# An *Integrative* Model *of* Moral Deliberation

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# Contents

# List of Figures

# 1

# The Problems of Contemporary Moral Deliberation

Moral questions are getting more complex, and productive moral conversation is getting harder to find. This is not the situation that everybody hoped for. There has long been a vague promise that science, technology, and democracy might gradually make moral questions and conversations easier. The research from various scientific disciplines clearly has relevance for moral values, but as this research gets more sophisticated so do the moral questions it elicits, and moral conversations are having a hard time keeping up. Technology has certainly brought the world into greater interaction, but that has not made productive moral conversation more common. In fact, as the world becomes more interconnected, people are discovering just how significant are the moral disagreements they have with other people and that there is no simple resolution to most of them.[1]

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[1] Seven out of ten Americans claim that the nation is sharply divided on moral issues. See L. Saad (14 December 2012) 'Most in U.S. Say Americans are Divided on Important Values', www.gallup.com, date accessed 15 July 2015. This perception appears to be in contrast with evidence of increasing tolerance in regard to some moral issues such as premarital sex, euthanasia, and gay lifestyles. See F. Newport (26 May 2015) 'Americans Continue to Shift Left on Key Moral Issues', www.gallup.com, date accessed 15 September 2015. Likewise, the notion of a 'culture war' ongoing in the USA has received a lot of attention, but generally sociological research has not revealed a clear and widespread alignment of one block of the society against the other. The well-documented rift between Democrats and Republicans appears primarily to be an increasing polarization of political

Democracy also complicates things. Under democratic ideals, individuals are valuable in and of themselves and deserve discretion over how they live their lives. Within quite broad social limits, this effectively allows each person to determine what he or she accepts as the morally right thing, and so democracies have become societies filled with moral authorities all who believe their personal moral values are the right ones.

One might think that an increasing awareness of moral diversity would prompt people to become more circumspect about whether they have the right answers to moral questions, but instead moral certainty prevails. It appears not just among religious folk who find their moral resolve emboldened by authoritative traditions and the support of similar-minded community members,[2] but also among many scientific folk, who have become ever more convinced that science has provided indubitable answers to human questions about value.[3] This moral certainty often

activists that does not necessarily translate into a pervasive rift among common voters. See Pew Research Center (12 June 2014) 'Political Polarization in the American Public', http://www.people-press.org/2014/06/12/political-polarization-in-the-american-public/, date accessed 20 September 2015. However, these findings likely overlook important dimensions of moral disagreement that do exist. The Gallup report noting a movement toward moral tolerance plays down the fact that between 30 % to over 40 % of the society continues to find these practices morally unacceptable, and the poll does not attempt to measure the intensity of opposition involved. See Newport, 'Americans Continue to Shift Left'. Moreover, the sociological studies discounting a 'culture war' are generally looking for a singular split within the society and have overlooked the extent to which serious polarization exists between various racial, gender, and religious groups. See G. C. Layman, T. M. Carsey, and J. M. Horowitz (2006) 'Party Polarization in American Politics: Characteristics, Causes, and Consequences', *Annual Review of Political Science*, 93–5. Increasing religious polarization is also observed in the UK and Canada, see S. Wilkins-Laflamme (2014) 'Toward Religious Polarization? Time Effects on Religious Commitment in U.S., UK, and Canadian Regions', *Sociology of Religion*, 75, 284–308, and surveys of international opinion on morality display large blocks of disagreement on many moral issues within nations and even larger ones between nations. See Pew Research Center (4 October 2007) 'Global Attitudes and Trends: Chap. 3. Views of Religion and Morality', http://www.pewglobal.org/2007/10/04/chapter-3-views-of-religion-and-morality/, date accessed 15 September 2015.

[2] M. Shaw, S. A. Quezada, and M. A. Zárate (2011) 'Violence with a Conscience: Religiosity and Moral Certainty as Predictors of Support for Violent Warfare', *Psychology of Violence*, 1, 275–86.

[3] Steven Pinker and Michael Shermer both support a type of scientific certainty, which is rooted in their confidence in the ability of human reason progressively and ultimately to find the best way to live. S. Pinker (2011) *The Better Angels of our Nature: Why Violence has Declined* (New York: Viking), 448, and M. Shermer (2015) *The Moral Arc: How Science and Reason Lead Humanity Toward Truth, Justice, and Freedom* (New York: Henry Holt and Company). Peter Berger makes a similar observation to mine in his assertion that fundamentalism can be both religious and secular. By fundamentalism, Berger means 'an attempt to restore or create anew a taken-for-granted body of beliefs and values'. P. Berger (2006) 'Between Relativism and Fundamentalism', *The American Interest*, 2 (1), 12.

empowers a frenetic moral indignation that intensifies the intractability of moral disagreements.[4]

## Five Styles of Moral Deliberation

Perhaps if there existed a group of specialists who were trained to resolve these moral disagreements, then they could provide the means to bring some clarity and accord to things. Indeed, there is such a specialization, and it is called applied ethics, but one will be disappointed if one hopes it will bring clarity and order. Applied ethics experiences the same sort of problems with moral conversation as the world at large, but it certainly is the right place to start a discussion of what is at the core of the difficulties.

Applied ethics appeared as a distinct intellectual discipline 50 years ago, primarily in the USA, as rising moral complexity created the need for intellectual clarity. Mounting concerns over social issues such as the War in Vietnam and racial equality filled the attention of a variety of professionals and intellectuals. Medical practitioners were especially interested in finding answers to the conflicts they were experiencing between medical science and patient autonomy and social utility. The techniques of law and moral philosophy with their objective and rationalist approaches to deliberation quickly became the most influential in the burgeoning field.[5] But from the outset there was a variety in approach, with many methods being reactions to others or representing the specialized techniques of a particular professional discipline. The resulting styles of deliberation may be discussed under the five following headings.

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[4] L. J. Skitka (2010) 'The Psychology of Moral Conviction', *Social and Personality Psychology Compass*, 4, 267–81.

[5] T. L. Beauchamp (2003) 'The Nature of Applied Ethics' in R. G. Frey and C. H. Vellman (eds) *A Companion to Applied Ethics* (Malden, MA: Blackwell Publishing, Ltd.), 1–2.

## Applied Philosophical Deliberation

The majority of intellectual reflection on ethical deliberation has sought to take the resources of moral philosophy and apply them to the analysis of ethical issues,[6] but there is considerable disagreement about how this is to be done. Many philosophers of applied ethics will take as their task the application of general moral theory to particular ethical problems. The most common method, at least ideally, entails the application of moral principles, usually duty oriented ones or utilitarian ones, to the issues. Duty oriented deliberation considers which moral duties are applicable to a case, and whether there are priorities among them.[7] Consequences of actions have no direct bearing on moral judgments. Utilitarian deliberation, on the other hand, considers how individual or social utility may be maximized in choice outcomes.[8] Rules have no direct bearing on a moral outcome, unless one appeals to the utility resulting from following a particular rule. In both applications, the reasoning process is scrutinized for logical consistency and conceptual clarity, and empirical data is used, if used at all, only to contextualize the issue under analysis. A clear demarcation between facts and values is retained, along with an attempt to remain aloof from parties and issues in the case, with the goal that the conclusion of the deliberation has a moral justification that has the same rational necessity as logic and mathematics.

Two alternatives to these standard approaches came to prominence in the 1970s and 1980s. Casuistry experienced a revival under the influence of Stephen Toulmin and Albert Jonsen. It deliberates over a moral case by attending to significant details of the case and identifying arguments and

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[6] Beauchamp, Jonsen, and Toulmin argue that this is an inappropriate and inadequate depiction of the character or actual practice of applied ethics. See Beauchamp (2003) 'The Nature of Applied Ethics', 1–2; and A. R. Jonsen and S. Toulmin, (1988) *The Abuse of Casuistry: A History of Moral Reasoning* (Berkeley, CA: University of California Press), 23–4. However, their assessment may have as much to do with their commitments to principlism and casuistry, respectively, as with what other practitioners in applied ethics actually believe. That many ethicists adopt this orientation will be obvious in Chap. 5.

[7] M. Altman (2011) *Kant and Applied Ethics: The Uses and Limits of Kant's Practical Philosophy* (Maldin, MA: Wiley-Blackwell).

[8] Perhaps the most influential current version is the preference utilitarianism of Peter Singer, which focuses on the utility of preferences of those affected in a case rather than the utility of happiness or pleasure. P. Singer (2011) *Practical* Ethics, 3rd edn (New York: Cambridge University Press), p. 13.

maxims that apply to those sorts of cases. Appeals are made to paradigm cases that have established moral precedent for the current case.[9] Principlism, which is primarily associated with the work of Tom L. Beauchamp and James F. Childress, espouses four ethical principles: autonomy, beneficence, nonmaleficence, and justice. Arguing that these principles are drawn from the tradition and practice of healthcare, Beauchamp sees them not primarily as norms to be applied, but as guidelines that prove helpful in shaping policy. The act of ethical deliberation involves discovering imaginative ways of specifying these principles in application to a case and balancing the conflicting interests that result.[10] Although a mainstay of biomedical and clinical ethics, this style has had an influence across all subdisciplines of applied ethics.

Discourse ethics is a methodology framed to compensate for the cold and calculating style many find in all four of the above approaches. Instead of focusing on the content of ethical deliberation, this method focuses on the requirements for the process of deliberation. Primarily connected with the philosophical work of Jürgen Habermas, it seeks to embody and extend the ideals of the Western enlightenment and liberal democracy. Embracing the reality of diversity and emphasizing individual autonomy and human interaction, the method is constructed as a means to respect individual perspectives while establishing universally agreed upon claims for what is right through the free participation of all affected parties in moral conversation.[11]

While the above approaches frame ethical deliberation as decisions about specific dilemmas, virtue ethics focuses on the character of the actor and the inclination of actors to seek out excellence in the midst of a moral community. Specific rules or principles are not the primary interest. Instead, the central question is how a virtuous person would act in a particular case. This approach is notable because of its efforts to retrieve communal emphases in ethical analysis.

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[9] A. R. Jonsen (1995) 'Casuistry: An Alternative or Complement to Principles?' *Kennedy Institute of Ethics Journal*, 5, 242–5.

[10] T. L. Beauchamp (1995) 'Principlism and its Alleged Competitors', *Kennedy Institute of Ethics Journal*, 5, 182–4.

[11] J. Habermas (1990) *Moral Consciousness and Communicative Action*, translated by C. Lenhardt and S. W. Nicholsen (Cambridge, MA: MIT Press), 65, 66, 93.

Massive amounts of talented intellectual energy have been expended in applying these methodologies to specific issues in the last 50 years, but none of the approaches escape severe criticism. The impersonality and abstraction connected with the deontological and utilitarian approaches are troubling to many, as well as the feeling that they are not particularly helpful in considering specific ethical cases because they cannot leap the chasm between theory and practice.[12] Critics of casuistry worry that it holds unstated theoretical assumptions and its appeal to intuitive judgment in the selection of details, maxims, and relevant cases can uncritically reinforce established ethical norms.[13] Critiques of principlism note that it tends to retain much of the abstraction of moral theory, doesn't necessarily yield very specific conclusions, and provides no clear guidance on how to resolve the inevitable conflicts between the principles.[14] A few efforts have been made to utilize discourse ethics in areas like bioethics and business ethics, but these remain very broad and only suggestive, and it is not clear that it can provide helpful conclusions.[15] And virtue ethics remains open to charges of cultural relativity in its pronouncements, and there still is no clear technique for interpreting and applying the injunction "do the virtuous thing."

## Empirical Deliberation

The impact of empiricism, particularly empirical science, in defining the modern Western world cannot be overemphasized. It transformed an intellectual landscape characterized by narrow rationalism and arbitrary superstition into one rooted in systematic physical experiments and

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[12] T. L. Beauchamp (2004) 'Does Ethical Theory Have a Future in Bioethics?' *Journal of Law, Medicine, and Ethics* 32, 209–17.

[13] J. D. Arras (1991) 'Getting Down to Cases: the Revival of Casuistry', *Bioethics, The Journal of Medicine and Philosophy,* 16, 47–8.

[14] K. D. Clouser and B. Gert (1990) 'A Critique of Principlism', *The Journal of Medicine and Philosophy*, 15, 219–36.

[15] See, for example, D. García-Marzá (2012) 'Business Ethics as Applied Ethics: A Discourse Ethics Approach', *Ramon Llull Journal of Applied Ethics*, 3, 99–114, and D. Garcia (2001) 'Moral Deliberation: The Role of Methodologies in Clinical Ethics', *Medicine, Healthcare, and Philosophy*, 4, 223–32.

arguments based on sensory evidence. It spawned technologies that have alleviated human suffering and created a higher standard of living for many portions of the human population. Although it has been applied across all intellectual disciplines, empiricism retains a persistently awkward relationship to ethics. Anyone who attempts to use empirical data in ethical reasoning may be accused of committing the so-called naturalistic fallacy. This is the logical mistake of trying to generate an ethical obligation from a description of reality. One must keep facts and values separate, and empirical science can therefore have little or nothing to say about ethical values. Indeed, many versions of empirical science continue to give some lip service to this distinction, by claiming that they are just looking for empirical facts and are not value driven. But in spite of this disavowal, empirical descriptions of truth have been so powerful and productive that almost everyone in Western civilization assumes at least an implicit connection between empirical findings and ethical value, although they find it difficult to explicate.

An empirical orientation in ethics gained considerable momentum in the 1990s, particularly in bioethics and clinical ethics. Often called empirical ethics or evidence-based ethics, or in some manifestations pragmatic ethics, the approach argues that a variety of data are critical to the framing of ethical responses, and points out that philosophical efforts in ethics often have ignored empirical evidence in framing ethical solutions. The relevant data might include, in the case of clinical ethics, for example, not just the study of what treatments tend to work best or what diagnostic procedures are more painful or intrusive than others but also the cultural beliefs of patients about medical treatment and doctor-patient relationships, the tendencies of patients to prefer certain ethical outcomes, and the actual results that have been achieved by different ethics policies. This data can provide new insights into the shape of what ought to be done and may even give birth to ethical norms that are counter to established ethical or medical traditions.[16]

Many are leery that empirical approaches smuggle in unstated assumptions and value judgments. For example, the assumption that the most

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[16] M. J. Goldenberg (2005) 'Evidence-based Ethics? On Evidence-based Practice and the 'Empirical Turn' from Normative Ethics', *BMC Medical Ethics*, 6, 1–9, and M. Dunn, M. Sheehan, T. Hope, and M. Parker (2012) 'Toward Methodological Innovation in Empirical Ethics Research', *Cambridge Quarterly of Healthcare Ethics*, 21, 466–80.

important human values can be described and captured by empirical investigation is highly limiting and potentially dangerous. Indeed, practitioners of empirical disciplines often fail to admit the limits of their work, assuming that the method can discern all the workings of the universe,[17] that solutions to problems will have empirical form, and that it is easy to avoid human bias in shaping the results of empirical investigations.

## Instrumental Deliberation

Instrumental reason looks for the most efficient way to achieve desired ends and often takes the form of active and rational problem solving. In regard to practical ethics, the particular ethical issue is the problem, and deliberation involves considering the most efficient way to find a solution to that problem. This orientation, portraying the goals of the professions that give it impetus, is often represented by process algorithms or flowcharts.[18] There is the assumption that if one gets the proper device or uses the proper process then one can create the intended product. It is frequently used in clinical ethics, where it mirrors the problem-solving process of the diagnosis and treatment of illness. It is also common in business ethics. For example, one frequently finds the argument that businesses should act ethically because ethical businesses are always more profitable than unethical ones. Little empirical research is referenced to verify this claim, and there is little recognition that if moral responsibility becomes a variable in an equation for net profit, then it might be altered in degree or type to enhance profit.[19] Instrumental reasoning also lurks in the use of codes of ethics and ethics review boards. The form and

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[17] Stephen Hawking displays this optimism, 'In my opinion, there is no aspect of reality beyond the reach of the human mind'. Quoted in A. Boyle (23 September 2014) '"I'm an Atheist": Stephen Hawking on God and Space Travel', http://www.nbcnews.com/science/space/im-atheist-stephen-hawking-god-space-travel-n210076, date accessed 20 July 2015.

[18] See, for example, the PLUS Decision Making Model at Ethics Research Center (29 May 2009) 'The PLUS Decision Making Model', http://www.ethics.org/resource/plus-decision-making-model, accessed 20 July 2015, and D. Gracia (2003) 'Ethical Case Deliberation and Decision-making', *Medicine, Healthcare, and Philosophy*, 6, 231–3.

[19] S. D. Simpson (2012) 'The Uneven Consequences of Corporate Misbehavior', *Investopedia*, http://www.investopedia.com/articles/economics/12/governments-care-corporate-misbehavior.asp, date accessed 20 July 2015.

operation of such mechanisms may often have as much to do with protecting the profession or corporation from legal liability and damage to public image as with protecting broader ethical values.[20]

## Mythic Deliberation

This approach has suffered considerably at the hands of the empirical orientation over the last couple of 100 years because intellectuals have granted empirical methodologies the power to define what *myth* means. For science, a myth is a claim that is false because it has insufficient empirical evidence. But in many ancient usages, myth had the opposite meaning. A myth was the embodiment of the traditions of a community and was true because its stories constituted the values and identity of the community.[21] Although many modern and scientific folk find myth to be outmoded, there remains a pervasive psychological need for myth, and the most central ethical values of humanity have been conveyed to the present by myths communicated through artistic and religious literature. When using a mythic orientation for ethical deliberation, one considers how to select resources from the mythological tradition, interpret them, and then apply them authoritatively to the issue.

Although this is arguably the most ancient style of moral deliberation, it has not been of much assistance to contemporary practical ethics. Most interpreters of Western literature revel in the beauty and impact of the literature or apply critical methodologies to it, but if they do get around to addressing ethical concerns, the application is so broad and abstract that its practical bearing on cases is unclear.[22] The efforts of specifically religious ethicists fall short as well. The more progressively minded find that

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[20] See, for example, M. L. A. Hayward and W. Boeker (1998) 'Power and Conflicts of Interest in Professional Firms: Evidence from Banking', *Administrative Science Quarterly,* 43, 1–22 and R. A. Prentice (2000) 'The SEC and MDP: Implications of the Self-Serving Bias for Independent Auditing', *Ohio State Law Journal*, 61, 1597–670, and M. David (1991) 'The Quest for a Code of Professional Ethics: An Intellectual and Moral Confusion' in D. G. Johnson (ed.) *Ethical Issues in Engineering* (Englewood Cliffs, NJ: Prentice Hall), 130–7.

[21] See, for example, M. Eliade (1963) *Myth and Reality* (New York: Harper & Row), 6.

[22] See, for example, the various essays in S. K. George (2005) *Ethics, Literature, & Theory: An Introductory Reader*, 2nd edn (Lanham, MD: Rowman & Littlefield Publishers, Inc.).

they reach the same conclusions as ethicists who dont share their theological traditions, which brings into question just how necessary their traditions are to the method.[23] The more conservative flee into the world of their myth without seriously engaging contemporary experience.[24] Narrative ethics falls generally under the mythic style, because mythic traditions are usually offered in narrative form. Unfortunately, the diversity, secularization, and individualization of the modern West has made narrative deliberation vague and psychologically particular. And so narrative ethics tends toward either broad and diluted affirmations of the value of narrative for the ethical life, which usually amount to exercises in moral philosophy rather than applied ethics,[25] or toward the use of narrative as a foil for therapeutic self-reflection.[26]

## Aesthetic Intuitionist Deliberation

This style of deliberation appears not to be deliberation at all. When confronted with an ethical question, a person almost immediately becomes aware of a judgment about the question. This orientation is rooted in bodily perceptions of attraction to or repulsion from some conclusion, and the degree of seriousness of the issue and the conclusion is measured by the degree of bodily reaction. And while there may be no awareness of deliberation, there are complex processes going on underneath consciousness that are weighing options in terms of significant value preferences. Unfortunately, these processes are very difficult to access. Most people are unaware of the mechanisms at work, and when asked for reasons to endorse their conclusion, they either incorporate

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[23] J. M. Gustafson (1975) *The Contributions of Theology to Medical* Ethics (Milwaukee, Wisconsin: Marquette University Press), 93–4.

[24] G. A. Lindbeck (1984) *The Nature of Doctrine: Religion and Theology in a Postliberal Age* (Louisville, KY: Westminster John Knox Press), 134–5.

[25] M. Nussbaum (2008) 'Human Dignity and Political Entitlements' in the President's Council on Bioethics (ed) *Human Dignity and Bioethics: Essays Commissioned by the President's Council on Bioethics* (Washington, D.C.: The President's Council on Bioethics) https://repository.library.georgetown.edu, date accessed 20 July 2015.

[26] R. Charon (2001) 'Narrative Medicine: A Model for Empathy, Reflection, Profession, and Trust', *JAMA*, 286, 1897–902.

reasons from one of the other four orientations or rather vaguely refer to intuition or conscience or the obviousness of the conclusion.

The label "aesthetic intuition" is an adaptation from Henry Sidgwick, who also called it ultra or perceptual intuitionism. He describes it as making judgments on the basis of "simple immediate intuitions alone" without reference to principles of conduct or any inferential mechanisms. He rejects it because it has a disturbing inconsistency. Individuals will make different intuitive judgments about similar cases at different times, and intuitive judgments vary considerably among different people. Moreover, no one ever finds sufficient reasons for their intuitions in the intuitions themselves.[27] This style is often considered anti-intellectual and includes inclinations that the first three styles are trying expressly to avoid.

## An Inadequate Model of Human Cognition

The assessment of the success of applied ethics and its various methods of deliberation depends on how one measures success. If one makes an assessment on the basis of the new artifacts it has spawned, then the large number of educational programs, specialized journals and conferences, and books it has produced make it a great success. If one measures effectiveness by the field's influence in shaping social policy and regulation, particularly in healthcare, then the field has also been a resounding success. If, however, one measures success on how well the field has engaged the challenges of moral complexity, providing insight into why people disagree and how to move beyond disagreement to productive conversation and practical conclusions, then the field has not made much headway. As demonstrated by the differences among the five styles of moral deliberation, the disagreements remain deep.

Applied ethicists recognize the problem of disagreement, but they tend to hold the belief that the problem resides within existing moral or methodological theories, and if their particular theory is just tweaked enough, then a clarity will be achieved that everyone will be forced to accept.

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[27] H. Sidgwick (1907) *Methods of Ethics* (London: MacMillan and Co.), 100.

But 30-plus years of tweaking has not brought a broad consensus on method or ethical conclusions, not within the profession,[28] or among intellectuals as a whole, and certainly not among the rank and file of ordinary people. And strikingly, even when there is agreement on a conclusion for a specific moral issue, it may be unclear why it was reached.

Stephen Toulmin was a staff assistant for the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research in the middle of the 1970s. The commission was made up of 11 members, five were scientists and the rest were a mix of lawyers, theologians, philosophers, and administrators, and this committee represented one of the first major forays into framing bioethics policy. Outside speculation suggested that the group would quickly degenerate into a cacophony of disagreement, but Toulmin remembers that

> even when the Commission's recommendations were not unanimous, the discussions in no way resembled Babel: commissioners were never in any doubt what it was that they were not quite unanimous about. Babel set in only afterwards. When the eleven individual commissioners asked themselves what "principles" underlay and supposedly justified their adhesion to the consensus, each of them answered in his or her own way: the Catholics appealed to Catholic principles, the humanists to humanist principles, and so on. They could agree; they could agree what they were agreeing about; but, apparently, they could not agree why they agreed about it.[29]

Toulmin tells this story to illustrate his conclusion that ethical principles are ineffective in ethical deliberation while casuistry is, and so he adds further explanation regarding the inadequacy of ethical principles. Principles cannot serve as the source of moral opinion because they are only "corridors or curtain walls linking the moral perceptions of all reflective human beings, with other, more general positions—theological, philosophical, ideological, or *Weltanschaulich*."[30] While the theory

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[28] For example, see T. L. Beauchamp (2004) 'Does Ethical Theory Have a Future in Bioethics?' *Journal of Law, Medicine & Ethics*, 32, 209–17, for an assertion that applying moral theories to practical ethical issues is not the proper method.

[29] S. Toulmin (1981) 'The Tyranny of Principles', *The Hastings Center Report*, 11, 31–2.

[30] Toulmin, 'Tyranny of Principles', 32.

contained in Toulmin's brief explanation is inadequate, he correctly senses that contemporary disagreements about moral deliberation are rooted in issues of human cognition. In fact, this is the underlying difficulty of contemporary applied ethics, and moral philosophy in general. The primary problem begins not with an inadequate moral theory, but an inadequate model of human cognition.

This claim can be seen as a more specific rendering of G.E.M. Anscombe's famous assertion in 1958 that "it is not profitable for us at present to do moral philosophy; that should [be] laid aside at any rate until we have an adequate philosophy of psychology, in which we are conspicuously lacking."[31] Of course, philosophers did not heed that particular exhortation and carried on with moral philosophy, albeit with much more emphasis on virtue ethics. Her assertion remains accurate, however, because philosophy has not rendered an acceptable philosophy of psychology, but perhaps not for the reasons Anscombe assumed. Philosophy has been unable to make much headway on an investigation of psychology because its methods have been narrowly analytic and have often ignored the findings of empirical science. Even as Anscombe was writing her article, there were developments ongoing in neuroscience, and what became sociobiology and evolutionary and cognitive psychology, which provided new perspectives on human cognition and have begun to yield insight. Human cognition is not just, nor primarily, made up of analytic, logical, and mathematical sorts of processing, but is also constituted by reflex, instinct, emotion, and nonconscious operations.

Moral philosophy has only recently begun to make use of this research, and applied ethics hardly at all, because the analytic commitments of both disciplines make it difficult to incorporate the empirical findings of the biological and social sciences. In the last three decades, a group of theories within cognitive psychology has sought to integrate these new lines of research with traditional modes of analytic human cognition. Called dual process theories, they pose two distinct cognitive operations: experiential processes of reflexive/intuitive action (what I will be calling Type 1 processes), which are fast, intuitive, and largely nonconscious, and reflective processes of conscious and deliberate analysis

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[31] G. E. M. Anscombe (1958) 'Modern Moral Philosophy', *Philosophy*, 33, 1.

(what I will be calling Type 2 processes), which are slow, methodical, and conscious. Typically, dual process theories give priority and authority to Type 2 processes, but as subsequent discussions in this book will indicate, this is a mistake. Type 1 processes turn out not just to be as important as Type 2 processes, but are the mechanisms by which all decisions are made.

Because there is a significant qualitative difference between the two processes, the challenge for decision making in general, and for applied ethics in particular, is to find ways to invoke both in deliberation. What will be proposed is a dialectical movement between the two processes, involving the translation of the products of one into the other, back and forth, until an aesthetic sense of fitness is reached by Type 1 cognition.

The five styles of deliberation that have already been discussed may be folded into this cognitive division. The applied philosophical, empirical, and instrumental styles fall under Type 2 processes. The aesthetic intuitionist style is essentially synonymous with Type 1 processing. The mythic style proves to have considerable affinity with a crucial cognitive bridge between the two processes, commonly known as narrative.

The presentation of this model requires background explication of the biological and social predispositions of human decision making. Human choices can only be understood in terms of the sort of creatures human beings are and the kind of world they find themselves in. It also requires an explication of dual process theory, and a discussion of how the two processes yield distinctly different forms of moral cognition and require a bridge between them. Chapters will be dedicated to each of these topics in preparation for a chapter that lays out the model.

# 2

# Human Embodiment and Moral Deliberation

## Stumbling Over Embodiment

Many people in the West have a deep disconnect with their status as biological beings. On the face of it, this seems ridiculous. A physical body is central to human identity and every activity that human beings perform, but yet there is a thoroughgoing denial of the ways biological necessity shapes human life. The successes of industrialized societies are part of the reason this denial occurs. People tend to live in cities separated from where their fruit and vegetables are grown and where the animals that supply their meat are slaughtered. The ill and the infirm are out of general sight in professional institutions dedicated to their care. People may live their whole lives without seeing a dead human body except on TV or in movies.

It was not always this way, and is still not this way in many parts of the world. In those societies that are preindustrial or struggling with war and famine, there remains a deep sense of connection to the biological necessities of life. High infant mortality rates, short life expectancy, and difficulties finding suitable food, or water, or shelter are persistent reminders of the precarious biological character of human existence.

For these societies, life remains close to the earth as it has for millennia, and survival is recognized to be a difficult thing.

The seriousness of this disconnect is more than a curiosity of urban society. It is not just that people do not know of the nearness and necessity of biological events. There is a deep-seated desire to not consider biological necessity, to live as though biology does not matter. This predilection stretches back through Rene Descartes into the heart of Platonic philosophy and portrays human valuing and all cognitive activity as a non-physical activity. But in spite of this philosophical preference and in spite of the social structures that often separate humans from nature, humans remain inextricably tied to the earth. Humans procreate and eat and live and die like many other species. They hold 98 % of their genes in common with chimpanzees, and even 61 % with fruit flies. These similarities are not trivial, because the shape of human-embodied existence has powerful effects on human experience and patterns of behavior.

George Lakoff and Mark Johnson in their 1999 book, *Philosophy in the Flesh*, make the point that human reason "arises from the nature of our brains, bodies, and bodily experience. This … is the striking claim that the very structure of reason itself comes from details of our embodiment."[1] Lakoff and Johnson's claim applies as well to morality and moral deliberation. Both are rooted in embodied processes and embodied manifestations of value. Survival in the sort of world there is, with the sorts of bodies humans have, is a major source of the values humans have and how they assess those values.

## Evolutionary Theory and Humanity

The rejection of the intellectual significance of human embodiment has led many to have an uncomfortable relationship with theories of evolution. Research professionals in the biological sciences overwhelmingly sub-scribe to the veracity of evolutionary theories, but most in the general population in the USA, for example, are ignorant of the real meaning of

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[1] G. Lakoff and M. Johnson (1999) *Philosophy in the Flesh: The Embodied Mind & Its Challenge to the Western Mind* (New York: Basic Books, 1999), 4.

evolutionary theory and/or reject it on religious grounds. Seventy-three percent disagree with the proposition "human beings have developed over millions of years from less advanced forms of life, but God had no part in this process," and 42 % believe that God created human beings as they are today.[2] Interestingly, these percentages have remained relatively unchanged in the last 30 years, with only a very small and gradual increase in those subscribing to nontheistic evolution.

Evolutionary theories provide important reminders that at the core of human existence lies the necessity of survival. Changes in genetic structure, either through accidental mutation or environmental impact, sometimes lead to structures and processes that enhance the survival of an organism in an existing environment, and if these changes are passed along to offspring, a whole species or portion of a species may grow to have some survival advantage over competitors. What has become more obvious in the last 100 years is that this heredity can pertain not just to organic structures but also behaviors, and that the patterned behaviors of organisms are related to some kind of survival advantage.

Everybody agrees that animals and insects have hardwired behaviors. Whether it is the instinct of the newly hatched baby sea turtle to race for the ocean or the ability of monarch butterflies to navigate thousands of miles, the success of all species relies on unlearned behaviors. The harder sell is that human beings have them also. But clearly, human beings have all sorts of responses that are instinctual, from the autonomic activity of a beating heart to the mammalian diving reflex, whereby certain mammals, humans among them, are able to adjust their bodies to spend more time beneath cold water. But those who object to human behavior being instinctual will claim that what they are objecting to are those human behaviors that are distinct to human cognition. Part of the problem with this objection is that it assumes too narrow a concept of cognition, limiting cognition to consciously rational and analytic processes. But there are many behaviors that operate without human consciousness that require complex cognition. For example, engineers tasked with building and programming robots to

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[2] Gallup (2014) 'In U.S., 42% believe Creationist View of Human Origins', http://www.gallup.com/poll/170822/believe-creationist-view-human-origins.aspx, date accessed 22 July 2015.

run like animals find their challenges to be quite as difficult, or even more difficult, than the challenges faced in building computers to play chess or *Jeopardy*.[3] The amount of sensory data that must be gathered and managed, and the choices that must be made in terms of changing environmental conditions about how to maintain balance, rhythm of motion, and speed are immensely complex and can legitimately be called cognition, whether in computers, humans, or animals.[4] Another example is the helping behaviors found in humans and many other mammals. There is the behavior in animals that has come to be called kinship altruism. Altruism is a label for a deliberate and conscious human disposition to regard the welfare of others before oneself. Kinship altruism is then the application of this disposition toward one's biological relatives, usually offspring. This label is particularly unfortunate in application to animals because it can project a conscious disposition upon nonhuman organisms, when it is not clear that these other organisms have such deliberate and conscious dispositions, and, more importantly, it is not even clear that the human care of children requires such a conscious disposition. In fact, the most interesting insight is not that animals are like humans, but that humans may have complex biological instincts like animals. Organisms, such as most mammals, that demand relatively long periods of development after birth to reach adulthood, require intense nurturing behaviors on the part of one or both parents for the survival of offspring to be made more likely. Without a hardwired disposition to care for these high-maintenance offspring, the offspring would never survive, and neither would the species. The point is that if this complex behavior is seen in animals as an instinct, then in humans it can also be an instinct rather than an artifact of conscious learning or choice.

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[3] M. Li, S. Wang, W. Guo, et al. (2014) 'System Design of a Cheetah Robot Toward Ultra-high Speed', *International Journal of Advanced Robotic Systems*, 11, 1–11.

[4] Moreover, the way sensorimotor data is structured and processed in the human brain may have considerable impact on how the brain frames concepts about the data and reasons from it. See V. Gallese and G. Lakoff (2005) 'The Brain's Concepts: The Role of the Sensorimotor System in Conceptual Knowledge', *Cognitive Neuropsychology*, 21, 455–79.

# Brain Structure and Brain Function

A focus on human embodiment yields a recognition that "mental" operations and behaviors are the result of chemical and electrical processes in the brain. There is no homunculus; that is, a little person in the brain making decisions, and there is no necessity to refer to soul or spirit to describe human behavior. Although much about the human brain remains outside the understanding of science, enough has been uncovered to see that the brain is the origin of human behavior. The peculiarities of brain structure and function are therefore the source of the peculiarities of human action, deliberation, and value.

Neural conceptions of the brain as partitioned according to function have a long-standing popularity, and some specialization of function exists within certain regions of the brain. However, there is a great deal of distribution of processing as well. For example, in some people born blind, portions of the occipital lobe may be rewired to process auditory sensations. And, important decisions are made at many different levels within the brain, with both specialization and immense distribution of responsibility.[5]

Observations of functional differences within different portions of the brain have led to a number of modular theories of brain function. A popular version argues for three overlapping brains: a reptilian brain, a mammalian brain, and a primate brain. These structures correspond to the brain stem, the limbic system, and the neocortex, respectively.[6] This theory, while limited in its explanatory power, holds the advantage of pointing out the importance of balance. At any moment, there are a multitude of processes going on in the human brain. Most of these processes are not conscious, and their inclinations can be contradictory. For example, a balance between the emotional centers of the brain and the executive centers is critical. Over- or underfunctioning of either leads to problems. Without the operation of emotional centers, which implement

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[5] M. S. Gazzaniga (2011) *Who's in Charge: Freewill and the Science of the Brain* (New York: Ecco), 44.
[6] P. D. MacLean (1990) *The Triune Brain in Evolution: Role in Paleocerebral Functions* (New York: Plenum Press).

basic drives and the commitment to certain actions, a person cannot make a decision.[7] If these inclinations are not monitored and controlled by certain executive neural functions, then they may be expressed in antisocial and violent behavior.[8]

Other research has demonstrated the effect of stress on the executive and emotional points of the brain. Under conditions of severe stress, the amygdala, one emotional center of the brain, releases chemicals that strengthen inclinations such as fear and the processing of emotional data and at the same time weaken the executive functioning of the prefrontal cortex. This can effectively shut down the prefrontal cortex and allow all actions to be driven by emotional inclinations.[9]

And yet with all the evidence of particular brain regions carrying out particular functions, the guiding characteristic of the human brain is connectivity. Neurons are similar to other cells with two important exceptions: their inability to replicate and the fact that each has 1–10,000 incoming connections with other neurons and 1–10,000 outgoing connections with other neurons. Because neurons are not in direct contact with one another, chemical neurotransmitters convey signals between neurons creating expansive pathways of communication throughout the brain. These pathways make possible the simultaneous activation of neurons located in different regions of the brain that create the complex realities of human experience and conceptualization.[10]

One particular kind of neuron has received a great deal of recent attention. Mirror neurons, documented in primates and provisionally

[7] A. R. Damasio (1994) *Descartes' Error: Emotion, Reason, and the Human Brain* (New York: Quill), Chap. 3.

[8] Y. Yang, & Adrien Raine (2009) 'Prefrontal Structural and Functional Braining Imaging Findings in Antisocial, Violent, and Psychopathic Individuals: A Meta-analysis'. *Psychiatry Research: Neuroimaging*, 174, 81–8. Adrian Raine made PET (positron emission tomography) images of death row inmates' brains. He discovered that their prefrontal lobes, that portion of the brain tasked with executive decision making, had low metabolic activity. He concluded that their prefrontal cortexes were not functioning well enough to keep control over the emotional and more 'primitive' parts of the brain that produce anger and violence. See A. Raine (2013) *The Anatomy of Violence: The Biological Roots of Crime* (New York: Pantheon Books), 67.

[9] A. F. T. Arnsten (2009) 'Stress Signaling Pathways That Impair Prefrontal Cortex Structure and Function', *Nature Review Neuroscience*, 10, 410–22.

[10] G. Lakoff (2008) *The Political Mind: Why You Can't Understand 21st-century Politics with an 18th-century Brain* (New York: Penguin Group), 25–7.

identified in humans, are important components of simulation circuitry. These are neurons that fire not only when an animal acts, such as a monkey moving a finger, but also fire when that action is observed in another, such as a monkey observing another monkey moving a finger.[11] It is hypothesized that these neurons may be part of the neural infrastructure behind sympathetic reaction, imitation, and social relations in humans.

## Neurotransmitters: Rewards and Aversions

For any organism to survive successfully, individually and as a species, it must be adept at predicting with high levels of accuracy the presence of physical threats, acceptable food, and acceptable mates. The reward and pain systems within the human brain accomplish this. Pleasure and pain relate directly to the condition of the organism and how well it is following behaviors that enhance survival. If the organism produces a response that matches the hardwired routines for survival, then this response is perceived as pleasure, and if it goes contrary to responses that enhance survival, this is perceived as pain.[12] Pleasure and pain are not only localized sensations, but are most significant as holistic experiences, an orientation of the whole organism. These experiences are largely produced by the actions of neurotransmitters, which communicate senses of pleasure and pain throughout the brain.

There are many different neurotransmitters, but I will talk about two: dopamine and oxytocin. Dopamine is a neurotransmitter at the heart of the human neural reward system and is the source of the sensations of feeling "in love," confident, and motivated, among other things. It acts upon portions of the brain called the striatum, nucleus accumbens, and the frontal cortex, which are centers for motivation to act for both near- and long-term goals. When certain stimuli are repeatedly followed by reward, dopamine receptor neurons shift from firing after the experience of reward to firing when the cue for the reward is observed; for example,

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[11] C. Keysers (2010) 'Mirror Neurons', *Current Biology*, 19, R971–R973.

[12] A. Damasio (2010) *Self Comes to Mind: Constructing the Conscious Brain* (New York: Pantheon Books), 53.

a light or sound.[13] Dopamine networks can be hijacked or damaged by high-fat diets,[14] which can diminish sensitivity to one's stomach feeling full, or addictive drugs,[15] which elicit a diminished sensitivity to levels of dopamine and eventually result in the addict needing the drug just to feel normal.

Oxytocin is a neurotransmitter that has received recent attention because of its important role in social bonding, although the exact mechanisms of its operation and impact are unclear, particularly in humans. Research indicates it is important in face recognition, social bonding, and perhaps especially for pair bonding of mates although its role for males is less clear than for females. An unsettling recent finding is that oxytocin may be related to ethnocentrism, the identification with one's own sociocultural group over or against others.[16] It may also be an important biochemical player in the phenomenon experienced by humans as trust. Perhaps its most important role is in the initiation of maternal behavior, particularly with bonding with offspring during pregnancy and after birth.[17]

# Emotion

Considerable work in neuroscience in the last 20 years has highlighted the extent to which emotion is a bodily phenomenon. Antonio Damasio has been an important contributor to this research, and he maintains that

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[13] M. W. Howe, P. L. Tierney, S. G. Sandberg, P. E. M. Phillips, and A. M. Graybiel (2013) 'Prolonged Dopamine Signaling in Striatum Signals Proximity and Value of Distant Rewards', *Nature*, 500, 575–578; and W. Schultz and P. Dayan, P. R. Montague (1997) 'A Neural Substrate of Prediction and Reward', *Science*, 275, 1593–9.

[14] L. A. Tellez, S. Medina, W. Han, J. G. Ferreira, P. Licona-Limón, X. Ren, T. T. Lam, G. J. Schwartz, and I. E. de Araujo (2013) 'A Gut Lipid Messenger Links Excess Dietary Fat to Dopamine Deficiency', *Science*, 34, 800–2.

[15] N. D. Volkow, J. S. Fowler, G. J. Wang, and J. M. Swanson (2004) 'Dopamine in Drug Abuse and Addiction: Results from Imaging Studies and Treatment Implications', *Molecular Psychiatry*, 9, 557–69; and G. Dölen, A. Darvishzadeh, K. W. Huang, and R. C. Malenka (2013) 'Social Reward Requires Coordinated Activity of Nucleus Accumbens, Oxytocin, and Serotonin', *Nature,* 501, 179–84.

[16] C. K. De Dreu, L. L. Greer, G. A. Van Kleef, S. Shalvi, and M. J. Handgraaf (2011) 'Oxytocin Promotes Human Ethnocentrism', *Proceedings of the National Academy of Science*, 108, 1262–6.

[17] H.-J. Lee, A. H. Macbeth, J. Pagani, and W. S. Young (2009) 'Oxytocin: The Great Facilitator of Life', *Progress in Neurobiology,* 88, 127–51.

emotions are bodily responses to stimuli perceived as impinging upon human goals. The perception of these stimuli prompt the secretion of specific hormones that are delivered throughout the body to elicit targeted bodily responses. In the case of a stimulus that represents a threat to the organism, cortisol is secreted, which disrupts existing homeostatic balances and leads to bodily reactions associated with the flight/fight instinct such as running or remaining motionless, changes in respiration, changes in digestive tract operation, and even stereotypical facial expressions and body postures. Emotion, Damasio argues, is the aggregate of these individual bodily responses.[18] The perceived degree of threat elicits a corresponding degree of bodily reaction, and over time, both in terms of the experience of an individual and the experience of the human species, bodily reactions come to be associated with certain stimuli and their expected outcomes. Damasio calls this idea the somatic marker hypothesis.[19]

Emotions as somatic markers can be elicited by two different pathways. One is the "body loop" just described where some external or internal stimulus evokes bodily reactions. This elicits the emotion of fear when a dog chases one during one's morning run. The other is the "as-if body loop" whereby the brain creates cognitive events corresponding to the emotions without being evoked by external stimuli. This elicits fear through imagination when thinking about the rabid and berserk St. Bernard in the movie *Cujo*. The "as-if" loop may have originated evolutionarily because it provided helpful practice for learning bodily responses that might be needed in the future.[20]

According to Damasio, whereas emotions are embodied reactions, feelings of emotions are perceptions of the bodily changes going on during an emotion.[21] They may appear only after the emotion has begun, or run its course, or they may never appear because the emotional event never becomes conscious.

Damasio's work points to the critical role of emotions in deliberation in general and moral deliberation in particular. Emotions are an embodied

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18 Damasio, *Self Comes to Mind*, 109–10.
19 Damasio, *Self Comes to Mind*, 174–5.
20 Damasio, *Self Comes to Mind*, 102.
21 Damasio, *Self Comes to Mind*, 111.

mode of decision making. When certain stimuli are sensed that match the criteria for altering homeostatic balance, or for returning the organism to balance, then strategies of response are invoked. The threshold of perception required for evoking the response does vary among people, but these thresholds and the conditions under which the response are triggered represent decision-making processes that are common among human beings. Emotional judgments take into account incredible amounts of data, much more data than conscious/analytic procedures are able to, and evoke holistic responses to it.

## Nonconscious Cognition

Scientific conversation about the unconscious has been going on for over 100 years, but it fell into some disrepute as Sigmund Freud's thought became more critically challenged. While Freud revolutionized the understanding of human brain activity, assigning over 90 % of it to unconscious operations, his assertion that unconscious mental activity was concerned with repressed feelings such as guilt has not been vindicated by empirical research. This failing led many psychologists to reject the importance of the unconscious.

In the last few decades, however, empirical research has begun to discover evidence for dynamics of nonconsciousness in human behavior. The term *nonconscious* is now typically used in preference to *unconscious* because of the latter term's lingering connection to Freud. Although the picture of nonconsciousness that is emerging corresponds at many points to the picture suggested by Freud, the results of contemporary studies portray the conscious and nonconscious not as polarized opposites but as points on a continuum with many gradations in between.[22] This research has found that a multitude of automatic and nonconscious processes underlie the everyday functioning of human beings. There are tasks that constantly monitor body systems for cold, heat, and pain.

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[22] S. Dehaene, J. P. Changeux, L. Naccache, J. Sackur, and C. Sergent (2006) 'Conscious, Preconscious, and Subliminal Processing: A Testable Taxonomy', *Trends in Cognitive Science*, 10, 204–211.

There are systems monitoring blood sugar, respiration, digestion, and all outside the purview of consciousness. In fact, consciousness is a system that is not well suited for these tasks, partly because consciousness is rather limited in its capacity. In spite of many people claiming well-developed multitasking abilities, focused attention can generally handle only one broad activity at a time, and process no more than 10–60 discrete pieces of data in a second.[23] For example, research into cell phone use while driving an automobile indicates that those drivers are as impaired in ability as if they were over the legal blood alcohol limit.[24] In contrast, nonconscious processes can manage upwards of 11 million pieces of data every second, with the visual system accounting for about 10 million of those.[25]

These automatic and nonconscious processes are not passive. The barrage of data received is sifted and organized according to a combination of hardwired and learned routines that judge what is most relevant for the organism. Although this processing is almost always behind the scenes, it sometimes can be detected in curious effects. For example, every human has a blind spot in the field of vision of each eye. Where the optic nerve attaches to the retina, there are no visual receptors, but the brain does not register a hole in vision, but instead delivers to consciousness a complete field of vision by filling in the blank area with data from the area around it. So, if one is looking at a green wall, the point of the blind spot is portrayed as green.[26]

There is also a neural assumption that visual data should portray patterns rather than randomness, and humans have a peculiar inclination to organize visual data into faces, whether looking at clouds, mountains, or even

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[23] A. Dijksterhuis and L. F. Nordgren (2006) 'A Theory of Unconscious Thought', *Perspectives on Psychological Science*, 1, 96–7. Other researchers estimate the capacity of conscious working memory to vary from four to seven items at a time. See J. N. Rouder, R. D. Morey, N. Cowan, C. E. Zwilling, C. C. Morey, and M. S. Pratte (2008) 'An Assessment of Fixed-capacity Models of Visual Working Memory', *Proceedings of the National Academy of Science*, 105, 5975–9.

[24] D. L. Strayer and F. A. Drews (2007) 'Cell-phone-induced Driver Distraction', *Current Directions in Psychological Science*, 16, 128–31.

[25] Dijksterhuis, 'A Theory of Unconscious Thought', 97.

[26] The same filling-in occurs on a larger scale with some patients with scotomas, large blind spots produced by lesions on the retina. See V. S. Ramachandran and J. L. Gregory (1991) 'Perceptual Filling in of Artificially Induced Scotomas in Human Vision', *Nature*, 350, 699.

tortillas and grilled cheese sandwiches. This inclination arises from the dedication of several specific areas of the human brain to the identification and processing of human faces.[27]

Perhaps most importantly, these nonconscious systems can interface with consciousness to provide alarms of different sorts. One manifestation of this is the ability of some people to hear their name uttered across a crowded room full of conversation.[28] Another is the nonconscious ability to perceive fear in the faces of others.[29] All flight/fight responses fall under this category, prompting physical reactions to some stimulus before the stimulus ever comes into conscious recognition. Interestingly, the progression can work in the opposite direction as well. During phases of learning new sequential tasks, brain imaging indicates the prefrontal cortex to be highly active, but once the task is mastered, the activity is shunted off to regions of lower consciousness.[30]

## Fundamental Routines of Survival

Human beings enlist several routines for survival that are held in common with many other organisms. These routines protect the survival of the individual and the species, and have for over 200 years been referred to, somewhat facetiously, as the five Fs: fight, flight, freeze, feed, and fornicate.[31] Behind the facetiousness is a recognition of the significance of these basic drives for humans. While socialization can tweak the character of these drives, socialization cannot remove them, and under many conditions has little effect. The character of these routines has been framed across millennia of human adaptation and are suited for the

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[27] D. Y. Tsao, S. Moeller, and W. A. Freiwald (2008) 'Comparing Face Patch Systems in Macques and Humans', *Proceedings of the National Academy of Science of the United States*, 105, 19514–9.

[28] N. Wood and N. Cowan (1995) 'The Cocktail Party Phenomenon: How Frequent are Attention Shifts to One's Name in an Irrelevant Auditory Channel?' *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 21, 255–60.

[29] B. de Gelder, J. Vroomen, G. Pourtois, and L. Weiskrantz (1999) 'Non-conscious Recognition of Affect in the Striate Cortex', *NeuroReport*, 10, 3759–63.

[30] J. Fuster (2008) *The Prefrontal Cortex*, 4th edn (Burlington, MA: Elsevier), 344.

[31] D. Hartley (1966) *Observations on Man: His Frame, His Duty, His Expectations (1749)*, Vol. 1 (Gainesville, FL: Scholars' Facsimiles & Reprints), 14.

primitive situations that humans lived under for that time, but are less well suited for many contemporary social situations. For the purposes of my discussion, I will alter the number and phrasing of the five Fs to flight/fight/freeze, nutritional ingestion, and reproduction.

## Flight/Fight/Freeze Routines

The flight/freeze/fight routines are about the physical survival of individuals and their offspring. These involve very fast assessments, often under 300 milliseconds, of potential danger and calculations of whether there is a real threat and whether one needs to run or stay still or fight in the face of that threat.[32] These instincts are shaped by the millennia in which humans lived under conditions of impending threat from enemies or natural predators.[33] Quick threat assessment was crucial to survival, and if the threat was large and very numerous, then the inclination was to run, because the general pattern operating in terms of natural threats is that whatever is large is more powerful and more dangerous. Of course, particularly for creatures that aren't as fast as the predators who pursue them, an alternative strategy is to make oneself appear larger. This is seen in the tendency of cats to arch their backs and ostriches stretching out their wings in the face of a potential attacker. However, staying still is sometimes the best strategy, because the predator may not sense the prey and pass by without attacking.

But sometimes, if the predator is smaller or of equal size or if there is nowhere to run, fighting is the best strategy. Violence has been a long-standing strategy of humans, not just against predators but against one another, and recorded human history is largely built around human conflicts. On ancient battlefields, the larger warrior was in most cases the superior warrior, and so if one was choosing with whom to align oneself,

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[32] M. I. Posner (2005) 'Timing the Brain: Mental Chronometry as a Tool in Neuroscience', *PLoS Biology*, 3, e51.

[33] D. E. Lieberman, D. M. Bramble, D. A. Raichlen, and J. J. Shea (2009) 'Brains, Brawn, and the Evolution of Human Endurance Running Capabilities', in F. E. Grine, et al. (eds) *The First Humans-Origin and Early Evolution of the Genus Homo: Contributions from the Third Stony Brook Human Evolution Symposium and Workshop October 3–7, 2006* (Dordrecht: Springer Netherlands), 76–92.

the larger warrior was whom one wanted. Although modern societies are not explicitly warrior societies, this preference remains. In US football and basketball, size is a determining factor of success, with the preponderance of professional athletes being much taller and heavier than the general population. American presidents in the last 50 years tend to be significantly taller than average height, with the taller of two candidates tending to win the election.[34] Other studies find a correlation between the height of males at the age of 16 and lifelong earnings, with taller males making 11 % more than shorter ones.[35] The average American CEO is six feet tall, which is three inches taller than the average American male, and over 30 % of American CEOs are over 6' 2", although only 3.9 % of all American men are over 6' 2".[36]

## Nutritional Ingestion

While all organisms need energy to fuel survival, not all substances in nature are edible for all organisms nor are all substances of the same nutritional value. A critical skill is to avoid ingesting toxic substances and eat those highest in nutritional value. The faculty of taste, intertwined with and dependent on the faculty of smell, is highly developed to serve this purpose. When things go awry is when there is either the absence of some kind of necessary nutrient, or there is an overabundance of some desirable nutrient that is usually in short supply. In the former case, there is starvation or vitamin deficiency. In the latter case, organisms may gorge themselves on the usually rare substance with disastrous effects to their health.

Prior to modern society, most humans had food access challenges. Some of these still exist in many parts of the world, and entail difficulty accessing sufficient amounts of vitamins, calories, minerals, or water to promote survival. Many ancient peoples were nomadic, and even

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[34] G. Stulp, A. P. Buunk, S. Verhulst, and T. V. Pollet (2013) 'Tall Claims? Sense and Nonsense About the Importance of Height of US Presidents', *The Leadership Quarterly*, 24, 159–71.

[35] N. Persico, A. Postelwaite, and D. Silverman (2004) 'The Effect of Adolescent Experience on Labor Market Outcomes: The Case of Height', *Journal of Political Economy*, 112, 1029.

[36] M. Gladwell (2007) *Blink: The Power of Thinking Without Thinking* (New York: Little, Brown, & Company), 86–7.

once more or less permanent communities began being formed, these individuals were still very active because persistent effort was required to obtain and preserve food. Many nutritional substances such as salt, fat, and sugar were usually in short supply, and humans developed hardwired preferences for these, which ensured that they were consumed when encountered.

Many modern societies have moved beyond these primitive nutritional settings. Not much energy is required to obtain, preserve, or prepare food, but the predilection for salt, fat, and sugar remains, and these substances are now widely and cheaply available. The result has created widespread health problems in industrialized nations. A physique suited for the work required to obtain food and water in difficult environments now sits most of the day, and ingests large quantities of salt, fat, and sugar as though they would disappear tomorrow. The result is obesity, high blood pressure, diabetes, and poor maintenance of joints and muscles.[37]

Nutrition issues are also, of course, brain issues. The human body's reward systems are aligned with these ancient preferences for salt, fat, and sugar, and research indicates that these foods increase the presence of dopamine in certain brain circuits. This explains the effect of so called "comfort food," and also suggests that some foods, such as "fast food," have addictive qualities similar to addictive drugs.[38]

## Reproduction

No sterile species exist. Reproduction may be asexual, whereby individuals are able to reproduce on their own, or sexual, whereby individuals of two different sexes combine to produce offspring. The majority of animal species reproduce sexually, and the reason generally offered is that sexual reproduction increases genetic variation, which promotes the fitness of a species. But if there were no hardwired drives to reproduce, it would seem that no

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[37] G. J. Armelagos (2010) 'The Omnivore's Dilemma: The Evolution of the Brain and the Determinants of Food Choice', *Journal of Anthropological Research*, 66, 162–86.

[38] N. D. Volkow, G. J. Wang, J. S. Fowler, and F. Telang (2008) 'Overlapping Neuronal Circuits in Addiction and Obesity: Evidence of Systems Pathology', *Philosophical Transactions of the Royal Society: Biological Science*, 363, 3191–200.

species would do so. Sexual reproduction holds innate hazards. For all but the most social of species, mating and parenting requires the expenditure of energy and time that could be used for the promotion of individual survival. Birthing often holds grave physical dangers for females, particularly young ones, and many diseases are spread in the process of mating. And in species where males compete physically for access to females, the smaller and younger male literally risks death when attempting to mate.

Many human beings want to think that the biological drive to reproduce and raise offspring is easily managed and that it does not overtly affect their behavior, but reproduction is as powerful of a dynamic for humans as any species. This is demonstrated not only by the incredible amounts of time and resources humans spend courting potential mates, maintaining relationships with current mates, thinking about sex, having sex, and caring for children, but also by how these motives color virtually the whole array of human behaviors.

## Mate Selection

A harsh reality of biological existence is that organisms are not equal. Within every species some individuals are more powerful, swifter, more agile, more fertile, better parents, live longer, and have better immune systems. In short, some individuals have better genes and better health. An organism with better genes and better health propagates higher quality offspring, and this fact explains mating selection criteria and mating strategies. The mating rituals of many species appear odd to humans, but they are taken by members of that species to be signs of superior fitness. There is the strutting dance of the ptarmigan, the elaborate building projects of the male bower bird, and the expansive inflation of elastic nasal cavities by the hooded seal. Most all of these are performed by the male, and the female stands as the judge of quality, picking the most distinguished suitor.

The biological differences between males and females yield different mating strategies. In many mammalian species, a female can produce only one offspring at a time. Yet, in most all species, males can mate with multiple females. This is part of an explanation of the pickiness of females across most species. The strategy for the female is to pick the best male possible, because that choice is fairly individual and final for the

season or for life. If she picks well, then her genes are passed along into healthy offspring likely to survive and flourish. If she picks poorly, then her offspring, her genes, and her poor criteria of choice will not survive. Because males can mate with many females, they are less picky and have a different strategy. This strategy is to mate with as many high-quality females as possible, which creates greater statistical probabilities that their genes will continue on into future generations.

## Human Assessments of Beauty

Many philosophers from the ancient Greeks up to the present have tried to express beauty in mathematical and rational terms, such as in the Golden Ratio, which describes a beautiful human face in terms of mathematical proportions. But what humans experience as beauty has much more to do with genetic fitness than mathematics, and the criteria for judgments of beauty is never so straightforward as an equation.

Physical responses to beauty in another person indicate that there is a substantial attraction to the physical characteristics of the other person, but when called upon to explain the significance of those items, humans are usually at a loss. Men are unable to explain what is it about the high cheekbones, long legs, hourglass shape, blonde hair, bright eyes, full lips, and white teeth of a woman that makes her alluring. Women are unable to say why it is the height, angular features, and wedged shaped body of a man that makes him attractive.

The criteria of human beauty have the same purpose as mating rituals in other species. Human beauty is a holistic judgment of the genetic fitness of another person. Markers of physical health, energy, strength, agility, a strong immune system, and fertility are all important, but the markers are somewhat different for the different sexes. Many will object that beauty is a culturally or ethnically relative thing, and while there are clearly variations in body type and conformation between different races and somewhat different valuations of attractiveness according to culture, there is a high correlation across races and cultures about what a beautiful male or female is.[39] Mathematics may

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[39] J. H. Langlois, L. Kalakanis, A. J. Rubenstein, A. Larson, M. HaUam, and M. Smoot (2000) 'Maxims or Myths of Beauty? A Meta-Analytic and Theoretical Review', *Psychological Bulletin*, 126, 404.

provide some description, but it is ex post facto in influence. For example, symmetry in body conformation and facial features is a persistent element of physical attractiveness. This is not because the human inclination is toward mathematical balance but because asymmetric body composition is a sign of genetic disarray.[40]

## Sex Differences in Human Mating and Selection

A basic assumption of evolutionary psychology is that behaviors never develop in a vacuum. All behaviors are the result of interactions between physical structures, genetic changes, and the environment. Different biology yields different behaviors, and this holds for human sexuality. In many parts of contemporary Western social and political mentality, it is controversial to emphasize the biological differences between males and females. It is even more controversial to suggest that the different biology yields different sorts of behaviors, but both common experience and empirical research point to these patterns.

Women have a greater biological commitment to reproduction than men do. Nine months of pregnancy involves significant bodily changes, discomfort, and potential health and physical danger. The developing fetus is literally wired into the mother's body. And until recently in first-world countries, and elsewhere still, unless a woman was socially attached to a male who could provide shelter, food, and protection, both her and her children were in jeopardy. In consequence, females came to be picky about their mates. That pickiness covers two domains.

First, there are selection criteria regarding genetic fitness and physical ability to provide and protect. Few women look for mates who are shorter than them, and women often prefer men who are considerably taller. Physical fitness, muscle mass, and an overall assessment of "maleness" are important because the bigger, more agile, and more fit male is the one with high-quality genes and the better hunter and protector.[41]

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[40] B. C. Jones, A. C. Little, I. S. Penton-Voak, B. P. Tiddeman, D. M. Burt, and D. I. Perret (2001) 'Facial Symmetry and Judgments of Apparent Health: Support for a "Good Genes" Explanation of the Attractiveness–Symmetry Relationship', *Evolution and Human Behavior*, 22, 417–29.

[41] D. A. Frederick and M. G. Haselton (2011) 'Why is Masculinity Sexy? Tests of the Fitness Indicator Hypothesis', *Personality and Social Psychology Bulletin*, 33, 1167–83.

Second, there are criteria estimating relationship commitment. The genes of a superior male are of no use if he abandons his mate and doesn't support the raising of children, and so females look for signs of commitment on the part of the male. Rounded physical features and more feminine voices are interpreted as signs of greater socialization, caring, and cooperation. Investments of time and costly resources into the relationship are crucial signs of sincere commitment. There are clearly trade-offs between the markers for genetic fitness and parental commitment, and there is evidence that females' preferences may vary with menstrual cycle.[42]

For male biology, mating requires less of a commitment. Human males can mate with multiple women in relatively short periods of time and are not physically encumbered by the results of mating. This makes possible the same sort of male mating strategy found in other species—procreate with as many genetically attractive females as possible. As in other species, this strategy can have positive results for the species if the males with the best genetic fitness and most resources maximize the proliferation of their genes. There is a boundary condition, however, which will be discussed more in the next section. Human offspring are very high maintenance, and until recently a human child who did not have both a mother and father, and perhaps a network of other relatives, to assist in its upbringing was likely to perish. In consequence, males who inseminate females without inhibition and do not offer support for the upbringing of offspring are not helping the species but may be damaging it by siring offspring whose chances of dying are significant.

While the basic sexual response of both males and females may have little consciously to do with a desire for offspring, even males, when they have their wits about them, do desire offspring to carry on their genetic identity. There is a predicament here, however, which is uniquely that of males. Until the advent of assisted reproductive technologies, no one ever had a doubt as to who the mother of a newborn child was. The identity of the father, however, could be very much in doubt. Prior to the development of paternity tests, there was no way for a father to be 100 %

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[42] D. R. Feinberg, B. C. Jones, M. J. Law Smith, F. R. Moore, L. M. DeBruine, R. E. Cornwell, S. G. Hillier, and D. I. Perrett (2006) 'Menstrual Cycle, Trait Estrogen Level, and Masculinity Preferences in the Human Voice', *Hormones and Behavior*, 49, 215–22; and D. M. Buss and D. P. Schmitt (1993) 'Sexual Strategies Theory: An Evolutionary Perspective on Human Mating', *Psychological Review*, 100, 204–32.

sure that a child was his. A male might worry that his resources could go toward the raising of children that were not really his. Some studies indicate that mothers, near relatives, and friends much more frequently remark about how much a newborn resembles his/her father than his/her mother. This is taken to be an encouragement to the father that the child is his and that it is worth his while to support it to adulthood.[43]

These different biological orientations of males and females can lead to different mating inclinations and different emotions in regard to being cheated on. In a 1989 study of heterosexual college students, males and females were approached by an average looking stranger of the opposite sex who after a short conversation suggested going to his/her nearby apartment for sex. More than 70 % of the males agreed, while none of the females agreed to do so.[44] The different responses clearly denote different mating strategies. Also, while both males and females may cheat on their sexual partners, they have different types of attitudes about being cheated on. When men are cheated on, they are disturbed if there is a possible emotional connection between their mate and the other person, but they are more bothered by the act of sex itself. When women are cheated on, they are bothered by the sex act, but they are even more bothered if there are signs of an emotional connection. These different responses correlate to ancient biological concerns. Males are concerned about expending resources on children who are not theirs, and so if a woman has sex with someone else, then during the next 9 months, any children born will be of suspicious paternity. Females, on the other hand, have historically been concerned about abandonment, and while they are bothered by the act of sex, they are more bothered if there is an emotional attachment that may lead to the male leaving.[45]

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[43] A. Alvergne, C. Faurie, and M. Raymond (2007) 'Differential Facial Resemblance of Young Children to Their Parents: Who Do Children Look Like More?' *Evolution and Human Behavior*, 28, 142.

[44] R. D. Clarke and E. Hatfield (1989) 'Gender Differences in Reception to Sexual Offers', *Journal of Psychology and Human Sexuality*, 2, 39–55.

[45] B. S. Kuhle (2011) 'Did You Have Sex with Him? Do You Love Her? An In Vivo Test of Sex Differences in Jealous Interrogations', *Personality and Individual Differences*, 51, 1044–7.

## Nurturing Children

No other organism is as labor intensive to raise as a human child. Without intensive care, training, and oversight during at least a decade and a half of their first years, children are unable to survive. In the USA this care requirement has ballooned in recent decades with a 2013 study by the US Department of Agriculture indicating that the cost for raising the average child to the age of 18 is about $250,000.[46] Fortunately, the inclinations to care for children are as powerful as the demands of raising them. The ability of oxytocin to bond a mother to a child, and, perhaps to a lesser extent fathers to their children, is strong enough to motivate parents to shoulder the immense responsibilities involved. The intensity of this parental motivation is often expressed by parents when they say that "their children are their life."

In primitive human settings, the high maintenance requirements of human children demanded the involvement of both parents to raise the child. Interestingly, even in the modern industrialized era, it is estimated that over 50 hours a week are required to maintain a household with children. The advent of time-saving and laborsaving mechanisms such as running water and washing machines have reduced the amount of strenuous labor required, but the hours saved have been replaced by the hours required to achieve higher standards of hygiene.[47] In the twentieth century as mothers went into the workforce and devoted less time to housework and childcare, fathers made up the difference, and the number of hours required has remained at 50.[48]

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[46] Center for Nutrition Policy and Promotion, U.S. Department of Agriculture (2013) *Expenditures on Children by Families 2012* (Washington, DC: Center for Nutrition Policy and Promotion), 21.

[47] S. Mintz, 'Housework in Late 19th Century America', http://www.digitalhistory.uh.edu/, date accessed 25 July 2015.

[48] L. Gorman (2008) 'Hours Spent in Homemaking Have Changed Little This Century', http://www.nber.org/digest/oct08/w13985.html, date accessed 26 July 2015.

# Embodiment and Ethics

Many ordinary folk and intellectuals in the contemporary West want to think that biological elements do not significantly affect human behavior or identity,[49] but it does. It's not that there is a portion of the human psyche that can be referred to as the so-called primitive brain, because the interconnectivity and cross specialization of various brain structures make largely moot that kind of simplification. However, ancient biological predilections pervade human behavior and cognition and must be taken into account when considering human values and moral deliberation.

A long-standing philosophical objection to utilizing references to biology or the natural world when talking about normative ethics is that it involves the so-called naturalistic fallacy; that is, claiming that something is good just because it occurs in nature. This problem is also sometimes addressed in concert with Hume's law, that one cannot

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[49] This pervasive attitude against biological factors demonstrates a curious intersection of diverse social and political perspectives. On the one hand, popular conceptions of religion tend to embrace a body–soul dualism that downplays the importance of biological identity. This is most noticeable in the persistent belief, not just in Western societies but across the world, that human existence continues after bodily death. See CBS News Poll: Americans' Views on Death (27 April 2014), http://www.cbsnews.com/news/cbs-news-poll-americans-views-on-death/, date accessed 19 September 2015; P. L. Harris (2011) 'Conflicting Thoughts about Death', *Human Development* 54, 160–8; J. M. Bering (2006) 'The Folk Psychology of Souls', *Behavioral and Brain Sciences*, 29, 453–98; and C. H. Legare, E. M. Evans, K. S. Rosengren, and P. L. Harris (2012) 'The Coexistence of Natural and Supernatural Explanations across Cultures and Development', *Child Development*, 83, 779–93. Of course, such beliefs do not inherently require a commitment to body–soul dualism, but in the thought of the contemporary West such dualism is prominent not just among common folk but also in cognitive science and philosophy of the mind. See M. Forstmann and P. Burgmer (2015) 'Adults Are Intuitive Mind-Body Dualists', *Journal of Experimental Psychology: General*, 144, 222–35; and A. Demertzi, C. Liew, D. Ledoux, et al. (2009) 'Dualism Persists in the Science of Mind', *Disorders of Consciousness*, 1157, 1–9. On the other hand, the progressive political preferences of many social scientists, and many intellectuals in general, prompt them to distance themselves from consideration of the role of human biology in behavior and identity because they fear such efforts will promote racism, sexism, and other forms of discrimination that democratic societies are expressly trying to avoid. See A. Panofsky (2014) *Misbehaving Science: Controversy and the Development of Behavior Genetics* (Chicago: University of Chicago Press); J. L. Duarte, J. T. Crawford, C. Stern, et al. (2014) 'Political Diversity Will Improve Social Psychological Science', *Behavioral and Brain Sciences*, 18, 1–54; J. Haidt (2 November 2011) 'The Bright Future of Post-Partisan Social Psychology', http://edge.org/conversation/the-bright-future-of-post-partisan-social-psychology, date accessed 19 September 2015; and L. S. Gottfredson (2005) 'Suppressing Intelligence Research: Hurting Those We Intend to Help', in R. H. Wright and N. A. Cummings (eds) *Destructive Trends in Mental Health: The Well-Intentioned Path to Harm* (New York: Routledge), 155–86.

derive an "ought" from an "is." On the one hand, these contentions underscore an important point of modern scientific theory. There are no "oughts" in nature. Natural processes hold no necessity of existence or shape. Individual organisms often die gruesome deaths; whole species have gone extinct. On the other hand, however, the problems of the naturalistic fallacy are problems posed by analytic categories of human reason, and as such, they may have no direct relevance to natural systems. They have a bearing only if one believes that there is vital affinity between human rational constructs and the way that the universe works, but there is no compelling evidence to use only that assumption. The earth and human biology predate Western notions of human rationality, and just as one can say that nature knows no "oughts," one can also say that nature is not bound to the necessities posed by any version of human rationality. This means that the naturalistic fallacy does not end the conversation, and that if one is willing to think outside analytic parameters, then nature may have much to do with human ethics.

Even biologists sometimes talk about animals and insects as though they have rational intentions when they display behaviors that enhance their chances of survival, but such behavior is intentional only in an ex post facto way. Genetic structures and behaviors that contribute to survival are the ones that have persisted because they made possible the survival of the organisms who developed them. Organisms whose physical processes and behaviors did not sufficiently match the requirements of the environment did not survive. This creates a unique tension for human beings. On the one hand, like the behavior of other creatures, human behavior has a high degree of biological determinism. No person chooses his or her genes or is able to alter them by means of individual volition. Given that about 50 % of the variation found among many human behavioral traits is determined by genetic inheritance,[50] this may significantly qualify the free will of human beings, exposing the oversimplifications involved in the modern meaning of terms such as *negligence*, *culpability*, *cowardice*, and *heroism*.

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[50] R. F. Krueger and W. Johnson (2008) 'Behavioral Genetics and Personality: A New Look at the Integration of Nature and Nurture', in O. P. John, R. W. Robins, and L. A. Pervin (eds) *Handbook of Personality: Theory and Research* (New York: The Guilford Press), 287–310; and R. F. Krueger, S. South, W. Johnson, and W. Lacono (2008) 'The Heritability of Personality is not Always 50%: Gene-Environment Interactions and Correlations between Personality and Parenting', *Journal of Personality*, 76, 1485–521.

On the other hand, humans are clearly not determined to the same extent as other organisms and can imagine and choose behaviors other than hardwired ones. This tension between biological determinism and free will has almost always been resolved in the modern West by an emphasis on conscious choice and a denial of any significant role for biology in shaping behavior, but this involves two oversights. First, it discounts the extent to which human behavior is heavily shaped by forces outside human conscious purview, as noted above. Second, it discounts the ancient wisdom found in these inclinations of instinct. These inclinations have the sense of a practical "ought" in that they are avenues to survival, the most basic of human values. These inclinations tell us that if one wishes to survive, as an individual, family group, or species, then one ought to run at loud noises, fight when attacked, eat when delicious food is encountered, and mate when superior mates are available.

Moreover, human perception of value is most fundamentally a perception of body states; that is, the detection of changes or stressors in the body prompted either from within or outside the body. The data available to the human body covers a broad spectrum,[51] and many of these data sets are not amenable to conscious or verbal representation. The awareness of these body states comes into consciousness as feelings, which are judged by valence, as positive or negative, and intensity, from low to high. Those body states that communicate dangers to survival are negative in emotional valence, and those that communicate potential enhancements to survival are communicated as positive in emotional valence. These assessments are the products of a vast array of cognitive filters and prioritizing routines driven by biological predisposition, and although they are incredibly fast and nonconscious, their operations are fittingly described as moral deliberation because they are weighing data and making choices on the basis of ancient human biological values.

These values may be severely at odds with modern social values. For example, the inclination to protect the survival of one's family may run diametric to the virtues necessary to maintain a large society. I frequently pose a scenario to my students asking them to imagine that they are

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[51] C. Allen (2014) 'Why Intelligence Requires both Body and Brain', *Footnote*[1], (27 January 2014), http://footnote1.com/why-intelligence-requires-both-body-and-brain/

at the halfway point on a long bridge. Their own young child is alone and unattended on one end of the bridge, and the child of a stranger is alone and unattended on the other end. At the same moment, the parent notices a pack of wild dogs heading toward each child, and the parent must choose between saving the life of his or her own child or the life of the child of a stranger. The students all pick saving the life of their own child. I then progressively increase the number of children of strangers who are in danger, but leave the number of their own children at one. I frequently have students, particularly those who currently have children, who claim it doesn't matter how many children are placed in jeopardy on the other side of the bridge; as parents they feel an unqualified obligation toward their own child, which will trump any obligation to any number of children who are not theirs. Embodied inclinations are powerful, automatic, and self-verifying such that one has the perception at the core of one's being about what the right action is, and no abstract argument can overcome this embodied judgment.[52]

Of course, the strengths of embodied deliberation are also the source of its problems. As a mode of operation that is largely nonconscious, embodied deliberation and judgment can operate outside conscious awareness unhindered by its laws or mores. Particularly when one is tired, weak, sick, or sexually aroused, these more primitive and basic motivations may come into control. In such states, people can perform acts that they would never perform otherwise. Moreover, even when one appears fully in control, these nonconscious forces are still operating. There is evidence that all choices, perhaps moral ones in particular, are arrived at by largely nonconscious means, and only after the choice is framed does the conscious mind construct various arguments to reinforce the already formed conclusion.[53]

Embodied values are communicated and assessed through the language of body states and emotions, and this creates problems of communication that impact moral deliberation in two ways. First, the awareness of a

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[52] See Martha Nussbaum's discussion of the Stoic notion of cataleptic assent in M. Nussbaum (1990), *Love's Knowledge: Essays on Philosophy and Literature* (New York: Oxford University Press), 265.

[53] J. Haidt (2001) 'The Emotional Dog and Its Rational Tail: A Social Intuitionist Approach to Moral Judgment', *Psychological Review*, 108, 814. Much more will be said about this in later chapters.

challenge to one's values arises through an awareness of one's own body states and what they are communicating. What body states appear in awareness, however, is a product of many filtering processes, and important body states may not be noticed. Or, conflicting body states, such as conflicting emotions, may appear in awareness and require adjudication. Such adjudication is usually not simple, because the emotions each elicit a qualitatively different sensibility and different magnitude. There are instinctual defaults for how to manage these conflicts, but they may represent ancient strategies that no longer fit modern social contexts. Second, one must find ways to communicate these body sensibilities to others. The default means of communication is nonverbal, particularly with facial expressions.[54] And while body language can convey massive amounts of information with nuanced subtlety, it is not well suited for comparing and examining differences in value perception between people. For this verbal communication is needed, but the problem with verbal language is that it almost always reduces the rich and lively perception of values as body states to cold and impersonal concepts.

The problems of embodiment for ethics, while large, are not insurmountable. A recognition of embodiment as an unavoidable condition with significant resources is the path around its limitations. Its ancient inclinations can help deliver us from an artificial and irrelevant ethic produced out of fictions unrelated to biological existence. What is required is an orientation that respects both the power and shortcomings of embodiment and marries its strengths to the resources of conscious and analytic forms of moral deliberation.

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[54] V. N. Giri (2009) 'Nonverbal Communication Theories', in S. W. Littlejohn and K. A. Foss (eds) *The Encyclopedia of Communication Theory* (Los Angeles, CA: Sage Publications, Inc.), 690–4.

# 3

# Human Sociability and Moral Deliberation

The relationship between individuals and communities is problematic in the contemporary West. On one hand, there is a pervasive conviction that individuals should be autonomous and separate from what is considered the inhibiting influence of social groups. This conviction has helped shape an image of moral deliberation as fundamentally individual and autonomous. On the other hand, there is a quasi-communitarian orientation, which, while emphasizing the importance of institutions and communities, does so because they are necessary for individuals to reach their potential.[1] Moral deliberation is still primarily an individual act, but social considerations and discussions can support that act. Both of these Western approaches are in contrast to many found in East Asia, and to some extent within all Eastern cultures. These emphasize the interdependence of individuals in community. Identity and responsibility are not found in isolation from the community, but by intrinsic relation to it. These Eastern perspectives

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[1] The first approach is critiqued, and then the second is represented in R. N. Bellah, R. N. Madsen, W. M. Sullivan, A. Swidler, and S. M. Tipton (1992) *The Good Society* (New York: Vintage Books), 2–13. The second can also be seen in the rise of the social gospel movement and modern social ethics. See G. Dorrien (2011) *Social Ethics in the Making: Interpreting an American Tradition* (Malden, MA: Wiley-Blackwell), 1. It is also represented in J. Rawls (1971) *A Theory of Justice* (Cambridge, MA: Belknap Press of the Harvard University Press), 3.

provide an important reminder to the West that even though the West tends to play down the role of communities, moral deliberation is always inherently social, because humans are inherently social.

## The Ability to Be Social

Human beings are arguably the most social of all creatures. While sometimes compared to bees and herd animals, humans differ from most animals in their willingness to be highly cooperative with others who are not their genetic relatives. Some of this difference is biological hardwiring. Humans have much larger brains relative to body size than most other mammals, and this larger size brain may make possible the immense amount of processing required for social interactions.[2] From birth the propensities for and necessities of social interaction are evident. Crying babies immediately stop crying when held and carried.[3] Infants can recognize facial expressions emoting fear, sadness, and joy,[4] and can mimic many of them.[5] Without proper nutrition and social interaction before the age of 6 months, children suffer significant cognitive and social impairment lasting into adolescence and beyond.[6]

Communication makes social cooperation possible, and human beings surpass all other creatures in their ability to communicate. Human infants

[2] R. I. Dunbar (2009) 'The Social Brain Hypothesis and Its Implications for Social Evolution', *Annals of Human Biology, 36*, 562–72.

[3] G. Esposito, S. Yoshida, R. Ohnishi, et al. (2013) 'Infant Calming Responses during Maternal Carrying in Humans and Mice', *Current Biology 23*, 739–45.

[4] V. N. Giri (2009) 'Nonverbal Communication Theories', in S. W. Littlejohn and K. A. Foss (eds) *The Encyclopedia of Communication Theory* (Los Angeles, CA: Sage Publications, Inc.), 690–4; and T. Grossman and M. H. Johnson (2007) 'The Development of the Social Brain in Human Infancy', *European Journal of Neuroscience, 25*, 909–19.

[5] T. Hutman and M. Dapretto (2009) 'The Emergence of Empathy during Infancy', *Cognition, Brain, Behavior: An Interdisciplinary Journal, 13*, 369.

[6] C. Beckett, B. Maughan, M. Rutter, et al. (2006) 'Do the Effects of Early Severe Deprivation on Cognition Persist into Early Adolescence? Findings from the English and Romanian Adoptees Study', *Child Development, 77*, 696–711. Experiments that socially isolate infant rhesus monkeys for months after birth indicate severe abnormalities in subsequent behavior and sociability. H. F. Harlow and S. J. Suomi (1971) 'Social Recovery by Isolation-Reared Monkeys', *Proceedings of the National Academy of Sciences of the United States of America,* 68, 1534–8. Similar effects can be expected among humans.

are predisposed to learn oral language, and with just moderate exposure children can learn to speak any human language with fluency, although this ability significantly begins fading around the age of 10.[7] But the bulk of human communication proceeds by nonverbal signs enabled by posture, body motion, body distance, gestures, touching, voice inflection, and facial expressions. These signs not only provide contextual meaning for verbal communication, but also provide information in their own right.[8] For example, nonverbal cues are critical in determining who can be trusted and who can't. Unlike most other creatures, humans are able to mask their emotions, and some are very good at lying, but humans are also gifted at detecting lies. Smiling and looking directly into someone's eyes are signs of cooperation and truthfulness, and the difference between an authentic and fake smile, while difficult to describe, can be detected by any human of normal social development at a glance.[9]

A specific set of human emotions contribute to social grouping. Basic human emotions such as anger are bodily reactions to efforts to thwart the interests of an individual. These basic emotions can also be experienced when the interests of a group that the individual belongs to are challenged.[10] But there are also a set of emotions that are specifically labeled social emotions because they operate only in conjunction with group membership.[11] These emotions, like basic emotions, evoke senses of pleasure or pain that are of the same order as directly stimulated pleasure or pain.[12] They communicate the perception that a relevant social group is pleased or displeased with one's actions through body states felt as shame, guilt, or embarrassment. Or, they may communicate

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[7] K. L. Sakai, (2005) 'Language Acquisition and Brain Development', *Science, 310*, 815–9.

[8] Giri, 'Nonverbal Communication Theories', 690–94; and Grossman, 'The Development of the Social Brain', 909–19.

[9] D. DeSteno, C. Brazeal, R. H. Frank, et al. (2012) 'Detecting the Trustworthiness of Novel Partners in Economic Exchange', *Psychological Science, 23*, 1549–56.

[10] S. Hareli and B. Parkinson (2008) 'What's Social about Social Emotions?' *Journal for the Theory of Social Behavior, 38*, 131–56.

[11] J. Zaki and J. P. Mitchell (2013) 'Intuitive Prosociality', *Current Directions in Psychological Science*, 22, 466–70; and D. DeSteno (2009) 'Social Emotions and Intertemporal Choice: "Hot" Mechanisms for Building Social and Economic Capital', *Current Directions in Psychological Science, 18*, 280–4.

[12] G. MacDonald and M. R. Leary (2005) 'Why Does Social Exclusion Hurt? The Relationship Between Social and Physical Pain', *Psychological Bulletin, 131*, 202–23.

that one has a particular social obligation, such as an obligation to help a person in need, through body states interpreted as empathy or sympathy.[13] Empathy is a sense of identity with the positive or negative emotional state of another person that is so intense that one feels that one is experiencing the same emotions as the other person. Sympathy is concern about the physical or psychological condition of another person. The intensity of empathy and sympathy vary according to both the identity and condition of the other person or group. If cooperation is expected from the other party, then high levels of empathy and concern are evoked, but if competition or aggression is expected, then not only is concern not evoked, but competition and aggression are.[14] Generally, there is greater identification with and concern for those who are similar to oneself, either in terms of life history, geography, or culture.[15] The extent to which the other party is perceived as vulnerable may be determinative for the presence or power of the emotions. More sympathetic concern is demonstrated for children, puppies, and even adult dogs, than for human adults.[16] There is also a greater concern for the plight of women than men.[17] Concern also varies according to the identity of the person doing the caring. More women than men tend to experience disgust in regard to

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[13] Giri, 'Nonverbal Communication Theories', 690–94; and Grossman, 'The Development of the Social Brain', 909–19.

[14] J. T. Lanzetta and B. G. Englis (1989) 'Expectations of Cooperation and Competition and Their Effects on Observers' Vicarious Emotional Responses', *Journal of Personality and Social Psychology,* 56, 552.

[15] G. Loewenstein and D. A. Small (2007) 'The Scarecrow and the Tin Man: The Vicissitudes of Human Sympathy and Caring', *Review of General Psychology,* 11, 112–26.

[16] J. Levin and A. Arluke (10 August 2013) 'Are People More Disturbed by Animal or Human Suffering?: The Influence of Species and Age', Paper presented at the annual meeting of the American Sociological Association Annual Meeting, Hilton New York and Sheraton New York, New York, NY, http://citation.allacademic.com/meta/p652313_index.html date accessed 5 September 2014.

[17] Interestingly, there is little psychosocial research on this question, but R. C. Carpenter's 2005 article 'Women, Children, and Other Vulnerable Groups: Gender, Strategic Frames, and the Protection of Civilians as a Transnational Issue', *International Studies Quarterly,* 49, 295–334, argues that transnational law and efforts to protect civilians emphasize protection of groups, including women, who are deemed to be more vulnerable than adult males, who themselves may be noncombatants, infirm, or parents of dependent children. The public concern, particularly in the USA, over the 2003 injury and capture of Jessica Lynch, a US Army soldier, by the Iraqi Army was highly disproportionate to the concern over other military personnel, especially males, who were killed, injured, or captured in the same incident. Lowenstein and Small, 'The Scarecrow and the Tin Man', 118, n. 7, and 123.

the mistreatment of animals.[18] Political liberals tend to emphasize fairness and care of individuals, and political conservatives tend to emphasize loyalty and authority within groups,[19] and are more easily disgusted.[20]

## The Dynamics of Human Socialization

Two types of socialization are at work in human groups. Primary socialization teaches social norms—the language, behaviors, and values of a particular group, and the individual's place within the group. These traditionally have entailed religious, political, ethnic, and regional values. When people are young, their social identities are most malleable. Parents and extended family members model behavior and provide feedback regarding the acceptability or unacceptability of the child's behavior in particular situations.[21] Out of this emerges an identification with the social group to which the family belongs.[22] Secondary socialization focuses on the development of the knowledge and skills needed to function in a profession, culture, or other subgroup lying within one's major identifying group. In the contemporary West, as extended family, religious institutions, and even the nuclear family have become more disconnected and fractured, other institutions such as public education have attempted to take on more of a primary role in socialization. Likewise, peer groups have come to exercise increasing socialization power, particularly in regard to sex role identity and practices, and there is evidence that peer groups exert as much influence on personal identity as one's genetic profile.[23]

Resocialization occurs when a person's initial set of values and behaviors

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[18] H. A. Herzog and L. L. Golden (2009) 'Moral Emotions and Social Activism: The Case of Animal Rights', *Journal of Social Issues,* 65, 493.

[19] J. Haidt (2012) *The Righteous Mind: Why Good People are Divided by Politics and Religion* (New York: Pantheon Books), 161.

[20] Y. Inbar, D. A. Pizarro, and P. Bloom (2009) 'Conservatives Are More Easily Disgusted than Liberals', *Cognition and Emotion,* 23, 714–725.

[21] N. Quinn (2005) 'Universals of Child-Rearing', *Anthropological Theory,* 5, 477–516.

[22] Y. Dunham, E. E. Chen, and M. R. Banaji (2013) 'Two Signatures of Implicit Intergroup Attitudes: Development Invariance and Early Enculturation', *Psychological Science,* 24, 860–8.

[23] V. Gecas (2000) 'Socialization', in E. F. Borgatta and R. J. V. Montgomery (eds) *Encyclopedia of Sociology*, Vol. 4. 2nd edn (New York: MacMillan Reference, USA), 2855–64.

are replaced by those of another group. In regard to secondary socialization, resocialization appears common. For example, when one changes careers, one must learn new jargon, skills, and habits of interaction. The resocialization of primary social norms is more difficult and often temporary. Typically, this is accomplished only by aggressive institutions such as prisons, the military, religious cults, and totalitarian states. Their methods commonly include separating individuals from their identifying groups, placing them in situations of physical and psychological stress, and treating them not as an individual but as a member of the target group, often by forcing them to carry out group rituals such as close order drills or chanting.[24] Clandestine state agencies use similar techniques when recruiting agents to spy on their own countries.[25] Much research indicates, however, that institutions are not particularly effective at making changes to primary socialization in the long term because individuals tend to revert back to their primary socialization when they escape from the influence of the institution.[26]

The most significant forms of resocialization are generational. Some of these generational changes are the result of aging. People tend to display different patterns of social behavior at different ages in their lives according to the different kinds of biological and social demands they experience,

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[24] M. L. Anderson and H. F. Taylor (2008) *Sociology: Understanding a Diverse Society*, 4th edn (Belmont, CA: Wadsworth/Thompson Learning Inc.), 105–06; S. S. Wiltermuth and C. Heath (2009) 'Synchrony and Cooperation', *Psychological Science,* 20, 1–5; and Gecas, 'Socialization', 2860.

[25] R. Burkett (2013) 'An Alternative Framework for Agent Recruitment: From MICE to RASCLS', *Studies in Intelligence,* 57, 7–17.

[26] The Bureau of Justice Statistics in the USA indicates that 75 % of prisoners are reincarcerated within 5 years of their release. See A. D. Cooper, M. R. Durose, and H. N. Synder (2014) 'Recidivism of Prisoners Released in 30 States in 2005: Patterns from 2005 to 2010', Bureau of Justice Statistics, U.S. Department of Justice, http://www.bjs.gov/, date accessed 22 July 2015. Military basic training may be limited in its effect, providing more of a screening process than an instilling of new values. Brainwashing is often brought up as an example of religious or political institutions changing people's minds. Certainly, solitary confinement and torture, or exposure to a cultic community as the only source of authority can have coercive effects on a person's behavior, but in most cases the effects of these efforts wear off after the coercive apparatus is no longer in play. See J. P. Healy (2011) 'Involvement in a New Religious Movement: From Discovery to Disenchantment', *Journal of Spirituality in Mental Health,* 13, 2–11; and A. Killen and S. Andriopoulos (2011) 'Editors' Introduction on Brainwashing: Mind Control, Media, and Warfare', *Grey Room,* 45, 7–17.

as represented by Erik Erikson's stages of psychosocial development.[27] The most significant levels of social change are found between different generations. These generational behavior differences are noted in popular Western culture as the difference between the Greatest Generation (born before 1928), the Silents (born between 1928 and 1945), the Baby Boomers (born between 1946 and 1964), Generation X (born 1965–1980), and the Millennials (born after 1980).[28] These differences point to changes in primary socialization from one generation to the next because of the different experiences each generation has when they are young, such as war, drought, famine, disease, or economic depression. These formative experiences resonate throughout the membership of that generation reinforcing their influence and creating a generational identity. Interestingly, the generation of Millennials shows a greater disposition toward change than previous generations.[29] This openness to change may be one dynamic contributing in the last decade to the greater frequency of people changing elements of their primary socialization. It is becoming more common for people to leave the religious faith of their childhood, either switching to a different brand within their original religion, or moving to label themselves as unaffiliated with any religion.[30] And, although political party affiliation traditionally does not change throughout life,[31] in the USA increasing distaste for the two major parties

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[27] E. H. Erickson (1980) *Identity and the Life Cycle* (New York: W. W. Norton & Company).

[28] In spite of variation in what generational categories are used and the objection of many that the variations of sentiment and behavior between individuals within each category don't support widespread generalizations, the categories have become broadly accepted. T. C. Reeves and E. Oh (2008) 'Generational Differences', in J. M. Spector, M. D. Merrill, J. V. Merriënboer, and M. P. Driscoll (eds) *Handbook of Research on Educational Communications and Technology*, 3rd edn (New York: Taylor & Francis Group, LLC), 295–303.

[29] See Pew Research Center (2010) *Millennials: Confident, Connected, Open to Change*, http://www.pewsocialtrends.org/files/2010/10/millennials-confident-connected-open-to-change.pdf, date accessed 5 July 2015, for a helpful overview of these issues.

[30] Pew Research Center (2009) 'Faith in Flux, Religion and Public Life Project', http://www.pewforum.org/2009/04/27/faith-in-flux/, date accessed 20 July 2015; and Office for National Statistics (2013) 'What Does the Census Tell Us About Religion in 2011?' http://www.ons.gov.uk/ons/rel/census/2011-census/detailed-characteristics-for-local-authorities-in-england-and-wales/sty-religion.html, date accessed 20 July 2015.

[31] E. Kaplan and S. Mukand (2011) 'The Persistence of Political Partisanship: Evidence from 9/11', Working Paper Series, No. 43, University of Warwick, http://www2.warwick.ac.uk/fac/soc/economics/research/centres/cage/research_old/papers/43.2011_kaplan.pdf, date accessed 20 July 2015.

is leading to more voters identifying themselves as independents.[32]

Culture is the collection of norms, beliefs, and values that sets one social group apart from another. Cultural artifacts provide group solidarity and identity, and punishments and rewards reinforce loyalty and lend universal status to norms found only in the group. But in spite of the perception that these norms are universal, social context heavily shapes judgment. When put into social groups different from the norm, ordinary people will conform to the pressures of that group over time, and either perform or tolerate actions that they never would outside that context.

Many judgments are made on the basis of social context. Not just CEOs and professional athletes, but also low wage workers measure income satisfaction on the basis of how their income compares to the other workers in their group.[33] Soccer referees tend to give fewer caution and dismissal cards to the home team than the visiting team.[34] The knowledge of audience reactions to American presidential debates heavily affects people's judgment of a debate.[35] And, people are less likely to help others in an emergency when there are people present who do not help.[36] People also have different expectations for different kinds of relationships. If one sees a relationship as purely social, then one is willing to expend great effort for no compensation. However, if the relationship is deemed to be a business relationship, then one expects compensation proportional to the service offered.[37]

[32] J. M. Jones (8 January 2014) 'Record-High 42 Percent of Americans Identify as Independents', http://www.gallup.com/poll/166763/record-high-americans-identify-independents.aspx, date accessed 20 July 2015.

[33] D. Arielly (2008) *Predictably Irrational: The Hidden Forces That Shape Our Decisions* (New York: Harper Collins Publishers), 15–18; D. Card, A. Mas, E. Moretti, and E. Saez (2012) 'Inequality at Work: The Effect of Peer Salaries on Job Satisfaction', *American Economic Review*, 102, 2981–3003; and S. J. Solnick and D. Hemenway (1998) 'Is More Always Better? A Survey on Positional Concerns', *Journal of Economic Behavior and Organization,* 37, 373–83.

[34] B. Buraimo, D. Forrest, and R. Simmons (2010) 'The 12th Man?: Refereeing Bias in English and German Soccer', *Journal of the Royal Statistical Society: Series A,* 173, 431–49.

[35] S. Fein, G. R. Goethals, and M. B. Kugler (2007) 'Social Influence on Political Judgments: The Case of Presidential Debates', *Political Psychology,* 28, 165–192.

[36] B. Latané and J. M. Darley (1968) 'Group Inhibition of Bystander Intervention in Emergencies', *Journal of Personality and Social Psychology,* 10, 215–21.

[37] M. S. Clark and J. Mills (1979) 'Interpersonal Attraction in Exchange and Communal Relationships', *Journal of Personality and Social Psychology,* 37, 12–24; and A. Fiske (1992) 'The Four Elementary Forms of Sociality: Framework for a Unified Theory of Social Relations', *Psychological Review,* 99, 689–723.

Central among cultural artifacts are the practices, narratives, and myths that give coherence and content to one's culture. They provide reference points for solidarity and mechanisms for the transmission of the cultural identity that distinguishes one group from another and persists across generations.[38] These are largely inherited, but are also transformed over time as each generation selects, interprets, and adapts the content according to its preferences. Although differences among cultures are in many cases different ways of dealing with the same problems, they often entail significantly different ways of seeing the world and reasoning about it.[39]

Social norms are an imperfect aggregate of group opinion. To speak in generalities about a culture is unavoidable, but that can obscure the extent to which there are variations from the norm and misperceptions of what the norm is. These differences are more than just a matter of statistical distribution. There are self-reporting problems: people are much more willing to reveal behavior and opinions that are consistent with existing social norms than to reveal those that go counter to them.[40] And because people assume that other people's outward behavior and expressions are entirely consistent with their private opinions, a group's actual opinion about an issue may not be ascertained from observation or interview.[41] Perhaps most importantly, these factors demonstrate that the consensus opinion of a social group is something quite different from the individual opinions of its constituents.

In spite of the pervasive individualism in contemporary Western culture,[42] the need to belong to a group is so strong that people will adapt

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[38] C. Jenks (2007) 'Culture: Conceptual Clarifications', in G. Ritzer (ed.) *The Blackwell Encyclopedia of Sociology* (Malden, MA: Blackwell Publishing), 928–32; and E. Durkheim (1915) *The Elementary Forms of the Religious Life*, translated by J. W. Swain (London: George Allen and Unwin, LTD.), 375.

[39] A. Norenzayan, E. E. Smith, B. J. Kim, and R. E. Nisbett (2002) 'Cultural Preferences for Formal versus Intuitive Reasoning', *Cognitive Science,* 26, 653–84.

[40] J. A. Kitts (2003) 'Egocentric Bias or Information Management? Selective Disclosure and the Roots of Norm Misperception', *Social Psychology Quarterly,* 66, 222–37.

[41] D. A. Prentice (2012) 'The Psychology of Social Norms and the Promotion of Human Rights', in R. Goodman, D. Jinks, and A. K. Woods (eds) *Understanding Social Action, Promoting Human Rights* (New York: Oxford University Press), 23–46.

[42] M. McPherson, L. Smith-Lovin, and M. E. Brashears (2006) 'Social Isolation in America: Changes in Core Discussion Networks over Two Decades', *American Sociological Review,* 71, 355–75; and M. A. Painter and P. Paxton (2014) 'Checkbooks in the Heartland: Change Over Time in Voluntary Association Membership', *Sociological Forum,* 29, 408–28.

their behavior to maintain social connections.[43] A desire for social approval prompts a willingness to defer to authority figures within the group, even to the point of performing acts outside a person's moral comfort zone.[44] When arbitrarily assigned to groups, individuals quickly identify with the group and follow its expectations even when those expectations may be burdensome.[45] People feel obligated to reciprocate when someone gives them something even if it is a stranger.[46] They also feel obligated when they have made a commitment or a promise to someone, even though that commitment may have been implicit or given without much thought, and they will seek to be consistent with that commitment in future dealings with that person.[47] Antagonists to one's group are met with defensive postures, retaliation, and negative stereotyping.[48]

Yet, the power of human socialization has its limits. Much of modern Western psychotherapy, social action, and politics has assumed that if a person's social conditions are changed then the person changes. This mindset led to horrible results in the lives of some children born with damaged or ambiguous sexual organs during the past 60 years. In certain cases, the parents, upon being informed that their new baby had both male and female sexual characteristics, were allowed to choose which sex

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[43] P. Dekker and A. van den Broek (2004) 'Civil Society in Longitudinal and Comparative Perspective: Voluntary Associations, Political Involvement, Social Trust, and Happiness in a Dozen Countries', Paper presented at the 6th International Conference of the International Society for Third-Sector Research, Ryerson University, Toronto, 11–14 July, 2004, http://c.ymcdn.com/sites/ www.istr.org/resource/resmgr/working_papers_toronto/dekker.paul.pdf, date accessed 20 July 2015; K. Hampton, L. S. Goulet, E. J. Her, and L. Rainie (2009) 'Social Isolation and New Technology: How the Internet and Mobile Phones Impact Americans' Social Networks', http:// www.pewinternet.org/files/old-media//Files/Reports/2009/PIP_Tech_and_Social_Isolation.pdf, date accessed 20 July 2015; and R. F. Baumeister and M. R. Leary (1995) 'The Need to Belong: Desire for Social Attachments as a Fundamental Human Motivation', *Psychological Bulletin,* 117, 497–529.

[44] S. Milgram (2004) *Obedience to Authority: An Experimental View* (New York: Perennial Classics), 1–12.

[45] C. Haney, C. Banks, and P. Zimbardo (1973) 'Interpersonal Dynamics in a Simulated Prison', *International Journal of Criminology and Penology,* 1, 69–97.

[46] D. T. Regan (1971) 'Effects of a Favor and Liking on Compliance', *Journal of Experimental Social Psychology*, 7, 627–39.

[47] R. B. Cialdini (2007) *Influence: The Psychology of Persuasion,* revised edn (New York: Collins), 43–86.

[48] M. Sherif, O. J. Harvey, B. J. White, W. Hood, and C. W. Sherif (1961) *Intergroup Conflict and Cooperation: The Robbers Cave Experiment* (Norman, OK: The University Book Exchange).

they preferred, and the child had surgical alterations and a program of hormonal therapy and socialization instituted to raise the child as a boy or a girl. The track record of these efforts was inconsistent at best and led in at least a few instances to tragic results. These outcomes suggest caution in assuming that sexual identity can be changed by social environment, even early in life.[49] A similar suspicion may be appropriate in regard to the ability of social institutions to affect social mobility. There is evidence that no matter what social legislation, social programs, or economic benefits are made available the rate of regression to mean levels of social status are the same slow rate for the rich and the poor.[50]

## Evolution and Social Groups

The alterations social groups experience over periods of time have many affinities with evolutionary processes, but this has been a controversial claim for over 100 years. Theorists in the social sciences have sought to build a fence through the middle of evolutionary theory, separating individuals, to which evolutionary theory ostensibly applies, from social and cultural systems, to which it does not.[51] In the last 30 years, the burgeoning discipline of sociobiology has sought to demonstrate how evolutionary theory applies not just to humans as individuals but also to social groups. According to this theory, human groups in which individual gains were suspended for the sake of group advantages were better able to survive than other groups who lacked individuals with the same social inclinations. This social cohesion was an advantage whether there was competition with other groups over limited resources and territory or whether it was a group in isolation attempting to frame the most efficient way to survive with existing resources.

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[49] C. K. Sigelman and E. A. Rider (2012) *Life-Span: Human* Development, 8th edn (Stamford, CT: Cengage Learning), 378.

[50] G. Clark (2014) *The Son Also Rises: Surnames and the History of Social Mobility* (Princeton, NJ: Princeton University Press), 12.

[51] D. Dawson (1999) 'Evolutionary Theory and Group Selection: The Question of Warfare', *History and Theory,* 38, 79–91, and J. Tooby and L. Cosmides (1992) 'The Psychological Foundations of Culture' in J. Barkow, L. Cosmides, and J. Tooby (eds) *The Adapted Mind: Evolutionary Psychology and the Generation of Culture* (New York: Oxford University Press), 19–135.

One objection to applying evolutionary theory to groups is that natural selection doesn't apply to anything other than genes. Unlike genes, which are highly accurate and mechanical replicators of themselves, groups are not. Unlike random and accidental mutation among genes, changes in the social artifacts of groups are usually intentional.[52] To overcome this objection to group selection, one must note two of the objection's problems. First, it is too narrow in defining natural selection as referring only to survival advantages occurring as the result of mechanical changes arising from random mutation. Certainly such a definition is most consistent with the traditional notion of natural selection, but holding on to that strict definition obscures analogous dynamics within groups. Even though social changes in a group are not purely mechanical or random, the changes they experience are never fully intentional or organized either, and those changes are sometimes passed along in the highly mechanical processes of ritual and indoctrination and may remain or be dropped according to how the group fares. Richard Dawkins attempted to capture this dynamic by coining the concept of a *meme* to describe items of cultural inheritance, which can be transmitted from person to person and from generation to generation.[53]

The second problem with the objection lies in the unstated philosophical commitment that fuels it. There is the belief among a large number of social scientists that human social groups are qualitatively different from individuals and other natural systems and are exempt from the crude processes that shape them. This sociological exceptionalism, however, is becoming ever harder to maintain in the face of the theories and evidence presented by sociobiologists and evolutionary psychologists who are willing to embrace natural selection in a broad and thoroughgoing way.[54]

A more serious objection to natural selection acting upon groups is one Darwin himself identified: on the face of it, group level selection cannot explain how human groups developed and survived. The selfish inclina-

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[52] S. Pinker (2012) 'The False Allure of Group Selection', http://edge.org/conversation/the-false-allure-of-group-selection, date accessed 20 July 2015.

[53] R. Dawkins (1989) *The Selfish Gene*, 2nd edn (New York: Oxford University Press), 192–3.

[54] See Tooby and Cosmides, 'The Psychological Foundations of Culture', 19–31, and a short discussion in J. J. Tillman (2008) 'Sacrificial Agape and Group Selection in Contemporary American Christianity', Zygon, 43, 544–5.

tions of human beings make them averse to forgoing their selfishness and cooperating with others who are not their genetic relations, particularly when such cooperation will have significant cost to themselves and their current and future offspring. Even if there are altruists in a group who are willing to sacrifice personally for the whole, free riders, who want to enjoy the benefits of membership in the group but avoid the obligations connected with it, will destroy the community by overpopulating it and leaving no room for altruists to keep the group identity alive.[55]

There are at least three important rejoinders to this objection. One is the prevalence of the emotions of human empathy and sympathy among human beings. Although these emotions vary in strength among different people, they constitute powerful motivators for human beings to make sacrifices for the sake of those with whom they identify in significant ways, and are found among almost 99 % of the human population.[56] Humans therefore have developed deep biological inclinations to cooperate with one another. The second rejoinder is that human groups routinely use mechanisms to encourage altruistic behavior and remove free riders. Communities demand costly signs of commitment such as oaths and contribution of resources, reward those who cooperate, and punish with shame or expulsion those who refuse to cooperate.[57] Third, many benefits of group membership are able to be realized only if everyone in the group participates, such as in certain types of hunting and food gathering, and so those tempted to be free riders realize that if they do not contribute to the group, they will die along with everyone in the group.[58]

Evolutionary arguments may then provide helpful explanations for existence and character of a variety of social artifacts. Social emotions are tied into the structure and function of the human brain, such that any human being, at least for the last several millennia, is born with a predisposition for social emotion. As human beings moved from the primitive

[55] C. Darwin (1871) *The Descent of Man and Selection in Relation to Sex,* Vol. 1 (New York: D. Appleton and Company), 156–57, and Dawkins, *The Selfish Gene*, 8.

[56] M. F. Lenzenwenger, M. C. Lane, A. W. Loranger, and R. C. Kessler (2008) 'DSM-IV Personality Disorders in the National Comorbidity Survey Replication', *Biological Psychiatry,* 62, 553–64.

[57] D. S. Wilson (2002) *Darwin's Cathedral: Evolution, Religion, and the Nature of Society* (Chicago: University of Chicago Press), 22.

[58] E. Szathmary (2011) 'To Group or Not To Group', *Science,* 334, 1648–9.

organization of hunter-gatherers, who were essentially extended families, to groups based around agriculture, which were larger groups made up of people not closely related to one another, those groups that had individuals with emotional predispositions for extended sociability had a survival advantage over groups that did not. This predisposition would then be more likely to persist among the offspring of the group with the survival advantage. To many, however, this sounds very much like a version of the discredited theory of Lamarckian evolution; evolution whereby one can inherit acquired characteristics from one's ancestors. Recently, Lamarckian evolution is getting another look from evolutionary scientists. One reason to take another look is that there may be observable instances of acquisition of genetic traits because of cultural practices. For example, the domestication of goats and cattle in Europe about 7000 years ago developed at about the same time that humans there acquired an ability to retain lactose tolerance beyond infancy. Those who retained this tolerance were able effectively to digest milk throughout their lives.[59] This introduced a new rich food source into their diet and created a significant survival advantage for those persons who had that trait. The mechanics of this change in the genome remain unclear, but some kind of interaction occurred between social practice and genetic adaptation. Second, objections to Lamarckian evolution may need to be revised in light of recent research in epigenetics. This scientific research looks at heritable elements that are not caused by changes in DNA structure but by changes to chemical on/off switches that sit on top of genes or by changes to the actions of RNA, which carries information about the synthesis of proteins from DNA to cells. Alterations in these can effect changes that are inherited across generations without the underlying DNA being affected. Exposure to tobacco smoke or fungicides or having an obese grandfather can lead to offspring being predisposed for certain cancers, diabetes, drug addiction, or mental illness.[60] Experimental evidence in mice also suggests that memories, such as those for fear, can be passed

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[59] P. Gerbault, A. Liebert, Y. Itan, A. Powell, M. Currat, J. Burger, D. M. Swallow, and M. G. Thomas (2011) 'Evolution of Lactase Persistence: An Example of Human Niche Construction', *Philosophical Transactions of the Royal Society of London, Series B, Biological Sciences,* 366, 863–77.

[60] T. H. Seay (2013) 'From Great Grandma to You: Epigenetic Changes Reach Down through the Generations', *Science News,* 183, 18–21; and N. Tsankova, W. Renthal, A. Kumar, and E. J. Nestler (2007) 'Epigenetic Regulation in Psychiatric Disorders', *Nature Review Neuroscience,* 8, 355–67.

from parent to offspring.[61] As a consequence, it is becoming ever more important to think of genes and culture as coevolving.[62]

Cultural practices may also be shaped directly by evolutionary processes. If certain social practices become inculcated into the identity of the group and either intentionally or accidently enhance the survival of a group, then when those practices are passed to future generations through imitation or social learning or even coercion they will enhance the survival of the group in the process. Religion is an example. Communities with beliefs in greater beings who control the natural elements and other people are more likely to have hope for a stable future and therefore the motivation to work hard and preserve culture. These requirements are traditionally embodied in moral rules, narratives, myths, and rituals.[63] Holy war provides an illustration. In these ancient combat myths, a holy war is a battle between gods, with the winner being the god of the particular community.[64] Commitment to this myth reinforced devotion to the god, group solidarity, and adherence to the moral and ritual practices of the religion. All of which promoted the survival of the community.

The association of natural selection with culture is a reminder that death is a possibility for any group. Although this may entail the death of all the members of the group through war, famine, or illness, the more common means is through the dissolution of the identity of the group. This may occur by coercion as in colonization where a culture is absorbed by another that is superior militarily or technologically, or it may occur when the culture ceases to hold the loyalty of the people. Economic hardships, environmental calamities, or a perceived lack of relevancy may prompt members to quit their culture to embrace the beliefs of foreign cultures.[65] Judaism provides an excellent illustration of a community

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[61] B. G. Dias and K. J. Ressler (2014) 'Parental Olfactory Experience Influences Behavior and Neural Structure in Subsequent Generations', *Nature Neuroscience,* 17, 89–96.

[62] R. Boyd and P. J. Richerson (2005) *The Origin and Evolution of Cultures* (New York: Oxford University Press), 4; and M. S. Gazzaniga (2011) *Who's in Charge: Freewill and the Science of the Brain* (New York: Ecco), 152.

[63] Wilson, *Darwin's Cathedral*, 41–42, 102, and 133.

[64] N. Forsyth (1987) *The Old Enemy: Satan and the Combat Myth* (Princeton, New Jersey: Princeton University Press), 44.

[65] See J. Diamond (2005) *Collapse: How Societies Choose to Fail or Succeed* (New York: Viking) for an emphasis on the environmental element.

well adapted to survive. Judaism has persisted as an identifiable religious community for 2500 years, even with numerous attempts to destroy it. And although it has almost always been a numerical minority wherever it has existed, the religion's ability to recreate stable communities made up of members willing to endure intense persecution has allowed it to survive longer than virtually every culture that conquered and persecuted it.[66]

Cultures are a bulk-packaged collection of beliefs, narratives, and identities, many of which are created for the sake of the community identity, and not with a view toward directly assisting individual survival. The common religious practices of fasting, celibacy, and pacifism, for example, are counter to three important survival instincts. Any group that espoused these practices collectively and exhaustively would not survive, but within many religions selected persons at selected times follow these practices and thereby intensify loyalty and solidarity to their social group. Similarly, the modern preoccupations with "childhood"[67] and racial identity[68] tell more about the interests and problems in recent communities than they do about humans biologically. Cultural practices and social norms are notoriously in flux and may be altered unpredictably for a variety of reasons, none of which may be rational.[69] For example, it is notoriously difficult to predict what particular book, play, movie, song, political candidate, or baby name is going to become popular. While quality itself is not necessarily irrelevant to what becomes popular, the knowledge of what other people have chosen exerts powerful influence on what people find attractive.[70] The same holds for civil law and moral obligation. Two hundred years ago, many highly educated and rational people believed that slavery was a good thing and women's suffrage was

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[66] Wilson, *Darwin's Cathedral*, 135–43.

[67] J. Clarke (2004) 'Interdisciplinary Perspective: Histories of Childhood', in Dominic Wyse (ed.) *Childhood Studies: An Introduction* (Malden, MA: Blackwell Publishing, Ltd.), 3–12.

[68] N. Bancel, T. David, and D. Thomas (2014) 'Introduction: *The Invention of Race*—Scientific and Popular Representations of Race from Linnaeus to the Ethnic Shows', in N. Bancel, T. Davice, and D. Thomas (eds) *The Invention of Race: Scientific and Popular Representations* (New York: Routledge), 11.

[69] H. P. Young (2010) 'The Dynamics of Social Innovation', paper presented at Sackler Colloquium on the Dynamics of Social, Political and Economic Institutions, Irvine, California, 3 December 2010, http://tuvalu.santafe.edu/~bowles/DynamicsSocial.pdf, date accessed 20 July 2015.

[70] M. J. Salganik, P. S. Dodds, and D. J. Watts (2006) 'Experimental Study of Inequality and Unpredictability in an Artificial Cultural Market', *Science,* 311, 854–6.

a bad thing. Today, in the West, such beliefs are explicitly excluded as belonging to beliefs of the educated and rational. One may fairly wonder then what enlightened and respectable beliefs of the contemporary era may come to be seen as abominable to communities 200 years in the future.

## Social Deliberation About Ethics

When deliberation is mentioned in the contemporary West, it is often taken to refer to individual deliberation, whereby the individual mulls over different possibilities for opinion or action. This severely ignores the social character of human identity and experience. Just as human existence is unavoidably social, so too deliberation about ethics must in some measure be social. This yields several significant conclusions. First, it means that moral deliberation must be corporate, but achieving this involves theoretical and practical problems from the outset. What is entailed by corporate identity in the West is often not the same thing as what is meant by highly collective communities in other parts of the world. While there are many forums for group deliberation in the West including trial juries, legislatures, and civic and professional associations of all sorts, these are examples of corporate deliberation in the most superficial of senses. Highly autonomous individuals, who may have no relationship or at best an insignificant relationship with one another, are brought together to deliberate about an issue in which they either have a great personal stake or no personal stake at all.[71] Moreover, the notion of deliberation common to these venues is antithetical to the mores common to collective identity found throughout many cultures in East Asia. Deliberation in groups in the West entails conflict of opinion and argument between individuals, which is aversive to many East Asians, whose cultures often

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[71] Jurgen Habermas and John Rawls are perhaps the most read theorists regarding this commitment, and their systems bear out this ideal of unidentified and unrelated individuals offering formal arguments in an ideal, abstract setting. See J. Habermas (1996) *Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy* (Cambridge, MA: Polity Press); and J. Rawls (1971) *A Theory of Justice* (Cambridge, MA: Belknap Press of the Harvard University Press).

take into account the relationships that exist between members of a group, avoiding shaming others in the group and deferring to those who are older and in authority.[72] These differences remain some of the greatest hurdles standing in the way of productive conversation between Western communities and Eastern ones, and in spite of the significant increase in interaction between Western and Eastern communities in the last three decades, these issues are still not well understood.

Second, moral deliberation must take into account social context. Primary socialization heavily determines one's perception of right and wrong, and people typically make judgments about right and wrong in comparison to their own social experience and social group. Social context pertains to details both internal to the group and external to it. Perception of moral obligation varies according to one's relationship with the parties at issue. One feels large obligations to members of one's nuclear family, and then progressively declining obligations to extended family members, and then other people who are more like oneself in terms of geography, appearance, profession, and nationality.[73] These priorities may be reordered in terms of perceptions of vulnerability, for example. If one observes an injury to an infant, even though the infant is a child of a stranger entirely unlike oneself, that observation will likely evoke feelings of compassion that at least temporarily trump obligations one feels for other parties in one's usual moral purview. Social context also pertains to details of social circumstance that affect to what extent certain values or obligations are applied. This means that deliberation must take into account social data. This not only includes statistical tendencies found among individuals or groups in a relevant community, but nonquantitative data such as social emotions. These are difficult to include in deliberation, but given that they are embodied judgments about the magnitude and impact of an issue within a community, they

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[72] S.-J. Min (2009) 'Deliberation, East Meets West: Exploring the Cultural Dimension of Citizen Deliberation', Doctoral Dissertation, Ohio State University, 28–37, https://etd.ohiolink.edu/rws_etd/document/get/osu1243277918/inline, date accessed 20 July 2015.

[73] The UNESCO World Values Survey indicates the persistent strength of both national and local identity. UNESCO (2009) *Investing in Cultural Diversity and Intercultural Dialogue* (Paris: UNESCO), 302–3, http://unesdoc.unesco.org/images/0018/001852/185202e.pdf, date accessed 22 July 2015.

must be taken into account.[74]

Social context is an even more significant factor when deliberation between different social groups is ongoing. The differences in social norms and values between these groups are sometimes so drastic that they are incommensurable with one another. Western cultures have often denied the significance of these differences in their quest for a universal platform for human value. But although universalizable principles, universal human rights, and a universal language have all been optimistically constructed, they have never been globally ascribed to, and even those groups that commit to them will interpret them from the standpoint of their own group values. For example, a nation may staunchly support international human rights in public statements but in the name of national security commit what other communities consider to be crimes against humanity. This observation suggests why universal moral ideals continue to provide limited remedy to human ills. For one thing, universal moral ideals have been based in the assumption of a common and unified human rationality that remains theoretically difficult to explicate and in practice rarely evident. For another, universal moral ideals assume the attraction and achievability of a global cooperative community, whereby individuals and communities forgo their own specific interests for the sake of global interests. While this remains attractive and it is contained in elements of many world religions, the tribalism of particular social groups, nation-states, and religions continues to thwart these inclinations.

Instead of trying to construct universal platforms from which to unite all moral conversation, one must embrace the inevitability of the separate ethical contexts of different communities and develop mechanisms for translating the norms of one social group into the ethical language and culture of another. This effort is complicated by the qualitative differences between the value systems of different cultures. Not only are they rooted in different traditions, myths, and narratives, but the different value com-

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[74] Some of these points about context are made broadly about bioethics by A. Kleinman (1999) 'Moral Experience and Ethical Reflection: Can Ethnography Reconcile Them? A Quandary for "The New Bioethics"', *Daedalus,* 128, 69–97; A. M. Hedgecoe (2004) 'Critical Bioethics: Beyond the Social Science Critique of Applied Ethics', *Bioethics*, 18, 120–43; and R. Rapp (2006) 'The Thick Social Matrix for Bioethics: Anthropological Approaches', in C. Rehmann-Sutter et al. (eds) *Bioethics in Cultural Contexts: Reflections on Method and Finitude* (Dordrecht: Springer), 341–51.

mitments entail different notions of what a social group should be and even how one should construe the passage of time, the human self, and rationality.[75] These realities demand that deliberating parties have a high fluency in the social norms and cultural languages and metaphors of the other communities involved in the deliberation. Such fluency is difficult to develop because of the moral and cognitive predispositions entailed in being born and socialized in a specific culture and social group. As a result, when deliberation across cultures occurs it is often artificial theater. None of the parties may be interested in embracing the possibilities of change required by legitimate deliberation.

Third, ethical deliberation must take into account the evolutionary context of a group. Many human inclinations for behavior are the product of eons of biological and sociological development in the face of challenges to survival. In a particular generation, these inclinations may change little, but across generations they do change, and the productivity of those changes is ultimately gauged by how effective they are in enhancing the survival of the group. This creates an unavoidable tension regarding change that is at the heart of social deliberation. There is great value in the inherited traditions of successful social groups because they represent patterns proven to assist in survival. One must be careful about altering them lest one create dispositions and practices that are detrimental. But one must also be sensitive to the need for alteration. Changes in environment or in the relationships with other groups can make inherited social norms and patterns counterproductive. Such appears to be the case in regard to the ancient inclination for social groups to compete with one another. While in earlier human settings there was almost always a survival advantage for the group that had a superior ability to compete for resources, today's world poses a different context. The earth is now a global social community where financial markets, pollution, genocide, and disease in one part of the world can severely impact very distant communities. Causing distress to one's enemies is no longer as clearly a productive strategy because the destruction of one's enemy can lead to one's own destruction.

Group evolution also provides a perspective that encourages a long view

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[75] R. E. Nisbet (2003) *The Geography of Thought: How Asians and Westerners Think Differently . . . and Why* (New York: The Free Press), xii–xxiii.

of the identity of a group. It is a reminder that the survival of the present community is a prerequisite for the survival of groups in the future. The recognition that genes and culture coevolve has significant implications for how the social practices of one group may affect future groups, but this long view is often not included in deliberation. For example, since the early twentieth century, the age of onset of puberty has been getting steadily younger for girls, and boys as well, it seems. Many hypothesize that this is the result of increased obesity rates among children in the West, but that doesn't explain all the data, and other factors such as stress may contribute.[76] The long-term effects of earlier puberty both on individuals and culture are not clear. In Western societies where childhood and the dependency of children on parents is practically extended beyond their teens into their 20s and sometimes longer, what does this mean when even younger children become biologically mature and begin reproducing? If contemporary societies were interested in population maximization, this could be seen as a positive development, but that is not currently an important goal. With social norms regarding adolescents and sexual activity already in flux over the last 50 years, this biological trend may be a harbinger of future social problems and new pressures on the framing of sexual norms.

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[76] M. E. Herman-Giddens (2013) 'The Enigmatic Pursuit of Puberty in Girls', *Pediatrics*, 132, 1125–6.

# 4

# Dual Process Theories and Moral Deliberation

## History of Decision-Making Theory

Humans have always had to make choices under uncertainty, but until the modern era, appealing to claims for certainty as found in religious tradition or deductive logic seemed more important than trying to calculate the best options for an uncertain future. The development of mathematical probability in the seventeenth century led to the formulation of a model of decision making that later came to be called expected value theory. It maintained that one should act according to the strict probability of specific outcomes and choose the one that has the highest expected value, which was the product of the worth of an action's consequences and the probability of the act occurring. The variables involved were considered to be the same for everyone, and so one could expect a commonly optimal outcome.[1] But research indicated that the findings of expected value

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[1] The origin of this model lies in Pascal's development of the notion of mathematical expectation and its application to decision making. It can be seen both in his famous fragment often called 'The Wager' and in *The Port-Royal Logic* first published in 1632. See B. Pascal (1995) *Pensées and Other Writings*, trans. H. Levi (Oxford: Oxford University Press), 152–6; and A. Arnauld and P. Nicole (1861) *The Port-Royal Logic*, trans. T. S. Baynes, 5th edn (Edinburgh: James Gordon), 367.

theory ran afoul of how people actually made choices, because people's preferences are often counter to the strict probabilities of gains or losses. For example, the St. Petersburg Paradox presents a game of chance offering a potentially unlimited expected value: the winning pot starts at two dollars and is doubled each time a coin toss produces a head. The game continues until a toss produces a tail. In spite of the probabilities of an infinite reward, studies have demonstrated that most people are hesitant to pay even a nominal amount to enter it. Daniel Bernoulli who performed early analysis of the paradox in the 1730s argued that people do not make their choices on the basis of strict monetary amount but on the basis of imputed utility. In the case of the paradox, while the expected value is infinite, the expected utility is finite and declines as one's wealth goes up. In response to this finding, Bernoulli framed expected utility theory as a method of combining individual value utilities with the relative probability of outcomes. A rational person chooses the option with the greatest expected utility. This explains why actors may choose an option with a smaller return but a higher probability over a choice with a higher return but lower probability. For example, in a choice between a guaranteed $50 and a 50 % chance of getting $100 or nothing, the expected value for the two options is the same, but many people are risk averse and find greater expected utility in the first option.[2]

Expected utility theory portrays human cognition as unified, ideal, and rational. Human beings make choices with full understandings of preferences and conditions, and with well-developed abilities to predict preferable results. Its theorists admit that it is a theory that is not primarily descriptive and therefore doesn't guarantee that anyone will achieve the level of ideal rationality depicted. Instead, it is a normative theory with great optimism about human beings' willingness to strive after ideal utility and about their ability to perform utilitarian reasoning with only rare mistakes.[3]

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[2] N.-E. Sahlin, A. Wallin, and J. Persson (2010) 'Decision Science: From Ramsey to Dual Process Theories', *Synthese*, 172, 131; G. Gigerenzer (2001) 'Decision Making: Nonrational Theories', in N. J. Smelser and P. B. Baltes (eds) *International Encyclopedia of the Social and Behavioral Sciences*, vol. 5 (Oxford: Elsevier), 3304; and B. Y. Hayden and M. L. Platt (2009) 'The Mean, the Median, and the St. Petersburg Paradox', *Judgment and Decision Making*, 4, 256–72.

[3] Sahlin, 'Decision Science', 131.

By the mid-twentieth century expected utility theory had become the dominant theory of decision making for actions under uncertainty and risk, but yet its predictions still differed from actual human choices. Herbert Simon noted that the computational and predictive requirements of the theory were beyond the ability of most humans.[4] Work by Kahneman and Tversky identified three significant differences between expected utility theory and human choice. First, people tend to choose the more certain of two outcomes even though it may be less attractive in terms of utility; the certainty effect. Second, they also tend to reverse their preferences between certainty and probability when situations are reversed from gains to losses. The certain gain is preferred over the probable gain, but the probable loss is preferred over the certain loss. This is called the reflection effect. Third, when two choices have common components, decision makers often remove these common elements from their reasoning, resulting in different results from what a rational calculation of utility would arrive at; the isolation effect.[5] Other research studies have indicated other aberrations. People's choices are often not made on the basis of conscious calculations of utility because when pressed for reasons for their decisions they may offer justifications that could not be related to the actual reasons for the decisions.[6] Also, when evaluating deductive arguments, people will frequently do so on the basis of prior beliefs rather than whether or not the arguments are logically valid.[7]

These observations worked against not just expected utility theory but also against claims for a unified character to human cognition. Efforts to explain these findings in the last 30 years have come to increasingly appeal to the kinds of cognitive dualism that have long been popular in the West. Stretching from Plato to Descartes to Nietzsche to Freud, there has been a tendency to explain contrasting human behaviors,

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[4] H. A. Simon (1955) 'A Behavioral Model of Rational Choice', *The Quarterly Journal of Economics*, 69, 101.

[5] D. Kahneman and A. Tversky (1979) 'Prospect Theory: An Analysis of Decision Under Risk', *Econometrica*, 47, 263–92.

[6] R. E. Nisbett and T. D. Wilson (1977) 'Telling More Than We Can Know: Verbal Reports on Mental Processes', *Psychological Review*, 84**,** 231–95; and P. C. Wason and J. S. B. T. Evans (1975) 'Dual Processes in Reasoning?' *Cognition*, 3, 141–54.

[7] J. S. B. T. Evans, J. L. Barston, and P. Pollard (1983) 'On the Conflict Between Logic and Belief in Syllogistic Reasoning', *Memory and Cognition*, 11, 295–306.

particularly ones that don't match expectations or the dictates of reason, by appeal to two, qualitatively different, cognitive operations. One set corresponds to the intuitive operations that seek certain gains and avoid probable losses. Its operations are described as nonconscious, automatic, parallel, implicit, approximate, emotional, associative, biased, intuitive, fast, contextualized, and requiring little effort to exercise. The second set corresponds to the operations of rationality where probabilities and utilities are calculated. Its operations are conscious, deliberate, serial, explicit, precise, logical, rule based, rationally unbiased, analytic, slow, decontextualized, and require significant effort to operate.[8]

## Dual Process Theories of Cognition

While this dualistic demarcation may appear tidy, it is far from it. There are agreements in broadly characterizing the two categories, but there are disagreements regarding terminology and the specific character of each category. Some writers call the first set intuitive, experiential, or just System 1 or Type 1. At times, the second set may be called analytic, rational, or System 2 or Type 2. The different terminology often indicates differences regarding the processes included in each category, and individual authors often have different lists of processes included in each or emphasize one specific process within a category more than another. Some writers find the first set of processes to be constitutive of evolutionarily ancient cognitive processes that humans share with some animals and describe the second set as made up of operations that are evolutionarily new and more distinctively human. Jonathan St. B. T. Evans, who has been very influential in the development of dual process theory, has come to eschew language of dual *systems*, because the notion of *system* suggests that entirely separate neurological structures are involved in the different operations and that the processes in each category are highly unified. While there are still

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[8] D. Kahneman (2003) 'A Perspective on Judgment and Choice: Mapping Bounded Rationality', *American Psychologist*, 58, 698; J. S. B. T. Evans (2012) 'Dual-Process Theories of Deductive Reasoning: Facts and Fallacies', in K. J. Jolyoak and R. G. Morrison (eds) *The Oxford Handbook of Thinking and Reasoning* (New York: Oxford University Press), 115–33; and Sahlin, 'Decision Science', 135.

many researchers who subscribe to some kind of modular neurological dual process theory, there are problems with that approach. There are modules within ancient perceptual structures, but these deliver data to both "old" and "new" processing. And, many animals can display behavior consistent with Type 2 processing, although in more rudimentary form than humans. For these reasons, Evans prefers the terminology of *types* rather than *systems*,[9] and I will follow his practice in my usage. Evans does, however, retain a flexible notion of "the old mind" and "the new mind." The old mind holds many operations in common with other animals and is made up of both evolved mechanisms and experientially learned processes and implicit memories, which involve the repetition of behaviors that allow individuals and species to survive in challenging situations. The new mind is highly specific to humans and allows the achievement of goals by imagining different possible scenarios and calculating possible consequences and using explicit knowledge.[10]

Further scrutiny indicates complexities within each type of process. The broad and diverse theoretical descriptions of Type 1 and Type 2 processes indicate that each type is made up of several cognitive processes. Some theorists distinguish among multiple types of intuition according to different underlying processes such as matching inputs to exemplars or constructing cognitive representations and according to what extent these processes are nonconscious and/or driven by emotion.[11] Likewise Type 2 processes may be broken into at least two categories: an algorithmic process that constitutes abstract reasoning and problem solving and a reflective process that contains dispositions for thinking, goal direction, and decisions about when to override the operations of Type 1 processes.[12]

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[9] J. S. B. T. Evans and K. E. Stanovich (2013) 'Dual-process Theories of Higher Cognition: Advancing the Debate', *Perspectives on Psychological Science*, 8, 224; and J. S. B. T. Evans (2014) 'Two Minds Rationality', *Thinking and Reasoning* 20, 132.

[10] Evans, 'Two Minds Rationality', 143.

[11] A. Glöckner and C. Witteman (2010) 'Beyond Dual Process Models: A Categorisation of Process Underlying Intuitive Judgment and Decision Making', *Thinking and Reasoning*, 16, 1–25; and K. E. Stanovich (2009) 'Distinguishing the Reflective, Algorithmic, and Autonomous Minds: Is it Time for a Tri-Process Theory', in J. Evans and K. Frankish (eds) *In Two Minds: Dual Process and Beyond* (New York: Oxford University Press), 57.

[12] Stanovich, 'Distinguishing the Reflective, Algorithmic, and Autonomous Minds', 59.

These complications extend to questions about how the two categories of cognitive processes interact with one another. The various models generally fall into one or another of three options. First, there are models that pose a clear distinction between the two kinds of processes, and suggest the engagement of one or the other according to relevant variables of the situation, such as the expertise of the decision maker, the confidence of the decision maker in the accuracy of a judgment, and the amount of time available for deliberation. This approach assumes a conscious or nonconscious administrator who selects the process most appropriate for the moment. Second, some models assume that the two processes are parallel and competitive, utilizing different types of processing and memory, operating at the same time, and frequently deriving opposing judgments. This approach is consistent with the experience of a conflicted mind, like that found in the experience of many drug or gambling addicts who want to quit but also feel compelled by their addiction, or more commonly among anyone who experiences qualitatively different motivations to pursue or avoid some course of action. Third, there are default-interventionist models that argue that automatic processes are always engaged first and analytic ones are engaged only when needed to supplement or correct the automatic processes or solve problems that Type 1 processes cannot.[13] For example, what is sometimes called motivated reasoning is conscious reasoning prompted by cognitive biases to look for evidence and conclusions for those biases.[14]

A long-standing assumption has been that Type 1 processes are the bailiwick of the naïve, uneducated, and biased, and that the "correct" results are provided by Type 2 processes. Daniel Kahneman argues that Type 1 processes are often comprised of heuristics, simplifying procedures or rules of thumb that sometimes produce acceptable results but often lead to significant errors. For example, in interviews people often answer a simpler question than the one posed, or someone may decide whether an object or person belongs to a particular class of objects or persons based

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[13] S. Chen and S. Chaiken (1999) 'The Heuristic-Systematic Model in its Broader Context', in S. Chaiken and Y. Trope (eds) *Dual Process Theories in Social* Psychology (New York: Guilford Press), 73–96, 74, and J. S. B. T. Evans (2008) 'Dual-Processing Accounts of Reasoning, Judgment, and Social Cognition', *Annual Review of Psychology 59*, 255–79.

[14] Z. Kunda (1990) 'The Case for Motivated Reasoning', *Psychological Bulletin*, 108, 480–98.

on how representative it is of some stereotype of that class.[15] What are less commonly admitted are the errors associated with Type 2 processes. One can follow "bad" rules, as in the case of the gambler who refers to the "law of averages" to argue that he is due to win soon. Or, one can utilize a "good" rule, but apply it badly, as in cases where laws are selectively enforced or applied to cases for which they were not intended.[16]

In spite of common errors in Type 2 processes, most dual process theorists continue to consider it to be the domain of human rationality. Evans is one of the few who argues that notions of rationality operate in both Type 1 and Type 2 categories. He claims that instrumental rationality is common to both processes, although Type 1 processes pursue goals by means of the instinctual or experientially learned elements of "the old mind" while Type 2 processes pursue goals by using conscious mental simulation and consequential calculation to determine optimal outcomes. But in addition to instrumental rationality, many Type 2 processes also portray epistemic rationality, which is the pursuit of accurate representations of the world.[17] Although his descriptions are not always entirely clear in terms of psychological or philosophical usage, Evans appears to fold both formal logical operations as well as scientific empirical reasoning into his notion of epistemic rationality.

Even with Evans's broadening of the notion of rationality to include both types of cognition, he continues to display the preference typical of academic researchers for Type 2 operations as the source of normative belief. Yet, he still recognizes that people find meaning in beliefs arrived at by Type 1 processes. In talking about epistemic rationality, he recognizes that people can hold "false" beliefs, which are beliefs not endorsed by deductive arguments or empirical evidence, his example being the beliefs of a religious cult. These beliefs are false by Type 2 process criteria but hold instrumental value because they create hope and security about the future for those who hold to them.[18] Interestingly, this is the criticism that Gideon Keren and Yaacov Schul level against dual process theories in

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[15] D. Kahneman, (2011), *Thinking, Fast and Slow* (New York: Farrar, Straus and Giroux), 13, 29.

[16] S. Elqayam and J. S. B. T. Evans (2011) 'Subtracting "Ought" from "Is": Descriptivism versus Normativism in the Study of Human Thinking', *Behavioral and Brain Sciences*, 34, 245.

[17] Evans, 'Two Minds Rationality', 135–7.

[18] Evans, 'Two Minds Rationality', 140.

general, arguing that while the evidence for the theories is not compelling, they are popular because they provide a story that satisfies what people, even researchers, currently want to believe.[19] Daniel Kahneman remarks that his dual process labels "System 1" and "System 2" are really "metaphors" and "useful fictions" that do not correspond to isolatable entities or brain regions, but are helpful in getting across the message he wants to convey because of "quirks" of human thinking.[20] These comments demonstrate that even as dual process theorists apply normativity to Type 2 processes they must continue to admit that Type 1 processes remain significant in the attribution of meaning and value.

## Dual Process Theory and Moral Decision Making

Most models for moral decision making in both philosophy and psychology assert that decisions are made by means of conscious and reasoned reflection on cases, which involves the determination of what rational rules apply and how competing principles or different possible consequences are to be balanced against one another. Emotions, intuitions, and nonconscious processes have no direct or significant contribution to the process. Lawrence Kohlberg, who applied Piaget's cognitive developmental scheme to moral development and whose work influenced a generation of intellectuals, argued that affective and personal inclinations must be left out of moral reasoning because "personal inclination should not be the arbiter of action."[21]

Just as research in cognitive psychology has challenged the standard Western view of rationality in general, so too it has challenged this standard of ethical decision making as fully conscious and deliberate.[22]

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[19] G. Keren and Y. Schul (2009) 'Two Is Not Always Better than One: A Critical Evaluation of Two-System Theories', *Perspectives on Psychological Science*, 4, 544.

[20] Kahneman, *Thinking Fast and Slow*, 96–7 and 151–3.

[21] L. Kohlberg (1981) *Essays on Moral Development Vol. 1*, *The Philosophy of Moral Development: Moral Stages and the Idea of Justice* (San Francisco: Harper & Row, Publishers), 187–8.

[22] R. E. Nisbett and T. D. Wilson (1977) 'Telling More Than We Can Know: Verbal Reports on Mental Processes', *Psychological Review*, 84, 231–59; J. A. Bargh and T. L Chartrand (1999) 'The

Moral judgments regarding an observed ethical violation may appear in consciousness almost immediately without any conscious deliberation going on.[23] The reasons offered for these intuitions are often *post hoc* ones, reasons constructed for the purpose of justifying the intuitions but not constituting the intuitions themselves.[24] Emotions are also frequently related to moral judgments. The manipulation of emotions by hypnosis can alter moral judgments,[25] and psychopaths and those who have damage to emotional centers of the brain may not lack cognitive reasoning skills, but they demonstrate poor decision making and emotional management skills that lead to behaviors that are deemed antisocial and unethical.[26]

There is also the phenomenon that Jonathan Haidt has labeled "moral dumbfounding": people often can't give clear reasons for their moral judgments. He conducted an experiment in which respondents were asked to make a judgment about whether an action depicted in five different scenarios is right or wrong. One scenario was the well-known Kohlberg case regarding a husband, Heinz, who steals a drug for his ill wife. Two others were intuitive moral cases that were carefully constructed so that no innate harm was involved but the actions involved were morally taboo; for example, cooking and eating meat from a human cadaver and having sex with a sibling. The two others were intuitive nonmoral cases, one in which a person drinks from a glass of juice before and after a sterilized cockroach is dipped in it and the other in which a person is paid two dollars to sign a piece of paper giving his/her soul to the seller and then tearing up the piece of paper. For the Heinz case, the respondents were almost always able to give reasons for their conclusions, rarely changed

Unbearable Automaticity of Being', *American Psychologist*, 54, 462–79; and R. B. Zajonc (1980) 'Feeling and Thinking: Preferences Need No Inferences', *American Psychologist*, 35, 151–75.

[23] Q. A. Luo, M. A. Nakic, T. B. Wheatley, R. A. Richell, A. B. Martin, and J. R. R. Blair (2006) 'The Neural Basis of Implicit Moral Attitude—An IAT Study Using Event-Related fMRI', *Neuroimage*, 30, 1449–57.

[24] J. Haidt (2001) 'The Emotional Dog and Its Rational Tail: A Social Intuitionist Approach to Moral Judgment', *Psychological Review*, 108, 818.

[25] T. Wheatley and J. Haidt (2005) 'Hypnotic Disgust Makes Moral Judgments More Severe', *Psychological Science*, 16, 780–4.

[26] S. W. Anderson, A. Bechara, H. Damasio, D. Tranel, and A. R. Damasio (1999) 'Impairment of Social and Moral Behavior Related to Early Damage in Human Prefrontal Cortex', *Nature Neuroscience*, 2, 1032–37; and A. L. Glenn, A. Raine, and R. A. Shug (2009) 'The Neural Correlates of Moral Decision-Making in Psychopathy', *Molecular Psychiatry*, 14, 5–6.

their conclusions, and generally felt confident in their conclusions. For the intuitive cases, however, the respondents were generally much less confident in their conclusions and referred to intuitive feelings more than rational arguments. When they offered rational arguments, they often quickly abandoned them. Frequently the participants admitted that they could not frame proper reasons for their conclusions.[27]

These observations have led some theorists to frame dual process theories of moral decision making, which claim that acts of moral reasoning are performed by Type 2 cognitive processes while emotional and nonconscious choices regarding ethical cases are made by Type 1 cognitive processes. Perhaps the most important of these theories are those of Jonathan Haidt and Joshua Greene.

## Jonathan Haidt's Social Intuitionist Model

The social intuitionist model is an approach that Jonathan Haidt has developed in partnership with Federick Bjorklund. This model is represented in Fig. 4.1. They maintain that moral judgments are the product of innate intuitions that affect and are also affected by the social construction of values. Moral intuitions are fast and often automatic, and produce moral judgments prior to the engagement of the much slower, conscious processes of traditional moral reasoning, whose function is primarily to persuade others about the truth of one's own intuitions. The exception is in the case of philosophers for whom moral reasoning is much more likely to provide direct effect on moral judgments (link 5) and moral intuitions (link 6).[28]

The strength of this model is that it gives explanation to the empirical evidence cited in the previous section. The immediacy of moral judgments, appeals to post hoc reasoning, and moral dumbfounding are all due to moral intuitions making moral judgments prior to the operation of any kind of moral reasoning.

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[27] J. Haidt, F. Bjorklund, and S. Murphy (2000) *Moral Dumbfounding: When Intuition Finds No Reason*. Unpublished manuscript, University of Virginia. Retrieved from http://people.stern.nyu.edu/jhaidt/moraljudgment.html, date accessed 10 June 2015, p. 10.

[28] J. Haidt and F. Bjorklund (2007) 'Social Intuitionists Answer Six Questions About Morality', in W. Sinnott-Armstrong (ed.) *Moral Psychology, Vol. 2: The Cognitive Science of Morality* (Cambridge, MA: The MIT Press), 188–9.
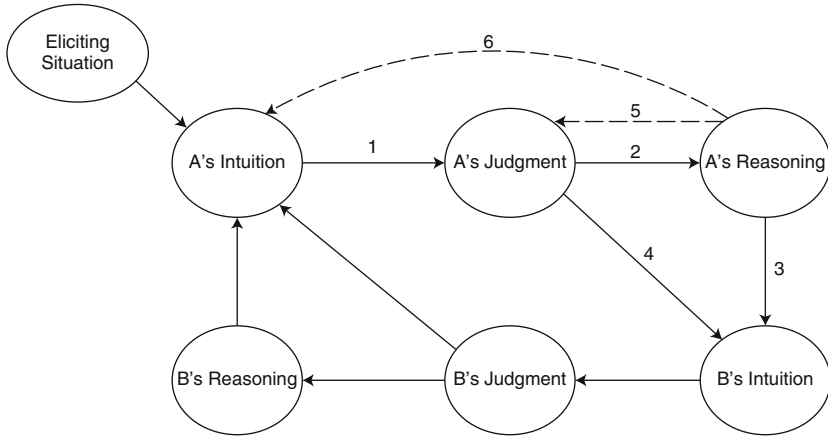
**Fig. 4.1** The social intuitionist model of moral judgment. The numbered links, drawn for Person A only, are (1) the intuitive judgment link, (2) the post hoc reasoning link, (3) the reasoned persuasion link, and (4) the social persuasion link. Two additional links are hypothesized to occur less frequently: (5) the reasoned judgment link and (6) the private reflection link. (*Source*: Haidt, "The Emotional Dog and Its Rational Tail," 815.)

Much of Haidt's recent work has been aimed at explicating the nature of these moral intuitions. While these are rooted in evolutionary adaptation, they are shaped by cultural context. His interest is in mapping which intuitions are related to moral emotions, and he identifies five that exist across cultures: harm/care, fairness/reciprocity, in group/loyalty, authority/respect, and purity/sanctity. Each of these innate intuitions is edited and adjusted according to the needs of particular cultures.[29]

Haidt and Bjorklund admit the provisional and hypothetical nature of much of their theory of judgment, and so they offer it as a broad outline, and one that is descriptive rather than normative.[30] Unfortunately, they have offered little subsequent work to flesh out the outline, and many elements are vague or apparently inconsistent.

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[29] J. Haidt and C. Joseph (2007) 'The Moral Mind: How Five Sets of Innate Intuitions Guide the Development of Many Culture-Specific Virtues, and Perhaps Even Modules', in P. Carruthers, S. Laurence, and S. Stich (eds) *The Innate Mind*, Vol. 3, *Foundations and the Future* (New York: Oxford University Press), 381.

[30] Haidt and Bjorklund, 'Social Intuitions Answer Six Questions', 188; and Haidt, 'The Emotional Dog and Its Rational Tail', 815.

While they refer frequently to moral reasoning, it is not entirely clear what sort of operations are deemed to be part of moral reasoning, other than rhetorical operations for persuasion and self-justification.[31] The model also fails to represent how social traditions provide input, and while in later writings the five different moral intuitions are outlined, there isn't attention as to how different intuitions may compete with one another nonconsciously or how they might be adjudicated through nonconscious means. So, too, the diagram oversimplifies how A's reasoning may influence B's intuition, suggesting that particular reasoning may elicit a particular intuition just as a particular situation did for A, but surely the conditions are always more complicated. For example, B may find A's reasoning to be contradictory to elements of his/her own intuitions and seek some way to adjudicate between them. Likewise, link 4 isn't clear as to the mechanisms whereby A's judgment impinges upon the persuasion of B's intuitions.

Haidt's model is innovative in comparison to many other recent theories in that it provides a dominant role for Type 1 processes in moral judgment. It is, however, extremely sketchy about how those processes operate and how they interact with Type 2 processes. Most importantly for the current discussion, it is not clear enough about how it suggests moral deliberation is conducted. Haidt and Bjorklund likely would respond to this criticism with the same observation they made in response to some criticisms from Darcia Narvaez in 2008. They asserted that their model was a model for moral judgment, not moral choice. They were interested in describing how individual moral judgments were made, not how people choose between competing possible choices. However, they claim that by making links 5 and 6 solid lines rather than dotted ones, then it can become a model of decision making. In actual choices between competing possible behaviors, people do deliberate by imagining the possible consequences each choice would elicit and the particular principles that impinge upon each option.[32] Even allowing Haidt and Bjorklund

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[31] The diagram itself also has a few problems. The emphasis is on the numbered arrows/links, which are processes. The content in the ovals are inputs or products with the exception of the ovals designated as A's reasoning and B's reasoning, which are processes. Consistency would demand that reasoning be also represented as links.

[32] J. Haidt and F. Bjorklund (2007) 'Social Intuitionists Reason, In Conversation', in W. Sinnott-

what may be a very fine distinction between moral judgment and moral decision making, particularly if one takes nonconscious processes to be a form of deliberation, this revision to their model raises questions. It is not immediately reconcilable with their earlier claim that links 5 and 6 are primarily used by philosophers, and one wonders if this limitation extends to the use of these links in deliberation. Moreover, they provide assurances that this inclusion of principled and consequential reasoning as critical to moral deliberation does not diminish the superiority of their model over purely rationalist models. This is for three reasons: "for most morally relevant actions, there is no deliberation," "when deliberation does occur, it is often biased by desire and an uneven search for evidence," and "the phenomenology of moral choice blends intuition and conscious deliberation."[33] Of course supporters of rationalist models can grant all of these points as descriptive of how people make choices when left to their own devices, and still maintain that reasoning link 5 should be the conduit of determinative choice.

## Joshua Greene's Model of Moral Judgment

In contrast to Haidt's effort to retain intuition as the primary process in moral judgment, Joshua Greene argues for a parallel, competitive structure between two kinds of psychological processes. In some of his earlier writing, he characterized the two processes as "two voices in one's head," one being the intuitive/emotional process voice, and the other being the "controlled cognitive voice." Greene points out that he is using the word *cognitive* in a more technical sense than usual, as a contrast to emotional processing rather than referring to any kind of general information processing. Moral decision making consists of these two voices combating one another until one of them wins and one can then deliver a moral judgment.[34]

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Armstrong (ed.) *Moral Psychology*, Vol. 2: *The Cognitive Science of Morality* (Cambridge, MA: The MIT Press), 243.

[33] Haidt and Bjorklund, 'Social Intuitionist Reason, In Conversation', 244.

[34] J. Greene (2011) 'Social Neuroscience and the Soul's Last Stand', in A. Todorov, S. Fiske, and D. Prentice (eds) *Social Neuroscience: Toward Understanding the Underpinnings of the Social Mind* (New York: Oxford University Press), 265–6.

More recently, he has invoked a digital camera metaphor, characterizing intuitional judgment as the automatic settings on the camera, which cover most photographic instances, and the brain's reasoning system as the manual settings, which are more flexible but require careful calibration.[35] He also notes divergences from the camera metaphor. While a camera toggles between modes, the human brain's intuitive mode is always functioning, and, at least by implication from the voices metaphor, both modes can be operating at the same time.[36]

Greene began the formulation of his theory out of empirical research on the "trolley cases," a set of ethical dilemmas introduced by Philippa Foot and then further discussed by Judith Jarvis Thompson.[37] There are two cases. In the bystander case, a person observes an approaching train that is out of control. There is a switch near the bystander that can change the train between two tracks. On one track, a single worker is working and unaware of the approaching train. On the other track, there are five workers unaware of the danger. The dilemma is whether to move the switch to direct the train onto the track with only the single worker. In the footbridge case, a bystander observes the runaway train from a footbridge over the track, and sees it approaching five workers on the track. There is a large stranger sleeping nearby who is in such a position that the bystander can push the stranger off the footbridge onto the track, killing the stranger but stopping the runaway train before it kills the five workers. The standard analysis of the cases considers the difference between killing and allowing to die as borne out in the two cases and how those designations match or don't match common intuitions about the cases. The typical conclusion is that it is acceptable to flip the switch in the bystander case, but it is unacceptable to push the stranger from the bridge in the footbridge case.

What had not been done until recently was pose these dilemmas to research participants and see how their responses matched with what philosophical analysis predicted. This research found that ordinary folks'

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[35] J. D. Greene (2014) 'Beyond Point-and-Shoot Morality: Why Cognitive (Neuro)Science Matters for Ethics', *Ethics*, 124, 696–7.

[36] Greene, 'Beyond Point-and-Shoot Morality', 698.

[37] P. Foot (1978) *Virtues and Vices and Other Essays in Moral Philosophy* (Berkley, CA: University of California Press), 19–32; and J. J. Thompson (1985) 'The Trolley Problem', *The Yale Law Journal*, 94, 1395–415.

responses matched the standard philosophical analysis. Most respondents found it acceptable to flip the switch in the bystander case, thereby killing one person rather than five, but found it unacceptable to push the stranger from the bridge in the footbridge case, also killing one person to save five. However, when the respondents were asked to justify their decisions, they had difficulty in offering reasons.[38]

Greene decided to run functional magnetic resonance imaging (fMRI) on research subjects while they considered the trolley cases. The results indicated that the consideration of the different dilemmas engaged different brain areas. The footbridge case engaged areas of the brain directly related to the processing of emotions, while the switch case engaged brain centers typically involved in reasoning about nonmoral cases, those associated with working memory and cognitive control.[39] Greene took this as an explanation for the different reactions people have toward the two scenarios. The footbridge case evokes an emotional response because the agent must personally touch the sleeping stranger when pushing him from the footbridge. The switch case is more impersonal because of a greater distance of the agent from the parties and because only a mechanical switch is touched, not a person. And so in the switch case emotions are not involved, and reason alone can be invoked. This conclusion is consistent with findings from neural pathology indicating that damage to certain emotional centers of the brain elicits behavior severely deficient in the expression of social emotions like guilt and compassion.[40] This conclusion was reinforced when the scenarios were presented to patients with frontotemporal dementia, damage to specific emotion processing brain structures. Over 60 % of these patients found it acceptable to push the man from the bridge in the footbridge case.[41]

[38] M. Hauser, F. Cushman, L. Young, R. K-X. Jin, and J. Mickhail (2007) 'A Dissociation between Moral Judgments and Justifications', *Mind & Language*, 22, 1–21; and F. Cushman, L. Young, and M. Hauser (2006) 'The Role of Conscious Reasoning and Intuition in Moral Judgments: Testing Three Principles of Harm', *Psychological Science*, 17, 1082–9.

[39] J. D. Greene, R. B. Sommerville, L. E. Nystrom, J. M. Darley, and J. D. Cohen (2001) 'An fMRI Investigation of Emotional Engagement in Moral Judgment', *Science*, 293, 2105–8.

[40] J. Haidt (2003) 'The Moral Emotions', in R. J. Davidson, K. R. Scherer, and H.H. Goldsmith (eds) *Handbook of the Affective Sciences* (Oxford: Oxford University Press), 852–70.

[41] M. Mendez, E. Anderson, and J. Shapira (2005) 'An Investigation of Moral Judgment in Frontotemporal Dimentia', *Cognitive and Behavioral Neurology*, 18, 193–7.

Greene further hypothesized that emotional versus reasoned responses would yield different reaction times for different dilemmas. Pushing a person to his/her death is a moral violation whose emotion would have to be overridden by a reasoned response, and so Greene hypothesized that responses that sanction that act would take longer than responses that did not. On the other hand, he expected there to be little or no difference in reaction times between yes and no responses to the switch case, because only reasoning was involved, not emotional disapprobation. His experiments confirmed both of these hypotheses.[42]

Greene developed an additional hypothesis regarding competing personal moral dilemmas that evoke emotional responses, arguing that those that have an important cost-benefit analysis component will prompt more activity in brain regions dedicated to response conflict as well as more activity in reasoning sectors of the brain. He presented research participants with two scenarios, one in which the question is whether to smother a crying baby who is about to reveal the hiding spot of a large number of people to an enemy during a time of war. The second was whether a teen mother should kill her recently born child. The fMRI results of the participants confirmed the expected increase in activity in the specific brain regions.[43]

Greene went a further step and related the two processes to the traditional categories of deontology and utilitarianism from moral philosophy. He recognized that in their traditional formulations both moral theories are connected with cognitive reasoning, and deontology in particular eschews connections with emotion. He proposed, however, relaxing elements of these traditional understandings and defining them in terms of the types of judgments they produce. And so he labeled judgments that disapprove of an action in spite of the number of lives that are lost as deontological judgments, and judgments that emphasize the saving of more lives in spite of going against a moral disapprobation as utilitarian judgments.[44] Using these definitions Greene conducted research on dilemmas

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[42] J. D. Greene (2007) 'The Secret Joke of Kant's Soul', in W. Sinnott-Armstrong (ed.) *Moral Psychology, Vol. 3: The Neuroscience of Morality: Emotion, Disease, and Development* (Cambridge, MA: The MIT Press), 44.

[43] Greene, 'Secret Joke', 45.

[44] Greene, 'Secret Joke', 39. I believe that Greene's connection of deontology to emotion does contain an insight, but not for the reasons his models demands. This resonance between deontology

for each type of judgment, monitoring reaction times and conducting brain scans, and his results confirmed his hypothesis. When research participants were given dilemmas regarding deontological judgments such as the footbridge case and the crying baby case, their reaction times were slower, and the activated brain areas were characteristic of emotional processing. However, when they were given cases involving utilitarian judgments such as the switch case, then their reaction times were faster, and activated brain areas were characteristic of higher cognitive reasoning and executive decision making.[45]

Greene's general conclusion is that the automatic/emotional judgments correspond to his version of deontological judgments. These judgments are helpful when shaped by trial and error experience and social experience, and when one is confronting unfamiliar circumstances. In most practical moral situations, however, the deliberate responses of utilitarianism should be followed, because they involve actual moral reasoning whereas whatever reasoning is connected with deontology winds up being just moral rationalization.[46]

Greene's theory is certainly innovative in its use of brain scan data and its revision of traditional categories of moral judgment to formulate a dual process theory of moral judgment, but there are problems. Independent research on some of his results, particularly the reaction time experiments, indicated that the differences in reaction times correlated better with personal/impersonal dynamics than with deontological/utilitarian dynamics.[47] Greene has admitted problems with that study, but believes that the problems are insufficient to overturn the theory and that subsequent studies have reinforced the original conclusions.[48] There is

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and emotion is explicable in terms of the model I develop in Chap. 8. The intellectual attraction of deontological theories is because they are Type 2 conceptualizations of important aesthetic sensibilities experienced as emotions.

[45] Greene, 'Beyond Point-and-Shoot Morality', 701–5.

[46] Greene, 'Beyond Point-and-Shoot Morality', 714–8.

[47] J. McGuire, R. Langdon, M. Coltheart, and C. Mackenziem (2009) 'A Reanalysis of the Personal/Impersonal Distinction in Moral Psychology Research', *Journal of Experimental Social Psychology*, 45, 577–80.

[48] J. D. Greene (2009) 'Dual-Process Morality and the Personal/Impersonal Distinction: A Reply to McGuire, Langdon, Coltheart, and Mackenzie', *Journal of Experimental Social Psychology*, 45, 581–4.

also criticism of the modular brain function assumptions behind Greene's approach. In spite of his recognition of the absence of specific neural systems for moral judgment and of the constant interaction between neural systems, his conclusions regarding the fMRI data retain the assumption of specialized function for specific brain regions. This assumption overlooks the limits of fMRI technology in detecting whether certain brain regions are loci of processing or relays between different regions.[49]

The ethical dilemmas used in the research also pose problems. While having an enduring philosophical interest, they may not capture the dynamics of real-world decision making, because they provide information only about responses to these contrived dilemmas,[50] and may yield different results according to whether they are presented via virtual reality versus textual presentation.[51] A similar difficulty arises with the operating notion of utilitarianism. It is not clear that the form of utilitarianism considered in the dilemmas is the sort of genuine concern for the greater good that would be expected in real-world contexts, and it also appears to be significantly different from the standard accounts of utilitarianism in moral theory whereby one reasons from explicit utilitarian principles to a conclusion.[52] Moreover, some critics point out that much of Greene's evidence can be interpreted in a much more ordinary way. The differences in reaction times and brain region activation could represent differences between intuitive and counterintuitive judgments rather than differences between deontological and utilitarian or even intuitive and deliberative conclusions.[53]

In later work with Joseph Paxton, Greene offers a diagram of his model that represents the dynamics at issue in dual process moral judgment

[49] H. Sauer (2012) 'Morally Irrelevant Factors: What's Left of the Dual Process Model of Moral Cognition', *Philosophical Psychology*, 25, 789.

[50] C. W. Bauman, A. P. McGraw, D. M. Bartels, and C. Warren (2014) 'Revisiting External Validity: Concerns about Trolley Problems and Other Sacrificial Dilemmas in Moral Psychology', *Social and Personality Psychology Compass*, 8/9, 536–54.

[51] I. Patil, C. Cognoni, N. Zangrando, L. Chittaro, and G. Silani (2013) 'Affective Basis of Judgment-Behavior Discrepancy in Virtual Experiences of Moral Dilemmas', *Social Neuroscience*, 9, 94–107.

[52] G. Kahane (2014) 'Intuitive and Counterintuitive Morality', in J. D'Arms and D. Jacobsons (eds) *Moral Psychology and Human Agency: Philosophical Essays on the Science of Ethics* (Oxford: Oxford University Press ), 18 and 34.

[53] Kahane, 'Intuitive and Counterintuitive Morality', 14.
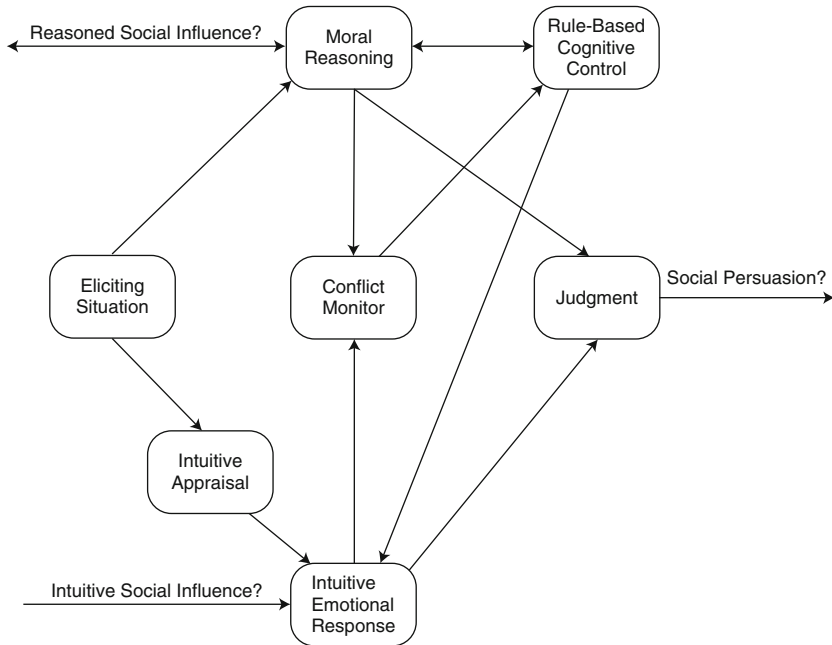
**Fig. 4.2** Joshua Green's dual process model of moral judgment. (*Source*: Paxton and Greene, "Moral Reasoning," 4.)

(see Fig. 4.2). The moral judgments arising from emotions and intuitions often differ from those arising from moral reasoning, and are adjudicated in a cognitive domain labeled "conflict monitor," which not only chooses between competing moral principles but also chooses between competing moral intuitions and does so on the basis of moral principles, primarily utilitarian ones.[54] Moral deliberation, it would seem, resides within the operations of this conflict monitor, whose operations are Type 2 processes.

Greene's notion of moral decision making as involving competition between Type 1 and Type 2 processes is insightful, but when his ultimate suggestion is essentially a return to the standard recommendation of moral

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[54] J. M. Paxton and J. D. Greene (2010) 'Moral Reasoning: Hints and Allegations', *Topics in Cognitive Science*, 2, 13.

philosophy that what we need is more principled control over emotional inclinations, one wonders if his long-standing commitments to utilitarianism are too much in control of his research design and interpretation.

## The Problems of Current Dual Process Moral Theory

Haidt and Greene's theories are part of a wave of new and expanding work in the areas of moral psychology and experimental philosophy that enlarges what can be counted as moral rationality. An interesting observation is, however, that in spite of their innovations the differences between the two models merely represent a contemporary version of the seventeenth- and eighteenth-century conflict between moral sentimentalism and moral rationalism. The moral sentimentalists held that morality resided at least partly, and perhaps largely, in human sentiments of emotional valuation. The moral rationalists held that morality resided in reason only.[55] Like the moral sentimentalists, Haidt has demoted Type 2 processes in moral judgment to the status of virtual nonplayers, attempting to make Type 1 processes the core of all activity of moral judgment. Like some moral rationalists, Greene admits a limited role for Type 1 processes, but Type 2 processes remain the normative standard.

Perhaps Haidt's and Greene's models are most helpful in demonstrating the difficulties involved in balancing these sentimentalist and rationalist inclinations in a dual process moral theory. Haidt's model encounters the problem of how one affirms one's moral conclusions as true not just for oneself but for others, if one does not appeal to generalized rational criteria. Like the sentimentalists, Haidt at points refers to moral judgments as akin to aesthetic judgments, which are immediate, effortless, self-vindicating, and agreed upon by lots of people apart from overt reasons being given. Just like the sentimentalists, however, Haidt has difficulty providing communicable

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[55] For a helpful description of the conflict, see M. B. Gill (2007) 'Moral Rationalism vs. Moral Sentimentalism: Is Morality More Like Math or Beauty?' *Philosophy Compass*, 2, 16–30.

reasons for why these judgments ought to be taken as normative by anyone else, and he is unable to provide clear insight as to how conflicting aesthetic judgments are to be adjudicated.[56]

Part of Haidt's difficulty may be found in his assumption of a firm distinction between ethical and aesthetic judgments.[57] This distinction is common in analytic philosophy and derives from the assertion that aesthetic judgments must be kept separate from ethical judgments because a consideration of the beautiful thing is different from a consideration of what the right or good act (or the good life) is. Although a few philosophers are willing to see connections between the aesthetic and the ethical,[58] most object to any blurring of the conceptual boundaries. In terms of Haidt's theory, this distinction is problematic, because it is not clear how ethical cognitions would differ qualitatively from aesthetic ones and it is not clear how such distinctions would be made on the basis of Type 1 processes.

Greene's model reveals the challenges of investigating ethical normativity from the standpoint of rationalism. Unlike many dual process theorists who retreat into the confines of descriptive science and avoid dealing with normative claims,[59] Greene is overtly investigating the character of what people do count and ought to count as normative. In doing so, his empirical methodology diverges from a standard approach of moral philosophy, which seeks rational justifications for normative assertions without considering whether these relate to what people actually do or can do ethically.[60] The priority that he gives to Type 2 processes represents the two commitments that lead most scientists and philosophers to support

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[56] Gill (2007) 'Moral Rationalism vs. Moral Sentimentalism', 16–30; and Haidt and Bjorklund, 'Social Intuitionists Answer Six Questions', 188–9.

[57] Haidt and Bjorklund, 'Social Intuitionists Answer Six Questions', 189. Haidt always refers to them separately and asserts that moral judgments are 'like' aesthetic judgments, not that they involve the same cognitions.

[58] S. Irvin (2010) 'Aesthetics as a Guide to Ethics', in R. Stecker and T. Gracyk (eds) *Aesthetics Today: A Reader*, (Lanham, MD: Roman & Littlefield, Publishers), 370–7.

[59] Elquyam and Evans, 'Subtracting "Ought" from "Is"', 246.

[60] J. Craigie (2011) 'Thinking and Feeling: Moral Deliberation in a Dual-Process Framework', *Philosophical Psychology*, 24, 55.

the priority of Type 2 processes. First, contemporary Western intellectuals are committed to varying forms of realism, which, in a broad sense, is the notion that knowledge claims about the world in general or ethics in particular exist independently of human minds, acts, or awareness. Moral truth, then, is assumed to be an artifact, discoverable by human endeavor whether that endeavor is philosophical or scientific. Second, there is a commitment to the quest for rational justifications for belief that provide fully communicable demonstrations for why a belief is true. For philosophy, formal and deductive methods dominate justification, and for science, the scientific method is the source of justification. From the standpoint of these commitments, Type 1 processes are dodgy. Although a few moral philosophers and scientists argue for forms of intuitional realism, which claim that human intuitions directly apprehend independent realities, these arguments aren't attractive to most rationalist theorists, and even those who will admit the value of intuitions for providing the beginning points for rational thought will still demand that those knowledge claims be justified by deductive or scientific empirical methods. The standard nomenclature of analytic philosophy communicates this bias against Type 1 processes. If one wishes to talk about approaches that are different from realism or deductive rationalism, then the standard labels are *antirealism*, and *irrationalism* or *nonrationalism*. Given these commitments, moral conclusions arrived at by Type 1 processes will always have less authority than moral conclusions arrived at by Type 2 processes.

In spite of the creative contribution of Haidt's and Greene's models, their models leave many questions. Haidt's descriptions of both Type 1 and Type 2 moral cognitions are thin, and Greene's labeling of Type1 moral cognitions as deontological and Type 2 cognitions as utilitarian appears too conveniently parallel to the categories of moral philosophy. Haidt makes clear that normative judgments arise from Type 1 processes but has no defense for why they deserve to be normative. Greene ascribes normativity to Type 2 moral cognitions, but this commitment appears to be an extension of his commitment to the normativity of rationalism and the scientific method, but such normativity is an act of will that does not originate within those methods.

Before a full-blown dual process model of moral deliberation can be proposed, a more complete description of Type 1 and Type 2 moral

cognitions is needed, with specific attention given to how each relates to ethical normativity. Type 2 moral cognitions will be addressed first, in Chap. 5, because they are the assumed standard of cognitive processing within moral philosophy, moral psychology, and applied ethics. Type 1 moral cognitions will be addressed in Chap. 6 and will require considerably more work to develop because they have not received much concerted attention in the modern West.

# 5

## Type 2 Moral Cognition

As noted in the previous chapter, Type 2 reasoning is characterized in dual process theory by conscious, deliberate, slow, methodical, abstract, rule-based, and consequentialist cognitive processes.[1] This characterization indicates the parallel between Type 2 processes and common descriptions of critical reasoning and its use in intellectual disciplines such as philosophy, education, medicine, and law.[2] The hallmark of these forms of reasoning is their goal of removing one from the influence of superstition, unfounded intuition, and personal and cultural bias. The primary goal is to arrive at the most reliable conclusion for some question by generating reasons that are convincing to oneself or others independently of particular biases.

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[1] J. S. B. T. Evans and K. E. Stanovich (2013) 'Dual Process Theories of Higher Cognition: Advancing the Debate', *Perspectives on Psychological Science*, 8, 225.

[2] P. A. Facion (1990) *Critical Thinking: A Statement of Expert Consensus for Purposes of Educational Assessment and Instruction. Research Findings and Recommendations* (Newark, DE.: American Philosophical Association), 6; B. K. Scheffer and M. G. Rubenfeld (2000) 'A Consensus Statement on Critical Thinking in Nursing', *Journal of Nursing Education*, 39, 358; R. A. Posner (1988) 'The Jurisprudence of Skepticism', *Michigan Law Review*, 86, 827–91; and D. Simon (2004) 'A Third View of the Black Box: Cognitive Coherence in Legal Decision Making', *University of Chicago Law Review*, 71, 511–86.

In spite of the ability to lump these cognitive processes under one heading, there remains considerable disagreement about what this type of reasoning actually entails. Is there a difference between formal logic and everyday reasoning? Is normativity in reasoning an ideal that lies beyond human practice or is a statistical tendency found in the majority of human reasoning? Do the different facets of reasoning represent different complementary elements like flowers in a bouquet, or is there one process that is more central than the others? No generally compelling answers to these questions have been found in philosophy, psychology, or other intellectual professions, and the lack of agreement has led to competing renditions of what reason is and what it ought to be doing.

These same disagreements shape discussions about what the proper methodology is in practical ethics. Arriving at conclusions that are convincing to oneself and others is still the central goal, but there is no general agreement on how this should be done. What exists are different methodologies that emphasize one or another Type 2 process, in particular deduction, analysis, induction, or coherence-based reasoning. Of course, the methods that result are never pure in terms of a specific process. Analysis, for example, in the sense of considering a problem in terms of component parts, is a pervasive intellectual process across all the methods. Likewise, deduction and induction are frequently mixed in practical applications. However, one or another of these processes tends to predominate in each approach to moral reasoning. Deduction is the primary process of the deductive method. Analysis is the primary mode of linguistic analysis. Induction is the primary mode found in casuistry, statistical and probability methods, consequentialism, and the scientific method. And, coherence-based reasoning is the mode of reflective equilibrium.

## Deductive Reasoning

There's a long-standing identification of deduction with reasoning. Having its origin in Aristotle's rules of syllogistic inference, deduction is the means by which to derive logically necessary conclusions from premises. The three-part structure of the syllogism consists of a major premise, a minor premise, and a conclusion. In modern logic, there are frequently

more than two premises, and often just one. Valid arguments are those whose conclusions must necessarily be true if their premises are true. Deduction does not determine whether or not premises are true, because such a concern lies outside its scope.

In Aristotelian logic, which held sway in the West for over 2000 years, syllogistic inference is categorical and deals with classes of things or universals. In the seventeenth and eighteenth century, logic was enlarged to include the study of the relation between ideas, and the laws of logic came to be viewed as the laws of thought.[3] Gottlob Frege, however, writing in the late nineteenth and early twentieth century made a distinction between the laws of logic and the way people actually think. According to Frege, laws of logic are aimed at normative senses of truth, while psychological/descriptive laws govern how people actually reason.[4] Even though people ought to conform to the patterns of logical thought, there was no guarantee that they would do so. Frege also held that deduction is concerned with relations between ideas and the analysis of the truth or falsity of propositions as communicated by sentences. From these notions developed propositional calculus whereby the truth or falsity of propositions can be deduced by means of the application of rules of inference.

Deduction's promise of necessary conclusions is an attractive standard for moral reasoning because it promises rational certainty. If one can provide true premises, then a true conclusion necessarily follows from a valid deductive argument. In practice deductive moral reasoning tends to use a top-down movement that connects broad moral principles to the particulars of specific cases. The method has had so pervasive an influence in practical ethics that it is often taken to be synonymous with "applied ethics," and many influential ethicists have supported it. Alan Donagan, for example, maintained that one deduces moral conclusions from the fundamental moral principle, "respect every human being as a rational creature," or from precepts deductively derived from the fundamental moral principle.[5] R.M. Hare argued that

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[3] G. Boole (2009) *An Investigation of the Laws of Thought on which are Founded the Mathematical Theories of Logic and Probabilities* (Cambridge: Cambridge University Press), 1.

[4] G. Frege (1956) 'The Thought: A Logical Inquiry', *Mind: A Quarterly Review of Psychology and Philosophy*, 65, 289–90.

[5] A. Donagan (1977) *The Theory of Morality* (Chicago: University of Chicago Press), 71.

There are two factors which may be involved in the making of any decision to do something. … They correspond to the major and minor premisses of the Aristotelian practical syllogism. The major premiss is a principle of conduct; the minor premiss is a statement, more or less full, of what we should in fact be doing if we did one or other of the alternatives open to us. Thus if I decide not to say something, because it is false, I am acting on a principle, 'Never (or never under certain conditions) say what is false,' and I must know that this, which I am wondering whether to say, is false.[6]

And John Rawls, even though he engages other rational methods as well, writes that he is seeking moral conclusions that can be deduced from the premises of the "original position," and that his goal is to create a logically rigorous system that approaches a "moral geometry."[7]

A common procedure for deductive ethics is to translate a particular ethical discussion into a syllogistic structure. If one is committed to a large-scale ethical theory such as some form of Kantianism or utilitarianism, then a general principle such as the categorical imperative or a version of the principle of utility related to that system will constitute the major premise. Often, however, the major premise is a moderately specific moral principle related to a social norm that one thinks is defensible, such as "people shouldn't lie" or "people should not steal." The minor premise is derived from details of the specific case at hand.

Major Premise:   We have a duty not to lie to other human beings.
Minor Premise:   A doctor not telling a patient the negative results of a medical exam is lying.
Conclusion:      The doctor should tell the patient the results of the medical exam.

There may of course be additional premises that qualify either the major or minor premise and extend the argument beyond the basic structure. For example, with the following additional premises, a different conclusion will result.

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[6] R. M. Hare (1972) *The Language of Morals* (New York: Oxford University Press), 56.

[7] J. Rawls (1971) *A Theory of Justice* (Cambridge, MA: Harvard University Press), 121.

Premise 1:    We have a duty not to lie to other human beings.

Premise 2:    A doctor not telling a patient the negative results of a medical exam is lying.

Premise 3:    The patient is currently under psychiatric care because of suicidal threats.

Premise 4:    Communicating the negative results of the medical exam may have disastrous effects on the mental stability of the patient, and constitutes a prima facie reason to qualify the duty not to lie to another human being.

Conclusion:  The doctor should not tell the patient the result of the medical exam.

The widespread commitment to deduction as a method within ethics provides a partial explanation of why so much effort has been spent on framing moral theory and so little on application. The belief is that if one gets the moral premises right, then the proper moral conclusions will result as a matter of logical necessity.

Translating an ethical case into deductive form is rarely as straightforward as this example suggests, however. Sometimes there are unstated premises involved, either in how the case is presented, or in how the argument is developed, and these must be made explicit. Often, empirical premises are involved, and their truth status must be verified by other means. As well, logical fallacies and errors in reasoning must be removed to allow the argument to be valid. Because ethical deliberation in this style involves numerous nested arguments whose conclusions become the premises for later arguments in the argument chain, one also has to make decisions about which arguments are made first and where to place them in the chain.[8]

According to deduction, disagreement about the ethical conclusions of arguments are due to either faulty premises or faulty arguments. The first require better moral theory or empirical investigation, and the second require better argument mechanics. The normativity of moral conclusions arrived at by deduction are therefore a result of the normative

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[8] See, for example, L.-M. Russow (2010) 'Ethics', in G. L. Comstock (ed.) *Life Science Ethics*, 2nd edn (New York: Springer), 46–55.

status given to deductive logic itself, but logicians themselves disagree as to whether deduction provides a model that exemplifies how all ethical reasoning ought to be done or provides an ideal method of rational justification, which, even though its demands can never be fully achieved in practice, points toward the proper direction for practical choice.

# Analysis

Although analysis is usually understood in a decompositional sense of breaking a whole into its pieces to understand the whole, this is not the only, nor necessarily the most important, conception. The ancient Greeks often practiced a regressive form of analysis whereby one worked backward from a thing or event to first principles, which would provide a foundation from which to demonstrate the nature of the thing or event. There is also an interpretative form of analysis whereby a claim is translated point by point into another language or form.[9]

Although each of these types of analysis have been used in moral deliberation, in the late nineteenth and early twentieth century, the interpretative form of analysis was developed in Anglo-American philosophy to a new level of sophistication and with an emphasis on language. Some argue that Gottlob Frege's work in logic led directly to the twentieth-century philosophical interest in language analysis.[10] In the midst of his exploration of how one can make knowledge claims, he found himself continually running into issues regarding language. On the one hand, language was an unavoidable vehicle for access to thought, but, on the other hand, language inevitably introduced distortions into thought that needed to be identified and removed. While it remains unclear just how much Frege believed language corresponded to the structure of thought and reality, he applied interpretive analysis in the task of translating statements into what he argued was their underlying logical form. This approach became crucial for the work of Ludwig Wittgenstein and

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[9] M. Beaney (2015) 'Analysis', in N. Zalta (ed.) *The Stanford Encyclopedia of Philosophy*, http://plato. stanford.edu/archives/spr2015/entries/analysis/, date accessed 21 July 2015.

[10] M. Dummet (1973) *Frege: Philosophy of Language* (New York: Harper & Row, Publishers), 668–9.

Bertrand Russell.[11] Their commitment to a correspondence between the elemental constituents of propositions and the elemental constituents of reality led to the belief that the character of the world could be discovered by analyzing sentences through transforming propositions into their elemental components and logical relations. Wittgenstein and Russell initially emphasized analysis only for the production of an ideal logical language, but G.E. Moore's 1903 *Principia Ethica* directed attention to the analysis of ordinary language. His commitment to a sharp distinction between facts and values led him to reject any analytic relevance for moral problems or how to reason about them. The purpose of ethics was instead to get the meaning of ethical terms straight by identifying and removing the vagueness and inconsistencies involved in their usage. Although Moore's ordinary language approach was initially eclipsed by ideal language analysis, in the 1950s the work of the later Wittgenstein and the Oxford philosophers made it prominent.

Also in the 1950s, however, analytic ethics began a gradual fall into disfavor. Concern grew that the mere analysis of moral terms did not reveal much about ethics and that analytic ethics' rejection of the relevance of moral problems could damage the discipline. These concerns led some analytic philosophers to construct normative systems for judgment, such as R.M. Hare's utilitarianism[12] and John Rawls' theory of justice,[13] and led others to analyze public policy such as H.L.A. Hart does in his book *Law, Liberty, and Morality*.[14]

In spite of the rejection of much of the agenda of language analysis, it lingers as a force in Anglo-American philosophy. This influence continues in practical ethics, with some still maintaining that applied ethics is inextricably connected to conceptual analysis.[15] Ronald Dworkin, in one of his last writings, pronounced moral reasoning to be "conceptual

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[11] A. George and R. Heck (2005) 'Gottlob Frege', in E. Craig (ed.) *The Shorter Routledge Encyclopedia of Philosophy* (New York: Routledge), 298–9.

[12] R. M. Hare (1963) *Freedom and Reason* (Oxford: Oxford University Press).

[13] Rawls, *A Theory of Justice*.

[14] H. L. A. Hart (1963) *Law, Liberty and Morality* (Oxford: Clarendon Press).

[15] See, for example, H.-J. Gock (2011) 'Doing Good By Splitting Hairs? Analytic Philosophy and Applied Ethics', *Journal of Applied Philosophy* 28, 238.

interpretation."[16] In bioethics, "informed consent," "autonomy," "killing," "letting die," and "human dignity" have been subjected to considerable scrutiny.[17] Indeed, the belief persists in many quarters that if one can become clear about the usage of moral terms and the language framing moral questions, then it will become clear exactly what the proper question is, how to find methodologies to answer that question, and how to justify the conclusion.[18]

## Induction

Whereas deductive inference looks for necessary conclusions that are entailed by their premises making valid arguments, inductive inference seeks probable conclusions derived from their premises to make strong arguments. Often called a bottom-up approach, induction gathers data from specific instances and reasons from that data to general conclusions or best explanations.

Inductive arguments are often presented in a format similar to deductive arguments, with stated premises and conclusions. The premises, however, tend to all be empirical or speculative. For example,

Premise 1:    All swans that have ever been sighted have been white.
Premise 2:    A swan was just sighted in Latin America.
Conclusion:  This swan was probably white.

Three types of inductive reasoning are used within practical ethics: analogical reasoning, statistical reasoning, and scientific reasoning.

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[16] R. Dworkin (2011) *Justice for Hedgehogs* (Cambridge: MA: Harvard University Press), 157.

[17] T. L. Beauchamp (2004) 'Does Ethical Theory have a Future in Bioethics?' *The Journal of Law, Medicine, & Ethics*, 32, 214–5. Also see a recent effort by Daniel P. Sulmasy in D. P. Sulmasy (2013) 'The Varieties of Human Dignity: A Logical and Conceptual Analysis', *Medicine, Health Care and Philosophy*, 16, 937–44.

[18] R. B. Brandt (1963) *Moral Philosophy and the Analysis of Language* (Lawrence, KS: The University of Kansas), 12. This assertion by Brandt continues to carry weight among many ethicists.

## Analogical Reasoning

Reasoning from analogy involves comparing different groups of objects or relations and drawing similarities between them. Often, the comparison involves an extrapolation of similarities, whereby the unknown or lesser known object or relation is compared to a thing or group of things that are known. For example,

Mule deer, white-tailed deer, elk, and moose are all ruminant mammals, with antlers, large ears, four legs, and similar mating and foraging habits.
Mule deer, white-tailed deer, and elk are prone to chronic wasting disease. Therefore, moose are likely prone to chronic wasting disease.

In ethical deliberation, analogical reasoning is used with casuistry and case analysis. In a methodology similar to medical diagnosis and common-law argument, individual cases are scrutinized in terms of their similarity or dissimilarity to recognized and well-analyzed paradigm cases. Each of these paradigm cases comes with maxims and arguments that have been derived from them. The maxims and arguments from the paradigm cases that are deemed to be sufficiently relevant to the case at hand are then applied to the current case, and adjusted in their application according to its peculiar details. Some maxims and arguments may be dismissed as irrelevant, and others may be deemed to be more primary than others.[19]

Although a few supporters of case-based reasoning attempt to portray the method in terms of an abbreviated argument structure,[20] most supporters avoid this. They will argue that the method requires expansive attention to a description of the case at hand, expansive descriptions of the possible paradigm cases, and a process of analogical reasoning that is not linear or predictable.[21]

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[19] A. R. Jonsen (1995) 'Casuistry: An Alternative or Complement to Principles?' *Kennedy Institute of Ethics Journal*, 5, 237–51; and A. R. Jonsen and S. Toulmin, (1988) *The Abuse of Casuistry: A History of Moral Reasoning* (Berkeley, CA: University of California Press), 257.
[20] See Jonsen and Toulmin, *The Abuse of Casuistry*, 319–26.
[21] See, for example, C. Strong (2000) 'Specified Principlism: What Is It, and Does it Really Resolve Cases Better than Casuistry?' *Journal of Medicine and Philosophy*, 25, 323–41.

## Statistical Reasoning

Descriptive statistics organizes and characterizes data, calculating tendencies among the data such as mean, mode, and standard deviation. Inferential statistics, often called argumentative statistics, analyzes the characteristics of a sample of a population of objects, events, or people, and from that sample generates conclusions about the general population. For example, a research group wants to determine whether college students in the USA believe that they will have longer life spans than their fathers. And so the research group randomly chooses 1560 college students from 150 American universities and asks them whether they expected to have a longer life span than their fathers. Eighty-five percent of these students respond to indicate that they expect to have a longer life span than their fathers. From this sample, the research group concludes that 85 % of all American college students believe that they will have a longer life span than their fathers.

Statistical reasoning is used in practical ethics for four purposes: identifying moral tendencies in human behavior, applying and evaluating the success of moral reasoning, calculating the probabilities of possible moral outcomes, and consequential reasoning. For the first, the statistical assessment of what humans generally take to be right or wrong morally can identify ethical values and moral rules. For example, Michael Ruse and E.O. Wilson argue that genetic and cognitive research indicates that there are "epigenetic rules" that are "genetically based processes of development that predispose the individual to adopt one or a few forms of behavior as opposed to others."[22] Morality arises out of these epigenetic rules as they prompt humans to consider some types of actions as right and some as wrong. As an illustration Ruse and Wilson point to the avoidance of sibling incest as a fairly universal tendency, which extends to any person with which one has close familial proximity prior to the age of 6. The origin of this rule lies in the benefits obtained from avoiding the increased mortality and health problems associated with children of parents who are as closely related genetically as siblings.[23] The way these

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[22] M. Ruse and E. O. Wilson (1986) 'Moral Philosophy as Applied Science', *Philosophy*, 61, 180.
[23] Ruse and Wilson, 'Moral Philosophy', 183–4.

rules are discovered is through surveying people's reactions to various scenarios and then looking for statistically significant patterns of behavior that can be described by a general rule.[24] The standard critique of this approach is that it both attempts to derive an "ought" from an "is" and commits the naturalistic fallacy with the result that it cannot provide any justificatory reasons for why anyone ought to pursue this particular set of values. Of course, Ruse and Wilson do not believe that there are any foundational and justificatory arguments for a normative ethic. Instead, ethical normativity is a psychological imputation that has been ascribed to the successful survival strategies of individuals and groups. Statistical reasoning provides the means to identify these normative values and the contexts in which they apply.[25] Although much of traditional moral philosophy is antagonistic to the sociobiological commitments of Ruse and Wilson, statistical reasoning is also referenced in mainstream practical ethics. Tom Beauchamp, for example, claims that there is a set of norms universally shared by all peoples who are committed to conditions that promote the flourishing of human lives. These include injunctions such as "treat all persons with equal moral consideration" and "don't kill." The presence of these common norms provides indication of, but not rational justification for, the importance of these norms for ethical reasoning.[26] Beauchamp appears to be unaware at the time of his writing that sociological research of the kind he described was being conducted. Such research is in fact still ongoing, although it is aimed at identifying broad moral inclinations rather than rules and shows more variation than Beauchamp suggests.[27]

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[24] Ruse and Wilson, 'Moral Philosophy', 183–5. Ruse and Wilson point to Kahnemann and Tversky's research using statistical techniques to investigate decision making as a discovery of some of these epigenetic rules. See A. Tversky and D. Kahneman (1981) 'The Framing of Decisions and the Psychology of Choice', *Science*, 211,453–8.

[25] Ruse and Wilson, 'Moral Philosophy', 174.

[26] T. L. Beauchamp (2003) 'A Defense of the Common Morality', *Kennedy Institute of Ethics Journal*, 13, 260.

[27] See Jonathan Haidt and Craig Joseph's analysis of this kind of research in J. Haidt and C. Joseph (2007) 'The Moral Mind: How Five Sets of Innate Intuitions Guide the Development of Many Culture-Specific Virtues and, Perhaps Even Modules', in P. Carruthers, S. Laurence, and S. Stich (eds) *The Innate Mind*, Volume 3, *Foundations and the Future* (Oxford: Oxford University Press), 373–4.

The second way statistical reasoning is applied in practical ethics is to monitor and evaluate the application of moral principles. For example, Katinka Quintelier, Linda Van Spybroeck, and Johan Braeckman consider the question of whether gender differences should be eliminated in regard to the care of children and look at the practice as followed in a Kibbutzim in Israel. Central to the discussion are three moral values: care for children, equitable parenting expectations for fathers and mothers, and maximum life satisfaction for mothers and fathers. The initial conclusion, according to a strict interpretation of a principle of gender equality, might be that parenting responsibilities should be equally divided between fathers and mothers as measured by time and effort. However, many statistical studies indicate that mothers across different cultures tend to spend more time with children than fathers do and have greater biological inclinations to care for children. While many fathers may be trained or encouraged to increase their parenting inclinations to come to the level of those of mothers, the statistical findings indicate that more mothers desire spending more time with their children than fathers do. These complexities are exacerbated by evidence that a majority of women in Western cultures find a life combining work outside the home and caring for family in the home superior to a life centered on either a career or staying at home. Fathers, on the other hand, tend to prefer a work-centered life over a home-centered life. This statistical information suggests then that forced elimination of gender differences in childcare could have the result of fathers and mothers having less life satisfaction and not achieving an optimal social or personal outcome.[28] As this example indicates, empirical data analyzed for statistical patterns may provide crucial insights as to how moral values ought to be applied and whether moral action plans are achieving their intended goals.

The third way statistical reasoning is used in practical ethics is in regard to probability under risk and under uncertainty. Decisions under risk are decisions made where the various results of decisions and their respective probabilities are known. Decisions made under uncertainty are decisions where the various outcomes and their probabilities are not reliably known. In act-utilitarian ethics, the value of an act is determined

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[28] K. Quintelier, L. V. Spybroeck, and J. Braeckman (2011) 'Normative Ethics Does Not Need a Foundation: It Needs More Science', *Acta Biotheoretica*, 59, 37–8.

by the results of that act, with some results being assessed greater utility and value than others. Of course, not all results have the same level of probability in human experience, and so one must calculate the expected value of each possible option by multiplying the value of that option by the probability that that option will be the result. This will yield different expected values for the various options, with the option with the highest expected value being the superior act.[29] For example, an orthopedic surgeon in assessing a patient with discogenic lower back pain has a number of different treatment options to suggest, including physical therapy, medication, disc replacement, or spinal fusion. If the research literature provides very reliable statistics regarding the success rates for each of these therapies, and one obtains specific utility values for the patient for each of these outcomes, then one can compute the best medical procedure for the patient, and the optimal means for the physician to fulfill the medical ethical obligation to "do good." If the prior probabilities are not known, however, then one must use methods for calculation of utility under uncertainty such as a Bayesian decision procedure where subjective probabilities are inserted into the calculation. These subjective probabilities are grounded in the relative expertise and experience of the person making the assessment and can be updated as new information is received. This updating allows the subjective probabilities to progressively approximate the objective probabilities of the event.[30]

The fourth way statistical reasoning is used in practical ethics may be a surprising one in that most people do not view consequences as a matter of statistics. Consequentialist reasoning is inextricably intertwined with statistical reasoning because consequences are concerned with statistical correlation. As David Hume pointed out, causation is not a characteristic inherent to an event. There is nothing necessary about one event being the cause of another. Instead, causality is a psychological imputation that results from one event being observed in conjunction with another many

[29] G. Oddie (1994) 'Moral Uncertainty and Human Embryo Experimentation', in K. W. M. Fulford, G. Gillett, and J. M. Soskice (eds) *Medicine and Moral Reasoning* (New York: Cambridge University Press), 148–9.

[30] M. Peterson (2009) *An Introduction to Decision Theory* (Cambridge: Cambridge University Press), 125–32; and J. C. Harsanyi (1978) 'Bayesian Decision Theory and Utilitarian Ethics', *The American Economic Review*, 68, 223–8.

times and under conditions where there are no other events that are oper-
ating relevant to the second event. And so causality is better called cor-
relation, and correlation is measured according to how much the events
occurring in proximity to one another occur more often than would be
expected among random events. Yet, in spite of these philosophical and
statistical objections, referring to events as causal consequences of other
events remains common, and consequential prediction is a frequent crite-
rion for assessment of intelligence and critical thinking,[31] particularly in
technical professions where the prediction of the performance of finan-
cial markets or the progression of a disease or the results of some political
action are central to success.

Practical ethics is often concerned with causality and consequences
when considering the possible consequences of individual human actions
or states of affairs. Many consequentialist ethicists object that consequen-
tialism is not a decision procedure that evaluates different possible conse-
quences of actions before they are committed but a theory that provides
a standard of assessment for actions after they are committed. But in
spite of this objection, the analysis of possible causal chains of events is
employed in many understandings of ethical deliberation. This includes
not just the anticipation of consequences for the purpose of assessing
the value of the eliciting events, but also the determination, through an
instrumental use of reason, of what actions will achieve a particular event
or state of affairs that one has determined is the most desired.[32] These
operations are critical to most versions of both rational choice theory and
Bayesian decision theory.

## Scientific Reasoning

The scientific method is often characterized as a unified and consistently
applied method, but there is considerable disagreement about how to
typify the method, and scientific practice often defies standard charac-
terizations. The reasoning involved is usually discussed under induc-

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[31] Facione, *Critical Thinking*, 9; and Scheffer and Rubenfeld, 'A Consensus Statement', 358.
[32] Beauchamp, 'A Defense', 266.

tive inference, and clearly it does utilize reasoning from empirical data, much of it quantitative and the result of other scientific experiments, to more general conclusions. Yet it also has elements of deductive reasoning, whereby one reasons from a general theory to come up with specific predictions implied by the theory that will be tested experimentally to provide evidence that supports or does not support the general theory.

The scientific method has also been offered as a model for decision making. For example, in the medical diagnostic and treatment approach called evidence-based medicine, the structure of the scientific method is converted into a decision process for providing diagnosis and treatment of medical maladies. This is often portrayed as five steps:

1. Convert information into answerable questions.
2. Track down the best evidence with which to answer these questions.
3. Critically appraise the evidence for its validity and importance.
4. Integrate this appraisal with clinical expertise and patient values to apply the results in clinical practice.
5. Evaluate performance.[33]

Step one often includes the recognition and framing of some physical problem, such as a patient's physical complaint and symptoms. Step four is usually described as involving diagnostic and treatment decisions.

This decision process has frequently been applied to ethical decision making in clinical ethics.[34] In such applications, step one will frame the problem as an ethical problem pertaining to a clinical issue, such as "does the removal of a patient's feeding tube best fulfill the ethical obligations that relevant parties have toward the patient?" Under steps two and three, in addition to the assessment of the patient's medical history and current medical data and an evaluation of the most reliable medical practices in similar cases, there will be the gathering and assessment of the specific ethical values of the patient and the current theory and information about other relevant ethical values and their application in similar cases. This

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[33] S. E. Straus and F. A. McAlister (2000) 'Evidence-Based Medicine: A Commentary on Common Criticisms', *Canadian Medical Association Journal*, 163, 838.

[34] See, for example, L. C. Kaldijian, R. F. Weir, and T. P. Duffy (2005) 'A Clinician's Approach to Clinical Ethical Reasoning', *Journal of General Internal Medicine*, 20, 306–11.

leads in step four to an ethical assessment of the proper course of action.

This process is quite similar to what John Dewey proposed as the standard for reflective thinking,[35] and various versions of pragmatic ethics have used these elements. These approaches emphasize ethical deliberation as a process, often a corporate one, that begins with the problem and assesses and discusses evidence, possible arguments, and possible outcomes until coming to a consensus among the relevant parties.[36] The result is normative not because of anything inherent to the result or the intellectual materials used in producing the result, but because it was arrived at by the appropriate process.

Inductive methods in reasoning have received increasing interest in practical ethics. For one thing, they incorporate the methods and assumptions familiar to professional practitioners in medicine, business, and the sciences in general, and thereby allow these professionals to avoid entertaining assumptions or practices foreign to their disciplines. But, underneath this is a more pervasive commitment. Western societies have a long-standing faith in the ability of inductive methods to provide truth and solve human problems. It seems obvious then to turn to these methods to determine proper ethical conclusions.

Inductive methods, however, are generally unsatisfying for practical ethics in the same way that statistical methods are unsatisfying. They do not deliver what people traditionally want from a decision-making method for ethics. What people want in an ethical conclusion is the certainty characteristic of deductive arguments, and inductive and statistical methods at best only deliver probable conclusions. This desire for certainty often leads to inductive practitioners claiming more certainty than the methods allow. Financial analysts speak with inflated confidence about what markets will do.[37] The doctor assures the patient that he will get well. The archaeologist is certain about the age of the relic. Applications of induction often assume a regularity and evenness to the natural world and human behavior that obscure the eccentricities

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[35] J. Dewey (1910) *How We Think* (Boston: Heath), 72–8.

[36] G. McGee (2003) 'Pragmatic Method and Bioethics', in G. McGee (ed.) *Pragmatic Bioethics*, 2nd edn (Cambridge, MA: MIT Press), 30–1.

[37] B. M. Barber and T. Odean (2001) 'Boys Will Be Boys: Gender, Overconfidence, and Common Stock Investment', *The Quarterly Journal of Economics*, 116, 261–92.

involved and their possible liabilities, particularly when events with a small probability of occurrence can have catastrophic effects.[38] Changing health recommendations demonstrate the unavoidability of uncertainty in the empirical sciences. Currently, studies remain divided regarding the health benefits of alcohol consumption, with one recent study suggesting that previous studies had found positive benefits because of poor filtering within sample groups.[39] Likewise, a nutrition advisory panel for the US government is poised to withdraw decades-long cautions about eating high-cholesterol foods, citing a change in evidence in nutritional research.[40]

## Coherence-Based Reasoning

Under conditions of complexity where ideas, behaviors, or states of affairs are disparate, in competition, and apparently irreconcilable, human beings experience what is called cognitive dissonance. This is a state of cognitive discomfort whose magnitude is directly proportional to the perceived inconsistencies. This discomfort prompts a search for ways to relieve it. Some people may engage defense mechanisms such as rationalization or denial to convince themselves that the inconsistencies are not relevant or real, but these strategies tend to be artificial and self-defeating. Cognitively honest strategies involve efforts to adjust understandings of the contradictions so that a greater state of coherency can be achieved.[41] One or another idea may be rejected, one idea used to explain the other, or a new, broader idea developed that explains the contradic-

[38] This is a central point of N. N. Taleb (2007) *The Black Swan: The Impact of the Highly Improbable* (New York: Random House, Inc.).

[39] C. S. Knott, N. Coombs, E. Stamatakis, and J. P. Biddulph (2015) 'All Cause Mortality and the Case for Age Specific Alcohol Consumption Guidelines: Pooled Analyses of Up to 10 Population-Based Cohorts', *BMJ*, 350, h384, http://www.bmj.com/content/350/bmj.h384, date accessed 21 July 2015.

[40] P. Whorisky (10 February 2015) 'The U.S. Government Is Poised to Withdraw Long-Standing Warnings about Cholesterol', *The Washington Post*, http://www.washingtonpost.com/blogs/wonkblog/wp/2015/02/10/feds-poised-to-withdraw-longstanding-warnings-about-dietary-cholesterol/ 18 February 2015, date accessed 21 July 2015.

[41] L. Festinger (1962) *A Theory of Cognitive Dissonance* (Stanford, CA: Stanford University Press), 1–18.

tion. Cognitive coherency has received considerable theoretical interest recently in cognitive psychology, law, and artificial intelligence,[42] and is often referenced under the heading of coherence-based reasoning.[43]

Although coherence-based reasoning is important in many decision-making methodologies, it is most closely associated with reflective equilibrium. The method of reflective equilibrium derives from a process first proposed as a justification for induction[44] and as a result has affinities to the reasoning within scientific method. But given that its core goal is to reconcile differences between moral principles and considered judgments, some would call these intuitions, it is usually categorized as a coherentist methodology. The origin of this method in ethics is John Rawls's justification for a starting point for all social contract agreements that may be considered fair, what he calls "the original position." This is a cognitive posture that is arrived at by an equilibrium achieved between moral conviction and principles of justice, and also becomes the cognitive position in which such reflective equilibrium operates.

Rawls's approach begins with one's prior judgments, which include not just specific judgments about cases, "John should have paid his income tax bill," but also commitments to mid-level rules, "it is wrong to cheat on one's income tax return" and broader beliefs, "a just society must have a fair tax code." One then generates moral principles from them. If the principles are consistent with one's prior judgments, then equilibrium has already been achieved, but likely there will be discrepancies between the two, and one will then be compelled to consider whether to revise the principles or to revise one's judgments. This movement back and forth is continued until a coherence is obtained between principles and one's considered judgments.[45] Narrow reflective equilibrium deals only with

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[42] Simon, 'A Third View', 511–86; D. Simon (1998) 'Psychological Model of Judicial Decision Making', *Rutgers Law Journal*, 30, 1–142; P. Thagard (1992) *Conceptual Revolutions* (Princeton, NJ: Princeton University Press), 63–69; and S. Joseph and H. Prakken (2009) 'Coherence-Driven Argumentation to Norm Consensus', in T. V. Engers (ed.) *Proceedings of the 12th International Conference on Artificial Intelligence and Law* (New York: ACM Press), 58–67.

[43] See, for example, Simon, 'A Third View', 511–86; and H. Prakken (2011) 'Argumentation without Arguments', *Argumentation 25*, 171–84.

[44] N. Goodman (1983) *Fact, Fiction, and Forecast*, 4th edn (Cambridge, MA: Harvard University Press), 64–8.

[45] Rawls, *A Theory of Justice*, 19–20; and J. Rawls (1974–1975), 'The Independence of Moral

considered judgments and moral principles. Wide reflective equilibrium deals with both of these as well as rival sets of principles and the background beliefs that support them. If a decision maker finds the arguments of a rival theory to be convincing, then he or she must seek an equilibrium between this rival theory and the theory previously established by narrow equilibrium. The back and forth revision must now be done between the moral judgments, the moral principles, and the background theories to seek ways to bring them into harmony.[46]

Rawls developed reflective equilibrium as a theoretical tool for his social contract theory and did not reflect upon it as a decision-making process for practical ethics, but it has frequently been put to such use.[47] Not surprisingly there is considerable variation involved in how the method is applied. A basic question is whether it should be applied in the narrow version or the wide version.[48] Most applications are so broad and general that they do not follow a particular version, and some apply the notion of coherency in an incidental way without adopting the full-blown method.[49]

Although reflective equilibrium has support from many quarters in practical ethics, it receives frequent criticism, particularly along two lines. First, the emphasis upon considered moral judgments is taken by many to be an overt reference to intuitions, which are according to Type 2 criteria inherently unreliable, and according to the analysis of some, remain unreliable even if those intuitions are brought into coherency with moral principles.[50] Second, the concept of coherency, although it has consid-

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Theory', *Proceedings and Addresses of the American Philosophical Association*, 48, 7–8.

[46] N. Daniels (1996) *Justice and Justification: Reflective Equilibrium in Theory and in Practice* (New York: Cambridge University Press), 22.

[47] Daniels, *Justice and Justification*; M. C. Nussbaum (1990) *Love's Knowledge: Essays on Philosophy and Literature* (New York: Oxford University Press), 172–6; and M. Benjamin (2003) *Philosophy and This Actual World: An Introduction to Practical Philosophical Inquiry* (Lanham, MD: Roman & Littlefield Publishers, Inc.), 119.

[48] Much more will be said about this in a later chapter. See Daniels, *Justice and Justification*, 22–4; and M. R. Depaul (2006) 'Intuitions in Moral Inquiry', in D. Copp (ed.) *The Oxford Handbook of Ethical Theory* (New York: Oxford University Press), 599–604.

[49] This appears true of the example of application in T. L. Beauchamp and J. F. Childress (2001) *Principles of Biomedical Ethics*, 5th edn (New York: Oxford University Press), 399.

[50] W. van der Burg and T. van Willigenburg (1998) 'Introduction', in W. van der Burg and T. van Willigenburg (eds) *Reflective Equilibrium: Essays in Honour of Robert Heeger* (Dordrecht: Kluwer

erable rational standing, is inherently variable. The specific cognitive operations include balancing and prioritizing and removing contradictions, but in application these are operations that are extremely difficult to define and difficult to apply in a uniform way, from person to person, and from culture to culture.

# Assessment of Type 2 Moral Reasoning

Type 2 reasoning has traditionally been seen in the West as the means to hold at bay the human inclinations toward superstition and bias. Its operations have often been appealed to in hopes of arriving at, or at least approximating, universal and ideal knowledge claims. It is not surprising then that the central Western methods for moral decision making are clustered around the different facets within this type.

What is surprising is often how poorly Type 2 reasoning works. Research indicating that people aren't very good at any of the particular facets of reasoning has multiplied in the last couple of decades. Those without training in logic perform poorly in assessments of deductive reasoning. They support many logical fallacies such as accepting arguments because they believe the premise or the conclusion, even though the argument structure is invalid.[51] People are also generally poor at probabilistic reasoning, often assuming that the conjunction of the probabilities of two events is higher than the probability of either single event.[52] These problems go in hand with a broader error regarding the likelihood of events under uncertain conditions. Instead of working in terms of calculated probabilities, people tend to operate on the basis of heuristics, rules of thumb, which are sometimes correct, but are often in error. Three of these are frequently noted. The representative heuristic is the overestimation of the likelihood of events that appear to represent objects, persons, or events typical of a particular category, or it may be the underestimat-

Academic), 9.

[51] J. S. B. T. (2002) 'Logic and Human Reasoning: An Assessment of the Deduction Paradigm', *Psychological Bulletin*, 128, 981–2.

[52] A. Tversky and D. Kahneman (1983) 'Extensional Versus Intuitive Reasoning: The Conjunction Fallacy in Probability Judgment', *Psychological Review*, 90, 293–315.

ing the probability of nonrepresentative events. The availability heuristic is the error of estimating the frequency of a class of events on the basis of the extent to which examples of those events have occurred in one's own experience. The anchoring heuristic is the error of estimating the probability of events on the basis of a starting point that is unrelated to the events.[53]

These errors might be seen as a result of how demanding Type 2 processes are. They require investments of time and cognitive resources that are beyond the reach of many people. But the frequency of these Type 2 reasoning errors may not mean that people are acting irrationally, but that they do not take Type 2 methods to be the appropriate means of decision making. For example, if one denies that formal logic really applies to human affairs and claims instead that it is an abstract system of thought unrelated to human behavior, then one will not feel bound to accept the truth of a valid deductive argument even if one accepts the truth of the premises. In a deductive moral argument, if the relevant moral principle is "do not commit murder," then the minor premise may likely be "this was an act of murder," but the classification of a particular act as murder is not obvious and will depend upon one's background beliefs and interpretation of the context and whether the alleged perpetrator is part of one's social group or not. As a result, it is these factors rather than the processes of deduction that determine whether or not one agrees with the conclusion.[54]

This represents a broader sense of dissatisfaction with Type 2 processes, which is the feeling that they do not capture the full breadth of human valuation and choice. The practitioners of the various Type 2 moral methodologies, however, have developed deep personal and professional commitments to those methodologies and the philosophical, psychological, and social commitments surrounding them. The intensity with which these commitments are defended against rivals is often out of character with the imper-

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[53] A. Tversky and D. Kahneman (1974) 'Judgment under Uncertainty: Heuristics and Biases', *Science*, 185, 1124–31.

[54] G. Harmon, K. Mason, and W. Sinnott-Armstrong (2010) 'Moral Reasoning', in J. M. Doris and the Moral Psychology Research Group (eds) *The Moral Psychology Handbook* (New York: Oxford University Press), 218–20; and S. Passini (2014) 'The Effect of Personal Orientations toward Intergroup Relations on Moral Reasoning', *Journal of Moral Reasoning*, 43, 89–103.

sonal and objective ideals of Type 2 methods.[55] This observation points to a significant dynamic. Whereas supporters of Type 2 methods assert that normativity regarding a moral conclusion is to be found only through Type 2 methods, the choice of whether or not some method is given normative authority appears to come from a different kind of cognition.

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[55] This intensity at times reminds one of the intensity found among political activists who are utterly certain of the rightness of their positions. See P.M. Fernbach, T. Rogers, C. R. Fox, and S. A. Sloman (2013) 'Political Extremism Is Supported by an Illusion of Understanding', *Psychological Science*, 24, 939–46.

# 6

## Type 1 Moral Cognition

## Characterization of Type 1 Processing

As noted in Chap. 4, Type 1 processes are characterized by operations that are nonconscious, automatic, parallel, implicit, approximate, emotional, associative, biased, intuitive, fast, contextualized, and requiring little effort to exercise. Many of these processes are connected to what Jonathan St. B. T. Evans has called the "old mind," which is evolutionarily prior to the new mind of Type 2 processes. These old processes use hardwired and instinctual routines as well as experiential learning that has been gathered through tacit learning mechanisms or overt learning that has become so routine as to be automatic.[1] Science and philosophy have had some difficulty saying much about Type 1 processes, because Type 1 processes are qualitatively different from Type 2 processes, and Type 2 processes, which remain the standard for science and philosophy, have difficulty characterizing them in terms of their own approach. But when Type 1 processes are discussed, the assumption that Type 2 processes are the normative standard for investigation of any kind of phenomena leads to the labeling of the products of Type 1 processes as substandard or erroneous.

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[1] J. S. B. T. Evans (2014) 'Two Minds Rationality', *Thinking and Reasoning*, 20, 131.

Type 1 processes have often been categorized generically as intuitions, and under that heading have gotten a great deal of discussion in philosophy, and to a lesser extent in science, but not surprisingly there's difficulty in providing a clear and consistent definition of what people mean by intuitions. Intuition is sometimes defined as the immediate apprehension of claims to truth: Sense objects are directly perceived by the human intellect, or the way to apply a general rule is immediately perceived, or the truth of concepts, universals, or supernatural truths is directly appreciated.[2] Often, commentators claim that intuitions arrive at the same conclusions as rationalistic methods without being preceded by rational inference, but most often intuitions are described as misleading and erroneous, and so the general admonition is that intuitions ought not be followed unless there are rational justifications for them.[3] The errors of intuition have traditionally been represented by logical fallacies, which are claims that appear convincing but lack valid argumentation. More recently, cognitive psychology has noted other kinds of Type 1 intuitive products called cognitive biases and heuristics, such as the representative, availability, and anchoring heuristics mentioned in the last chapter. These heuristics are criticized as lacking complexity and accuracy, and the recommendation is that they should be abandoned in favor of decisions based on statistical probabilities.[4]

Over the last 50 years, however, there has been a gradual revision within cognitive psychology of this opinion of heuristics. It is becoming more common for them to be described as evolutionarily adaptive and generally productive means for decision making in the often less than ideal situations of ordinary human experience. Much of this positive assessment of heuristics and biases is rooted in the "bounded rationality" work of Herbert Simon, who argued that there were limits to human abilities to process information and that humans are inclined to operate within those limits. For example, in considerations of social policy,

[2] See, for example, N. Bunnin and J. Yu (2004) *The Blackwell Dictionary of Western Philosophy* (Malden, MA: Blackwell Publishing), 358.

[3] See, for example, J. S. B. T. Evans (2010) 'Intuition and Reasoning: A Dual Process Perspective', *Psychological Inquiry*, 21, 313–26.

[4] D. Kahneman and S. Frederick (2005) 'A Model of Heuristic Judgment', in J. Holyoak and R. G. Morrison (eds) *The Cambridge Handbook of Thinking and Reasoning* (New York: Cambridge University Press), 268; and H. Brighton and G. Gigerenzer (2012) 'Homo Heuristicus: Less-Is-More Effects in Adaptive Cognition', *Malaysian Journal of Medical Science*, 19, 7.

humans do not seek maximized welfare, but welfare that is good enough for human purposes.[5] Gerd Gigerenzer, in partnership with others, has carried forward this idea by noting that standard rational and statistical models generally focus on decisions under risk, decisions in which all the possible outcomes are known as well as their relative probabilities, but these are not the conditions under which most decisions are made. Most common decisions are under uncertainty, where all the possible outcomes are not known nor are their probabilities.[6] Gigerenzer framed a "less-is-more" approach, which asserts that simple rules of the sort exemplified in a variety of choice structures in nature can often perform as well as complex statistical analyses. For example, the heuristic that Gigerenzer calls "take-the-best strategy" consists of three rules:

1. Search rule: Search through cues in order of their validity.
2. Stopping rule: Stop on finding the first cue that discriminates between the objects (i.e., cue values are 1 and 0).
3. Decision rule: Infer that the object with the positive cue value (1) has the higher criterion value.[7]

When this strategy is tested in experiments by asking subjects which of two cities has the larger population, it is found that reliance on a single reason, which of the cities was most familiar to the respondent, winds up providing the proper result in a large percentage of cases.[8]

But in spite of the growing literature in the social sciences, linguistics, and philosophy that emphasizes the positive value of different Type 1 processes, this literature fails to render a version of Type 1 processes that stands alone from Type 2 processes. Supporters of philosophical intuitionism typically utilize the methods of analytic philosophy to define intuitions or to argue for their justification. As noted, Gigerenzer is convinced that

[5] H. A. Simon (1956) 'Rational Choice and the Structure of the Environment', *Psychological Review*, 63, 129–38.

[6] K. G. Volz and G. Gigerenzer (2012) 'Cognitive Processes in Decisions under Risk are not the Same as in Decisions Under Uncertainty', *Frontiers in Neuroscience*, 6, 1–6.

[7] G. Gigerenzer and W. Gaissmaier (2011) 'Heuristic Decision-Making', *Annual Review of Psychology*, 62, 456.

[8] Gigerenzer and Gaissmaier, 'Heuristic Decision-Making', 463.

heuristics are rule-governed cognitive patterns; they are just different cognitive rules from those of statistical probability. And George Lakoff and Mark Johnson, while developing an alternative notion of cognition as embodied, fail to substantially change the character of reasoning involved. Lakoff moves reasoning from the domain of the abstract to the domain of organisms thinking and functioning in their physical environment, but the character of reason remains concerned with identifying and constructing underlying categories, structures, and logic to make sense of experience.[9] And for Johnson, it is the human "ability to abstract a quality or structure from the continuous flow of our experience and then to discern its relations to other concepts and its implications for action that makes possible the highest forms of inquiry, of which humans are uniquely capable."[10]

The same is true of ethics. The well-known movement called ethical intuitionism, which claims that ethical truths are self-evident, has had many supporters, particularly in Britain, since the eighteenth century. At first glance it would appear to be a distinctly Type 1 moral cognition, but the way these self-evident truths are explicated is by pure Type 2 process. The self-evident truths are propositions that can be justified by logical argument and distinguished analytically from other types of beliefs.

## William James and Type 1 Cognition

The search for a theoretical approach that does justice to Type 1 processes as qualitatively different from Type 2 processes and makes productive use of that difference is difficult. To find the best example one must go back 100 years to the work of William James. James was one of the most creative minds of the late nineteenth and early twentieth century, contributing formatively to modern psychology through the publishing of his two-volume work *Principles of Psychology*. His prose style has a literary quality unmatched in modern philosophy or psychology, and his power of introspective analysis has few rivals. But while elements of his creative work, such as the phrase "stream

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[9] G. Lakoff (1987) *Women, Fire, and Dangerous Things*: *What Categories Reveal About the Mind* (Chicago: University of Chicago Press), xi–xii.

[10] M. Johnson (2007) *The Meaning of the Body*: *Aesthetics of Human Understanding* (Chicago: University of Chicago Press), 92.

of consciousness," took firm root in public and academic thought, many elements of his work remain overlooked. Depth psychology and behaviorism overshadowed his psychological theory for over a generation after his death, and logical positivism and language analysis overshadowed his philosophical theory for the same generation. Those who might turn an eye toward his thoughts on pragmatism often prefer John Dewey or Charles S. Peirce.

Within James's writing, however, are found the resources for a Type 1 cognitive theory. Teasing a balanced and coherent theory out of his works can be difficult because there are incongruities to his approach. Some of these incongruities might be explained as developmental, and indeed by his own admission, reading Henri Bergson in the early twentieth century did influence the tone of his commitments, but not all of the problems are developmental. The *Principles of Psychology* itself holds some incompatibilities within it, which may represent struggles between James's commitment to scientific method and his implicit use of an aesthetic model of cognition. But by means of picking and choosing, with some qualifications, from James's thought, a robust model of Type 1 cognition can be described.[11]

## James's Dual Process Model

James is often identified as an early proponent of dual process thought. This attribution usually focuses on his distinction in *Principles of Psychology* between two types of reasoning: associative and true. Associative reasoning consists of "trains of images suggested by one another," consideration of "whole things" rather than qualities of things, and immediate inferences "where a present sign suggests an unseen, distant, or future reality."[12] James claims that most elements of "human knowingness" constitute this sort of immediate inference, where a present experience connects to a memory and yields a conclusion: One smells a familiar odor and concludes that a

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[11] Productive discussions on these issues can be found in M. Cuddly-Keane (2010) 'Narration, Navigation, and Non-Conscious Thought: Neuroscientific and Literary Approaches to the Thinking Body', *University of Toronto Quarterly*, 79, 680–701; D. Galin (2004) 'Aesthetic Experience: Marcel Proust and the Neo-Jamesian Structure of Awareness', *Consciousness and Cognition*, 1, 241–53; and R. B. Goodman (2004) 'James on the Nonconceptual', *Midwest Studies in Philosophy*, 28, 137–48.

[12] W. James (1890) *Principles of Psychology*, Vol. 2 (New York: Henry Holt & Company), 325–6.

skunk is nearby, or one hears a characteristic sound and concludes that a train is traveling over tracks down the block.[13] True reasoning, like associative reasoning, may involve turning to the thought of B after the thought of A, but it carries beyond B to consider the thought of C by means of "some inward relations" between B and C that require conceptual articulation and analysis to be explicated.[14] Associative reasoning is highly reflexive and is the response processing of animals, and true reasoning is the cognition characteristic of human achievement.

But within *The Principles of Psychology* where James lays out this discussion, it is not clear how James's account of reasoning meshes with his account of consciousness. In probably the most famous section of this work, James describes consciousness in process terms using several different metaphors, sometimes mixing them. His best known is that human consciousness is like a stream, flowing constantly and changing but with a unity of direction. Focal conscious awareness is of the flow immediately before one's mind but also involves retrospective attention to the flow that has just passed and an anticipation of what is yet to come, and this against all the surrounding swirls and eddies that are not in primary attention.[15] In much of James's later writings, he refers to the stream more generically as the flux of experience.

Another of James's metaphors portrays consciousness as the successive flights and perches of a bird. It flies along from one point of focus to another, briefly and unpredictably perching. The perches are the substantive elements of thought and involve "sensorial imaginations" that are held before the mind and contemplated. The places of flight are the transitive elements and consist of indistinct thoughts of relations between the matters contemplated in the substantive mode.[16]

James also uses the metaphor of the nucleus and the fringe. The nuclei of thought are the points of directed conscious attention, and the fringe is the background from which a particular nucleus is derived. The fringe is inherently vague, amorphous, and supportive of the nucleus.[17]

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[13] James, *Principles of Psychology*, Vol. 2, 326.

[14] James, *Principles of Psychology*, Vol. 2, 329.

[15] W. James (1890) *Principles of Psychology*, Vol. 1 (New York: Henry Holt & Company), 224–43.

[16] James, *Principles*, Vol. 1, 243.

[17] James, *Principles*, Vol. 1, 281.

James understood that these metaphors corresponded in significant ways to the structure and coordinated movements of the human eye. At the back center of the human eye lies a small section of the retina called the fovea. This area has the largest concentration of cone receptors of the whole retina, and provides the highest level of visual acuity. Spreading out from this area, the retina provides progressively diminished levels of acuity, often generally called peripheral vision. The brain makes the most of the physical structure of the eye and the brain's limited conscious processing ability by using saccades, which are fast eye movements switching from one point of focus to another so that the light of an object of interest falls directly on the fovea. Such movements are critical in activities such as driving a car and reading, and involve fixations for very short periods of time on different portions of objects and the visual field. Consciousness adjusts to the movement as well so that there is little or no awareness of the field of vision moving as the eyes switch quickly from one object to another.[18]

The point of James's various metaphors is to emphasize the qualitative differences between the different types of consciousness. Fringe consciousness is amorphous and changing and defies attempts to describe it. The perceptions within this fringe consciousness exceed the cognitive limits of focal attention and logic, and are not beholden to it, succumbing only to the influence of persuasion.[19] Out of the vast "primordial chaos of sensations" flooding upon human perception, human cognition selects certain elements to be brought into direct focus where steady and analytic attention is placed upon a small number of items. James likens the process to that of sculpting from stone. Each stone holds countless different possible sculptures, but each person picks and chooses what bits of stone to remove.[20] While the possible differences are immense and variation is rampant, there is persistent similarity in the choices that people make.[21]

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[18] James, *Principles*, Vol. 2, 161–6; and A. Herwig and W. X. Schneider (2014) 'Predicting Object Features Across Saccades: Evidence from Object Recognition and Visual Search', *Journal of Experimental Psychology: General*, 143, 1903–22.

[19] James, *Principles*, Vol. 1, 243; and William James (1909) *A Pluralistic Universe: Hibbert Lectures at Manchester College on the Present Situation in Philosophy* (New York: Longmans, Green, & Co.), 329.

[20] James, *Principles*, Vol. 1, 288–9.

[21] James, *Principles*, Vol. 1, 260, 289.

This rendition of human consciousness is not easily reconcilable with James's notion of reason, and at least two interpretations are possible. One might take associative reasoning to be the conscious, but somewhat automatic, selection of materials from the flow of experience on the basis of their similarity with other items in the flow, the flights of the bird, and then true reason would deal with the items of focus, the perchings of the bird. Or one might take each type of reason as a different way of carrying out cognitive processing within a particular instance of focal consciousness.

Whatever is the case in *The Principles*, in one of his last major publications, *A Pluralistic Universe*, James presents a substantially different cognitive dualism, one that takes a harsher attitude toward rational conceptualization and an even more positive attitude toward experience. Attributing the change at least partly to a reading of Henri Bergson, this dualism pits what James calls "intellectualism" against sense experience. Intellectualism is the cognitive activity that produces concepts and logical relations out of the stream of consciousness whose content is supplied by subconscious repositories of feeling and sense experience. While intellectualism does set human beings apart from animals by its ability to gather bits of experience into abstract concepts that can then be classified and manipulated, James argues that it has developed into an almost sinister practice because its practitioners have forgotten that concepts are mere human artifacts and have enshrined them as "a superior type of being, bright, changeless, true, divine, and utterly opposed in nature to the turgid, restless lower world."[22] Once experience is abstracted into independent essences whose truth is found in their definitional independence from other essences, then they became not just substitutes for the experience from which they were derived but also the authoritative judges of how that experience ought to be characterized.[23] But, this is a perversion of the nature of human experience and consciousness. "To understand life by concepts is to arrest its movement, cutting it up into bits as if by scissors, and immobilizing these in our logical herbarium where, comparing them as dried specimens, we analyze which of them statistically includes or excludes which other."[24]

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[22] James, *Pluralistic Universe*, 218.

[23] James, *Pluralistic Universe*, 219.

[24] James, *Pluralistic Universe*, 244.

The main offence is intellectualism's commitment that "the first innocent continuity of the flow of sense-experience" is incoherent in itself and needs a conceptual coherency imposed upon it, which achieves nothing but to shatter the initial coherency of sense experience.[25] The solution lies in recognizing that

> the flux of sensible experience itself contain[s] a rationality that has been overlooked, so that the real remedy would consist in harking back to it more intelligently, and not in advancing in the opposite direction away from it and even away beyond the intellectualist criticism that disintegrates it, to the pseudo-rationality of the supposed absolute point of view.[26]

## Rationality

These revisions found in *The Pluralistic Universe* help reconcile elements of James's thought regarding rationality, aesthetics, and ethics that had appeared at odds with one another in portions of James's previous work. For intellectualism, rationality only applies to the moments of rest in consciousness and the conceptualizing and abstracting of the relations found between those moments of rest. Human experience, however, has its own rationality. What is deemed rational is what appears easy and attractive to a person, and this can be elicited by a variety of actions depending on personal sentiment.

> In general it may be said that if a man's conception of the world lets loose any action in him that is easy, or any faculty which he is fond of exercising, he will deem it rational in so far forth, be the faculty that of computing, fighting, lecturing, classifying, framing schematic tabulations, getting the better end of a bargain, patiently waiting and enduring, preaching, joke-making, or what you like.[27]

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[25] James, *Pluralistic Universe*, 72–3.

[26] James, *Pluralistic Universe*, 73.

[27] James, *Pluralistic Universe*, 113.

Elsewhere James characterizes rational sentiment as "a strong feeling of ease, peace, rest," such as the "relief and pleasure" that arises in "the transition from a state of puzzle and perplexity to rational comprehension."[28] This pleasure is a "feeling of the sufficiency of the present moment, of its absoluteness, ⋯ this absence of all need to explain it, account for it, or justify it."[29] In "tip of the tongue" experiences, for example, one searches for a particular word to communicate a thought. In this search, one has the distinct perception of a gap that needs to be filled, and in looking for this or that word to fill the gap, there is an accompanying feeling of appropriateness or inappropriateness with each considered option.[30]

This sentiment of rationality is also related to a "will to believe" which establishes dead hypotheses, ones given no chance of being believed, and live hypotheses, ones granted the possibility of being believed. James offers the example of a person considering whether or not to adopt a particular theological doctrine out of a particular religion. For those who are followers of that religion, the theological doctrine may be in play: it constitutes a belief that they actively consider living by. But for those outside the religion, the theological hypothesis does not enter the realm of possible belief at all.[31] By *will*, James means "all such factors of belief as fear and hope, prejudice and passion, imitation and partisanship, the circumpressure of our caste and set."[32] Such belief is a "passionate affirmation of desire," which is commitment to what we want to believe, usually entailing a faith in the opinions of others whom we consider authoritative. It is only after this will to believe is established that we then look for arguments to counter criticism. All such arguments are ultimately hollow because if "a pyrrhonistic sceptic asks us *how we know* all this, can our logic find a reply? No? certainly it cannot. It is just one volition against another, ⋯ we willing to go in for life upon a trust or

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[28] W. James (1912) *The Will to Believe and Other Essays in Popular Philosophy* (New York: Longmans, Green, and Co.), 63.

[29] James, *Will to Believe*, 64.

[30] James, *Principles*, Vol. 1, 254, 261–2.

[31] James, *Will to Believe*, 2.

[32] James, *Will to Believe*, 9.

assumption which he, for his part, does not care to make."[33] The authority assigned to facts, then, lies not within the items called facts, but in the act of will that asserts that the facts are authoritative.[34] And this is true equally of the skeptic, the devoutly religious, and the scientist, for they all choose to believe those things that have some use for them.[35]

The will to believe establishes two kinds of personalities. For the one, the world is and will always be just as they have always seen it to be, and any discrepancies leveled against that equilibrium of belief will be fended off as invalid. For the second, discrepancies of view within the person are recognized. The differences between these perspectives are so stark that the choice between them requires a transformation of identity. While James speaks of this kind of transformation along with a discussion of religious conversion, his notion is broader than just decisions regarding religion. He uses as a hypothetical example the possibility of Theodore Roosevelt contemplating quitting the world of politics to become a full-time outdoorsman. Such a momentous choice would involve the weighing of ideas and identities and authorities in terms of which were most invigorating to one's interests.[36]

## Aesthetics

This subjective conception of rationality presents a view of cognition that is aesthetic in character, in that it focuses on human choice as rooted in embodied preferences between different sensory experiences. In James's early works, he recognizes the value of aesthetics, but treats it in terms of the "intellectualism" that he has not yet renounced, and apparently does not recognize the value of aesthetic cognition. In volume 2 of *The Principles of Psychology*, he has no extended treatment of aesthetics, although he notes that he wishes he had the space to do so. When he does mention aesthetics, he usually also discusses ethics, and both are depicted as exercises in metaphysics. Aesthetics and ethics are attempts to translate an experi-

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[33] James, *Will to Believe*, 10.

[34] James, *Will to Believe*, 25.

[35] James, *Will to Believe*, 10–11.

[36] W. James (1902) *The Varieties of Religious Experience*: *A Study in Human Experience* (London: Longmans, Green, and Co), 189–94.

ence of the flux of human experience into abstract conceptualizations. Both aesthetics and ethics "express inner harmonies and discords between objects of thought," but they belong to an ideal, constructed world that never matches the world of experience. As examples of aesthetic principles he points to "such axioms as that a note sounds good with its third and fifth, or that potatoes need salt."[37] As examples of ethical propositions, James points to the claims "that the individual and the universal good are one, and that happiness and goodness are bound to coalesce in the same subject."[38] The translation of the natural material of experience into aesthetic forms is quite laborious and frustrating, but less so than for ethical forms, and yet neither of these come near to the affinity of scientific forms for natural experience. As a result, scientific conceptualizations are always nearer to the flux of human experience than any other form,[39] and this is best demonstrated by science's ability to give reasons for judgments, which is never possible in aesthetics or ethics.[40] This also provides a dualism of genius. The scientist and philosopher using abstraction seek grounding reasons for things. The poet, and the artist in general, get caught up in the splendor of particulars playing on the senses and never even turn to consider the reasons for things.[41] This is the rationale for his surprising disparagement of myth and metaphor; surprising given his prolific use of metaphor throughout his writings.[42] Primitive humans utilize myth as a mere associative reason for why they ought to do now what was done in the past, and their metaphorical descriptions display at best applications of associative reason connecting current experience to previous experience. They do not say "the bread is hard," but "the bread is stone."[43]

In a book review in 1894 of Henry Marshall's *Pain, Pleasure, and Aesthetics*, James discusses aesthetics as the awareness of beauty, whether

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[37] James, *Principles*, Vol. 2, 672.

[38] James, *Principles*, Vol. 2, 675.

[39] James, *Principles*, Vol. 2, 640.

[40] James, *Principles*, Vol. 2, 365.

[41] James, *Principles*, Vol. 2, 361.

[42] Many have struggled with this incongruity. See, for example, J. M. Kress (2000) 'Contesting Metaphors and the Discourse of Consciousness in William James', *Journal of the History of Ideas*, 61, 263–83.

[43] James, *Principles*, Vol. 2, 365.

in art or in nature, which provides pleasure to the one who is sensing it. "The experience of a single strain of melody or verse of poetry, of a single square foot of genuine color, is more important to the soul than the reading of all the books on beauty ever composed."[44] But later in the review, he remarks that the dry prose found in the book may represent Marshall's respect for beauty itself. Given that philosophy is concerned with abstractions and analysis, which reduces wholes to parts, beauty ought best be kept separate from analysis just as one keeps a living body off a dissecting table.[45]

In *The Varieties of Religious Experience*, published in 1902, James describes mystical experience in aesthetic terms. Mystical experience more closely resembles the character of sensations than it does conceptual knowledge. And while all mystics will argue that mystical experience comes from a realm about which the five senses cannot provide direct insight, mystical experience is both evoked and communicated through aesthetic mediums.[46] Mystical experience can be prompted by

> single words, and conjunctions of words, effects of light on land and sea, odors and musical sounds, all bring it when the mind is tuned aright. Most of us can remember the strangely moving power of passages in certain poems read when we were young, irrational doorways as they were through which the mystery of fact, the wildness and the pang of life, stole into our hearts and thrilled them. The words have now perhaps become mere polished surfaces for us; but lyric poetry and music are alive and significant only in proportion as they fetch these vague vistas of a life continuous with our own, beckoning and inviting, yet ever eluding our pursuit. We are alive or dead to the eternal inner message of the arts according as we have kept or lost this mystical susceptibility.[47]

The arts can therefore provide content about experience that cannot be directly expressed. "Music gives us ontological messages which nonmusical criticism is unable to contradict, though it may laugh at our foolish-

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[44] 'Review of H. R. Marshall's Pain, Pleasure, and Aesthetics', (1894), *Nation*, 59, 50.

[45] Review, p. 50.

[46] James, *The Varieties of Religious Experience*, 405.

[47] James, *The Varieties of Religious Experience*, 382–3.

ness in minding them."[48]

By the time of the writing of *Some Problems of Philosophy* in 1916, James has renounced his "intellectualism" and is then able to describe a cognitive role for aesthetic experience. He notes that intellectualism has as its goal the abstraction of concepts from the flux of experience by means of a kind of cognitive translation, and then analyzes the relationships between the concepts. But because these concepts are inevitably reductions of the flux, this method is inadequate. And so, because "the flux can never be superseded, we must carry it with us to the bitter end of our cognitive business, keeping it in the midst of the translation even when the latter proves illuminating, and falling back on it alone when the translation gives out."[49] What is needed then is a method closer to how the cognitive flux functions, and this means being willing to "take reality bodily and integrally up into philosophy in exactly the perceptual shape in which it comes."[50] Yet just as James has outlined this creative notion of aesthetic cognition, he pulls back from it, asserting that the flood of sensations upon human experience is almost overpowering, both because of the quantity of data and because of the constant sense that one never has enough data: "The only way to get the rest [of the relevant data] without wading through all future time in the person of numberless perceivers, is to substitute various conceptual systems which, monstrous abridgments though they be, are nevertheless each an equivalent, for some partial aspect of the full perceptual reality which we can never grasp."[51] James proposes choosing pieces from the available conceptual systems according to how the pieces may further one's own purposes.

## Ethics

James's article "The Moral Philosopher and the Moral Life" presents ethics as the same sort of subjective enterprise as belief as in *The Will to Believe*.

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[48] James, *The Varieties of Religious Experience*, 421.

[49] W. James (1916) *Some Problems of Philosophy: A Beginning of an Introduction to Philosophy* (New York: Longmans, Green, and Co.), 78–9.

[50] James, *Some Problems of Philosophy*, 95.

[51] James, *Some Problems of Philosophy*, 95–6.

James argues that ethical terms such as "goodness, badness, and obligation" do not have inherent content that refers to values existing outside of the perceiver but have a reality that is rooted in the consciousness that perceives them. Ethical normativity arises from an act of the will, whereby some sensation or object or relation is deemed to be good, and even absolutely so.[52] Difficulties arise in two cases. One is the case of the isolated individual, alone in the universe. Within this individual's consciousness arises awareness of inconsistencies regarding what that person holds to be the good thing. These inconsistencies are reconciled not by appeal to reason but by appeal to the subjective impressions of some ideals over others. Some "will be more pungent and appealing than the rest, their goodness will have a profounder, more penetrating taste; they will return to haunt him with more obstinate regrets if violated. And so the thinkers [sic] will have to order his life with them as its chief determinants, or else remain inwardly discordant and unhappy."[53] The individual seeks an equilibrium among these conflicting feelings.

The second source of conflict is when another conscious being is introduced into this ethical universe who holds commitments to different expressions of what is good from the first individual. Each being appeals to rival subjective feelings as the endorsement for his/her particular ethical ideals, because there is no platform external to them by which to adjudicate their ethical assertions. The degree of conflict is multiplied with the addition of another person to the universe, and an ethical cacophony quickly results.[54] The philosopher seeks to establish an ethical equilibrium in this chaos through the declaration of an abstract and uniform moral perspective that ostensibly exists prior to the universe of willed values. The theologian seeks a harmony by posing the existence of God who declares the priority of some set of values. Yet, neither of these approaches can constitute real or concrete values unless some person or group of persons commit to them as authoritative.[55] This makes the field of ethics unavoidably speculative and tentative. The philosopher of ethics cannot explain where ethical values come from, the character of the sensibilities that spawn them, nor which

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[52] W. James (1891) 'The Moral Philosopher and the Moral Life', *International Journal of Ethics* 1, 335.

[53] James, 'The Moral Philosopher', 335–6.

[54] James, 'The Moral Philosopher', 336.

[55] James, 'The Moral Philosopher', 336–8.

conflicting possibility is the better course. All the philosopher can do is wait upon the testimony of experience as to which course provides the better result.[56] And so the philosopher must write books that are more "suggestive" than dogmatic, more allied with "novels and dramas of the deeper sort, with sermons, with books on statecraft and philanthropy, and social and economic reform," and thereby begin to "abandon the old-fashioned, clear-cut, and would-be 'scientific form.'"[57] The only principle that the ethical philosopher can propose is that one ought "to act as to bring about the very largest total universe of good which thou canst see."[58] Abstract rules can be of assistance in promoting this principle, but only when intuitions are not distinct. Such rules fail because the context of each ethical decision is a unique universe of conflicting ideals that has no precedent. All the philosopher can do is vote "for the richer universe, for the good which seems most organizable, most fit to enter into complex combinations, most apt to be a member of a more inclusive whole. But which particular universe this is, he cannot know for certain in advance, he only knows that if he makes a bad mistake the cries of the wounded will soon inform him of the fact."[59] This is an image of the gradual social evolution of ever more adaptive systems of ethical ideals, which are framed by the "struggles from generation to generation, to find the more and more inclusive order,"[60] with each experiment judged by whether it results in greater complaints of suffering or appeasement.[61]

## A Jamesian Model of Moral Cognition

In several ways, James's account of ethics is disappointing. While James laid out a sketch of an aesthetic alternative to rationalistic ethics, he stops short of fully explicating it or endorsing it. Instead he advocates a utilitarian principle whose origin is only vaguely rooted in an optimistic sentimental perspective. And for practical ethics, James ultimately offers little advice other than promoting the use of ethical experiments. One

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[56] James, 'The Moral Philosopher', 349.

[57] James, 'The Moral Philosopher', 350.

[58] James, 'The Moral Philosopher', 349.

[59] James, 'The Moral Philosopher', 350.

[60] James, 'The Moral Philosopher', 346–7.

[61] James, 'The Moral Philosopher', 348.

should vote for the most promising outcome, and see if it obtains the results one wants. If it causes a lot of suffering that one hears about, then that's a sign that it didn't work out well. James's suggestions also display a social naïveté. On the one hand, James doesn't give much attention to humans as social creatures, focusing almost entirely on individual aspects of human existence. On the other hand, he is highly optimistic about individual human freedom and assumes a universal context of democratic societies that maximize that freedom. This optimism extends to the assumption of a cumulative progress to the ethical experiments, even though human history is full of examples of progress being undone just about as often as it is made. But perhaps most seriously, James doesn't explain how his subjectivistic model, in which normativity is an act of will, is reconciled with his notion of progress. If progress is judged relative to particular times and particular people, then a society that deems it proper to wipe out their enemies or forcibly convert them to their ways of thinking is making just as much progress as one that seeks to alleviate human suffering on the whole.

## The Moral Is Found in the Flux of Sensations

But in spite of these shortcomings, James has provided perhaps the most substantial outline to date of a Type 1 theory of moral cognition. It runs a little short and vague at points, but upon it can be built something substantial. First of all, James's emphasis upon human experience as experience in motion provides a platform that can take account of much of the far ranging work done in cognitive and social psychology in the last 100 years. Human experience is a mixture of conscious and nonconscious perceptions, covering different types and intensities of sensation.[62] The minority are clear and distinct events of cognitive focus, though often

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[62] The range of perceptions available through the human senses are difficult to comprehend. The human sense of smell can detect 1 trillion different odors. See C. Bushdid, M. O. Magnasco, L. B. Vosshall, and A. Keller (2014) 'Humans Can Discriminate More than 1 Trillion Olfactory Stimuli', *Science*, 343, 1370–2. Human hearing can discriminate between audio frequencies ranging between 20 and 20,000 Hz and differing in volume and timbre. Human sight can perceive at least 200 different colors, each with varying brightness. The sense of touch distinguishes an innumerable range of intensities, pressures, vibrations, textures, pains, heat, cold, and body orientations. See E. B. Goldstein (2010) *Sensation and Perception,* 9th edn (Belmont, CA: Wadsworth, Cengage Learning), 268, 201, and 337–59.

fleeting and usually static. The majority run a sweeping gamut from the completely conscious to the vaguely conscious to the nonconscious.

Within this perceptual stew there are qualitatively different sorts of perceptions. Many are of objects. Many are of relations between objects. Sensation is rarely limited to a single sensory type, and all five senses are coordinated to produce holistic perceptions. There are overpowering emotions rooted in instinctual responses and ones learned to automaticity or inculcated by primary socialization.[63] Others are vague but overarching attitudes and commitments, such as those that James described as sensations of harmony or unease. Moreover, as suggested by James's metaphor of the stream, there is a perceived flow to this sensory flux, which gives direction to both experience and deliberation. But unlike the metaphor of the stream, the flow is less like water through a narrow channel than the deep, expansive, and often chaotic flow of air in the earth's atmosphere. The conscious sense of before and after is made within this deluge of sensations; some of which are blocked from any level of consciousness, and all of which receive some degree of filtering to provide a sense of unity to experience.

If this deluge of perceptions was not managed by human cognitive apparatus, everyone would be overwhelmed in the way that those who suffer from autistic spectrum disorder are.[64] The cognitive benchmark for the organization of sensations is a sense of harmony, variously perceived as meaning, rightness, and wrongness,[65] and it entails a balancing or prioritizing of the different sensations involved. It is within and out of this multidimensional flow of experience that individual and corporate

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[63] Antonio Damasio argues that James gets a lot right about the bodily character of emotions, but that he doesn't do enough with his ideas. In particular James fails to consider anything but the most primitive emotions, and does not consider how emotion may be involved in cognition. A. Damasio (1995) *Descartes' Error: Emotion, Reason, and the Human Brain* (New York: Avon Books), 129–30.

[64] B. Mangan (1993) 'Taking Phenomenology Seriously: The "Fringe" and Its Implications for Cognitive Research', *Consciousness and Cognition*, 2, 93–8. Mangan has also noted the commonalities that James's notions of the flux and the fringe have with Gestalt psychology. Moreover, research in cognitive linguistics, feeling-of-knowing experiences, and change blindness, all discussed by James, have received some significant empirical support in the last 30 years. See B. Mangan (2007) 'Cognition, Fringe Consciousness, and William James', in M. Velmans and S. Schneider (eds) *The Blackwell Companion to Consciousness* (Malden, MA: Blackwell Publishing Ltd.), 678–9.

[65] Mangan argues that this sense of meaningfulness is the marker for when organization of perception in consciousness matches organization in the nonconscious. See Mangan, 'Taking Phenomenology Seriously', 99.

human identity issues: what communities we identify with, whom we love, who our enemies are, and our personal dispositions.

The powerful role of myth in achieving cognitive harmony is frequently overlooked among contemporary intellectuals, primarily because their use of Type 2 processes designates a myth as something not justified by logic or empirical evidence and is therefore false. But from the standpoint of Type 1 cognition, a myth is true if it achieves a significant harmony of important sense data. Myths establish cognitive harmony by using forms and content that appeal to the emotions, inclinations, and inherited identities of a group, and inherited mythology can be successful even if filled with what appear to be, by Type 2 processes, contradictions and fantasy.[66] Joseph Campbell noted that "mythological symbols touch and exhilarate centers of life beyond the reach of vocabularies of reason and coercion,"[67] and "touch and release the deepest centers of motivation, moving literate and illiterate alike, moving mobs, moving civilizations."[68]

## The Will to Value

The second important affirmation of a Jamesian moral cognition is that references to ethical normativity are products of the ways human beings establish harmony in the flux of experience. The choice of what experiences and commitments to take as authoritative are not arrived at by logical/reflective modes of cognition, but by these instinctual inclinations, implicitly learned preferences, and social predispositions, all communicated through embodied perceptions of fitness, interest, harmony or disharmony, and rightness or wrongness.[69] These establish what one considers live and dead options

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[66] M. McGuire (1977) 'Mythic Rhetoric in *Mein Kampf*: A Structuralist Critique', *The Quarterly Journal of Speech*, 63, 1–3. McGuire recognizes this point, even though I believe his structuralist approach obscures the reasons that it applies so well. See also K. Owens (2007) 'Myth Making as a Human Communication Paradigm: The Case of Martin Luther King, Jr., and the Civil Rights Movement', *American Communication Journal*, 9, http://ac-journal.org/journal/2007/Fall/3Myth MakingasaHumanCommunicationParadigm.pdf, date accessed 22 July 2015.

[67] J. Campbell (1991) *The Masks of God: Creative* Mythology (New York: Penguin Compass), 4.

[68] J. Campbell (1991) *The Masks of God: Primitive* Mythology (New York: Penguin Compass), 12.

[69] The notion of 'rightness and wrongness' is Bruce Mangan's elaboration on James's notions of harmony and disharmony. Mangan, 'Taking Phenomenology Seriously', 99. This provides some insight into why people's ethical judgments may not match their moral behavior. The judgments

for choice, what are facts, and what data is to be ignored. The philosopher's devotion to logic, as with the physicist's devotion to mathematics, arises because of what each is inclined to find interesting and appropriate.[70]

This explains why open-minded deliberation is rare. Matters about which one has no interest can theoretically be deliberated open-mindedly because there is no commitment to any of the parties involved nor any of the values at issue, but outside of "debate team" competitions there is no reason to enter into a debate unless one has commitments to particular values or outcomes, and the fact that one has no stake in the issue biases one's perspective. There is a frequent objection to this claim in the modern West, found in writers such as Jörgen Habermas and John Rawls. They contend that the commitment to open-minded debate can trump, at least temporarily, commitments to one's particular values and interests. But it has become ever clearer, as many Eastern cultures demonstrate, that there is a deep ingenuousness to this claim. The commitment to open debate assumes commitments to a whole array of momentous social and political values, such as human individuality trumping the authority of a community, that aren't even allowed into the debate, and the implicit inclusion of these values make the whole idea a dead option for many cultures.

In deliberation about momentous matters, then, debate involves a conflict between opposing commitments of the debating parties. Each party looks to find a way to turn the will of the other party to its way of thinking. This is the setting in which Aristotle believed rhetoric plays its role; it provides a means to persuade someone regarding a true conclusion. Of course, Aristotle believed that the virtuous rhetorician already knew what the true conclusion was, by means of dialectic, and used rhetoric as the means of persuading an audience who lacked understanding of dialectic (*Rhetoric*, 1355b). From the standpoint of Type 1 processes, however, rhetoric is all there is. Logic and induction are of no help, because they are latecomers

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are made on the basis of Type 2 processes, but decisions about behavior are made by Type 1 cognitions. See N. Gold, B. D. Pulford, and A. M. Colman (2015), 'Do as I Say, Don't Do as I Do: Differences in Moral Judgments Do Not Translate into Differences in Decisions in Real-Life Trolley Problems', *Journal of Economic Psychology*, 47, 50–61, for a description of the discrepancy, although the authors do not entertain a dual process explanation.

[70] E. P. Wigner (1960) 'The Unreasonable Effectiveness of Mathematics in the Natural Sciences', *Communications on Pure and Applied Mathematics*, 13, 3.

to the debate. The parameters for truth were set out before a person gave authority to logical processes or to the experimental method, and so the veracity of these playing fields was established not on the basis of these methods, but according to how they appealed to prior inclinations of the person regarding what was harmonious, interesting, and meaningful.

Aristotle identified three mechanisms that the successful rhetorician uses to cause an audience to be convinced that the rhetorician's conclusions are true: the rhetorician must appear to be the type of person that people want to believe, the rhetorician must evoke an emotion in the audience that will find the offered conclusion appealing, and for those audiences that have granted authority to reason, the rhetorician can deliver a rational argument (Rhetoric, 2356a). Contemporary advertisers understand these techniques,[71] as do those who recruit foreign spies and interrogate prisoners.[72]

If rhetoric fails, and an option cannot be harmonized with a person's established values, then there are two broad choices. One is to label the opposing value or set of values as false or misconstrued or irrelevant, and make it a dead option. Emotional energy and defense mechanisms are then harnessed to dismiss the challenge to one's values and regain a sense of cognitive harmony. When this option is chosen, further debate, instead of lessoning disagreement, exacerbates it.[73]

The second option is to change one's values, either adjusting one's existing values so that they can accommodate the rival viewpoint or adopting the rival viewpoint. This is no easy matter. The balance of values and inclinations that creates an individual's cognitive harmony is central to one's personal and corporate identity and revising that harmony involves significant psychological cost.[74] And while personal transformation beyond

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[71] R. Heath (2012) *Seducing the Subconscious: The Psychology of Emotional Influence in Advertising* (Malden, MA: Wiley-Blackwell), 156–59; and R. Cialdini (2001) 'The Science of Persuasion', *Scientific American*, 284, 76–81.

[72] V. Kuzichkin (1990) *Inside the KGB: My Life in Soviet Espionage*, translated by T. B. Beattie (New York: Pantheon Books), 55; and M. Alexander and J. R. Bruning (2008) *How to Break a Terrorist: The U.S. Interrogators Who Used Brains, not Brutality, to Take Down the Deadliest Man in Iraq* (New York: Free Press), 128–38.

[73] C. G. Lord, L. Ross, and M. R. Lepper (1979) 'Biased Assimilation and Attitude Polarization: The Effects of Prior Theories on Subsequently Considered Evidence', *Journal of Personality and Social Psychology*, 37, 2098–109.

[74] See G. Kirkebøen, E. Vasaasen, and K. H. Teigen (2013) 'Revisions and Regret: The Cost of Changing Your Mind', *Journal of Behavioral Decision Making*, 26, 1–12.

adolescence is a common theme in Western societies, it is not clear how often such transformation occurs in a lasting way.[75]

For example, several studies have looked at how or whether people change their opinions when they are confronted with data that corrects their false empirical beliefs. When subjects who had a false belief about the danger of childhood immunizations, the outcome of healthcare reform, or the reality of climate change were informed about the inaccuracy of those beliefs, the information produced no significant changes in belief.[76] In fact many of the studies found a backfire effect, where the educational efforts actually increased commitment to the beliefs not supported by evidence. Similar results were found in a study that manipulated accounts of the racial identity of a robber. The robber is initially described as Australian Aboriginal and then "corrected" to Caucasian, but the participants who had the highest levels of racial prejudice continued to refer to the perpetrator as "likely Aboriginal."[77] When empirical misinformation is about things that are not of particular value to a person, then the misinformation is easily corrected, but when misinformation is connected to important personal identifying values, then people ardently resist correction.[78]

When personal change does occur, it occurs because one's existing commitments are unable to establish harmony within the central elements of one's experience, and this discrepancy becomes so traumatic

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[75] What I am talking about here are self-initiated forms of self-transformation. This is distinct from efforts to transform character by states and institutions as discussed in Chap. 3. One can argue that those who seek out mental health assistance are self-directed for change, but the choice of treatment is usually at the behest of the mental health professional. And whether the treatment is in the form of drugs or psychotherapy, interventions at their best may alleviate symptoms only about 40 to 60 % of the time, and even then the alleviation of psychological symptoms is not necessarily the same thing as a transformation of values. See E. Anthes (2014) 'Depression: A Change of Mind', *Nature: An International Weekly Journal of Science*, 515, 185–7.

[76] B. Nyhan, J. Reifler, S. Richey, and G. L. Freed (2014) 'Effective Messages in Vaccine Promotion: A Randomized Trial', *Pediatrics*, 133, E835-42; B. Nyhan, J. Reifler, and P. A. Ubel (2013) 'The Hazards of Correcting Myths about Health Care Reform', *Medical Care*, 51, 127–32; and P. S. Hart and E. C. Nisbet (2012) 'Boomerang Effects in Science Communication: How Motivated Reasoning and Identity Cues Amplify Opinion Polarization about Climate Mitigation Policies', *Communication Research* 39, 701–23.

[77] See U. K. H. Ecker, S. Lewandowsky, O. Fenton, and K. Martin (2014) 'Do People Keep Believing Because They Want to? Preexisting Attitudes and the Continued Influence of Misinformation', *Memory and Cognition 42*, 292–304.

[78] Maria Konnikova (16 May 2014) 'I Don't Want to Be Right', *The New Yorker*, http://www.newyorker.com/science/maria-konnikova/i-dont-want-to-be-right, date accessed 20 July 2015.

that one will consider revising one's identity. This is the sort of thing recently witnessed as some Westerners, some of whom know little about Islam, forego their current lives to fight alongside Muslim jihadists in Syria, Iraq, or Libya. Attachment to these groups, who portray very clear demarcations between what is evil and what is good, ostensibly provides the sense of personal significance and cognitive harmony that these individuals crave.[79] This search to relieve cognitive discord characterizes much of religious conversion in general. Such conversion is rarely effected in the isolated individual. It is the product of personal relationships, both good and bad. Disaffected relationships with significant others, such as parents, with whom one has value disagreements or lack of attachment, set the context for the investigation and then establishment of relationships with people of alternative communities and values.[80] And while a change of mind has come to often be described by the notion of a gestalt switch, a sudden individual reorientation of worldview, these changes of mind are probably better understood as a reorientation of one's relationships. One finds people whose rival set of values can provide a cognitive harmony for the experiences that one's own commitments cannot.[81]

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[79] A. W. Kruglanski and E. Orehek (2011) 'The Role of the Quest for Personal Significance in Motivating Terrorism', in J. Forgas, A. Kruglanski, and K. Williams (eds) *The Psychology of Social Conflict and Aggression* (New York: Psychology Press), 153–66. Other research indicates that as people are less willing to tolerate diverse points of view the likelihood of violent confrontations increase. See P. Suedfeld (2010) 'The Scoring of Integrative Complexity as a Tool in Forecasting Adversary Intentions: Three Case Studies', Contract report, Defence R&D Canada-Toronto, http://www.dtic.mil/dtic/, date accessed 22 July 2015.

[80] C. Buxant, V. Saroglou, and J. Scheuer (2009) 'Contemporary Conversion: Compensatory Needs or Self-Growth Motives?' in R. L. Piedmont and A. Village (eds) *Research in the Social Scientific Study of Religion*, Vol. 20 (Leiden: Brill), 47–67.

[81] While Richard Posner uses Thomas Kuhn's phrase of 'gestalt switch', he makes note of the matrix of technological innovations and change in public relationships that have been behind the spreading acceptance of 'women's equality'. See R. A. Posner (1993) *The Problems of Jurisprudence* (Cambridge, MA: Harvard University Press), 419. Of course, relationships are also points of exploitation. Military interrogators recognize that the central mechanism by which to get information from a source is to establish a relationship with the source whereby the source believes that he or she will gain something. See C. McCauley (2007) 'Toward a Social Psychology of Professional Military Interrogation', *Peace and Conflict: Journal of Peace Psychology*, 13, 299–410.

## Moral Cognition Is Aesthetic

The third important affirmation of a Jamesian moral cognition is that such cognition must be consistent with the character of the flux of human experience. As previously noted, he claims that when attempts at translation of the experiential flux into concepts fails, as it always does, one must fall "back on it [the flux] alone when the translation gives out,"[82] and "take reality bodily and integrally up into philosophy in exactly the perceptual shape in which it comes."[83] And while James does not develop this, his comments point toward an aesthetic cognition that creates and discerns relations in experience without bringing them under conceptual description. Some things are attractive or unattractive because of how our body senses the world for the purposes of survival.[84] Some things are attractive because of social predilections and relationships. The judgment of something as attractive or unattractive is not a rationalistic operation but a bodily response of approval or disapproval, which is self-authenticating because "it feels right." These bodily responses cannot be fully disassociated and analyzed into discrete concepts or relations apart from one another or even clearly articulated in language. Certainly, many experiential judgments are no more than crass expressions of instinct, egoism, or default social response, but these deficiencies should not overshadow how experiential judgment is central to human decision making and that there are ways to evaluate it and critically employ it.

# Aesthetic Moral Cognition

## Introspection

Introspection is a critical action in regard to the use of aesthetic experiences, because the only access to these experiences is the firsthand accounts of the sensing subject. But while introspection was a mainline method in nineteenth-

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[82] James, *Some Problems of Philosophy*, 78–9.

[83] James, *Some Problems of Philosophy*, 95.

[84] George Lakoff develops this idea but with considerable lingering reference to reason. See G. Lakoff, *Women, Fire, and Dangerous Things*, 56 and 200.

century psychology and philosophy of mind, it has fallen into disrepute. In psychology, it is disparaged because of a distrust of self-reports in general, particularly when the underlying processes of introspection cannot be empirically verified.[85] And in the philosophy of mind, introspection is often ignored because of difficulties in putting introspection under analytic concepts or in describing how introspection discerns conceptual structures of thought.[86] These reasons are part of a broader intellectual aversion in the West to many Eastern and popular Western versions of introspection, which offer promises of new insights but rarely provide substantive direction for decision making.[87]

According to the Jamesian model of experience developed here, the tendency of human awareness is to concentrate on individual points of consciousness and to abstract concepts from them. But this focus leaves lots of sensory data out and fails to account for the nonconscious and automatic biases that filter the data. Two broad steps are necessary as preliminaries to aesthetic cognitive deliberation. First is a developed sensitivity to one's sensory/perceptual awareness. The tendency is to orient toward the items of cognitive focus and filter "background" data out of attention. But for a robust perspective on experience, efforts must be made to bring vague background impressions and implicit memories into the mix. Second, introspection must be suspicious in character. Once one recognizes that choices are made on the basis of commitments derived from vague and less than fully conscious impressions, then one realizes that these commitments are not the only possible ones, and perhaps not the best ones. The challenge is to investigate other possible ways of organizing experience, which entails both a suspension of many of one's biases and an openness to other possibilities. For many, neither of these cognitive movements are possible. Their range of experience has been limited, not

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[85] A. I. Jack and A. Roepstorff (2003) 'Why Trust the Subject?' in A. I. Jack and A. Roepstorff (eds) *Trusting the Subject*, Vol. 1 (Charlottesville, VA: Imprint Academic), v–xx.

[86] See S. Shoemaker (1986) 'Introspection and the Self', *Midwest Studies in Philosophy*, 10, 101–20.

[87] There is a broad diversity of approach here, ranging from Eugene T. Gendlin's highly linguistic form of introspection, see E. T. Gendlin (2009) 'We Can Think with the Implicit, As Well as with Fully Formed Concepts', in K. Leidlmair (ed.) *After Cognitivism: A Reassessment of Cognitive Science and Philosophy* (Dordrecht, NI: Springer), 147–61, to Wayne Dyer's transreligious spirituality. See W. W. Dyer (2007) *Change Your Thoughts—Change Your Life: Living the Wisdom of the Tao* (Carlsbad, CA: Hay House, Inc.).

only in the sense that they have been members of only one society, speak only one language, and traveled little, but also in the sense that if they have lived in different places, read different types of literature, and spoken more than one language, these experiences were treated without the possibility of constituting live options. The emissary of colonialism, the entrepreneur, and the clandestine foreign agent may know other languages, cultures, and values well, but this knowledge does not represent a live option for choice but a means to serve prior commitments. A suspicious disposition broaches the difficult question as to whether the commitments by which one harmonizes experience are indeed the best ones. Are one's experiential awareness and emotional sensibilities what they should be? Are one's commitments rooted in healthy relationships? Are the communities one is a member of healthy? These are difficult questions to frame because they are attempting to scrutinize one's personal and social identity and values, which are the basis for all the commitments one has. If one's personal and social values do not already contain commitments to this kind of scrutiny, then it is difficult for a person to have an inclination to exercise it.

## Art and Aesthetic Deliberation

Introspective scrutiny does not operate most effectively in a vacuum, in spite of the claims of many forms of mysticism and spirituality. Human experience is primarily experience in the world, and it needs content to operate upon. Moreover, given the preconceptual and prelinguistic character of perception, human experience is not amenable to rationalistic formulation or expression.[88] As James suggested, appreciating human experience requires an engagement with it in as close to its own terms as possible, without reference to concepts or supposed underlying structures. This engagement is most often approximated in the making and appreciation of art.

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[88] James recognized this, but believed that the only thing to do with experience was to make assertions about it. 'The feeling of the inward dignity of certain spiritual attitudes, as peace, serenity, simplicity, veracity … are quite inexplicable except by an innate preference of the more ideal attitude for its own sake. The nobler thing *tastes* better and that is all we can say'. James, 'The Moral Philosopher', 187.

Unfortunately, much discussion of art distorts its aesthetic character. Attention may be given to the techniques involved in the production of the work, such as the brush strokes of Van Gogh or Hemingway's preference for nouns over adjectives or Beethoven's use of modulation. Given the inherent technical challenges involved in creating any art object, this focus is understandable. But usually the significance of a work of art is taken in regard to its communication of underlying structures of human experience, so that the commentary on an artistic piece attempts to identify the symbols within the work and translate those symbols into the analytic and structural elements that are supposedly the whole point of the piece. But these analytic and reductionist methods always prove inadequate because the highest forms of art are not produced or appreciated by Type 2 processes.

An approach very close to James's is found in Susanne Langer's writings on art. She embraces the Jamesian notion of sensory knowledge as not being communicable in language or standard forms of rationality.[89] Instead, they are communicated through art, which she defines as "the practice of creating perceptible forms expressive of human feeling."[90] Artistic forms have a congruency "with the dynamic forms of our direct sensuous, mental, and emotional life …. They are images of feeling, that formulate it for our cognition. What is artistically good is whatever articulates and presents feeling to our understanding."[91] Aesthetic form is not abstracted from or merely symbolized in the work that communicates it; instead, a work of art becomes an apparition of the form, so that a quality piece of art actually expresses the feeling and emotion of human experience. "'Music sounds as feelings feel.' And likewise, in good painting, sculpture, or building, balanced shapes and colors, lines and masses look as emotions, vital tensions and their resolutions feel."[92] Unfortunately Langer considers works of art as only expressions of form, and fails to attribute a significant place for art's effect on the body.

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[89] S. K. Langer (1957) *Problems of Art: Ten Philosophical Lectures* (New York: Charles Scribner's Sons), 91. I say very close to this view, because Langer often references structures, concepts, symbols, and logic as involved in the appreciation of art. At times her writings suggest an inherent compatibility between rational structures and the experiences art communicates.

[90] S. K. Langer (1962) *Philosophical Sketches* (Baltimore, MD: The Johns Hopkins Press), 84.

[91] Langer, *Problems of Art*, 25.

[92] Langer, *Problems of Art*, 26.

In regard to music, she writes,

> If music has any significance, it is semantic, not symptomatic. Its 'meaning' is evidently not that of a stimulus to evoke emotions, nor that of a signal to announce them; if it has an emotional content, it 'has' it in the same sense that language 'has' its conceptual content—symbolically … Music is not the cause or the cure of feelings, but their logical *expression*.[93]

Langer's commitment to rational symbolism ultimately precludes her from advocating an experiential aestheticism. She sees a work of art as only an expression of meaningful symbols for human feelings, which are appreciated through forms of rationalistic cognition. There are a few problems with this assertion. Langer assumes that works of art can embody and express emotions, but from a phenomenological standpoint this is impossible. Emotions are body states of sentient beings, and inanimate objects, whether paintings, sculptures, scripts, or sheet music, cannot express such body states. Only when a human being produces or performs them is expression involved. In fact, her emphasis on symbols and expressions really misses the core value of art. Not the symbolization of emotion, but the stimulation of a perceptual event in the experience of the participant is the most important goal of art. Art cannot embody emotion or human experience but it does serve as a catalyst for it. A painting, a play, or an opera are quality pieces of art to the extent to which they reliably evoke valuable experiences in the consciousness of an audience. Art is contrived experience and is made up of forms that evoke sensations that one might encounter in real-world experience. Art is successful to the extent that it can appeal to human sensations and the ways they are organized and filtered.

Art is limited, however. Its forms cannot always mimic the sensory forms encountered in lived experience, either in detail or in scale, but human cognition is willing and imaginative and can overlook the limitations and even fill in gaps. For example, a dramatic play may use the barest of stage sets, but a willing audience forgets the unrealistic items and

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[93] S. K. Langer (1954) *Philosophy in a New Key: A Study in the Symbolism of Reason, Rite, and Art* (New York: The New American Library), 176.

the physical confines of the stage and loses itself in the story. Quality art is therefore inherently participatory: viewing, hearing, or touching a significant piece of art stimulates human sensory experiences akin to those evoked by the sensory data of ordinary human experience.[94]

Art can then provide an important medium for aesthetic deliberation in two ways. First, art puts one in touch with a sweeping range of sensory experience and cognitive dispositions that make up human experience. Art provides education in the arousal of emotion and the range of emotion possibly appropriate for particular circumstances. It assists one in exploring different ways of sensing and responding to experience.[95] As Marcel Proust writes, "Through art alone are we able to emerge from ourselves, to know what another person sees of a universe which is not the same as our own and of which, without art, the landscapes would remain as unknown to us as those that may exist in the moon."[96] The genius of the artist is to identify impressions of the world that are vital to most people and translate them into forms that those lacking the artist's creative acumen can appreciate.[97] Art makes possible the access of vague or implicit elements of human experience, providing insight into connections between objects of memory, explicit and implicit. Proust in particular exemplifies the use of narrative art as a means to rekindle and contemplate old and vague memories to discover their significance.[98]

And second, art is a useful medium for aesthetic deliberation because it provides a venue for experimentation. By extension from Proust's descriptions, every human creation proffered as a work of art is a phenomenological experiment: Will this work elicit significant emotions and experiences from the artist, from significant groups of people in particular

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[94] Lavazza and Manzotti make a similar point about art eliciting an experience of unity in those who participate in viewing, hearing, or reading it. See A. Lavazz and R. Manzotti (2011) 'A New Mind for a New Aesthetics', *Revista Portuguesa de Filosofia*, 67, 523.

[95] Aristotle and Plato explicitly ascribe to music the ability to educate the emotions and judgment. See *Politics*, 1340a14–25, and *The Republic*, 401,d-e. See also Martha Nussbaum's remarks on tragedy in M. Nussbaum (1988) *The Fragility of Goodness* (New York: Cambridge University Press), 390.

[96] M. Proust (1981) *Remembrance of Things Past*, Vol. 3, *The Captive, The Fugitive, Time Regained*, Trans. by C. K. S. Moncrieff, T. Kilmartin, and A. Mayor (New York: Random House), 932.

[97] Proust, *Remembrance of Things Past*, 926.

[98] Proust, *Remembrance of Things Past*, 906 and 925.

places and times? This stands in stark contrast to the standard rationalistic models for the appreciation of art, which commend objective and theoretical assessment.[99] Instead, works of art must be tried on like a suit in a clothing store for possible fit with one's experience and sensory predilections. Until a work of art is exposed to the sensory experience of a human being, it cannot be judged as to whether or not it resonates with experience and provides value. The painting must be viewed. The novel must be read. The opera must be heard. Only in these acts is there produced a judgment about the quality of the work. Many artists, perhaps most of the great ones, feel their way along as they create a piece, testing it against their emotional and sensory inclinations for the harmony and fit they find appealing.[100] And so aesthetic deliberation is not about rationalistic arguments or proofs, but about which sensory experiences are deemed compelling and authoritative.

Art therefore inherently contains a normative element. Although art is often criticized as being unavoidably relativistic, there are both personal and corporate criteria operating. The artist creates a piece with particular sensibilities in operation, and then a community that views and participates in the piece of art makes its own judgment about the work, enlisting its own sensibilities regarding the quality of the piece. These judgments tend to show both continuity and diversity. The continuity of judgment is due to the similarities in perceptual apparatus and hardwired interpretations of sense information across the human species. Apart from anomalies like color blindness or synesthesia, everyone senses pretty much the same data and has highly similar instinctual responses to it. But upon these hardwired preferences are piled social preferences, which vary geographically and chronologically. Different cultures have different aesthetic sensibilities, and different eras have different aesthetic sensibilities. Styles of art move in and out of fashion, both because of

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[99] Susan L. Feagin's assertion that one can listen to music or read literature without having feelings about it represents the dispassionate and, I believe, unrealistic approach of much of analytic philosophy. See S. L. Feagin (2010) 'Affects in Appreciation', in P. Goldie (ed.) *The Oxford Handbook of Philosophy of Emotion* (New York: Oxford University Press), 642–3.

[100] Bruce Mangan refers to an interview with Georgia O'Keeffe in which she noted that in making copies of her paintings she judged the colors in the copies not by whether they were 'absolutely right', but whether or not 'they seem right when you are finished'. B. Mangan (2008) 'Representation, Rightness and The Fringe', *Journal of Consciousness Studies*, 15, 78.

social changes in the world and because of the human experiential preference for novelty. Aesthetic deliberation is a cognitive movement that attempts to adjudicate phenomenologically between these preferences. There is great potential for consensus in the common character of human experiencing, but social variations guarantee that aesthetic deliberation will always be fraught with discord.

## Practical Ethics

From the vantage point of Type 1 cognition, ethical decisions are no different than other kinds of decisions; all decisions are aesthetic ones, deliberated and chosen on the basis of options that appeal to aesthetic senses of harmony and rightness. This approach has much in common with virtue ethics, in that it is an orientation around dispositions and sweeping habits of experiencing the world rather than principles and individual actions. These habits are partly innate and partly the product of living in particular communities. No particular method can be prescribed for ethical choice other than references to a judgment being fitting and appropriate as understood by others who display aesthetic virtue.

Aristotle's *Nicomachean Ethics* displays this aesthetic orientation, although interpreters have tended to prefer translations and interpretations that emphasize Aristotle's rationalistic inclinations. The aesthetic dimension for ethics is perhaps best represented in Aristotle's use of the word *kalon*. Often translated as "fine" or "noble," its primary meaning in Aristotle's time referred to the beauty of some object or relation, and over time it became particularly attributed to moral goodness.[101] Ross's translation has Aristotle asserting that "virtuous actions are noble [*kalon*] and done for the sake of the noble [*kalon*],"[102] but this passage could just as

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[101] J. Owens (1981) 'The ΚΑΛΟΝ in the Aristotelian Ethics', in D. J. O'Meara (ed.) *Studies in Aristotle* (Washington, D. C.: The Catholic University of America Press), 261. Richard Kraut argues that in many places, but not all, Aristotle is referring to beauty rather than a nonaesthetic rendering of moral goodness. See R. Kraut (2013) 'An Aesthetic Reading of Aristotle's Ethics', in V. Harte and M. Lane (eds) *Politeia in Greek and Roman Philosophy* (Cambridge: Cambridge University Press), 231–50.

[102] Aristotle (2009) *Nicomachean Ethics*, translated by D. Ross, Revised by L. Brown (Oxford: Oxford University Press), 1120a24–5.

well be translated as "virtuous actions are beautiful, and done for the sake of beauty." The issue is not just that there is no English word as versatile as *kalon*, but that the modern intellectual biases associated with English usage avoid combining aesthetic sensibilities with moral ones.

Moral deliberation is really concerned with aesthetic deliberation because it entails the adjudication of competing senses of harmony and rightness that filter and prioritize sensations within one's flow of experience. Moral deliberation does not work in a vacuum but finds assistance through a variety of artistic mediums, which are used not just for the exploration and education of ethical sensibilities but for the experimental investigation of appropriate possibilities and outcomes. Every type of art can therefore be of assistance in moral deliberation, although few of them have been developed and employed in this sense. Narrative forms of art are particularly useful for moral deliberation and will be explored in the next chapter.

# 7

# Narrative and Moral Deliberation

In the last 40 years, narrative has been talked about extensively outside literary disciplines. Professionals in psychology, sociology, law, theology, philosophy, and applied ethics have all turned their attention to the form, and the academic literature on it is immense and rapidly growing. Much of this attention has been due to a dissatisfaction with the structural and foundational approaches that have dominated these disciplines. Narrative is seen as a form that can replace aloof abstraction and emotional coldness with a vibrant sense of humanity and greater opportunities for meaningful communal discourse. Research vindicates many of these hopes, indicating, for example, that the reading and writing of narratives increases senses of empathy for others.[1]

Unfortunately, three broad problems plague the use of narrative in intellectual disciplines. First, the claims for the form have been overextended. Narrative is sometimes promoted as solving all intellectual problems by

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[1] R. A. Mar, K. Oatley, M. Djikic, and J. Mullin (2011) 'Emotion and Narrative Fiction: Interactive Influences Before, During, and After Reading', *Cognition and Emotion*, 25, 818–33. Much of this research has been in regard to medical training. See S. L. Arntfield, K. Slesar, J. Dickson, and R. Charon (2013) 'Narrative Medicine as a Means of Training Medical Students toward Residency Requirements', *Patient Education and Counseling*, 91, 280–6.

providing coherency and meaning where no other technical device can. It is variously prescribed as a tool for thinking, a portal into the underlying structures, conceptions, and symbols of human thought, and a means by which to create a nearly universal moral community.[2] As Roland Barthes writes,

> Narrative occurs in all periods, in all places, all societies; narrative begins with the very history of humanity; there is not, there has never been, any people anywhere without narrative; all classes, all human groups have their narratives, and very often these are enjoyed by men of different, even opposing culture: narrative never prefers good to bad literature; International, transhistorical, transcultural, narrative is there, like life.[3]

But this supposed ubiquitous presence of narrative does not solve the targeted problems. Narrative either becomes a form utilized in different contexts in different ways and as a result does not resolve existing disagreements, or it becomes so generic and vague that it becomes nothing more than a file folder in which just about anything can be stored.

A second problem is that narrative form has become another outlet for Western individualistic self-absorption. Particularly in psychotherapy and less formal self-help psychology, one is admonished to embrace the storied character of one's existence, root out incoherencies in one's narrative, and by choosing the story that one wants to live create a self with meaning.[4] Narrative is therefore primarily about autobiography, and its use by narrative ethics yields results that are quite as individualistic and preoccupied with the troubled concept of the self as any of the modern ethical theories that adherents of narrative seek to correct.

But the most serious problem is that, although narrative is often appropriated for the purpose of correcting the failings of critical, structuralist,

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[2] D. Herman (2003) 'Stories as a Tool for Thinking', in D. Herman (ed.) *Narrative Theory and the Cognitive Sciences* (Chicago: University of Chicago Press), 163–92. Alasdair MacIntyre's *After Virtue* offers not only an impractical romanticization of classical Aristotelean and Thomistic communitarian approaches, but a commitment to the rational structures and realism underlying these approaches. See, for example, pages 122 and 128–9 in A. C. MacIntyre (2007) *After Virtue*, 3rd edn (South Bend, IN: University of Notre Dame Press).

[3] R. Barthes (1989) *The Semiotic Challenge* (New York: Hill and Wang), 89.

[4] D. P. McAdams (2006) 'The Problem of Narrative Coherence', *Journal of Constructivist Psychology*, 19, 109–25.

abstract, and realist methodologies, the use of narrative turns out to be not much more than a cosmetic alteration or addition to them. Throughout the academic literature on narrative lies the assumption that Type 2 processes are normative. So while human experience may be espoused as narrative at its core, that core is taken to be a structural reality that can be analyzed and elucidated by means of Type 2 processes. For example, narratives are labeled into types: fables, legends, folk tales, or sagas, or broadly as fiction or nonfiction. They are analyzed into constituent elements: plot, characters, setting, perspective, and audience, or into underlying structures: frames, scripts, schemas, symbols, or metaphors.[5] These efforts are quite different from dealing with narrative as a form that approximates the way human perception senses and filters experience.

In fact there are two types of approaches to narrative corresponding to the two types of cognitions in dual process theory. There are Type 2 narratives, which are constructed on the basis of analytic categories and interpreted using Type 2 processes. This Type 2 approach is pervasive throughout the professional and philosophical literature. There are also Type 1 narratives, which are constructed and interpreted on the basis of Type 1 processes. These have much less representation in academic literature and are primarily found in creative writing.

## Type 2 Processes and Narrative Interpretation

Type 2 narratives are constructed by means of a conscious identification and designation of symbols, themes, literary techniques, and content. Many of these involve the hack writing of popular fiction where the author follows a formula for constructing the story,[6] or the mechanical style of some journalism that seeks to answer the questions of who, what, why, when, where, and how. In applied ethics, these often appear as case

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[5] Examples are common, but one can look at W. Labov and J. Waletzky (1997) 'Narrative Analysis: Oral Versions of Personal Experience', *Journal of Narrative and Life History*, 7, 3–38.

[6] J. Truby (2007) *The Anatomy of Story: 22 Steps to Becoming a Master Storyteller* (New York: Faber & Faber, Inc.).

studies, which are constructed on the basis of some methodological or value bias. Common to all these efforts is the goal of representation. A valuable narrative is one that provides accurate representation of the analytic dynamics underlying the story. But in the academic world, the most attention is not upon the construction of Type 2 narratives, but the use of Type 2 processes to analyze all narratives, even Type 1 narratives.

While many narrative theorists view their efforts as intellectual alternatives to standard literary criticism and philosophical analysis, their commitments to Type 2 processes preclude them from making very radical revisions. I will look at four well-known narrative theorists who recognize that narrative holds resources beyond standard analytic approaches but in spite of their creative efforts are not able to distance themselves very far from Type 2 methods.

## Paul Ricoeur

In Paul Ricoeur's investigation of the human quest to make life intelligible, he proposes narrative as the most accurate representation of the human perception of time. He writes, "My basic hypothesis [is] that between the activity of narrating a story and the temporal character of human experience there exists a correlation that is not merely accidental but that presents a transcultural form of necessity."[7] According to Ricoeur, narratives have a specific arc to them that runs through three states of representation. Mimesis$_1$ entails the basic human competencies that prefigure all human actions, such as the ability to understand the sign systems of a particular culture and the sense of before and after central to temporal awareness. Mimesis$_2$ entails the plotting of events and characters into a story line on the basis of the assumptions from memesis$_1$ to create a coherent narrative of the unavoidably discordant elements of human situations that constitutes a possible, although imaginary, world. Mimesis$_3$ is the integrating of a narrative into one's own personal lived experience.[8] And while Ricoeur roots human subjectivity in material human realities,

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[7] P. Ricoeur (1984) *Time and Narrative*, Vol. 1, trans. by K. McLaughlin and D. Pellauer (Chicago: IL: The University of Chicago Press), 52.

[8] Ricoeur, *Time and Narrative*, 43–87.

communication ultimately depends upon linguistic realities to provide the necessary symbolic representation, and words are communicative only to the extent to which they correspond to ideas.[9]

Ricoeur is interested in avoiding the abstractions of semiotic theory by emphasizing the whole arc of narrative. Mimesis$_2$ provides a mediating function linking the two sides of the text, as he calls them, mimesis$_1$ and mimesis$_3$. Mimesis$_1$ has much in common with Type 1 processes, being rooted in biological and experiential sensibilities, but the significance of this domain is largely lost in Ricoeur's focus on the emplotment function of mimesis$_2$ as the conscious manufacturing of a linguistic, rule-governed, symbolic, and structural order of events.[10]

## Jerome Bruner

Jerome Bruner, a cognitive psychologist who has been heavily influenced by the work of Ricoeur, describes a dual process model of thought that includes narrative. One mode of thought he calls the paradigmatic or logico-scientific mode, which is characterized by logical, mathematical, and conceptual operations. Bruner notes that this is generally considered the standard for intellectual thinking, but he claims it is not the most pervasive type of thought. That is the other type, the narrative mode, which constructs stories that are believable because they are lifelike in their representation of reality.[11] This mode is central to personal identity, and people construct their autobiographical narratives using not just individual material but stock narratives and social circumstances that their culture provides them.[12]

Although Bruner's model intends to emphasize the qualitative difference between the two modes, they wind up not being so distinct. He asserts that creating good fiction is similar to creating good mathematics;

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[9] P. Ricoeur (2003) *The Rule of Metaphor: The Creation of Meaning in Language* (New York: Routledge), 55.

[10] Ricoeur, *Time and Narrative*, 64–70.

[11] J. Bruner (1986) *Actual Minds, Possible Worlds* (Cambridge, MA: Harvard University Press), 11–13.

[12] J. Bruner (2004) 'Life as Narrative', *Social Research*, 71, 694.

they both involve the transformation of intuitions into expressions in a symbolic system—natural language or some artificialized form of it. The forms of expression that emerge, the discourse that carries the story, or the calculus that depicts a mathematical relation—these are crucial for understanding the differences between an inchoate account of a bad marriage and *Madam Bovary*, between a clumsily argued justification and an elegant and powerful derivation of a logical proof.[13]

The result is that Bruner does not focus on the intuitions that are ostensibly the major source of the narratives, but on the analysis of the narratives themselves, the "selective narrative rules" that are used in their construction and their "recipes for the structuring of experience."[14]

## Walter R. Fisher

A very similar dual process scheme is promoted by Walter R. Fisher, a rhetorical theorist. Fisher poses two different cognitive paradigms. One he calls the rational-world paradigm, which is built on traditional models of logical reasoning. The other he calls the narrative paradigm, which is based on "narrative rationality." The narrative paradigm tests human communication on the basis of two principles. One is the principle of narrative probability or coherence and describes how a story "hangs together." The other principle is narrative fidelity, which measures a story's truthfulness and reliability according to a logic of good reasons, which is made of the standards of formal and informal logic and of rhetorical warrants for belief.[15] Each of these principles has both a culturally determined dimension and a universal dimension. Fisher foregoes the rationalist inclination for justified conclusions and argues that the task of those skilled in narrative rationality is not to promote a conclusion fit for everyone, but to be a kind of narrative counselor, who facilitates a debating public's application of whatever criteria of

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[13] Bruner, *Actual Minds*, 15–16.

[14] Bruner, 'Life as Narrative', 701 and 708.

[15] W. R. Fisher (1987) *Human Communication as Narration: Toward a Philosophy of Reason, Value, and Action* (Columbia, SC: University of South Carolina), 47; and W. R. Fisher (1978) 'Toward a Logic of Good Reasons', *The Quarterly Journal of Speech*, 64, 378.

coherency and reliability it chooses.[16] This inevitably leads to rival stories, but they are incommensurable only if they deny one or another party's narrative self-conception. The goal therefore is to construct "stories that do not negate the self-conceptions people hold of themselves."[17]

Fisher intends his narrative paradigm to be a radical alternative to the standard rational-world paradigm, but it turns out not to be quite so radical after all. For example, what Fisher means by a logic of good reasons does involve a larger class of cognitions than just formal and informal logic, but his descriptions of it retain Type 2 emphases on systematic procedures, analysis, and rational assessment.[18] As he admits, the approach is "an adjunct to existing 'logics,'"[19] not a replacement of them.

## Martha Nussbaum

Martha Nussbaum is interested in what she calls "the project," an endeavor committed to the notion that "literary form and human content are inseparable, … that literary forms call forth certain specific sorts of practical activity in the reader that can be evoked in no other way."[20] The project criticizes

> much contemporary work in moral philosophy, on the grounds that this work claims, on the one hand, to assess all of the major available conceptions of human and personal social life, while, on the other hand, it confines itself entirely to forms of writing which, in their abstract and emotionless character, are far better suited to investigating some practical conceptions than others and which call up a correspondingly narrow range of responses and activities in the reader.[21]

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[16] W. R. Fisher (1984) 'Narration as a Human Communication Paradigm: The Case of Public Moral Argument', *Communication Monographs*, 51, 13.

[17] Fisher, 'Narration as a Human Communication Paradigm', 14.

[18] Fisher, 'Toward a Logic of Good Reasons', 377.

[19] Fisher, 'Toward a Logic of Good Reasons', 377.

[20] M. Nussbaum (1989) 'Narrative Emotions: Beckett's Genealogy of Love', in S. Hauerwas and L. G. Jones (eds) *Why Narrative? Readings in Narrative Theology* (Grand Rapids, MI: William B. Eerdmans Publishing Company), 221.

[21] Nussbaum, 'Narrative Emotions', 221.

She contends that if moral philosophers wish to understand practical conceptions of human life then they must engage complex narrative texts that evoke moral activities, particularly emotional activities connected with ethical value reflection.[22]

Informed primarily by an Aristotelian method for investigating the classic question of "How should a human live?" she looks not for views that correspond to an ideal but for views that are consistent and coherent with the deepest human values as part of a matrix of "judgment, feeling, perception, and principle, taken as a whole."[23] In this search, fictional literature provides two kinds of contributions. First, it can expand the character of the questions to be investigated to match the wide range of commitments human experience entails and provide guiding biases regarding what is valuable and how value ought be dealt with. These biases will include recognition of such things as the unavoidability of unpredictable events, the value of emotion, and the inevitable incommensurability of some values. Second, novels provide specific structures and forms for the understanding of crucial ethical conceptions. Novels provide the means to carry out the basic function of moral philosophy: "a pursuit of truth in all its forms, requiring a deep and sympathetic investigation of all major ethical alternatives and the comparison of each with our active sense of life."[24]

Taken alone, these comments by Nussbaum might appear to support a preference for Type 1 processes of cognition. She notes the priority of "perception" for both Aristotle and Henry James as an ethical facility, and that this priority demonstrates that "the ethical crudeness of moralities based exclusively on general rules" requires "a much finer responsiveness to the concrete."[25] But in spite of these statements, Nussbaum makes clear her Type 2 process commitment that "rules and general categories still have enormous action-guiding significance in the morality of perception," and she does not want to be mistaken as suggesting that the reading

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[22] Nussbaum, 'Narrative Emotions', 222.

[23] M. C. Nussbaum (1990) *Love's Knowledge: Essays on Philosophy and Literature* (New York: Oxford University Press), 26.

[24] Nussbaum, *Love's Knowledge*, 26–7.

[25] Nussbaum, *Love's Knowledge*, 37.

of novels should be substituted for the nonliterary works in philosophy.[26] Elsewhere she adds, "the literary imagination is a part of public rationality, and not the whole. I believe that it would be extremely dangerous to suggest substituting empathetic imagining for rule-governed moral reasoning, and I am not making that suggestion."[27]

## Type 2 Narrative and Applied Ethics

Applied ethics, particularly biomedical ethics, has made considerable use of narrative theory. Elements of this interest have derived from practical ethics' long-standing use of case studies, which are themselves types of stories.[28] Growing out of interactions in the 1960s between medical professionals and philosophers on problems of medical ethics, the case developed into an alternative or supplement for abstract examinations of moral theory. Cases had been used for some time in law, business, and medicine, but ethicists judged the length, technicality, and specificity of those cases to be too cumbersome for their purposes, and so they rewrote them into more concise shape to generate discussion and leave possible

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[26] Nussbaum, *Love's Knowledge*, 37.

[27] M. C. Nussbaum (1995) *Poetic Justice: The Literary Imagination and Public Life* (Boston: Beacon Press), xvi. Nussbaum deals with the work of Henry James in considerable detail as an exemplar of the importance of literature for thinking about ethical questions, but her treatment of James generally demonstrates the same kind of Type 2 processing as found in most other literary criticism, which often produces tortuous expositions aimed at identifying underlying symbols and conceptualizations. For example, in the midst of an extended explication of passages out of James's *The Ambassadors*, Nussbaum remarks that the character Mrs. Newsome is 'a brilliantly comic rendering of some of the deepest and most appealing features of Kantian morality' (Nussbaum, *Love's Knowledge*, 27). It is not clear, however, that James took as his task the presentation of such structural and symbolic representations. Henry James appears to have held the same priority of perceptions and feelings over conceptualization that his brother William held to in his later works (see K. Boudreau (2010) *Henry James' Narrative Technique: Consciousness, Perception, and Cognition* (New York: Palgrave MacMillan), 1–6). T. S. Eliot noted this in an often misinterpreted essay about the work of Henry James, noting that 'James's critical genius comes out most tellingly in his mastery over, his baffling escape from, Ideas' and 'James in his novels is like the best French critics in maintaining a point of view, a view-point untouched by the parasite idea' (T. S. Eliot (1918) 'In Memory of Henry James', *The Egoist*, 5, 2. Retrieved from http://library.brown.edu/pdfs/1308746718915629.pdf, date accessed 22 July 2015).

[28] T. Chambers (1999) *The Fiction of Bioethics: Cases as Literary Texts* (New York: Routledge), 3.

solutions open during ethical deliberation.[29] Unfortunately, this trimming yielded narratives devoid of important context and with little pertinence to the way humans perceive and process experiences in the world. Moreover, they were usually written from the perspective of some theoretical or methodological bias to make an outcome easier for students or clients.

Attention to narratives that were more literary in style arose in the 1980s as a way of avoiding the stilted character of cases studies and allowing the introduction of more contextual detail and a richer opportunity for the imagination of other perspectives and conclusions. Literary criticism was invoked as a useful tool for the analysis of all narratives, including case studies, although in these efforts narrative remained subservient to traditional philosophical methodologies.[30]

A large amount of the discussion about narrative in applied ethics has to do with whether the narratives are contrived or real. The point of this is whether the cases are constructed on the basis of some theoretical or methodological bias, but underneath it frequently lies a significant Type 2 process commitment: "Real cases are by implication impartial, theory-free, and guileless."[31] Considerable effort has been deployed to try to overcome the distinction between fiction and nonfiction, utilizing theory from literature to distinguish such things as the world of the author from the world of the reader,[32] but in general, applied ethics' use of narrative has followed the same path as in other disciplines. While narrative is invoked as a means of correcting the problems of ethical foundationalism, abstraction, and hyperindividualism, the corrections are always incomplete, because root level Type 2 analytic processes remain in play.[33]

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[29] M. Davis (1999). *Ethics and the University* (New York: Routledge), 46.

[30] Chambers, *The Fiction of Bioethics*, 3.

[31] Chambers, *The Fiction of Bioethics*, 7.

[32] Chambers, *The Fiction of Bioethics*, 47.

[33] See, for example, S. Hauerwas and D. Burrell (1989) 'From System to Story: An Alternative Pattern for Rationality in Ethics', in S. Hauerwas and D. Burrell (eds) *Why Narrative? Readings in Narrative Theology* (Grand Rapids, MI: William B. Eerdmans Publishing Company) which, while containing some evocative comments about the role of 'skills of perception' in moral deliberation (p. 169), refers to narrative as a necessary foundational cognitive category (pp. 168 and 177), and emphasizes the importance of analyzing stories to determine their function (p. 170) and developing explicit criteria for authoritative stories (p. 190).

# Type 1 Narrative Construction and Interpretation

In contrast to the formulaic and methodical means for constructing Type 2 narratives, Type 1 narratives are constructed automatically, nonconsciously, and by means of aesthetic sensibilities. In fact, the term "narrative" must be used with considerable caution and qualification in regard to Type 1 processes, for its use suggests the structural, causal, and linear elements typical of Type 2 narratives. But if one begins with the assumption of the priority of Type 1 processes and admits that the phenomena of human experience are more complex than the label "narrative" can capture, then narrative may be recognized as designating a cognitive form that provides sensibility to the prelinguistic, preconceptual, and presymbolic flow of perceptions falling upon human senses. Narrative constructs an order, unity, and explanation for what is perceived by means of filtering and prioritizing the perceptions of human experience and creating evaluations of before and after, causality, and change. Often these narratives are linear, implying causal chains, but this is not necessarily the case as demonstrated by the complex and often haphazard sequences by which memories are called into human consciousness. The order of memories may have much less to do with chronological progression than with a response to what is currently taken to be meaningful in relation to external or internal stimuli.[34]

Some of the most direct evidence of narrative cognition projecting a unity onto perception is provided by the experiments of Michael Gazzaniga. He found curious behaviors among epileptic patients who had their corpus callosums, the tissue that connects the hemispheres of the brain, surgically severed to stop seizures. He devised an experiment that presented different information to the two hemispheres at the same time. The neural circuitry of human beings routes the monitoring and controlling of the left side of the body to the right hemisphere, and the right side of the body to the left hemisphere. The same is true for each eye's field of vision. The

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[34]T. F. Brady, T. Konkle, and G. A. Alvarez (2011) 'A Review of Visual Memory Capacity: Beyond Individual Items and Toward Structured Representations', *Journal of Vision*, 11, 1–34. Often overlooked from a Western perspective are the many examples of nonlinear narratives in human literature. See, for example, D. Penault (1992) *Story-Telling Techniques in the Arabian Nights* (Leiden: E. J. Brill).

left half is processed by the right hemisphere, and vice versa. Gazzaniga devised a mechanism whereby he would divide each eye's field of vision in half, and then, given the severed corpus callosum, could visually present different objects to different hemispheres of the brain. In the most well-known version of this experiment, he presented a snow scene to the left visual field/right hemisphere, and a picture of a chicken head to the right visual field/left hemisphere. The patient was then instructed to search out objects with his/her left and right hand that corresponded with the picture viewed. With the left hand the patient chose an object that corresponded to the snow scene being viewed in the left visual field, a shovel. Gazzaniga then directed the patient to lift this object so that it could be viewed by the right visual field/left hemisphere. Obviously, this object, the shovel, did not match the image, the chicken head, viewed by the left hemisphere, but when Gazzaniga asked the patient why a shovel was chosen the patient responded immediately with "that's to clean out the chicken coop."[35]

Gazzaniga duplicated this remarkable finding many times in these patients and came to label the left hemisphere of the brain as the "interpreter." He argues that human experience, external and internal, is constantly managed and constructed by multiple processes; many of the perceptions received by these processes are contradictory, but contradiction is distressing to human beings, and the left hemisphere of the brain fills in gaps and creates the smooth rendition of experience that human consciousness desires. Without a mechanism that selects and prioritizes perceptions, smoothes over gaps, and ignores some inconsistencies, humans might not be able to make any decisions in complex situations.

## William James and Type 1 Narratives

While William James does not directly address narrative, his commitment to the superiority of "raw unverbalized life"[36] as the revealer of truth provides numerous insights into the character of Type 1 narratives. The first of these

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[35] M. S. Gazzaniga (2012) *Who's in Charge: Freewill and the Science of the Brain* (New York: Ecco), 83.

[36] W. James (1909) *A Pluralistic Universe: Hibbert Lectures at Manchester College on the Present Situation in Philosophy* (New York: Longmans, Green, & Co.), 272.

is that the narrative form can approximate the process, flow, and change characteristic of human experience. The present is never a thing of experience that one can describe and point to. Human consciousness is about change and motion. Perceptions follow one another, overlap one another, some remaining in the background, and others moving in and out of focal attention.

> The rush of our thought forward through its fringes is the everlasting peculiarity of its life. We realize this life as something always off its balance, something in transition, something that shoots out of a darkness through a dawn into a brightness that we feel to be the dawn fulfilled.[37]

And within this flux of experience, the various elements of experience interpenetrate. Only conceptualization formulates items in isolation, separating the past from the future from the present.[38] In human experience there are no isolatable elements outside the whole flux, and the elements "compenetrate and are cohesive; that if you tear out one, its roots bring out more with them."[39] This applies to the field of consciousness, which is

> a centre surrounded by a fringe that shades insensibly into a subconscious more …. The centre works in one way while the margins work in another, and presently overpower the centre and are central themselves. What we conceptually identify ourselves with and say we are thinking of at any time is the centre; but our *full* self is the whole field, with all those indefinitely radiating subconscious possibilities of increase that we can only feel without conceiving, and can hardly begin to analyze. The collective and the distributive ways of being coexist here, for each part functions distinctly, makes connexion with its own peculiar region in the still wider rest of experience and tends to draw us into that line, and yet the whole is somehow felt as one pulse of our life,—not conceived so, but felt so.[40]

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[37] James, *Pluralistic Universe*, 283–84.

[38] James, *Pluralistic Universe*, 254.

[39] James, *Pluralistic Universe*, 271–2.

[40] James, *Pluralistic Universe*, 288–9.

 The expansiveness of human perception is greater than the ability of consciousness to process it. Human cognition manages this limitation by condensing experience into manageable bits.

> No one elementary bit of reality is eclipsed from the next bit's point of view, if only we take reality sensibly and in small enough pulses—and by us it has to be taken pulse-wise, for our span of consciousness is too short to grasp the larger collectivity of things except nominally and abstractly. No more of reality collected together at once is extant anywhere, perhaps, than in my experience of reading this page, or in yours of listening; yet within those bits of experience as they come to pass we get a fullness of content that no conceptual description can equal.[41]

James, then, might well agree with the assertion that narrative is one of the cognitive mechanisms that allows human consciousness to break up the flux of human experience into manageable chunks while still retaining significant senses of motion, priority, and wholeness characteristic of more fundamental human perception.

James also might assert that there are nonverbal and verbal narratives. Given that narratives are representations of relations within the flux of human perception, such relations can be presented without language, as testified to by the accounts of persons who are able to think even though unable to speak or hear or read.[42] But language can also function as a cognitive tool that translates the reality of the perceptual flux into pieces that are understandable by human consciousness. When words and sentences are focused on as static and immutable fixtures for concepts, they have little significance, but when words and sentences are cast into motion like the flow of conscious thought, then these moving narratives can communicate sensed harmony or disharmony among the elements of the perceptual flux.[43]

James also recognizes the critical role of imagination in managing perception. "The only way in which to apprehend reality's thickness is either to experience it directly by being a part of reality one's self, or to

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[41] James, *Pluralistic Universe*, 284–5.

[42] W. James (1890) *Principles of Psychology*, Vol. 1 (New York: Henry Holt & Company), 266–8.

[43] James, *Principles of Psychology*, 260–8.

evoke it in imagination by sympathetically divining someone else's inner life."[44] Human imagination is connected to some of the neural elements mentioned previously in Chap. 2. Mirror neurons that have been discovered in animals as firing both when an animal does a particular act and also when the animal observes another animal performing that particular act may exist in humans, and may provide a neural foundation for the human vicarious experience of events that they observe. Also related is Antonio Damasio's notion of the "as-if body loop" whereby the brain creates cognitive events corresponding to emotions without being evoked by the bodily response to external stimuli that typically evoke emotions.[45]

This evidence suggests that human imagination is innately cognitive and preconceptual and provides means by which to reexperience events from the past, imagine the experiences of other creatures, or create new scenarios of experience. In terms of this cognitive ability, the function of Type 1 narrative goes beyond representation. Narrative provides a mechanism for constructing imaginative life experiences, not just in the sense of organizing possible relations between perceptions but in terms of evoking emotions and the other perceptions experienced in ordinary life.

## Narratives Evoking Simulated Human Experience

Keith Oatley has investigated how fictional narratives enhance the imaginative responses of human beings. He notes that many researchers have dismissed fiction as valuable to psychological research because of findings that reading fiction can lead to the acceptance of claims that are empirically false, but Oatley asserts that fictional narratives hold significance that extend beyond questions of empirical reliability. Reading and thinking about fictional narratives provide opportunities to establish coherency and personal insight within complex interactions of ideals, events, and people. These opportunities are generated by the human cognitive ability to use fictional narratives to simulate real-world experiences, not

[44] James, *Pluralistic Universe*, 250–1.

[45] A. Damasio (2010) *Self Comes to Mind: Constructing the Conscious Brain* (New York: Pantheon Books), 102.

just thoughts or details but actual emotional responses.[46] He has called fiction "a cognitive and emotional simulation" "that runs on the minds of readers just as computer simulations run on computers."[47]

The quality of a narrative is gauged by the quality of the experiences it evokes, and the power of these turn on the quality of the portrayal of characters, context, and plot and how well they connect to one's cognitive predispositions and one's past experience. But the power of the simulation is not merely a function of the quality of the narrative, but also of the quality of the narrative disposition of the reader or hearer. If the reader or hearer does not have a schooled repertoire of emotional and aesthetic sensibilities and sufficient imagination to engage with a narrative, then even the highest quality narrative proves benign. If the reader or listener is unable to allow a particular narrative or its posed solutions to be live options, then the simulation, if it can even be started, will be ineffectual.[48]

The ability of narrative to simulate human experience creates an important experimental role for narrative in moral deliberation. By constructing alternative narratives for a particular question, each differing on the basis of some crucial detail or value, one can test the viability of the scenario by running it as a simulation in one's imagination and finding out what aesthetic judgment results.[49] In this way, rival

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[46] K. Oatley (1999) 'Why Fiction May Be Twice as True as Fact: Fiction as Cognitive and Emotional Simulation', *Review of General Psychology*, 3, 102–3; and R. A. Mar, K. Oatley, M. Djikic, and J. Mullin (2011) 'Emotion and Narrative Fiction: Interactive Influences Before, During, and After Reading', *Cognition and Emotion*, 25, 818–33. This is similar to the aesthetic point made in I. A. Richards's often overlooked literary theory. See I. A. Richards (1925) *Principles of Literary Criticism* (New York: Harcourt, Brace, and World, Inc.). The notion of mental simulation has been common in discussions of philosophy of mind and folk psychology, but those discussions have rarely included references to literature and narrative. See I. Ravenscroft (2009) 'Is Folk Psychology a Theory?', in J. Symons, S. Robins, and P. Calvo (eds) *The Routledge Companion to Philosophy of Psychology* (New York: Routledge), 140–2.

[47] Oatley, 'Why Fiction is Twice as True as Fact', 101.

[48] There are obvious similarities of this approach with reader-response criticism, particularly in reader-response's articulation of reading as a subjective and potentially unique experience. However, although reader-response theory begins with attention to the reader's reaction to a narrative, this reaction is believed to be understood best by analysis and conceptualization, which effectively compromises the Type 1 narrative quality of texts. See L. Tyson (2006) *Critical Theory Today: A User-Friendly Guide*, 2nd edn (New York: Routledge), 169–86, for a description of this emphasis.

[49] J. Hakemulder (2000) *The Moral Laboratory: Experiments Examining the Effects of Reading Literature on Social Perception and Moral Self-Concept* (Amsterdam: John Benjamins Publishing Co.) 150.

narratives representing rival moral values and aesthetic sensibilities can be pitted against one another, and a conclusion reached about which one is most optimal. The value of such simulations has less to do with the imagination of the possible consequences that each narrative might elicit, and more to do with what emotions and sensations are elicited.[50] To construct these kinds of narratives, analytic operations can only play a supporting role. Type 1 narratives must be constructed the way creative writers construct stories, with attention to aesthetic sensibility, emotional effect, and holistic response. But in an important way, these experimental narratives are different from those created by many artists. In the modern era, artists often create to express something aesthetically important to them. This may involve a desire to communicate their insights to others, but this is not necessarily the case, and so many artists do not feel compelled to share their work. The experimental narratives posed here are intensely practical. Their point is facilitation: to create a scenario that generates emotional responses as much like real-world experience as possible so that the aesthetic sensibilities of value judgment may be engaged.

## Type 1 Moral Deliberation Using Narratives

Not much research exists on the extent to which people use narratives for deliberation in the way suggested in the last section. Two sets of research, however, provide some valuable insights.

Drew Westen, in his analysis of US presidential advertisements and debates, argues that political choices by voters are rooted in a choice between proffered narratives. He compares a US presidential campaign advertisement of Bill Clinton in 1992 with one of John Kerry's in 2004. While the substance of the two advertisements is similar, the form and style of the two are dramatically different. Clinton's persuades the audience to see him as a person who is the same kind of person they would like

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[50] R. M. Miller, F. A. Cushman, and I. A. Hannikainen (2014) 'Bad Actions or Bad Outcomes? Differentiating Affective Contributions to the Moral Condemnation of Harm', *Emotion*, 14, 573–87.

to be, rising from humble beginnings with a love for the country and a desire to do public service. Supportive music and images accompany the monologue. Perhaps most strikingly, there appears video footage of Clinton as a boy meeting and shaking the hand of John F. Kennedy, which subliminally connects Clinton to the ideals and mystique of Kennedy. The overriding tone is one of hope and trustworthy character. The Kerry ad attempts to deliver the same message, but, as Westen argues, even though Kerry references his military service and love for the nation, his mention of himself as "privileged," educated at Yale University, and from the Northeastern part of the USA presents him as exactly the guy his opponent George W. Bush portrayed him as, a guy who is not one of "us." What the Clinton campaign understood that the Kerry campaign did not is that voters do not vote for a candidate because of his or her carefully reasoned arguments but on the basis of which candidate's story they believe and approve of, and emotionally loaded references and images in narratives are more akin to the character of the cognitions that make decisions than policy positions, arguments, and personal assertions.[51]

Unfortunately, Westen's dual process approach does not draw sharp enough contrast between what he calls the "emotion biased motivated reasoning" by which political decisions are made and the "cold reasoning"[52] of rational arguments. As a result, he still appeals to a formal, mechanical method for the construction of political candidates' narratives such as that developed by George Lakoff.[53]

In the late 1970s Abby Lippman and F. Clarke Fraser conducted research on genetic and reproductive counseling and discovered that narratives were commonly used in deliberation by those who were counseled. The counselees sought to imagine what it would be like to have and care for a child with a genetic condition, and how others would react to them

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[51] D. Westen (2007) *The Political Brain: The Role of Emotion in Deciding the Fate of the Nation* (New York: Public Affairs), 3–12. Unfortunately, Westen too quickly buys into the structural, Type 2 narrative approach such as that advocated by George Lakoff, and only discusses the formal, mechanical construction of narratives.

[52] D. Westen, P. S. Blagov, K. Harenski, et al. (2006) 'Neural Bases of Motivated Reasoning: An fMRI Study of Emotional Constraints on Partisan Political Judgment in the 2004 U.S. Presidential Election', *Journal of Cognitive Neuroscience*, 18, 1947–58.

[53] G. Lackoff (2008) *The Political Mind: Why You Can't Understand 21st-Century Politics with an 18th-Century Brain* (New York: Viking), 21–36.

if they had such a child. They did this by constructing different narratives that represented different possible outcomes regarding reproductive choices. The narratives tended to be binary in structure; they were either for having another child or not having another child, and while oriented around the various ambiguities and uncertainties, the narratives tended to try to limit these as much as possible.[54]

According to this research, such scenarios were constructed and assessed on the basis of the parent's knowledge of the situation, of others situations and their reactions to them, and the parent's knowledge of his or her own dispositions and inclinations. The past experiences of a potential parent were quite determinative. If a parent had a genetic condition or already had a child with a genetic condition or one who died young, then this put a concrete perspective on the content of the imagined narratives. Such parents were tangibly aware of the emotional and practical details entailed in caring for a child with a genetic condition, and whether or not they could deal with that stress. If a parent already had a normal child, then this also provided a stable perspective on the looming uncertainties of another birth. In particular, already having a child relieved some of the pressure of making the choice because the choice of whether or not to have another child was less momentous than choosing whether or not to have any child at all. Moreover, the fact of already having a child often provided impetus for the decision and provided a reason for having another child other than the parent's own desire. It partly became a decision of whether or not the existing child would need a brother or sister.[55]

Parents and potential parents would deliberate by constructing different narratives that included the fact of the birth of a child with some genetic condition. Each narrative would provide a simulation of a different possible outcome of the situation. These different narratives provided a testing ground for imagining emotional responses and usually were cast as the worst imaginable scenarios. The parent would ask himself/herself, "Can I handle this outcome if it occurs?" and assess whether or

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[54]A. Lippman-Hand and F. C. Fraser (1979) 'Genetic Counseling: Parents' Responses to Uncertainty', *Birth Defects: Original Article Series*, 15, 330–34.

[55]Lippman-Hand, 'Genetic Counseling', 333–5.

not he or she had the emotional and relational resources necessary for the outcome. Among the different worst case narratives, the parents would often search for a "least lose" alternative, which involved a maximum loss that they thought they could accept. If narratives could be constructed that limited the various uncertainties to levels manageable by the parents and projected a "least lose" outcome that was deemed acceptable by the parents, then the parents were likely to decide in favor of reproduction. If the narratives could not sufficiently limit the uncertainties or provide a "least-lose" outcome, then the parents would tend to reject reproduction as an option. The authors concluded that these imagined scenarios gave the parents a sense of certainty about the ambiguities and possibilities involved in their choice that the various probabilities and procedures of expected utility methodology or some other method did not.[56]

While Lippman and Fraser were not doing their research under a theoretical understanding of dual process theory, their observations are very suggestive for how moral deliberation with narratives can be conducted. Their descriptions of the scenarios that the counselees constructed match the nonconscious, contextual, and emotionally loaded narratives expected by Type 1 narrative deliberation. Moreover, the sorts of cognitive operations the counselees reported using in the construction of different scenarios, imagining their outcomes not just in terms of consequences but also in terms of possible emotions, and making a decision in terms of weighing which scenario they were best prepared for matches the kind of cognitive operations that a Type 1 aesthetic deliberation requires. Also, their findings emphasize the importance of contextual information in framing and assessing narrative. An additional insight is made clear by the authors. There is a recognition that the differences between the emotional and relational circumstances of each counselee was a determinative factor in which scenarios they could accept. This is an essential contextual ingredient in any kind of narrative deliberation. As one of the decision makers, one must be aware of one's strengths and limitations. One must also be aware of the strengths and limitations of those one is deliberating with and also those who were characterized in the various narratives. If any of these characterizations do not sufficiently match the emotional

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[56] Lippman-Hand, 'Genetic Counseling', 333–6.

and personal resources that those characters can apply, then the narratives and the whole act of deliberation will be unable to generate options that represent live options for the parties involved.

## Narrative Suspicion

Ultimately, narratives are effective only to the extent to which there are persons who are able to receive and interpret them effectively. Human beings and communities vary considerably in their propensity for imagination and sensitivity to perceptions. Some people lack developed senses of perception to begin with. This references not just people with a sensory deficit such as blindness or deafness, but those with a dullness in cognitive sensitivity, a malformed ability to prioritize sensation, or an inability to manage emotional responses or develop imaginative scenarios. These deficits can result from biological dysfunction and drug addiction as well as social disorientation. Without training in the sensibilities necessary to appreciate narratives and to allow them to evoke the simulation of certain experiences, then even a well-formed narrative has no strength.[57]

A central sensibility required for the management of Type 1 narratives is suspicion. Invoking this term in reference to narrative immediately brings to mind Ricoeur's attention to a "hermeneutics of suspicion," which for him refers to efforts to demystify both texts and consciousness by searching out the distorting illusions lying within their symbols. He derives this phrase from what he sees as the use of suspicion as a methodological tool in the work of Freud, Marx, and Nietzsche, but he wants to avoid the determinism, skepticism, and paranoia that he believes it produced in their hands. These might be avoided, he thinks, by balancing a hermeneutics of suspicion with a hermeneutics of recollection, which is the recovery of meanings that have been lost or overlooked.[58] Some

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[57] Alasdair MacIntyre notes the importance of imagination for thinking in the terms of a rival moral tradition as if it were one's own, although his characterization of deliberation between moral traditions as centering on differences 'in claims to truth and to rational justification', is a much less aesthetic notion of imagination than I have in mind. See MacIntyre, *After Virtue*, xii–xiii.

[58] P. Ricoeur (1970) *Freud & Philosophy: An Essay on Interpretation*, trans. by D. Savage (New

interpreters of Ricoeur argue that he struggles throughout the latter part of his career with the proper role of suspicion in hermeneutics. He eventually drops suspicion as a particular form of hermeneutics, although he continues to use the concept frequently.[59]

Ricoeur's emphasis on suspicion and his worries about it are well placed, and the formulation of suspicion in terms of Type 1 narrative and sensibilities makes the necessity and dangers of suspicion clearer. Human perceptual and aesthetic sensibilities often operate with little caution. Although there are inherent limitations to human cognitive operations, the self-authenticating character of Type 1 processes works against a recognition of limitation. Whatever elicits positive emotional responses is deemed good, and whatever elicits negative emotional responses is deemed evil, and only in circumstances of egregious malfunctioning are these responses questioned. This lack of questioning derives from the fundamental cognitive inclination for unity within perception. Within the flux of disparate and contradictory perceptions of human experience, cognition operates to impose some sense of unity and harmony. This is done by prioritizing some things and ignoring others, and the unity that is produced comprises the psychological stability and identity of a person. Type 1 narratives are central to this unity in consciousness, and so challenges to the cultural and individual narratives that one has used in assembling a unified personality constitute assaults upon one's identity and psychological stability. To question the reliability of one's aesthetic judgments and their narratives is to question the mechanisms by which one determines all of one's values.

This explains the intractability of many moral and social issues. For example, in the USA a social issue that continues to polarize the society is the question of how much private gun ownership should be regulated. Very few people have mixed feelings about the question. Supporters of each position seem unable to fairly consider the position of the other side nor to consider the limitations of their own position, and so each side picks the studies and arguments that support their judgment and generate what they take to be

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Haven, CT: Yale University Press), 28–35.

[59] See, for example, A. Scott-Baumann (2009) *Ricoeur and the Hermeneutics of Suspicion* (London: Continuum), which has an insightful concluding chapter.

true renditions of the questions without seriously considering alternatives. Only when one has suspicion not just of the intentions of those who oppose one's view but of one's own view, can one construct alternative narratives to one's own, which can represent live options.

The absence of suspicion leaves individuals and whole societies open to rhetorical manipulation by those who understand the narrative inclinations of a population and target those inclinations to get the response that they want. This is the stock-in-trade of successful advertisers and marketers. Their sales pitches are constructed to appeal to the most powerful narrative dispositions that they can. Children are a prime target population because they often lack even rudimentary sensibilities of suspicion and are easily persuaded to commit to a product or service and then pester their parents to purchase it.[60]

The US response to the 9/11 attacks represents a significant lack of narrative suspicion. According to the analysis of George Lakoff, President George W. Bush had several options in front of him on how to characterize and respond to the attacks. One approach was to appeal to the narrative of international crime. From the approach of this narrative, the act was performed by a group of conspirators who should be investigated and pursued by US law enforcement agencies in cooperation with law enforcement groups in other countries. This is the response that had been used in a number of international criminal cases in the past with considerable success. The other approach, and the one which Bush enlisted, was to use the narrative of war. According to this narrative, the terrorist act was an act of war that required a declaration of war on terror and the deployment of military forces against the attackers. In most ways, the attack did not involve the classic elements of an act of war. The attackers were not part of a recognized nation or military, and the attack was not aimed at achieving a specific military objective. However, as Bush and his advisors understood, the loss of life entailed in the 9/11 attack was on the scale of a military attack and whereas the narrative of crime would not elicit much emotional resonance or engagement from a traumatized

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[60] W. M. O'Barr (2008) 'Children and Advertising', *Advertising & Society Review*, 9, http://muse. jhu.edu/journals/advertising_and_society_review/v009/9.4.o-barr01.html, date accessed 7 July 2015.

American public, the metaphor of war would. Lakoff also argues that the narrative of war was attractive to Bush because it immediately expanded his executive powers not just over a foreign war but over many domestic issues as well.[61]

Very few in the American public objected to the enlistment of the war metaphor, perhaps because it invoked feelings of patriotism and reprisal that most found comforting in those unsettling times. Few in the US Congress opposed measures such as the Patriot Act that increased the power of the president in a time of "war," likely because they feared being caught by a narrative that characterized anyone who opposed these measures as unpatriotic or weak. The politics and military action of the next 10 years were filled with consequences that few of the operating narratives predicted. A "war" on terror turned out not to be a narrative like that of traditional wars. The enemy was vague and elusive, fighting often in urban areas and with guerrilla tactics. Successful attacks against their forces seemed unable to demoralize their supporters, but instead increased recruitment and commitment. Tribal and religious factions in Iraq and Afghanistan were not able to overcome their differences to build strong central governments and militaries to effectively cooperate, and surrounding nations refused to give much help. In retrospect, lack of experience and naiveté on the part of administrators in the USA yielded the construction and acceptance of optimistic narratives that proved incredibly flawed. An American public, shattered and fearing other attacks, clutched at the narratives that appealed to its most instinctual sensibilities and failed to exercise sufficient suspicion.[62]

Of course, the major administrative planners who made these decisions continue to reject much of the above interpretation and construct their own narratives. Almost none of the administrators involved in those decisions have admitted serious mistakes. They argue that war was the appropriate narrative and reject claims that they were acting to get access to oil fields or to make

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[61] G. Lakoff (11 September 2006) 'Five Years after 9/11: Drop the War Metaphor', *Huffington Post*, http://www.huffingtonpost.com/george-lakoff/five-years-after-911-drop_b_29181.html, date accessed 22 July 2015.

[62] For a helpful overview of these issues, see D. C. Gompert, H. Binnendijk, and B. Lin (25 December 2014) 'The Iraq War: Bush's Biggest Blunder', http://www.newsweek.com/iraq-war-bushs-biggest-blunder-294411, date accessed 5 July 2015.

money for businesses in which they had personal or emotional interest or to exact revenge for earlier misdeeds and threats on family and friends. They will argue that their decisions were well aligned with the data they had at the time, and they feared additional terrorist attacks on the USA and wanted to avoid those at almost any cost. They will also argue that military efforts would have been quicker and had a more lasting effect if more resources had been committed and left in place indefinitely, and that the USA and the world are safer today because of the actions they took.[63]

Momentous decisions are rarely about competing formal arguments; they are choices between rival narratives and the personalities who are committed to them. A lack of narrative suspicion leads to groupthink in which particular narratives are judged as the only appropriate ones and rival versions are not seriously developed or considered. This narrowness is not the product of a lack of cognitive ability specifically, but the product of an uncritical commitment toward the narratives one finds attractive. Without the cultivation of a sensibility of narrative suspicion, one can easily be exploited by a powerful narrative in the hands of a skilled rhetorician.

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[63] See, for example, Dick Cheney's comments, Z. J. Miller (25 June 2014) 'Dick Cheney Says Iraq War Was "the Right Thing"', *Time*, http://time.com/2919765/dick-cheney-iraq-obama/, date accessed 15 July 2015; and Condoleezza Rice's comments, 'Despite Costs, Outcome in Iraq Has Been Worth it Says Condoleezza Rice' (1 February 2010), https://www.gsb.stanford.edu/insights/despite-costs-outcome-iraq-has-been-worth-it-says-condoleezza-rice, date accessed 10 July 2015.

# 8

# Dual Processes Interacting in Moral Deliberation

If Type 1 and Type 2 moral cognitions are qualitatively different processes, both of which contribute to decision making, then the question is how they can be brought into interaction in making decisions. This is not a question that has received a great deal of attention in dual process theory in general or dual process moral theory in particular. Most dual process research has investigated the strengths or weaknesses of one or the other process, usually with the conclusion that Type 2 processes are the standard for accurate and dependable decisions. The few who give either an equal standing to the two processes or a priority to Type 1 processes have given little guidance on how the two processes might interact.[1]

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[1] In addition to the discussions in Chap. 4, see two discussions that pose an interaction between the two processes but do not detail how it occurs: S. Seiler, A. Fischer, and Y. P. Ooi (2010) 'An Interactional Dual-Process Model of Moral Decision Making to Guide Military Training', *Military Psychology,* 22, 490–509; and A. Ronkainen (9 September 2011) 'Dual-Process Cognition and Legal Reasoning', in M. Araszkiewicz et al. (eds) *Argumentation 2011: International Conference on Alternative Methods of Argumentation in Law*, Masaryk University, Brno, CZ, 1–32, http://ssrn.com/abstract=2004336, date accessed 5 July 2015. Also, Jonathan Haidt's dual process moral theory provides valuable general insight about why moral arguments are intractable, but his suggestions are ultimately too sketchy to discern a practical shape for moral deliberation. See J. Haidt and J. Graham (2007) 'When Morality Opposes Justice: Conservatives Have Moral Intuitions That Liberals May Not Recognize', *Social Justice*, 20, 111–12.

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**167**

In moral philosophy, the dialectical models of John Rawls and Martha Nussbaum are efforts to be more explicit about how intuitions and reasoning can both be employed in decision making. Their models are important to look at, but their commitments to the normativity of Type 2 processes wind up negating much of their helpfulness for a model that gives the major role to Type 1 processes. William James, however, does provide some scattered details of how dual processes interact cognitively and aesthetically, and when mixed with other elements already discussed can be used to assemble a robust dual process model of moral deliberation.

## Reflective Equilibrium

During the last 60 years, if one admits to two qualitatively different cognitions and the need for interaction between them, then one is most likely going to refer to reflective equilibrium. This approach was discussed in Chap. 5 as a method under Type 2 ethical deliberation and is generally described in the form that John Rawls and later Norman Daniels laid out. In Daniels's expansion upon Rawl's model, often called wide reflective equilibrium, he sets a goal of seeking a coherence between three categories of materials: one's considered moral judgments, background theories, and moral theories. One begins with one's considered judgments that are moral conclusions one already takes as true. One analyzes them for credibility, keeping the ones about which one has little hesitation and removing those that may be distorted by emotion or personal bias. With these judgments in hand, one scrutinizes particular ethical theories to see which ones are compatible with both these considered judgments and with one's broader philosophical theories. When incompatibilities are discovered, then one considers the revision of one or more of these elements to bring them into alignment with one another. Such revision is enhanced by considering not just alternative moral theories but rival background theories. If a person finds any of these more attractive than the ones currently held, then a thorough revision of one or more of the three components is done to bring them into harmony.[2]

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[2] N. Daniels (1979) 'Wide Reflective Equilibrium and Theory Acceptance in Ethics', *The Journal of Philosophy,* 76, 258–60.

This approach initially shows promise for an integrative theory of dual process deliberation, because it respects a qualitative distinction between intuitive "considered moral judgments," and the Type 2 processes involved with "moral and background theories." Indeed, in an early article on reflective equilibrium, Rawls describes considered moral judgments as intuitive. He does qualify this by insisting that by intuition he does not mean judgments that are "impulsive" or "instinctive." Instead "an intuitive judgment may be consequent to a thorough inquiry into the facts of the case, and it may follow a series of reflections on the possible effects of different decisions, and even the application of a common sense rule …. What is required is that the judgment not be determined by a systematic and conscious use of ethical principles."[3] And not just anyone's intuitions really count, because the justification of the authoritative intuitions, as well as the ethical principles that they imply, lies in the demonstration that these are the intuitive judgments of competent judges. Rawls spends considerable time describing the "virtues of moral insight" of judges. These include intelligence, familiarity with the world, willingness to use inductive logic, the inclination to look for reasons for and against a question, an awareness of personal biases and the ability to reconsider those biases and adjust for how they might skew conclusions, and a sympathetic imagination that allows a concern for the human values at stake and the consideration of questions remote from one's own experience as though they were one's own issues.[4] All of these virtues fit with Type 1 sensibilities of aesthetic judgment, but Rawls was not interested in explicating a type of cognition qualitatively different from analytic reason. His purpose in discussing the intuitions of competent judges was to provide insight into the ethical principles implied by them.[5] As a result, even though Rawls invokes elements of Type 1 cognition, the character of these Type 1 processes are not critical to his account because the point of the method is to reveal Type 2 principles.

In later discussions of reflective equilibrium, Rawls abandons reference to the virtues of competent judges. What remains is the commitment to a compatibility between considered moral judgments and principles of

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[3] J. Rawls (1951) 'Outline of a Decision Procedure for Ethics', *The Philosophical Review,* 60, 183.

[4] Rawls, 'Outline of a Decision Procedure', 178–80.

[5] Rawls, 'Outline of a Decision Procedure', 184.

moral theory, such that when one has these principles and the circumstances of a case in hand, one can construct arguments that arrive at the considered judgments that one has. Rawls claims that the relationship between considered judgments and ethical principles is the same as the deep structural relationship between the fluent speech of a native speaker and the principles of grammar describing proper speech.[6] Equilibrium between judgments and principles is attained by bringing the structural components underlying considered judgments into coherency with the structural elements of moral principles. This assertion significantly compromises the fundamental qualitative differences between considered judgments and moral principles and makes Rawls's reflective equilibrium into a Type 2 process. While one could claim that Rawls is assuming some kind of intuition in the act of perceiving the judgments that align with deep moral principles, how this intuition works is never made clear, and its distinctive character is not crucial to the model.[7]

## Perceptual Equilibrium

Martha Nussbaum is impressed with the affinity between Rawls's reflective equilibrium and Aristotle's admonition that one ought to investigate the question "How should one live?" by a back and forth movement between intuitions and alternative conceptions of the good life.[8] Such a method begins with a description of the major alternatives of the good life, which literary texts are often helpful in providing. This involves examining studies of what people commonly believe as well as existing

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[6] J. Rawls (1971) *A Theory of Justice* (Cambridge, MA: Belknap Press), 46–7. Rawls does not use the language of 'deep structural elements', but he does reference Noam Chomsky in a footnote in the text, which makes this usage legitimate.

[7] I should note that Leland F. Saunders does make an effort to combine dual process theory with reflective equilibrium, but as use of the word *justification* in the title of his article indicates, he retains a focus on analytic goals rather than embracing the qualitatively different goals of Type 1 processes. See L. F. Saunders (2009) 'Reason and Intuition in the Moral Life: A Dual-Process Account of Moral Justification', in J. Evans and K. Frankish (eds) *In Two Minds: Dual Process and Beyond* (Oxford: Oxford University Press), 335–54.

[8] M. C. Nussbaum (1990) *Love's Knowledge: Essays on Philosophy and Literature* (New York: Oxford University Press), 174; and M. C. Nussbaum (1986) *The Fragility of Goodness: Luck and Ethics in Greek Tragedy and Philosophy* (Cambridge: Cambridge University Press), 240–1.

scientific evidence, scientific theory, and philosophical discussions. Then, there is an identification and scrutiny of the points at which these alternatives do not align with one another or with one's own experience. This leads to an effort to find ways to align the alternatives with one another and with one's experience. There is no explicit model for doing this. Investigators can only "ask what looks deepest, what they can least live without—guided by their sense of life, and by their standing interest in consistency and in community. That is, they want to arrive at a view that is internally coherent, and also at one that is broadly shared and sharable."[9] This model attempts to include all the different types of data possible, hold no experience or theory as unrevisable, and seeks coherence among all the various parts, all the while remaining self-conscious about the methods and biases in play and about the ends being sought.[10] During the process, one ought to take special note of things universally held to be true, and those appearances and alternatives that competent judges would hold as valuable.[11]

While Nussbaum's method has much in common with that of Rawls, she emphasizes its distinctions. She finds the method of reflective equilibrium to be too much about reflection and not enough about perception. To be reflective, according to Rawls, is to be unaffected by powerful emotions and particular circumstances. But her reading of Aristotle, as well as her interpretation of the character Strether in Henry James's *The Ambassadors*, yields a significant emphasis on emotions and particular circumstances, such that what is important is not an equilibrium among reflections but among perceptions.[12] Emotions are powerful purveyors of information that is relevant to deliberation, but emotions may be excessive and in conflict, not just with theory but with themselves, and therefore require tempering. She also finds Rawls to be too interested in general and universal claims, which obscures Aristotle's insight that "the discrimination lies in perception," meaning that practical reasoning

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[9] Nussbaum, *Love's Knowledge*, 174. Also see Nussbaum, *Fragility*, 245–6.

[10] Nussbaum, *Love's Knowledge,* 174 and 186.

[11] Nussbaum, *Fragility*, 248.

[12] Nussbaum, *Love's Knowledge*, 175 and 182–3.

depends on a particular ordering of claims rather than general ones.[13] In addition, Nussbaum notes that Aristotle and Henry James portray the persistent tension between theories and perceptions as requiring not a quest for equilibrium but a constant oscillation of comparison and adjustment between perceptions and alternative conceptions. With that in mind she contemplates whether this model might better be called, not "perceptual equilibrium," but "perceptual oscillation."[14]

But like Rawls, in spite of her efforts to provide a significant role for intuitions and emotions, she retains a fundamental rationalist commitment that colors the whole model. This is the commitment that appearances of perception can always be analytically explicated because reliable apprehension of perceptions involves the use of first principles.[15] This serves to qualify her claim that all elements in the method are open for revision. First principles such as a statement implying its negation[16] or the law of noncontradiction[17] are not open to revision because they are required for any meaningful discussion to be conducted.

There is a further limitation deriving from Aristotelian practice, which does not seem to bother Nussbaum. Aristotle expressly limited relevant perceptions only to those that resembled his own species, community, and condition of life. Data regarding the habits of animals and communities remote geographically or culturally from the Greek experience were not included.[18]

These philosophical and cultural limitations represent a significant shortcoming of Aristotle's and Nussbaum's models. They limit the types of literature that Nussbaum is able to include in her method, and, in spite of her efforts, make her method heavily controlled by Type 2 processes in ways that limit the relevancy of the model. A reference to the literature of the Hebrew Bible makes this point. Although there have been efforts for over 2000 years to interpret the Hebrew Bible in terms of the static and logical elements of certain types of Greek philosophy, this literature retains the marks of a different cultural perspective. What Western logic would call contradictions

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[13] Nussbaum, *Love's Knowledge*, 175–6.

[14] Nussbaum, *Love's Knowledge*, 52 and 190.

[15] Nussbaum, *Fragility*, 251.

[16] Nussbaum, *Love's Knowledge*, 45.

[17] Nussbaum, *Fragility,* 252.

[18] Nussbaum, *Fragility,* 245–6.

permeate the narratives. Some of these portray the complex textual traditions lying behind the texts. For example, there are two major creation stories in the first two chapters of the book of Genesis, and the stories differ at many levels of description. Others of these derive from the complex character of human personality portrayed. The major heroes of the narratives of the Hebrew Bible are terribly flawed human beings, who perform significant acts of religious faith but are also fraught before and after, and sometimes during, those acts with dispositions of maliciousness, lust, greed, and cowardice. For many Western interpreters these "discrepancies" have been points of embarrassment or objects requiring convoluted rationalization and harmonization. But the majority of the ancient rabbis and the communities that preserved these texts did not find them to be problematic because they did not find the principles of logic to be descriptive of human experience. No human being is purely evil or purely good, and humans are themselves living contradictions, capable both of amazing acts of love, mercy, and generosity, and heinous acts of destruction. Although the Hebrew Bible remains a major source for ethics in the Western world, Nussbaum's model would appear to have difficulty including its material and its life perspectives.

## William James, Conceptual Translation, and the Mediating Attitude

Although William James mounts a vehement attack against conceptualization in much of his later work, he retains a recognition of the frequent usefulness, and sometimes necessity, of concepts. The usefulness of concepts derives from the limitations of human focal consciousness in grasping the vast range and movement of the flux of perceptions. What James calls conceptual translation is the slicing off of pieces of the perceptual flux that stand out and giving these slices places in focal consciousness, where they can be compared with other concepts, their likenesses and dissimilarities identified, and their analytic relationships with other concepts established.[19] These relationships can be expanded, creating maps that are

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[19] W. James (1916) *Some Problems of Philosophy: A Beginning of an Introduction to Philosophy* (New York: Longmans, Green, and Co.), 65 and 97.

elaborated over generations. Such maps take on a reality of their own, and although they are at best modular caricatures of the flux of experience, they can create new values and new conclusions. Concepts lend themselves to retention in memory more than do raw perceptions, and analyzing the relationships between concepts can predict with some accuracy when other similar slices of perception will appear in the future.[20]

The problem with conceptualization, as James notes frequently, is that it inevitably corrupts and oversimplifies human perception. Once reality is dissected, it cannot be easily reconstructed.[21] And so, the translation of perceptions into concepts provides benefits and liabilities, varying by circumstance.

> If what we care most about be the synoptic treatment of phenomena, the vision of the far and the gathering of the scattered like, we must follow the conceptual method. But if, as metaphysicians, we are more curious about the inner nature of reality or about what really makes it go, we must turn our backs upon our winged concepts altogether and bury ourselves in the thickness of those passing moments over the surface of which they fly, and on particular points of which they occasionally rest and perch.[22]

Because each method compensates for the defects of the other, James proposes an approach that alternates between the two methods.[23] Although he does not develop the mechanics of this approach very thoroughly, he appears to be thinking of a movement beginning with the translation of perceptions into concepts, which are analyzed and manipulated, and then these concepts and relationships are attached again to perceptions, providing limited illumination of them. This approach James calls a "mediating attitude."[24] Because of James's empiricism and rejection of rationalism, his method provides a much more significant role for Type 1 processes than does that of Rawls and Nussbaum.

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[20] W. James (1909) *A Pluralistic Universe: Hibbert Lectures at Manchester College on the Present Situation in Philosophy* (New York: Longmans, Green, & Co.), 235, 244, and 250–51; and James, *Some Problems*, 73–4.

[21] James, *A Pluralistic Universe*, 261.

[22] James, *A Pluralistic Universe*, 251–2.

[23] James, *Some Problems*, 74.

[24] James, *Some Problems*, 57–8.

# A Dual Process Model of Moral Deliberation

The diagram in Fig. 8.1 attempts to pull together many of the claims and commitments of the preceding chapters. A few qualifications should be noted regarding this diagram and the model it depicts. First, from the outset this book has had a preference for Type 1 processes, arguing that for a number of empirical and introspective reasons Type 1 processes are primary in human experience, the assertion of value, and in decision making. Given that this model assumes the priority of Type 1 processes in decision making, it does not distinguish between different types of decisions. Moral decisions are made in the same way as all other decisions, on the basis of aesthetic deliberation and judgment. There may be different content and Type 2 cognitions appealed to, but the cognitive operations involved in moral deliberation are the same as with other types of deliberation.

Second, one should be cautious about any graphic depicting human cognition. Although the hope of most contemporary brain imaging studies is to develop a specific representational model of brain functioning, the interconnectivity and cross-specialization of brain regions makes this difficult if not impossible. There are also the phenomenological challenges that Aristotle, Nussbaum, and James suggest. An individual's perception of experience and his or her reaction to it cannot be well rendered by graphic, linguistic, or analytic representations, and so when they are produced, they are always reductionist. In fact, the point of this diagram, and indeed the model as a whole, is not to try to give a representation of cognitive processes per se, but to develop a process that takes into account the character of cognitive processes enough that it provides a helpful way of thinking about them and negotiating their strengths and weaknesses.

This goal provides good reasons to make the diagram as simple as possible. If the diagram attempted to incorporate all the relevant cognitive operations such as biological and sociological filters, implicit and explicit memories, and instinctual and social norms, then it would be so jumbled as to be of little assistance. A further aspect of this simplification is that the model is only rendered as a model of individual deliberation. But, as has been noted throughout the book, moral deliberation is inher-

A Dialectical Model of Dual Process Ethical Deliberation

Data Available for Senses

Type 1 Cognition

Focal Consciousness

Aesthetic Translation

Type 2 Cognition

Aesthetic Judgment

Fringe
Consciousness

Narrative

Conceptual Analysis

Conceptual Translation

Judgment
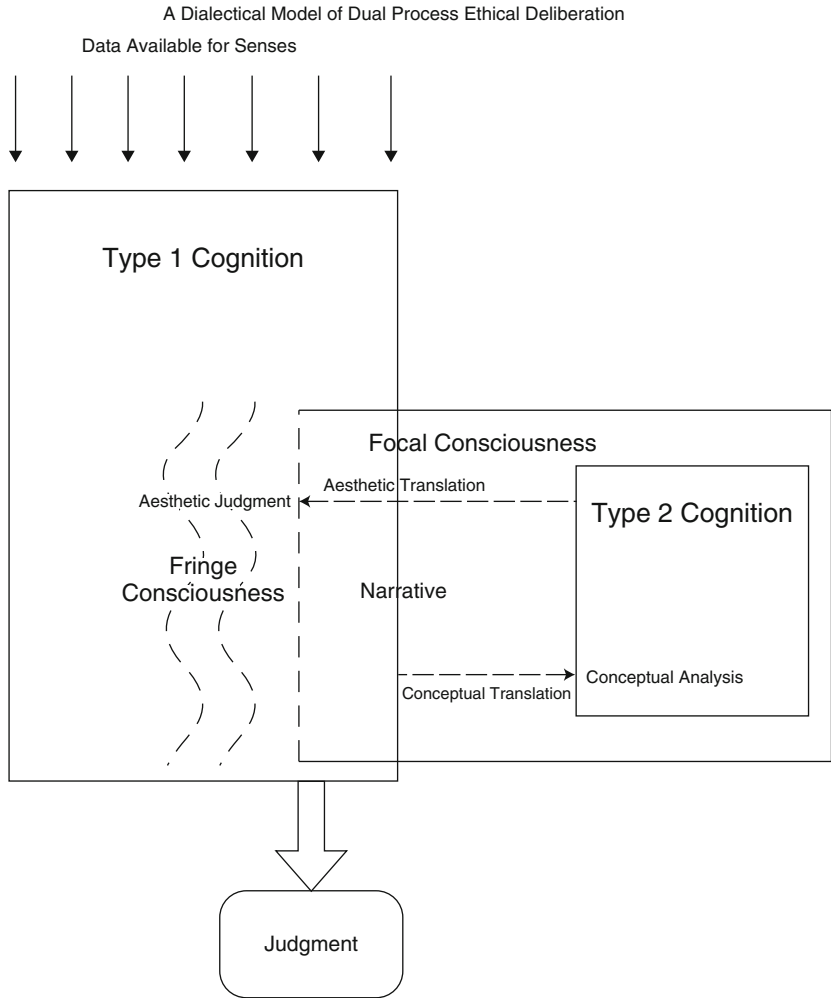
**Fig. 8.1**   Dual process model of moral decision making

ently social. The graphic and the model can be expanded with only slight
modification to include the dynamics of deliberation in a social setting,
but for the sake of clarity, these are not currently included.

The flow of the model begins with sensations falling upon human
perception. These can be external or internal sensations, and as this

model suggests these play a primary role in human cognition. This flow of sensory input, as gauged by human ranges of ability, is complex, innumerable, constant, and of varying magnitude. Portions of it are more important to human survival than others, and the filtering of these inputs is done from the outset. Some of these filters have to do with limiting ranges of sensation to those most important for human functioning. Some have to do with the limitations of human cognition. The larger relative size of area in the diagram for Type 1 processes as compared to Type 2 processes indicates the significantly larger amount of data that Type 1 processes deal with, and its greater importance for judgment and decision making. As is also represented, even when Type 2 processes are engaged, the final determination of a judgment or decision is made through Type 1 cognition.

William James's distinction between fringe consciousness and focal consciousness provides a helpful demarcation within the different process fields. Fringe consciousness is a Type 1 cognition that deals with the vast flow of perception in prelinguistic and preconceptual fashion. This consciousness involves a filtering of perceptions on the basis of biological and social priorities and projects senses of meaningfulness, declaring some options as live or others as dead. These perceptions achieve awareness through felt emotion, which are transitional body states involving both fringe and focal consciousness. Focal consciousness isolates elements out of the flow of perceptions for particular scrutiny and often for conceptualization and processing under Type 2 processes, where the perceptions are studied, preserved, and systematized.

The qualitative differences between Type 1 and Type 2 processing require translation for material to move from one process to the other. When material from Type 1 processes is translated into Type 2 processes, William James's phrase "conceptual translation" is used. This is the slicing of items from the flux of experience into pieces and the delivery of them to Type 2 processes for analysis and systemization. The translation of material from Type 2 processes into Type 1 processes is called aesthetic translation. This translation involves the transformation of concepts from Type 2 processes into forms similar to the flux of human experience, whereby aesthetic judgment can be exercised.

This graphic also suggests three kinds of deliberation. Two of them correspond to the two processes of dual process theory. Type 1 deliberation weighs questions of perceptions internal and external, managing differences on the basis of instinct, learned response, and aesthetic judgment. Type 2 deliberation involves the manipulation of concepts according to analytic relationships.

Each of these two types have weaknesses and strengths. The weaknesses of Type 1 deliberation are that it is the source of narrow prejudice, overactive emotionalism, primitive social inclinations, and the excesses that go with them. It has difficulty in isolating and charting patterns over long periods of time and difficulty drawing conscious focus to the dynamics operating. The strengths of Type 1 deliberation are its ability to take into account a wide variety of perceptual inputs and body states ranging from the nonconscious to the conscious, its speed, and its connection to inherited survival strategies. The weaknesses of Type 2 deliberation include methodological narrowness, abstraction, impersonality, artificiality, and reductionism. Its strengths are its ability to focus on and remember individual units of experience and produce expansive mappings of experience.

In much of the treatment of decision making in the modern West, Type 1 and Type 2 deliberation are assumed to operate separately. If one engages aesthetic sensibilities, that generally leads to an abandonment of critical analysis, and if Type 2 deliberation is used, that leads to downplaying the role of aesthetic sensibilities. But both processes are needed in the alleviation of the weaknesses of the other, and this recognition invokes the third type of deliberation, which I am calling dual process deliberation. It is a dialectical movement between the two other types of deliberation whereby elements from either type are translated into elements of the other type and processed, assessed, and then translated back into the other type for reassessment.

Although few admit it, most deliberation is dual process deliberation. Even practitioners of rationalist philosophy, mathematics, and science make use of aesthetic judgment when making choices about what kinds of theories and conclusions they prefer.[25] The question is which type of deliberation receives

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[25] R. Root-Bernstein and M. Root-Bernstein (2003) 'Intuitive Tools for Innovative Thinking', in L. V. Shavinina (ed.) *The International Handbook on Innovation* (Oxford: Elsevier Science Ltd.)

priority in dual process deliberation, and this model assumes the priority of Type 1 processes as the beginning and ending of deliberative movement.

Dual process deliberation includes both a fast movement and a more methodical movement. In the fast movement a perceptual impression comes into awareness as standing out of harmony with the patterns of experience that a person takes as normative. This awareness is communicated into consciousness through a perception of emotional response. Attention will be directed upon the perception in proportion to the magnitude of the emotional response, and while there may be inclinations to respond immediately with an instinctual response, if the impression falls sufficiently outside the parameters of an instinctual threat, then instinctual responses will be forestalled and the impression will be delivered to focal consciousness. Focal consciousness receives the perception as an emotional reaction with overtones of judgment already built-in corresponding to whether there was a positive or negative emotional response to the perception. A conscious assessment reviews whether there are competing emotional sensibilities or particular details of context that might override this initial impression. If not, the initial assessment is endorsed, but if so, it is overridden with an assessment generated by the competing aesthetic judgment, and the program of action accompanying that judgment is embraced. For Type 1 deliberation, this ends the process, but if there is the inclination to engage Type 2 processing, then the emotional and aesthetic elements of Type 1 deliberation are translated into a concept in Type 2 cognition where it is analyzed for similarity to other concepts and their relations, and then delivered back to Type 1 cognition for an aesthetic judgment as to whether the concept or relation provides a sensibility of fitness or harmony. The Type 1 cognitions described can be carried out in milliseconds, although the Type 2 analysis can become faster with practice.

The methodical movement is used when there is an assessment that a perception of disharmony is part of a complex bundle of perceptions and relationships and there is a luxury of time to perform more deliberate translation work between both processes. Narrative is crucial to this

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377–9; and D. Abbott (2013) 'The Reasonable Ineffectiveness of Mathematics', *Proceedings of the IEEE*, 101, 2147–53.

movement because it is an aesthetic form that approximates the flow and complexity of perceptions in human experience and can generate the same cognitive responses that real-world experience does. It is also able to be efficiently translated into focal attention as a linguistic and conceptual form, and then analyzed by Type 2 processes.

The methodical movement begins just as the fast movement does, with the awareness of a disharmony between a perception or bundle of perceptions and one's aesthetic sensibilities of harmony and rightness. In the methodical movement, however, once the perception is considered by Type 1 deliberation, it is judged to be of such complexity or momentous standing that a more deliberate process should be undertaken. The perception and its accompanying aesthetic sensibilities are rendered into a narrative. Elements of this rendering have already been performed when the perception and the aesthetic judgments about it were delivered into focal consciousness, because these judgments are expressions of the aesthetic commitments within the narratives that embody one's personal and social identity. The fast dual process movement is important at this point to refine the consciousness of the perception and the particular portions of one's narrative experience that are relevant to it and to fashion the narrative so that it is manageable by focal consciousness. These fashioning efforts work to identify what it is about the perception that creates feelings of unease and what points of similarity or dissimilarity exist between it and authoritative narratives. In this process, competing sensibilities and data with different implications will be encountered. A strong inclination of Type 1 processing is to ignore the disparities and generate a singular and harmonious account and judgment, but Type 1 introspection in conjunction with Type 2 critical thinking can achieve awareness of these conflicts and preserve them. Possible issues are identified by Type 2 processes. These can be issues of mischaracterization or variability of sensibilities, or they can be misfits between beliefs that are part of a narrative and the findings of systematic empirical research. These issues are delivered to Type 1 aesthetic sensibilities for judgments about whether they are appropriate issues or alterations. The input of Type 2 processes gradually refashion the Type 1 narratives and the perception and its accompanying aesthetic sensibilities into more and more of a Type 2 narrative, with overt structure, point of view, characterization, plot, and

assumed audience. This construction is assessed during each modification, and as it develops the narrative is able to generate a stream of experience in cognition, which if the narrative is well made will approximate real-world experience and provide opportunity for the application of aesthetic judgments regarding the fitness or unfitness of that narrative and its conclusion.

After an initial narrative is constructed, if there are elements of it that appear to resist harmonization with important sensibilities, then alternative narratives can be constructed, perhaps using sensibilities and perceptions not used in the initial narrative. Then the narratives must be chosen from. If one still has sensibilities that suggest disharmony, then narratives foreign to one's own identity can be consulted. They may be studied for elements that can be dissected and then injected into a narrative to remove senses of disharmony, or they may be translated in wholesale and compared to the other narratives one has constructed. One must also remember throughout this process that the primary function of the narratives is to give expression to the aesthetic sensibilities lying behind them, and these sensibilities are not all or nothing impressions but are expressed in varying degrees of intensity. Effective narratives are able to evoke these varying degrees of intensity and provide opportunities for experimentation with the intensities so that determinations can be made about what levels of each sensibility constitute an appropriate fit given the other operating sensibilities. This process of constructing narratives, revising them, and comparing them to rivals according to aesthetic sensibilities continues until some kind of stability among the narratives is achieved. That stability may involve embracing a single narrative and ignoring or dismissing the sensibilities and data that it does not take into account, or for personalities and cultures that can tolerate high degrees of plurality and ambiguity, the conclusion may be to hold several rival narratives in tension with one another, because the competing sensibilities attracting one to several of the narratives are very similar in type and intensity.[26]

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[26] In spite of the intense interest in both narrative and deliberative democracy in the last 30 years, there is little empirical research on the benefits of perspective taking in deliberation. What little research there is may be found in discussions of international or business negotiations. See, for example, A. D. Galinsky, W. W. Maddux, D. Gilin, and J. B. White (2008) 'Why It Pays to Get Inside the Head of Your Opponent: The Differential Effects of Perspective Taking and Empathy in

This latter outcome is not particularly satisfying to many Western delib-
erators particularly in regard to social deliberation on moral issues. They
are troubled by the failure of rival moral traditions to reach the unforced
consensus they believe is the hallmark of rational deliberation.[27] What
these theorists overlook is that moral impasses are problems primarily when
deliberation is viewed ideally as low-context, impersonal, and rationally and
empirically measured. Under those assumptions, deliberations are judged
as successful only when a discrete answer is provided for the problem; one
that can be agreed upon by anyone, anytime, and anywhere. The model
proposed here, however, is high-context, relational, and aesthetically
measured. No particular moral problem exists in isolation. It exists within
a web of perceptions related to other individuals, culture groups, moral
traditions, and other moral issues. To the extent to which solutions can be
found, they are found through deliberative relationships involving mutual
narrative constructions that take into account the differences between the
parties involved. The goal of this process is harmony, not an idealistic

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Negotiations', *Psychological Science*, 19, 378–84.

[27] The difficulties of reaching a consensus in moral deliberation are recognized by major moral
philosophers, but their solutions require either overly optimistic commitments to Type 2 processes
or the abandonment of deliberation altogether. Alasdair MacIntyre admits that deliberations
between rival moral narratives may be incommensurable, but he characterizes such conflicts as
epistemological crises that may be resolved if one account can solve the epistemological problems
of the other account better than its own tradition can. See A. MacIntyre (1988) *Whose Justice?
Which Rationality?* (Notre Dame, IN: University of Notre Dame Press), 362. In fact, one tradition
can actually 'defeat another in respect of the adequacy of its claims to truth and to rational
justification, even though there are no neutral standards available by appeal to which any rational
agent whatsoever could determine which tradition is superior to which'. A. MacIntyre (2007) *After
Virtue: A Study in Moral Theory* 3rd edn (Notre Dame, IN: University of Notre Dame Press), xiii.
John Rawls proposes an overlapping consensus whereby even though deliberating parties may have
different basic comprehensive doctrines they can discover intersections between their comprehensive
beliefs regarding common political interests. See J. Rawls (1996) *Political Liberalism* (New York:
Columbia University Press), 15 and 24n27. This assertion, however, requires a commitment to
Western ideals of individualism and rationality that many people, particularly in other parts of the
world, do not have as part of their comprehensive or political beliefs. It appears unclear then how
there can be any hope of an overlapping consensus unless one is already a Western political liberal.
See M. G. Barnhart (2004) 'An Overlapping Consensus: A Critique of Two Approaches', *The
Review of Politics*, 66, 259–62. Jürgen Habermas asserts that when deliberation, which he considers
to be the discovery of reasons that are convincing to all the parties involved, cannot reach a
consensus then deliberation must be abandoned for a different process that he calls bargaining,
which seeks a constructed compromise that salvages as much of each party's narrow self-interests as
possible. J. Habermas (1996) *Between Facts and Norms: Contributions to a Discourse Theory of Law
and* Democracy, trans. W. Rehg (Cambridge, MA: The MIT Press), 166.

harmony of rationalist and impersonal consensus, but a harmony of relationship whereby parties who radically disagree with one another discover aesthetic reasons to maintain hospitable relations in spite of their disagreements.[28] Such a perspective does not require the labeling of a conclusion that preserves tension between opposing narratives as a failure, but recognizes that such conclusions can represent the stable conditions under which significant relationships and narratives can be maintained among the relevant parties.[29] Productive moral conclusions and social policies issue from productive moral relationships, which principles and arguments are powerless to produce. Such relationships exist not for the sake of a single event of moral deliberation, but are the dynamic out of which moral change ultimately occurs, if not during a deliberation in the present moment, then out of others in the future.[30]

## An Abbreviated Illustration of the Model

A practical illustration of this model may be helpful. In offering this illustration, however, I am not attempting to demonstrate or label all the cognitive processes operating nor the specific sequence by which they might operate. This is hardly possible given both the complexity of

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[28] These suggestions obviously owe much to non-Western approaches to conflict resolution. See R. Cohen (1997) *Negotiating Across Cultures: International Communication in an Interdependent World*, revised edn (Washington, DC: United States Institute of Peace Press), 36–7; and K. Peng and R. E. Nisbett (1999) 'Culture, Dialectics, and Reasoning about Contradiction', *The American Psychologist*, 54, 741–54.

[29] Engaging or representing relevant parties in moral deliberation is a major contemporary challenge. The expansive size of most contemporary societies and the global character of interactions between different societies effectively remove the logistical possibility of providing a significant voice for hardly any of the parties who have a stake in the discussion. Habermas attempts to overcome this problem by requiring that moral discourse deal only with those norms that all the possibly 'affected persons' would agree to. See Habermas, *Facts and Norms*, 107. Such a discourse principle is quite reductionist, however, both in that it considers as the relevant norms only those most common to all and in that it treats individuals' perspectives as significant only to the extent to which they are similar. The model offered here encounters the same challenges of representation but confronts them not with reductionism but with its own challenge for complexity. Moral deliberations must reflect the complexity found among the relevant actors who are related to the issue, and this means not just reflecting differences of moral conviction but also the differences of personality and ability existing among the deliberating parties.

[30] See the discussions about the social context of personal change in Chaps. 3 and 6.

human cognition as well as the limitations of written communication. To document all of the operating contextual cues, filters, priorities, and aesthetic sensibilities would take a book-length treatment, if they could even be identified and then effectively described in prose. For similar reasons, I will also not attempt to demonstrate narratives as full-blown simulations of experience. I will provide details that I think are suggestive in that direction, but to achieve those effects would require much more space and the use of literary techniques. What I am providing is an illustration of one way that aesthetic sensibilities and their accompanying narratives can be portrayed as guiding the deliberation of a specific moral issue.

In July 2007, Wimbledon became the last of the four major international tournaments of tennis to award female champions the same prize money as male champions. This was the culmination of an effort begun in the 1970s, even before the formation of the Women's Tennis Association. Often heralded as a victory for female athletes, it is a policy that still receives critical attention, both because some do not find it to be fair and because almost all of the other smaller professional tennis tournaments continue to award greater amounts of prize money to male champions than female champions.

The question of equal prize money for professional female tennis players does not often register in broad public awareness. Tennis is not as popular a spectator sport as many others and is viewed by some as elitist and even boring. But, women's tennis receives more attention than perhaps any other female sport, which makes it not only an example for activists of what other sports should do but also a lesser priority for further reform.

This issue primarily engages three aesthetic sensibilities: justice, empathy, and compassion, and the way these sensibilities are applied has to do with two broad narratives, each intertwined with smaller narratives. The first of these broad narratives portrays justice as reward according to ability. This is an ancient narrative rooted in a time when primordial human societies were organized according to the abilities of their members. Because of the physically demanding requirements of hunting and war, physical strength was the primary determiner of merit in human social groups, and because among human beings men are almost always physically stronger than women, men achieved higher status and cultural

power. Women fulfilled their roles by being obedient to their families and bearing and rearing children. As societies became more complex, differences in merit were portrayed as residing in social status, and so a just society was one that bestowed rewards according to social status.

The contemporary justice as reward according to ability narrative holds on to the differences of ability between people, particularly the biological differences, but tends to place less emphasis on inherited social status and more on work ethic. Some people are physically faster and stronger, some smarter, and some more hard working. According to this narrative, professional sports are contrived dramas that mimic the conditions of primitive survival by providing contests where the most physically capable distinguish themselves. Audiences revel in these struggles because of the empathetic satisfaction they experience in identifying with their particular champion. According to the free market capitalism version of this narrative, economic rewards are also allotted according to ability and the virtuous are those who are faster, smarter, and more imaginative than competitors at providing a good or service.

The second broad narrative, which I am calling justice as same treatment, portrays each human being as of infinite worth, deserving autonomy and discretion over his or her own affairs. The intrinsic worth of each person overrides any differences in race, gender, or physical and mental ability, and social structures should emphasize the same treatment for all. This narrative is generated by a sensibility of compassion, particularly for the poor, the oppressed, children, and women because they are most vulnerable to the destructive forces of nature and society.

In regard to women's issues, this narrative is often cast in opposition to a version of the justice as reward according to ability narrative called "a war on women."[31] This war is the systematic repression of women by male-controlled societies for millennia. Only since the early twentieth century in the West has the narrative of justice as sameness of treatment made inroads against the war on women, but even though women have demonstrated that they are not fragile and inept, male-dominated societies continue to exclude them from political decision making, economic mobility, and the exercise of personal freedom. Justice is achieved when social institutions and economic relations

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[31] L. Melling (18 July 2013) 'The War on Women 2.0: Do They Think We are Stupid?', https://www.aclu.org/blog/war-women-20-do-they-think-were-stupid, date accessed 8 August 2015.

operate so as to give equal standing for males and females irrespective of their physical differences. Such social relationships will not develop on their own, and so there must be social policies instituted and enforced that will ensure that the relationships within a society will approximate this pattern. Sports are an important arena for the expression of this kind of equality, and society must develop the social opportunities for females to pursue all kinds of sports, even the ones only males have traditionally participated in.

The justice as same treatment narrative has sometimes confronted the challenges of the narrative of justice as reward according to ability narrative by generating story lines portraying women to be as physically capable as males. These are frequently found in contemporary movies and television dramas, where female characters appear who are portrayed to be faster, stronger, and tougher than male characters, particularly those male characters portrayed as evil. In tennis this subnarrative has been staged and tested several times. In 1973 Bobby Riggs, a male middle-aged player who was ranked number one in the 1940s, first handily beat a top ranked 30-year-old professional, Margaret Court, and then 4 months later lost by a wide margin in an internationally televised match against 29-year-old Billie Jean King.[32] A doubles match was played 13 years later, when Riggs, then 67, teamed up with Vitus Gerulaitis, a top male competitor of the time, to take on two of the top female players, Martina Navratilova and Pam Shriver. The women won the match decidedly, by focusing their attack on Riggs.[33] Another match occurred in1992 between Navratilova and Jimmy Connors, a top male competitor, but even with adjusted rules favoring Navratilova, Connors won fairly easily.[34] In 1998 during the Australian Open, the Williams sisters, Venus ranked number five 5 in the world and Serena ranked number 20, stated that they could beat any male player in the world ranked under 200. Karsten Braasch was ranked 203 at the time, and accepted the challenge, playing each sister one set.

[32] S. Roberts (20 September 2008) 'A Ray of Progress for Women as Battle of the Sexes Turns 35', *Sports Illustrated*, http://www.si.com/more-sports/2008/09/20/king-parker, date accessed 1 August 2015.

[33] J. Sarni (24 August 1985) 'Women Win War of Sexes', *Sun Sentinel*, http://articles.sun-sentinel.com/1985-08-24/sports/8502040832_1_vitas-gerulaitis-navratilova-and-shriver-bobby-riggs, date accessed 1 August 2015.

[34] B. Dwyre (26 September 1992) 'A Grand Non-Slam Victory', *Los Angeles Times*, http://articles.latimes.com/1992-09-26/sports/sp-959_1_tennis-match, date accessed 1 August 2015.

He won each set decidedly.[35] More recently, Novak Djokovic, a top-ranked player in the men's tour played Li Na, a top-ranked female tennis player as part of a celebration of the China Open's tenth anniversary. Na won the miniset three sets to two, but the match was really an exhibition with Na being spotted two points at the beginning of every game.[36]

Obviously none of these were scientific studies, but all of them save perhaps the Riggs–King match suggest the greater performance capability of males. Not surprisingly from a rhetorical perspective, supporters of the justice as same treatment narrative refer only to the Riggs–King match.[37] Although scientific studies demonstrate that males are generally physically faster and stronger than women, such studies are not referred to by supporters of the narrative of justice as same treatment. Of course, supporters of justice as reward according to ability do not tend to point out that women's performance in endurance events, particularly open-water swimming,[38] more closely approximates men's performance and that the continued improvement in athletic performance among women in all sports might signal social and biological changes that could bring the sexes much closer in performance in the coming centuries. The tendency to ignore these details suggests that for some supporters of the justice as reward according to ability narrative there is a war on women narrative operating as a subnarrative.

In the last 70 years, some supporters of justice as reward according to ability have adjusted their narrative regarding the roles available to women because of recent historical experience and the effects of technology. During World War II, women in large numbers filled labor vacancies left by males drafted for combat. These women effectively performed many jobs not traditionally performed by women. Some of this

[35] 'How to … Beat Both Williams Sisters in One Afternoon' (2 September 2001) *The Observer*, http://observer.theguardian.com/osm/story/0,,543962,00.html, date accessed 1 August 2015.

[36] C. Nguyen (2 October 2013) 'Djokovic, Li Na Put on a Show in Battle of the Sexes at China Open', *Sport Illustrated*, http://www.si.com/tennis/beyond-baseline/2013/10/02/djokovic-li-na-battle-of-the-sexes, date accessed 1 August 2015.

[37] L. Schwartz (nd) 'Billie Jean Won for All Women', https://espn.go.com/sportscentury/features/00016060.html, date accessed 5 August 2015.

[38] E. Eichenberger, B. Knechtle, P. Knechtle, et al. (2012) 'Best Performances by Men and Women Open-Water Swimmers During the "English Channel Swim" from 1900 to 2010', *Journal of Sports Science*, 30, 1285–301.

effectiveness was due to the ability of technology to compensate for their deficits in physical strength. Today, the performance of most professional tasks does not depend upon physical ability. The supporters of justice as reward according to ability, however, assert that biological differences between males and females still yield differences in behavior and inclination, making one sex or the other more fit for some roles and activities.

Even the supporters of the justice as same treatment narrative tacitly recognize its limits. If females are as physically capable as males, with the Riggs–King match as the exemplar for tennis, then this narrative should endorse the dissolving of separate male and female tournaments, but there is no support for that scenario. This is probably because even the staunchest supporters of justice as same treatment imagine the possible outcomes of such a policy, and those outcomes include scenarios in which no woman ever makes it into a tournament final or is even ranked in the top 100 worldwide. Instead, one sometimes finds a call for changes to the rules of competitive play. Claiming that the rules of tennis were constructed to conform to male-specific physical advantages, the recommendation is that the rules be altered to accommodate the specific strengths of females. Supporters of justice as reward according to ability will point out that such differences already exist, at least in the Grand Slam tournaments. In those tournaments, males play the best of five sets, while females play the best of three sets. This is a hangover from the early days of women's tennis when everyone thought that female competitors were more frail and could not play five sets. At the US Open, male tournaments use heavier balls than the female tournaments, ostensibly to slow down male play and speed up female play. The contradiction between these practices and the narrative of justice as same treatment is often pointed out. Many female competitors have said that they would gladly play the best of five sets, but organizers of the tournaments claim that such a change would make it impossible to schedule the number of matches needed within the allotted 2 weeks. It is also important to note that all the tournaments other than the four Grand Slam tournaments are decided by the best of three sets for both men and women's matches.[39]

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[39] 'Gender and Tennis: Coming up Short', (23 January 2012) http://www.economist.com/blogs/gametheory/2012/01/gender-and-tennis, date accessed 6 August 2015; and 'Equal Work for Equal Pay?' (30 September 2013) http://worldsport.blogs.cnn.com/2013/09/30/equal-work-for-equal-pay/, date accessed 5 August 2015.

These last comments introduce some previously unmentioned actors to this case, the organizers and sponsors of the events. These may be the characters who are most aware of the sensibilities guiding both justice narratives. These tournaments are not strictly for-profit ventures in the sense that there are no investors who receive returns on their investments, but there is a lot of money at stake. Each tournament incurs a great deal of overhead, and while the stipends of board members may be modest in comparison to those of boards at successful for-profit institutions, the salary of the CEO at the United States Tennis Association, for example, may be above seven figures, with many within the management structure making a six-figure salary. There is also the expectation, particularly for the four major tournaments, that each of them will be the major source of revenue for organized tennis within their respective countries.[40] So, although these are nonprofit institutions, the focus on profit may incline the institutions toward the economic version of the justice as reward according to ability narrative. This could be the origin of the disparity in prize money found at the smaller tournaments. Men's matches are judged to be the ones who generate more ticket sales and media attention and therefore deserve more of the proceeds. Unfortunately, the data for this portrayal is not clear. Some tournaments sell tickets that cover both male and female matches, and some women's final matches appear to generate more interest than male ones.[41] As well, there's no admission by executives that they are making use of such data in their allotting of prize money.

An economic perspective also suggests that a sensitivity to disparities in prize money overlooks the most significant monetary injustices. Champions make the bulk of their income not from prize money but from advertising sponsorships. And while there is some correlation between whether a player has won a major championship and how much money he or she gets in product endorsements, which players get the most lucrative contracts sometimes has as much to do with their physical attractiveness as with whether they are male or female or a top-ranked player.[42]

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[40] R. Cohen (26 August 2014) 'USTA Conflict of Interest Controversies at US Open Tennis Tournament', http://nonprofitquarterly.org/2014/08/26/usta-conflict-of-interest-controversies-at-us-open-tennis-tournament/, date accessed 5 August 2015.

[41] 'Equal Work for Equal Pay?'

[42] K. Badenhausen (25 August 2014) 'Roger Federer Leads 2014 List of the World's Highest-Paid

Of course, businesses can no longer ignore public opinion in their operations. Particularly in the last decade, consumers in the West have shown ever more inclination to shun those businesses who express opinions or perform actions with which they have deep value disagreements. If the ethical sensibilities of a large number of consumers become opposed to a particular business, that business can suffer catastrophic losses in a short time and experience irreparable long-term damage to its image. Tennis tournament executives, then, recognize that if large portions of the public make an aesthetic judgment that the tournament is unfair in regard to any of its practices, then ticket revenue and sponsorships can be immediately and perhaps permanently affected. This may describe the responses of the various tournaments. The organizers of the major tournaments, which get the most attention in tennis, were each responding, albeit at different times, to perceived threats to their public image that could affect their revenue. Because the less prestigious tournaments receive less public attention, their organizers have so far decided that the disparity in prize money will not detrimentally affect their bottom line.

The rival narratives for this case can be constructed fairly cleanly, and indeed most conclusions about the question will proceed directly as a result of which narrative a person has their primary commitment to. Those who subscribe to the narrative of justice as reward according to ability will not support the same prize money for male and female champions, and those who support the narrative of justice as same treatment will. These straightforward conclusions become more complicated in terms of possible personal and social relationships. If one knows someone who is a professional tennis player, an organizer, or coach, then one is likely to give great bearing to the aesthetic inclinations one has toward that person, and make adjustments to the content or interpretation of one's guiding narrative. If one has a positive relationship with that person and he or she is seen to be hurt by the policy, then one is likely to disagree with the policy, and vice versa. The same effect occurs to a less powerful

Tennis Players', http://www.forbes.com/sites/kurtbadenhausen/2014/08/25/roger-federer-leads-2014-list-of-the-worlds-highest-paid-tennis-players/, date accessed 5 August 2015; and M. L. Corbett (17 June 2013) 'Anna Kournikova is the Best and Worst Thing to Ever Happen to Women's Tennis', http://bleacherreport.com/articles/1671532-anna-kournikova-is-the-best-and-worst-thing-to-ever-happen-to-womens-tennis, date accessed 5 August 2015.

extent even if one does not personally know the parties involved. For example, the image one has of the tennis players from news reports and television appearances affects one's application of the sensibilities of care and merit and can lead to qualifications of the broader narrative. And so, some who support justice as reward according to ability might consider this issue to be an exception to their narrative if one of the female champions has a life story that invokes their compassion sufficiently for them to believe she is being mistreated.

If one is willing, however, to run the different narratives as cognitive simulations, then one discovers that they each elicit important aesthetic sensibilities for this case. Both empathy for the best athlete getting the best reward and compassion for those who are not treated well are applicable. The level of injustice involved, however, is not large. The women in the smaller tournaments who get less prize money than the male champions are apparently not facing financial crises for that reason. Likewise, the greater amount of body stress experienced by males in the Grand Slam tournaments because they play more sets does not appear to be of such a magnitude that it ensures future physical debilitation for them. There is then currently a temporary stability in public opinion. Neither narrative may currently generate significant sensibilities of disharmony, which leads to the conclusion that things ought to be left just as they are. Of course, moral stability is always temporary. If new information arises about how tournament organizers make their decisions about prize money or the public learns that a champion has a terminally ill relative with no insurance, then those details can upset the existing harmony and start the process of deliberation again.

## The Importance of Aesthetic Sensibilities

One of things the illustration reiterates is the dependence of the model on the aesthetic sensibilities of the moral deliberator. This topic was discussed a bit in the last chapter, but the illustration provides a perspective for additional treatment. Most models of moral deliberation do not include much attention to the characteristics of the deliberator. Rationalist models have an unstated assumption that the deliberator is highly rational and skilled in Type 2 cognition and therefore present

deliberation as a mechanical process that will work independently of any peculiarities of the deliberator. The operation of the model offered here, however, depends heavily on the aesthetic sensibilities of the actors.

These sensibilities are the products of human beings experiencing the world as biological and social creatures operating in specific environmental contexts. Because human beings are creatures who process sense data in certain ways and construct their personal and social identities in certain ways, certain kinds of inclinations are preferable for survival.

Basic to the notion of sensibility itself is an ability to effectively manage perceptions that come through the senses. At one level, this is a concern with the proper functioning of the human sense receptors, which can go awry in many different ways, and it is also a concern about the proper functioning of the physical neural systems that process and interpret the data gathered by receptors. This last concern is perhaps identical with what can be called aesthetic dispositions, which are the inclinations one has regarding how sense data is processed, filtered, and prioritized. Human sensitivity varies from person to person and runs the gamut from a disposition of hypersensitivity to emotional callousness. If one is too sensitive, then one is constantly stressed because almost everything upsets one's cognitive harmony. If one has too little sensitivity, then one often fails to identify and respond to possible threats to one's well being.

Balancing these extremes requires the engagement of critical introspection. While this is often characterized as a Type 2 operation, it has a distinct aesthetic character. It is the willingness to consider whether one's own dispositions, actions, and social groups are the best ones. Is the data that one gives authority to the best collection of data and the best rendition of it? Have one's past decisions been mistaken? The importance of a sensibility of suspicion regarding narratives was discussed in Chap. 7 and that discussion is applicable again here. Without an ability to apply a measure of suspicion for the different data and cognitions involved in deliberation, one hazards two grave dangers. First, one may not feel the need to question the propriety of one's acts or decisions. Persons who enjoy large levels of personal or social power have weak inhibitions to provide checks on their behavior. Sometimes called "the moral licensing effect," this phenomenon exists when people believe the positive moral identity that they have given themselves or a particular group has granted them

makes almost all their actions morally justified.[43] Second, one may be easily fooled. Public figures, from politicians to religious officials to advertisers and marketers understand the human disposition to contemplate the world only from one's own viewpoint, and, like the sophists whom Plato and Aristotle attacked, these figures play to the default dispositions of an audience to turn the audience's desires in the direction that they want. The only suspicion that they encourage is the suspicion of one's enemies.

If suspicion is left to its own devices, it leads to rampant skepticism or paranoia. To avoid these extremes, suspicion must be tempered with creative imagination. Imagination not only amplifies the ability of suspicion to question every possibility; it can also generate narratives that assume doubt is not an option. One's imagination must function well enough not only to construct narratives that order one's own sensibilities in different ways, but it must be able to generate narratives based on sensibilities foreign to one's own, and then it must be able to run these narratives in one's consciousness as though they were one's own live options. The capabilities of creative imagination are increased by expanded cultural experience. Familiarity with multiple cultures, languages, and ethical traditions and having relationships with people of a variety of backgrounds enhances one's ability to embrace the possibility of something other than what one believes.

When cultivated and engaged effectively, imagination yields another important sensibility, tolerance.[44] The ability to imagine why other

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[43] D. Keltner, D. H. Guenfeld, and C. Anderson (2003) 'Power, Approach, and Inhibition', *Psychological Review*, 110, 265–84; and S. Sachdeve, R. Iliev, and D. L. Medin (2009) 'Sinning Saints and Saintly Sinners: The Paradox of Moral Self-Regulation', *Psychological Science*, 20, 523–8. One of the most famous examples is former US President Richard Nixon's statement in an interview with David Frost, 'Well, when the president does it, it's not illegal'. 'I Have Impeached Myself' (7 September 2007) http://www.theguardian.com/theguardian/2007/sep/07/greatinterviews1, date accessed 2 August 2015.

[44] This sensibility has received recent endorsement from unexpected sources and for unexpected reasons. Jonathan Haidt, a social psychologist, has advocated tolerance because social conservatives and social liberals have different mixtures of different moral intuitions that cause them effectively to see the world in different ways. John Hibbing, along with others, argues that there are physiological trait differences between liberals and conservatives that correlate to their different political outlooks. The conclusion is that elements of human political and moral attitudes are beyond one's conscious volition to choose or change, and that recognition demands that one be more tolerant of the positions of those with whom one disagrees. See J. Haidt and J. Graham (2007) 'When Morality Opposes Justice: Conservatives Have Moral Intuitions That Liberals May Not Recognize', *Social Justice Research*, 20, 98–116; D. R. Oxley, K. B. Smith, J. R. Alford, et al.

people embrace the sensibilities and narratives that they do can yield an understanding of why they arrive at the moral conclusions that they do. This works against the inclination to deal with those with different moral conclusions as strange and inherently dangerous, because one can imagine that if one had been born where they were, speaking the languages that they do, following the religion that they do, with the culture and relationships that they have, then one might well believe just what they believe. In this way, imagination can increase a person's range of live options in deliberation. Even if they are not options that one can ultimately embrace, they can become options that one can understand.

Toleration has its limits however, and those limits are assessed by a sensibility of impending crisis. Tolerance is a sensibility that values stability and encourages the acceptable sacrifice of other goods for the sake of stability. But the sensibility of impending crisis provides a warning that the human values that are in danger are so critical to identity that they dare not be sacrificed. This sensibility is a favorite target of contemporary malicious rhetoricians because they know that this sensibility is easily activated and directed toward predetermined goals. For this reason, this sensibility must always be balanced with suspicion and imagination.

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(2009) 'Political Attitudes Vary with Physiological Traits', *Science*, 321, 1667–70; and J. R. Hibbing, K. B. Smith, and J. R. Alford (2014) 'Differences in Negativity Bias Underlie Variations in Political Ideology', *Behavioral and Brain Sciences*, 37, 307.

# 9

# Conclusion

The previous chapters have argued that the expanding moral complexities of human experience are not being confronted well by moral philosophy and applied ethics. Disagreement persists not just in efforts to find common moral conclusions but also on how to frame moral questions and deliberate about them. These difficulties stem from the widespread acceptance of an inadequate model of cognition. This model assumes the priority of analytic and rationalist cognitions and promises that clarity and agreement about knowledge claims in general and moral claims in particular are achieved by deliberating about theories, moral principles, or empirical methods, and refining these elements until they approximate the realities outside the theories. But after more than a generation of skilled and creative work using these analytic approaches, there appears to be no significant progress.

The dual process theory of cognition developed in this book explains these problems as deriving from too much emphasis being placed on one category of cognitive processes. Analytic processes (Type 2 cognitions) are not the only nor the most critical cognitive processes for human decision making. Intuitive and aesthetic cognitions (Type 1 cognitions) are the means by which humans sense and impute moral authority and value. On the basis of this cognitive model, a dual process model of moral deliberation was constructed that

requires a back and forth movement of function between Type 1 cognitions and Type 2 cognitions. Narrative proves to be an aesthetic form particularly suited for bridging the qualitative differences between these two cognitions, and the model recommends deliberation as a process of producing narratives that embody the details and values of an ethical question and simulate the flow of real-world experience. This makes possible the engagement of aesthetic sensibilities regarding the rightness or wrongness of particular details in the narrative and of the moral thrust of the narrative as a whole. On the basis of these sensibilities, narratives are revised, rival narratives constructed and compared, and a narrative conclusion chosen.

This model holds implications for future research and education, not just in applied ethics but also the empirical sciences and the arts. If one embraces the notion that Type 1 cognitions are the cognitive locus of all judgments of normativity, then this represents a crucial theoretical perspective that can reorient many aspects of empirical research projects, affecting everything from what research questions are pursued to how research is designed to how conclusions are determined. Although there is work ongoing in cognitive psychology regarding the character of Type 1 processes, the existing understanding is spotty, and more research would be valuable. In particular, more examination of the cognitions associated with aesthetic sensibilities is needed: How they are affected by biological and sociological predispositions and what contributes to the shape and operation of basic emotions, social emotions, and introspection? Because Type 1 processes are not entirely amenable to traditional empirical methods of investigation, research methodology will need refinement. One productive direction is to perform more scrutiny of the ways artists perform their craft and the ways people appreciate art. Insight into these kinds of aesthetic judgments has direct relevance for all human judgment, and this relevancy in turn places a greater responsibility upon the arts and literary studies to undertake their own research into what they are doing and achieving. Often, the responsibility of the artist is assumed to begin and end with individualistic expressions of aesthetic sentiment,[1]

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[1] For an expression of this, see H. Klebesadel and L. Kornetsky (2009) 'Critique as Signature Pedagogy in the Arts', in R. A. R. Gurung, N. L. Chick, and Aeron Haynie (eds) *Exploring Signature Pedagogies: Approaches to Teaching Disciplinary Habits of Mind* (Sterling, VA: Stylus Publishing, LLC), 108.

but the importance of understanding the nature of aesthetic judgment represents a heightened professional responsibility for artists to turn their attention more upon how these cognitive assessments can best be done. This responsibility may be greatest for narrative authors given the case made here that narrative is an aesthetic form most suited for a cognitive deliberation that adjudicates between Type 1 and Type 2 processes.

These research efforts will require more interdisciplinary activity. Applied ethics has of course always been an interdisciplinary field in that it has addressed ethical problems in all specialized fields and attempted to incorporate a variety of specialized methods. This interdisciplinary character, however, has often been merely descriptive of the diverse subspecializations existing within applied ethics, each with its own professionals who use their particular methods and who do not always converse very well with those in the other subdisciplines. Because Type 1 cognitions are cognitions that everyone uses, irrespective of their professional specialization, a focus on Type 1 cognitions makes possible new types of conversations between disciplines, although the challenges remain large. Interdisciplinary research has been encouraged for over a generation, out of a recognition of the barriers to the development of knowledge involved in growing intellectual compartmentalization. This compartmentalization is not just a problem within the sciences, or between the sciences and the humanities, but also within the humanities.

A 2005 joint report by the National Academy of Sciences (U.S.), the National Academy of Engineering, and the Institute of Medicine (U.S.) on interdisciplinary research dealt just with interdisciplinary research within the sciences. It was motivated by the commitment that new kinds of knowledge could be developed through interdisciplinary research, but that such efforts were hindered by a culture of intellectual specialization with built-in disincentives for cross-specialization work. The report recognized that the social sciences do not yet understand the "complex social and intellectual processes that make for successful IDR [interdisciplinary research]"[2] and that progress in this area will enhance productivity of

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[2] National Academy of Sciences (U.S.), National Academy of Engineering, and Institute of Medicine (U.S.) (2005) *Facilitating Interdisciplinary Research* (Washington, DC: National Academies Press), 3 and 53.

IDR. But, the report's image of interdisciplinary cooperation remained the traditional one; discrete research disciplines each use their specialized methods to solve a piece of a larger problem that they all hold in common.

The dual process model developed here suggests why these efforts are generally frustrated. A central character of Type 2 processes is to analyze and separate, and these processes are what has created the various intellectual disciplines. Using only Type 2 processes, it will prove quite difficult to generate common research goals or methodologies. If there is, however, a recognition of and focus on Type 1 processes and the aesthetic sensibilities that are common to all decision making, then there are many more possibilities for interdisciplinary research. Moreover, to the extent that the aesthetic methods of the arts are understood to be important to all disciplines, the arts can become an important ambassador for common efforts across disciplines.

This model also suggests that training in applied ethics, and indeed in all disciplines, needs to be adjusted. The productivity of the methods of science and technology has led to their impact on education in all disciplines, so that even in the arts significant elements of training involve attention to the development of Type 2 cognitive skills. If Type 1 processes are determinate in human choice, however, then there needs to be more explicit attention to them in all disciplines.

Donald A. Schön addresses the issues involved in his well-known book, *Educating the Reflective Practitioner*. Although he is writing before a broad public awareness of dual process theory, his approach is a dual process one, and although his cognitive model is slightly different than the one presented in this book, his recommendations for education are quite relevant. He bases his recommendations upon a contrast between the practices of a profession from the standpoint of technical rationality, and the practices of a profession using reflection-in-action. He characterizes technical rationality as a Type 2 process according to which "*professional* competence consists in the application of theories and techniques derived from systematic, preferably scientific, research to the solution of the instrumental problems of the practice."[3] He characterizes reflection-in-action as a Type

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[3] D. A. Schön (1991) *Educating the Reflective Practitioner* (San Francisco, CA: Jossey-Bass Publishers), 33.

1 process in which knowledgeable and effective action is conceived and implemented in the midst of action, but without one being able to clearly communicate the reasons involved.[4]

Technical rationality works well for common situations that can be solved by application of the techniques and guidelines customarily used in the profession. But for problems that are not common, the practitioner must engage in the art of reflection-in-action by which "practitioners not only follow rules of inquiry but also sometimes respond to surprising findings by inventing new rules, on the spot," which requires an artistry that makes "new sense of uncertain, unique, or conflict situations."[5]

Schön notes that training in professional practices has been conducted in different ways. Sometimes one develops skills autodidactically, sometimes one apprentices oneself to a master in a specialty, or one may participate in a practicum. The first two present difficulties. There are significant barriers to developing professional competencies on one's own, and it typically requires a laborious effort of trial and error. Apprenticeships have not been in vogue for considerable time, and contemporary businesses, whether industrial or professional, are not set up to initiate novices with no prior knowledge into the knowledge needed for a craft or profession. This leaves the practicum as the training mechanism of choice. Practicums provide settings where students learn by performing simplified versions of the real-world tasks of the profession.[6]

Schön identifies three kinds of practicums. If one approaches a profession in terms of technical rationality, then a practicum is concerned with technical education. The specific rules and mechanisms integral to the profession will be demonstrated and practiced under the tutelage of a coach. If one views a profession as reflection-in-action, then a practicum will still induct the student into the knowledge base, operations, and means of reasoning connected with the profession, but it will also address the ways competent professionals reason in solving difficult problems when there is no obvious overlap between the professional's knowledge base and these kinds of cases. In such practicums coaches at times emphasize the standard

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[4] Schön, *Educating the Reflective Practitioner*, 25.

[5] Schön, *Educating the Reflective Practitioner,* 35.

[6] Schön, *Educating the Reflective Practitioner,* 37.

methods of the profession and at other times emphasize a limited version of reflection-in-action that encourages students to step away from standard methods to develop new ones when they think they are warranted. The third kind of practicum focuses on the use of reflection-in-action in the confrontation of unique and unfamiliar situations of professional practice under the assumptions that existing rules and methods do not address every case and that there is no single right solution for every problem. Students are encouraged to go beyond standard methods and experiment with new ways of defining problems and new directions for action. Schön notes that the third kind of practicum often exists in art training and to some extent within most professional schools.[7]

The cognitive model developed in this book suggests Schön is right in his suggestion regarding training in the professions in general, and applied ethics in particular. If aesthetic sensibilities are at the heart of moral deliberation, pedagogical methods must be used that are suited for those types of cognitions, and those methods are the methods of training found in the arts. Moral deliberation is ultimately more of an art than a science and that means introduction into its practice requires pedagogical methods suitable for the training of aesthetic judgment. Although Schön's dual process model is not entirely precise in distinguishing the methods of technical rationality from those of reflection-in-action, his suggestion that the most valuable kind of education involves opportunities to experiment and develop new solutions is very parallel with my model's attention to the development of skills in narrative construction, assessment, and revision.

Of course, Schön's notion of reflection-in-action assumes that the best professionals can clearly assess whether or not there is an effective achievement of the goals of their particular profession. That same attunement does not seem to be the case with applied ethics. A significant part of the difference is the ability in most professions to measure the solutions to practical professional problems empirically—the patient recovers, the court case is won or lost, the audit reveals no problems. But in debates about the application of moral values, there are rarely such clearcut assessments because the very mechanisms of assessment are themselves at stake. This issue has often been addressed in applied ethics under

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[7] Schön, *Educating the Reflective Practitioner*, 39–40.

the question of whether or not there is a specific "expertise" connected to the practices of applied ethicists. Not surprisingly, these discussions can't agree on the specific skills that would be included under such an expertise.[8] These problems complicate the application of Schön's model of education to applied ethics because the coach of an ethics practicum may not be able to supply the kind of assurance regarding the solution to a problem that Schön's model requires. Apart from that one qualification though, Schön's suggestions for education are quite applicable for training in applied ethics.

In closing I want to address a potential limitation of the model proposed here that derives from the character of dual process theory itself. Dual process theories' assertion of a qualitative difference between Type 1 and Type 2 processes fits well with dualistic Western traditions, but not so well with other cultures such as Eastern ones, which lack dualistic inclinations. Not only do they lack the dualism, but they have different conceptions of many of the ingredients of Western rationality, including formal reasoning, dialectic, probabalistic thinking, and science,[9] and may consider those elements not particularly important for the challenges that ordinary life presents. Because dual process theory requires these qualitative distinctions and also typically grants normative authority to Type 2 processes, this would appear to limit the applicability of dual process theories, and any model derived from them, to only Western intellectual

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[8] See, for example, B. Gordijn and W. Dekkers (2008) 'Ethical Expertise Revisited', *Medicine, Health Care, and Philosophy*, 11, 125–6.

[9] Many studies back up this contention. See A. Norenzayan, E. E. Smith, B. J. Kim, and R. E. Nisbett (2002) 'Cultural Preferences for Formal Versus Intuitive Reasoning', *Cognitive Science*, 26, 653–84; K. Peng and R. E. Nisbett (1999) 'Culture, Dialectics, and Reasoning about Contradiction', *American Psychologist*, 54, 741–54; W. Wong (2006) 'Understanding Dialectical Thinking from a Cultural-Historical Perspective', *Philosophical Psychology*, 19, 239–60; G. N. Wright and L. D. Phillips (1980) 'Cultural Variation in Probabilistic Thinking: Alternative Ways of Dealing with Uncertainty', *International Journal of Psychology*, 15, 239–57; G. E. R. Lloyd (1996) 'Science in Antiquity: The Greek and Chinese Cases and their Relevance to the Problems', in D. R. Olson (ed.) *Modes of Thought: Explorations in Culture and Cognition* (Cambridge: Cambridge University Press), 15–33; A. MacIntyre (1991) 'Incommensurability, Truth, and the Conversation Between Confucians and Aristotelians about the Virtues', in E. Deutsch (ed.) *Culture and Modernity: East-West Philosophic* Perspective (Honolulu, HI: University of Hawaii Press), 104–22; M. D. Gu (2006) 'Theory of Fiction: A Non-Western Narrative Tradition', *Narrative*, 14, 311–38; and K. Mukaida, H. Azuma, L. Shapiro, and D. S. Crystal (2010) 'Cultural Scripts in Narratives about Future Life: Comparisons among Japanese, Chinese, and American Students', *Japanese Journal of Personality*, 19, 107–21.

contexts. This is potentially a problem for the model developed here, because a main point of it is to deal with contemporary moral complexity and much of that moral complexity is a result of increased interactions between Western and non-Western values.

The theory of cognition and moral decision making presented in this book, however, diverges from the standard form of dual process theories. By placing Type 1 processes at the center of normative authority and focusing attention upon what transpires within that mode, this model has considerable affinity with portrayals found in the East, which emphasize relationships, holism, and the search for ways to embrace contradictory perspectives.[10] This suggests that this model might prove quite productive when used in deliberation with people and communities who have very different attitudes toward Type 2 processes than Westerners do.

This observation is also a reminder that the value of theories must be assessed on the basis of Type 1 criteria. As already noted, Daniel Kahneman recognizes this about his own dual process theory. He calls the labels System 1 and System 2 mere "metaphors" and "useful fictions" because he thinks their most important function is to facilitate communication.[11] This is also the goal of the model offered in this book. The measure for its success is to be found in whether it facilitates communication and relationship formation between parties who have radically different moral convictions, because only within such relationships is moral agreement ever created.

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[10] R. E. Nisbet (2003) *The Geography of Thought: How Asians and Westerners Think Differently … and Why* (New York: The Free Press), 22–7.

[11] D. Kahneman (2011) *Thinking, Fast and Slow* (New York: Farrar, Straus and Giroux), 96–7 and 151–3.

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# Index

## A

act utilitarianism, 99
addiction, 21–2, 29, 68
aesthetic(s), 119–22, 134–40
aesthetic intuitionist deliberation,
        10–11
aesthetic sensibilities, 134–40,
        178–81, 191–4, 196
    imagination, 154–7, 161,
        193–4
    James, William, 119–22, 132
    judgment, 82–3, 156–7, 178–81,
        196–7
    moral deliberation, 132–40, 151,
        156–7, 175–83
    suspicion, 161–6, 192–3
    tolerance, 193–4 (*see also*
        harmony, cognitive
        and aesthetic)
aesthetic translation, 177
altruism, kinship, 18

analogical reasoning, 95.
        *See also* casuistry
analysis, 88, 92–4
    decompositional, 92
    dual process theory, 13–14
    interpretive, 92
    language, 92–4
    regressive, 92
analytic philosophy, 83–4, 92–4,
        111–12
    ethics, 4, 92–4
    moral decision making, 4, 92–4
Anscombe, Gertrude Elizabeth
        Margaret, 13
applied ethics, 3–14, 88–9, 93,
        143–4, 149–50
    embodiment, 36–40
    narrative, 157–61
    social deliberation, 57–61
    type 1 moral cognition, 109–40
    type 2 moral cognition, 87–108