the reasons why it has been done badly is that the facts that we give learners are incorrect or misleading. A proper evaluation of these facts and of the framework that they are expressed in is surely an essential prerequisite for effective teaching.

References

Berry, R. 1994. Blackpool would be a nice place unless there were so many tourists': some misconceptions about English grammar. *Studia Anglica Posnaniensis* XXVIII: 101-112.
Berry, R. 1999. The seven sins of pedagogic grammar. In *Language analysis, description and pedagogy*, eds. R. Berry, B. Asker, K. Hyland and M. Lam, 29-40. Hong Kong: Hong Kong University of Science and Technology.
Berry, R. 2009. 'You could say that': Generic you in modern English. *English Today* 25: 29-34.
Berry, R. 2010. *Terminology in English language teaching*. Bern: Peter Lang.
Biber, D, S. Johannson, G. Leech, S. Conrad and E. Finegan. 1999. *Longman Grammar of spoken and written English*. Harlow: Pearson Education.
Carter, R. and M. McCarthy. 2006. *Cambridge grammar of English*. Cambridge: Cambridge University Press.
Chalker, S. 1990. *English grammar word by word*. Walton-on Thames: Nelson.
Collins Cobuild English grammar. 2011 (third edition). Glasgow: HarperCollins.
Collins Cobuild wordbanks online. (accessed online January 2009).
Fairclough, N. 1989. *Language and power*. Harlow: Longman.
Flowerdew, J. 1996. Discourse and social change in contemporary Hong Kong. *Language in Society* 25: 557-586.
Flowerdew, J. 1997. The discourse of colonial withdrawal: A case study in the creation of mythic discourse. *Discourse and Society* 8: 453-477.
Harris, R. 1998. *Introduction to integrational linguistics*. Oxford: Elsevier Science.
Huddleston, R. and G. K. Pullum. 2002. *The Cambridge grammar of the English language*. Cambridge: Cambridge University Press.
Huddleston, R. and G. K. Pullum. 2005. *A students' introduction to English grammar*. Cambridge: Cambridge University Press.
Leech, G., B. Cruickshank and R. Ivanić. 2009. *An A – Z of English grammar and usage*. Harlow: Pearson Education.
Lock, G. and A. B. M. Tsui. 2000. Customizing linguistics: Developing an electronic database for teachers. *Language Awareness* 9: 17-33.
McCarthy, P. 2000. *McCarthy's bar*. London: Hodder & Stoughton.
Marton, W. 1988. *Methods in English language teaching: Frameworks and options*. New York: Prentice Hall.
Oxford English Dictionary. (accessed online January 2009 at http://dictionary.oed.com).
Pennycook, A. 1994. The politics of pronouns. *ELT Journal* 48: 173-178.
Quirk, R., S. Greenbaum, G. Leech and J. Svartvik. 1985. *A comprehensive grammar of the English language*. Harlow: Longman.
Siewierska, A. 2004. *Person*. Cambridge: Cambridge University Press.
Swan, M. 1995 *Practical English usage*. (second edition). Oxford: Oxford University Press.
Updike, J. 2006. *Terrorist*. New York: Random House.
Wales, K. 1996. *Personal pronouns in present-day English*. Cambridge: Cambridge University Press.
Walsh, S. 2003. Developing intercultural awareness in the second language classroom through teacher self-evaluation. *Language Awareness* 12: 124-142.

About the Authors

Jennifer Behney is Assistant Professor of Italian and second language acquisition in the Department of Foreign Languages and Literatures at Youngstown State University. She completed her Ph.D. in the Second Language Studies (SLS) program at Michigan State University in 2011 with a dissertation entitled *L2 gender facilitation and inhibition in spoken word recognition*. Her research interests include grammatical gender acquisition, facilitation and inhibition in spoken word recognition, eye-tracking and gender agreement marking, L2 syntactic priming, working memory, inhibition, and interaction, form-meaning connections in lexical access, and dialect/minority language preservation. Her publications include: Behney, J. and Gass, S. (2013). Interaction and the Noun Phrase Accessibility Hierarchy: A study using syntactic priming. In J. Schwieter (ed.). *Innovative research and practices in second language acquisition and bilingualism.* John Benjamins; Spinner, P., Gass, S. and Behney, J. (2013). Ecological validity in eye-tracking: An empirical study. *Studies in Second Language Acquisition* 35, and Gass, S., with Behney, J. and Plonsky, L. (2013). *Second language acquisition: An introductory course (4th ed.)*. New York: Routledge.

Roger Berry is Professor in the Department of English at Lingnan University, Hong Kong, where he teaches courses in English grammar and applied linguistics. Previously he taught in Poland at Adam Mickiewicz University, where Waldemar Marton was the supervisor of his Ph.D. dissertation entitled *Teaching the English article: An exercise in pedagogic grammar*. His two latest books are *English grammar: A resource book for Teachers* (Routledge 2012) and *Terminology in English language teaching* (Peter Lang 2010). In his spare time he writes light verse on the topic of language, many pieces of which have been published.

Halina Chodkiewicz is Professor of Applied Linguistics in the Department of English, Maria Curie-Skłodowska University, Lublin, Poland. She teaches psycholinguistics, second language acquisition and ELT courses and supervises

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M.A., and Ph.D. dissertations. Her research interests focus on second/foreign language reading development, vocabulary learning and teaching, and content-based instruction. She is the author of numerous papers and three books on issues related to developing reading competence and vocabulary acquisition in English as a foreign language. Her recent publications concern the implementation of reading to learn tasks in academic EFL settings, as well as the development of readers' strategic behavior.

Anna Barbara Cieślicka is Assistant Professor at the Psychology and Communication Department, Texas A&M International University, Laredo, Texas. Her main research interests focus on issues related to bilingual language processing, such as cross-linguistic interactions in the mental lexicons of bilingual language users and the mechanisms underlying bilingual figurative language comprehension. Her recent publications (e.g. Cieślicka, A. B. and Heredia, R. R. (2011). Hemispheric asymmetries in processing L1 and L2 idioms: Effects of salience and context. *Brain & Language,* and Cieślicka, A. B. (2012). Do nonnative language speakers 'chew the fat' and 'spill the beans' with different brain hemispheres? Investigating idiom decomposability with the divided visual field paradigm. *Journal of Psycholinguistic Research*) explore hemispheric differences in the course of bilingual figurative processing and factors affecting bilingual lexical access, such as language dominance, context, or salience. Anna B. Cieślicka is currently preparing a co-edited volume with R.R. Heredia, *Bilingual figurative language processing*, to be published in 2013 by Cambridge University Press.

Maria Dakowska is Professor of applied linguistics in the Department of English Studies, University of Warsaw. Her research interests range from teaching and learning English as a foreign language in the global society, especially the field's articulation as an academic discipline with specialized levels and pure as well as applied goals, to psycholinguistic processes in second/foreign language learning and teaching, various aspects of foreign language teacher training and task design, as well as cognitive conceptions of human information processing, verbal communication and human development.

Krystyna Droździał-Szelest is Professor of Applied Linguistics at the Faculty of English, Adam Mickiewicz University. She teaches B.A., M.A., and Ph.D. seminars in English Language Teaching methodology and applied linguistics. Her Ph.D. and Post-Ph.D. degrees, obtained from Adam Mickiewicz University in Poznań, are both in applied linguistics. Her present research interests cover ELT methodology, teacher training and teacher development, foreign language education, language teaching materials and educational psychology. She has published one book and a number of research papers, and has supervised 19 Ph.D. theses.

Susan Gass (Ph.D., Indiana University) is currently University Distinguished Professor at Michigan State University where she serves as Director of the English Language Center and of the SLS Ph.D. Program. She has published widely in the field of second language acquisition. Her latest book published with Jennifer Behney and Luke Plonsky, *Second Language Acquisition: An Introductory Course, 4th edition*, will appear in Spring, 2013. In addition, she has published more than 100 articles, 30 books, many of which have been translated into other languages. She has lectured in numerous locations around the world. She has served as President of the American Association for Applied Linguistics and as President of the International Association of Applied Linguistics. She is the recipient of numerous awards including the Pimsleur Award for Research in Foreign Language Education (1995 and 2012), the Distinguished Faculty Award at Michigan State University, the Ralph Smuckler Award for advancing international studies and programs and the Michigan Association of Governing Boards Award.

Hanna Komorowska is full Professor of applied linguistics and language teaching at the University of Social Sciences and Humanities and at Warsaw University. After the fall of communism she was heading the Expert Committee for foreign language teaching and teacher education reform in Poland. Former vice-President of Warsaw University, the Polish delegate for the Modern Languages Project Group of the Council of Europe, and member of the EU High Level Group on Multilingualism in Brussels, she is now a consultant to the European Centre for Modern Languages in Graz and co-author of the *European portfolio for student teachers of languages*. She publishes widely in the field of FLT methodology and teacher education.

Anna Michońska-Stadnik Ph.D., is a Professor at the Institute of English Studies, University of Wrocław, Poland and at the Philology Section of the Karkonosze Higher State School in Jelenia Góra. She is a graduate of the University of Wrocław (1977) and Victoria University of Manchester, UK (MEd TESOL in 1985). Professor Michońska-Stadnik teaches mostly diploma courses, M.A., and B.A., and ELT methodology. She is a member of IATEFL, Modern Language Association of Poland (deputy chair), and Wrocław Scientific Society. Her scholarly interests include psycholinguistics, SLA studies, foreign language teacher training, and SLA research methods. She has published four books and more than sixty research articles in Poland and abroad.

Anna Niżegorodcew took her Ph.D. in the Philosophical Faculty of Jagiellonian University, Kraków, Poland. She is Professor of English and head of the Applied Linguistics and English Language Teaching Section of the Department of English Studies at Jagiellonian University. She was the founder and the head of Jagiellonian

University Foreign Language Teachers' Training College. Professor Niżegorodcew has published a number of books and articles in the areas of teaching English, second language acquisition and second/foreign language teacher education. Recently she has participated in two intercultural teacher training projects: the *European Master for Teacher Training Project* and the *Polish-Ukrainian Project: Developing Intercultural Competence through English*. Her main areas of interest are SLA theory and research, L2 classroom discourse, communication strategies, intercultural communication and English as a lingua franca.

Michael Pasquale (Ph.D. Michigan State University) is an Associate Professor of linguistics and the Chairman of the Humanities Division at Cornerstone University, Grand Rapids, Michigan (USA). His specialization is on the interaction between sociolinguistics and second language acquisition. His dissertation looked at the bilingual contact situation of Quechua and Spanish speakers in Peru. His current research areas focus on the folk linguistics of second language acquisition, particularly studying the beliefs of teachers and students concerning the language learning process, and also language policy in relation to English language teaching. He is a member of the AILA Folk Linguistics Research Network and contributed an article on "Folk beliefs about language learning and teaching" to *AILA Review 24: Applied Folk Linguistics* (2011).

Mirosław Pawlak is Professor of English in the Department of English Studies at the Faculty of Pedagogy and Fine Arts of Adam Mickiewicz University in Kalisz, Poland and the Institute of Modern Languages of State School of Higher Professional Education, Konin, Poland. His main areas of interest are SLA theory and research, form-focused instruction, corrective feedback, classroom discourse, learner autonomy, communication and learning strategies, individual learner differences and pronunciation teaching. His recent publications include *The place of form-focused instruction in the foreign language classroom* (2006, Kalisz–Poznań: Adam Mickiewicz University Press), *Production-oriented and comprehension-based grammar teaching in the foreign language classroom* (with Anna Mystkowska-Wiertelak, 2011, Heidelberg–New York: Springer), *Error correction in the foreign language classroom: Reconsidering the issues* (2012, Poznań–Kalisz–Konin: Adam Mickiewicz University Press), and several edited collections on learner autonomy, language policies of the Council of Europe, form-focused instruction, speaking in a foreign language and individual learner differences.

Teresa Siek-Piskozub is full Professor in the Department of English Applied Linguistics and English Didactics of the Faculty of English, Adam Mickiewicz University in Poznań and was its head till 2012. She is the author of numerous articles and five books on foreign language teaching and learning, one of which

was translated into Romanian. Her research interests include applied linguistics, psycholinguistics, and theories of language learning and teaching. She has (co) edited collections on applied linguistics and EFL pedagogy. For many years she was the editor of *Neofilolog*, the journal of the Modern Language Association of Poland and *FIPLV World News*, the newsletter of the Fédération Internationale des Professeurs de Langues Vivantes. She has lectured in many countries and has read papers during numerous national and international conferences.

Dennis R. Preston is Regents Professor, Oklahoma State University and University Distinguished Professor Emeritus, Michigan State University and has been a visiting scholar at the Osaka Shoin Women's College and the Universities of Hawaii, Arizona, Michigan, Copenhagen, Colorado, and Berkeley and a Fulbright Researcher in Poland and Brazil. He was Director of the 2003 Linguistic Society of America Institute, President of the American Dialect Society, and has served on the Executive Boards of those societies and others, as well as the editorial boards of numerous journals and panels of granting agencies. He is a member of the advisory committees of several international research projects and is invited frequently for presentations in both academic and popular venues. His work focuses on sociolinguistics and dialectology, including four recent NSF grants, two in folk linguistics and two in language variation and change. His most recent book-length publications are, with Nancy Niedzielski, *Folk linguistics* (2000), with Daniel Long, *A handbook of perceptual dialectology*, Volume II (2002), *Needed research in American dialects* (2003), with Brian Joseph and Carol G. Preston, *Linguistic diversity in Michigan and Ohio* (2005), with James Stanford, *Variation in indigenous languages* (2009), and, with Nancy Niedzielski, *A reader in sociophonetics* (2010). He is a fellow of the Japan Society for the Promotion of Science and the Linguistic Society of America and was awarded the Officer's Cross of the Order of Merit of the Polish Republic in 2004.

Michael Sharwood Smith is currently Emeritus Professor at Heriot-Watt University, Edinburgh and Honorary Professorial Fellow at Edinburgh University (Moray House School of Education). He is also a full professor at the English Department of the Academy of Social Sciences (SAN) in Warsaw. He has worked in various countries including France, Sweden, Poland, South Africa and the Netherlands. He has taught linguistics, applied linguistics, second language acquisition, TESOL and advanced EFL for many years and has over a hundred publications in one or other of these areas, amongst other things introducing into the field the terms grammatical consciousness-raising, crosslinguistic influence and input-enhancement. His major research interests are in cognitive processes underlying second language development in adults and children. Michael Sharwood Smith is founding editor of *Second Language Research*, and its precursor *The Interlanguage Studies Bulletin*. He was a former (founding) vice-president of the European Second Language Association and Convener of the AILA Scientific Commission on Second Language Acquisition. Given the absence of

a non-regional international association of second language acquisition, he also set up the web-based International Commission on Second Language Acquisition, to serve as a focal point for the research field. His books include *Second language learning: Theoretical foundations* (1994) and *Aspects of future reference in a pedagogical grammar of English* (1975), and numerous edited volumes.

Baburhan Uzum received his Bachelor's and Master's degrees in English Language Teaching from Middle East Technical University in Turkey. He is currently a doctoral student in Second Language Studies at Michigan State University. His research interests include second language curriculum and material development, psycholinguistic and sociolinguistic approaches to second language acquisition, second/foreign language teacher education, language socialization, and computer assisted language learning. His recent studies have appeared or are forthcoming in peer reviewed journals in applied linguistics and education such as *International Journal of Politics, Culture & Society, CALICO*, and *Teaching and Teacher Education*.

Maria Wysocka (M.A., Ph.D., D.Litt.) is a Professor of applied linguistics and language teaching at the University of Silesia. As a teacher-researcher, she takes special interest in foreign language teacher education and professional development including language teacher training, teacher creativity, and the development of language teacher and language learner autonomy. She is also working on training procedures aimed to develop reflective teaching. She is the author of a book on professional language teaching. Recently, she has become interested in the teaching of English as International Language.