

A Clouded View: How Language Shapes Moral Perception

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INTRODUCTION:

Flannery O'Connor writes in her novel *Wise Blood*,

The black sky was underpinned with long silver streaks that looked like scaffolding and depth on depth behind it were thousands of stars that all seemed to be moving very slowly as if they were about some vast construction work that involved the whole order of the universe and would take all time to complete. No one was paying any attention to the sky.¹

The images in this passage are striking for a number of reasons. First, there is the sense that finding solutions or building new images, structures, and ways of being might not be completed during one's lifetime. The discipline of patience and long term planning with the sacrifice involved are qualities frequently hard to fathom in an age of almost instantaneous communication. Second, this passage highlights what many of us already know, that the ethical life is complex and actions and decisions build upon each other. Third, we can be forgetful and inattentive to our surroundings, only seeing a fraction of our landscape. Finally, when we do look up at the sky, if we have learned particular constellations, we may find it hard to perceive new patterns or see the stars behind those most visibly present. Thus, this literary excerpt symbolizes the related aspects of my endeavor to explore the connection between our concepts, which are language for describing reality, and the role these same concepts have in structuring how we interpret and perceive reality, especially pertaining to environmental concerns.

Convincing humans to change behavior proves difficult in a variety of disciplines and theological or religious ethics is no different. Ethicists have at least a two-fold issue: one, their arguments for a particular ethical stance must be persuasive, and two, if their arguments are persuasive, they must also motivate people to change their behavior or choose a particular course of action. Frequently, ethicists, when describing ethical stances, have modeled their work on a particular type of scientific methodology consisting of identifying a problem, developing a thesis explaining the problem's existence, and proposing a solution for solving the problem. The difficulty with this model is it does not necessarily motivate people to adopt a type of action they deem valuable, particularly if their foundational assumptions about reality do not change. Rather, internal conflict between values and worldviews can occur resulting in inaction or moral paralysis. In order to move beyond moral paralysis, encouraging changed behavior requires

1 Flannery O'Connor, *Wise Blood*, (reprint, New York: The Noonday Press, 1967), 37.

helping people to reconceive their foundational metaphors or at least examine their foundational metaphors for overlooked or hidden insights into reality.

Foundational metaphors can be understood in two ways: (1) metaphors function as a structuring principle for providing an explanation and formation of reality and (2) metaphors can provide images that capture a basic, but influential understanding of those principles. These images are important since they help bridge the gap that sometimes exists between concept and action, thus helping move someone from belief to action. Furthermore, metaphorical images can supply the language to explain changed behavior. Yet we do not yet have new, broadly accepted metaphors for life in the twenty first century, with our attention to environmental concerns and the consequences of our actions on climate change. I offer that these important functions of metaphor might help explain why burgeoning concern about the environment and the recognition that the way we live must change has not resulted in widespread transformative practice or action. A disconnect remains between theory, knowledge, and practice. This partitioning indicates that new conceptual frameworks and knowledge about the earth may require new images and metaphors. If we change or develop our theoretical conceptions without changing accompanying metaphors, then transformed action and change of attitudes may not follow, since the foundation or scaffolding remains unchanged. An expansion of these ideas will proceed in three parts: examining the philosophy of metaphor, the dynamics of scientific presuppositions, and the language framing the discourse of environmental ethics using two case studies.

PART ONE: EPISTEMOLOGY AND PHILOSOPHY OF METAPHOR

Prelude

Across disciplines in the twentieth and into the twenty-first century, practitioners re-engaged the questions: how do humans know and what is reason's role in that knowing? The answers to these questions are important because what and how we know influence our actions. While these related epistemological questions are perennial, recent thinkers have wrestled with particular problems stemming from the manner in which Enlightenment thinkers answered these questions.² Some attribute the core problems to Descartes, while others argue that Descartes is not solely responsible for current philosophical issues.³ For instance,

2 See for example, John E. Thiel, *Nonfoundationalism* (Minneapolis, MN: Fortress Press, 1994), particularly 1-37; Stanley J. Grenz, *A Primer on Post-modernism* (Grand Rapids, MI: William B. Eerdmans, 1996); Charles Taylor, *Philosophical Arguments* (Cambridge, MA: Harvard University Press, 1995), particularly 1-19.

3 Antonio R. Damasio, *Descartes' Error*, 250-2; Bernstein, *Objectivism and Relativism: Science, Hermeneutics and Praxis*, (Philadelphia: University of Pennsylvania Press, 1988), 16. Bernstein is clear that there is a distinction between what Descartes actually said and the history of interpretation or what is called the Cartesian legacy. Descartes' thinking is more nuanced than often portrayed. For more detail see Bernstein, 115-118; also, Stanley J. Grenz, *A Primer on Post-modernism*, 57-81; See, Alasdair MacIntyre, *After Virtue: A Study in Moral Theology* (Notre Dame, IN: University of Notre Dame Press, 1981), particularly 1-102. MacIntyre does not look at Descartes in his review of the Enlightenment project. He examines other key figures that he argues lead to the failure of the Enlightenment project as it relates to morality.

Richard Bernstein claims that Descartes in his search for a foundation to ground his knowledge exposed and articulated clearly the human tendency to think in an either/or schema for perceiving and solving problems.⁴ Descartes did not invent this either/or schema, he just provided “chilling clarity” of the core problem from which we all suffer. Bernstein labels this core problem “Cartesian anxiety” and defines it as “[e]ither there is some support for our being, a fixed foundation for our knowledge, or we cannot escape the forces of darkness that envelop us with madness, with intellectual and moral chaos.”⁵ This either/or schema presupposes that the concepts, aspects of existence, or methodologies which ground our knowledge must be immutable. Furthermore, it assumes that the acceptance of certain categories to construct a foundation entails the rejection of others. The schema ignores the possibility that two ideas can each contain truth, or define aspects of reality, while concealing other aspects. Furthermore, this schema presupposes an empiricist view of knowledge based on observation, the collection of data, and the verifiability of that data. This type of knowledge is valuable, but it does not impart meaning. Meaning making is what motivates and infuses our actions with purpose. Stated differently, data and facts are not enough; the data and facts must be meaningful. Humans exist in and must have knowledge and comprehension of the world in order to function and live. This knowledge and comprehension of the world is framed by value systems and is instilled with meaning.

George Lakoff and Mark Johnson are among the many philosophers, theologians, and ethicists attempting to overcome the dichotomies of polar opposites, either/or thinking.⁶ They identify two dominant but polar camps for comprehending the world, objectivism and subjectivism. Objectivism is primarily concerned with the external world, that which is outside us, the environment we observe and use. “Objectivism takes as its allies scientific truth, rationality, precision, fairness, and impartiality.”⁷ On the other hand, subjectivism is primarily concerned with the “internal” world of consciousness and interpretation, which attempts to formulate meaning. Subjectivism “takes as its allies the

4 Bernstein, *Objectivism and Relativism*, 16.

5 Ibid., 18, (emphasis in original); idem, *Philosophical Profiles* (Philadelphia, PA: University of Pennsylvania Press, 1986), 9-12. It is this either/or framework which Bernstein believes that despite all recent philosophical attempts still haunts and remains the foundation for the existing tension in epistemological discourse. This tension manifests itself under a variety of guises, for example in the foundationalist versus anti-foundationalist debate, the liberal-conservative debate, or any other debate where the participants are stereotyped into two opposing camps. The result is usually a lack of dialogue. Each side defends their positions, trying to convince the other of the error in their way of thinking, instead of trying to reach common insights regarding the human condition. For a description of one attempt to overcome the either/or dilemma see James Keating’s Review of *The Shaping of Rationality: Toward Interdisciplinarity in Theology and Science* by J. Wentzel Van Huyssteen, in *Thomist* 66/2 (April 2002): 315-20.

6 See for example, Richard J. Bernstein, *Beyond Objectivism and Relativism*; William C. Placher, *The Domestication of Transcendence: How Modern Thinking about God went Wrong*, (Louisville, KY: Westminster John Knox, 1996).

7 Lakoff and Johnson. *Metaphors We Live By* (Chicago: University of Chicago Press, 1980), 189.

emotions, intuitive insight, imagination, humaneness, art, and a ‘higher’ truth.”⁸ Since objectivism and subjectivism are defined in opposition to one another, they need each other to justify their position. As with any opposition, one seeks to bolster their position, while dismantling the other. Sadly, this discord means we, as affective- rational human beings, are torn. We live with the tension of two competing visions of reality, external (objective) and internal (subjective) with appropriate times to be either objective or subjective.⁹ Lakoff and Johnson argue that neither the proponents of objectivism nor subjectivism adequately attend to the interconnectedness of our external and internal worlds.¹⁰ There is a relationship of mutual conditioning, influence and change, which exists between the internal and external worlds. Therefore, they argue for a more synthetic approach that recognizes the human place within the created world, not outside of it, and acknowledges that there is “constant interaction with the physical environment and with other people.”¹¹ For Lakoff and Johnson, metaphors provide one venue with which to account for how humans describe their observations, formulate meaning, account for truth, and perceive human cognition.¹² They believe and argue that metaphor is neither a peripheral notion nor simply a linguistic style to convey information. Rather, metaphor helps structure both human cognition and meaning.

Furthermore, Mark Johnson, in *Moral Imagination*, argues that our moral language is impoverished and subsequently we lack creativity for thinking about emerging moral situations and the moral life in general. Johnson argues that certain aspects of the Enlightenment legacy resulted in “a moral folk theory.”¹³ The moral folk theory operates on the premise of reason and affectivity’s opposition, thus creating problematic conflict in human decision-making. The conflict transpires because we prioritize deductive reasoning. Rather than perceiving reason as purely logical and deductive, Johnson asserts that our human reasoning is actually imaginative. His argument for an imaginative rationality allows additional possibilities for integrating poetic discourse into debates about environmental problems as a means of fostering changed behaviors and envisioning alternative courses of action. However, our imaginative rationality relies on particular metaphorical frameworks that do not always adequately account for new insights. Thus, our moral language is impoverished because we lack new metaphors, both for structuring and forming our worldview and as images to convey new or deepened insights.

8 Ibid.

9 Ibid.

10 Ibid., 229.

11 Ibid., 229-30.

12 *Ibid.*, 185-86.

13 Mark Johnson, *Moral Imagination: Implications of Cognitive Science for Ethics* (Chicago: The University of Chicago Press, 1993). Hereafter referred to as *Moral Imagination*. For additional discussions of the Enlightenment legacy in Johnson’s work see, George Lakoff and Mark Johnson, *Philosophy in the Flesh: The embodied mind and its challenge to Western Thought* (NY: Basic Books, Perseus Books Group, 1999), at 391-414; Mark Johnson, *The Body in the Mind: The Bodily Basis of Meaning, Imagination and Reason* (Chicago: University of Chicago Press, 1987), at xxiii-xxvix.

Metaphor

Grammatically a metaphor is defined as “an indirect comparison that implies a likeness between two unlike things without using *like* or *as*.”¹⁴ The function of metaphors as an element of our grammatical system and as a literary trope provides a means to compare one object in light of another, highlighting similarities and differences. However, recent studies,¹⁵ of which Lakoff and Johnson are part, recognize that “[m]etaphor is not merely a matter of language. It is a matter of conceptual structure.”¹⁶ This conceptual structure includes and arises from human intellect and experiences.¹⁷ In other words, concepts, including metaphors, form a structuring system that influences not only our thoughts, actions, relationships, formulations of meaning, and our interpretations of these things, but also influencing our perceptions of and presuppositions about the world.¹⁸ Moreover, as a building has more than one structural beam, so our conceptual system is composed of more than one metaphor. Single metaphors lack the ability to explicate fully the depth of meaning contained within a concept. “So when we say that a concept is structured by a metaphor, we mean that it is partially structured and that it can be extended in some ways but not others.”¹⁹ In other words, metaphors both highlight and hide aspects of a concept, subsequently allowing comprehension of certain aspects of reality and hiding others. Thus, multiple metaphors or sets of metaphors are necessary for the illumination of the multi-dimensional aspects of human reality.²⁰ Therefore, taken together, many metaphors highlight the different aspects of a single concept.

However, conflicts can and do arise if not everyone in the society accepts the new metaphorical structure or the changed actions which follow from new insights. Lakoff and Johnson argue that the metaphorical structuring of our existence is so extensive and “familiar that we would normally not notice it.”²¹ Thus, recognition that current and dominant metaphorical structures need to be exposed and examined frequently occurs only when a new or different metaphorical structure challenges perceived reality and meaning. In other words, one experiences the occurrence of a paradigm breaking moment, which calls into question the previous understanding of reality. New scientific information

14 John E. Warriner, *English Composition and Grammar*, (Chicago, IL: Harcourt Brace Jovanovich Inc., 1988), 249.

15 For an overview of other pertinent studies on metaphor and their relationship to moral theology, see Thomas R. Kopfensteiner, “The Metaphorical Structure of Normativity,” *Theological Studies* 58 (1997): 331-46, particularly 332-35.

16 Lakoff, *Metaphors We Live By*, 235.

17 Ibid.

18 Ibid., 3.

19 Ibid., 13.

20 Ibid., 221.

21 Ibid., 43. By way of example, I recently began trying to change my language when speaking to a group that includes both women and men, or to a group comprised only of women. The common linguistic phrase is to address a mixed group or a group of women as “guys.” As in what are you “guys” up to, or what have you “guys” going to do today? Speaking to a group of women and calling them “guys” functions I would argue in a similar way to using “men” or “man” to refer to all of humanity. It ignores or obscures aspects of who women are as people.

can also lead to a restructuring of reality or worldview even if we do not have metaphors to describe this change yet.

As stated earlier, if metaphors function as a primary “means of structuring our conceptual system,” and perspectives on reality, then “[n]ew metaphors have the power to create a new reality.”²² New metaphors initially provide new insight into our experience. New insight in turn may create a change in action, which in turn roots and begins the creation of a new reality. Subsequently, actions based on a metaphor’s entry into a conceptual system ultimately “will alter that conceptual system and the perceptions and actions that the system gives rise to.”²³ In other words, our epistemology is altered, subsequently affecting our behavior and ethical or moral theory.

Mark Johnson emphasizes that moral theory needs to be based upon a new vision of reason: imaginative rationality.²⁴ Seeing rationality as imaginative is rooted in the work he undertook with George Lakoff on metaphor and its relationship to the structuring of our cognition. They write,

Reason, at the very least, involves categorization, entailment, and inference. Imagination, in one of its many aspects, involves seeing one kind of thing in terms of another kind of thing — what we have called metaphorical thought. Metaphor is thus *imaginative rationality*. Since the categories of our everyday thought are largely metaphorical and our everyday reasoning involves metaphorical entailments and inferences, ordinary rationality is therefore imaginative by its very nature.²⁵

In other words, our ability to reason rests partially on our ability to gather facts, information, and relevant data, followed by a critique and assessment of them. Yet, reason also rests on our ability to project into the future, see the potential results of our decisions, envision possible directions, recognize and explain that “which cannot be comprehended totally.”²⁶ Reason relies on

22 Ibid., 145.

23 Ibid., 145.

24 In addition to *Moral Imagination* see, Mark Johnson, *The Body in the Mind*, 139-72; idem, “Imagination in Moral Judgement,” *Philosophy and Phenomenological Research* 46 (Dec. 1985): 265-80.

25 Lakoff and Johnson, *Metaphors We Live By*, 193 (italics in original). For a brief history of the use of metaphor in philosophy, see Mark Johnson, “Metaphor in the philosophical tradition,” in *Philosophical Perspectives on Metaphor*, ed. Mark Johnson (Minneapolis, MN: University of Minnesota Press, 1981), 3-47. This book also includes essays by Max Black, John R. Searle, and Paul Ricoeur, each of whom have influenced current understandings of metaphor. For additional studies on metaphor see, Mary Hesse, *Models and Analogies in Science* (Notre Dame: University of Notre Dame, 1966); Max Black, *Models and Metaphors: Studies in Language and Philosophy* (Ithaca: Cornell University, 1962); Paul Ricoeur, *The Rule of Metaphor: Multi-disciplinary Studies of the Creation of Meaning in Language*, trans. Robert Czerny (Toronto: University of Toronto, 1984); idem, *Essays in Biblical Interpretation*, ed. Lewis Mudge (Philadelphia: Fortress Press, 1980); Raymond W. Gibbs, Jr., ed. *The Cambridge Handbook of Metaphor and Thought* (New York, NY: Cambridge University Press, 2008).

26 Lakoff and Johnson, *Metaphors we Live By*, 193; Johnson, “Imagination in Moral Judgement,” at 280.

deduction, objectivity, as well as imagination.

Imaginative rationality can be more succinctly defined as “that [which] is at once insightful, critical, exploratory, and transformative.”²⁷ This type of rationality recognizes that often we are faced with situations where the “right” thing to do is not clear, and we need an additional insight beyond the principles at hand.²⁸ Therefore, the ability to perceive alternative goods and values that might be at stake or to envision how certain courses of action would impact one’s relationships and ability to form a meaningful life becomes important. However, the ability to critically examine or assess these “imaginings” remains crucial. The language of facts, descriptions of how things are, do not work. Evocative, illuminating language becomes important. How is imagination employed to create a vision, to help people see an aspect of reality overlooked, ignored, or to which we have been blind?

So, if as Lakoff and Johnson argue, metaphorical theory helps reunite reason and imagination, what implications does this have for environmental ethics? How do we raise awareness about the need for environmental sustainability? How do we help each other see that we not only need to avert immediate short-term disasters, but need to plan for the longer-term effects of our behavior? What new metaphors do we need to convey information? Part two attempts to begin answering these questions by looking at how we have typically understood scientific knowledge.

PART TWO:

Scientific rationality

The work of philosopher of science Thomas S. Kuhn on scientific revolutions has been a touchstone in science and across disciplines.²⁹ It has been criticized and its importance debated.³⁰ Nonetheless, it represents an intellectual assessment of

27 Johnson, *Moral Imagination*, 187; idem, “Imagination in Moral Judgement,” 265-66, 279-80.

28 Johnson, *Moral Imagination*, 75. Imagination helps define the aspects of reason that can see differences and similarities between typical and atypical cases. The weighing of the similarities and differences also requires determining, which older, already solved cases to use as prototypes. This process is imaginative.

29 Thomas S. Kuhn, *The Copernican Revolution* (Cambridge: Harvard University Press, 1957); idem, *The Structure of Scientific Revolutions*, 3d. ed. (Chicago: The University of Chicago Press, 1996); idem, *The Road since Structure: Philosophical Essays, 1970-1993*, ed. James Conant and John Hauge-land (Chicago: The University of Chicago Press, 2000). For Kuhn’s later reflections on his use of the term “revolution” see, Thomas S. Kuhn, “The trouble with the Historical Philosophy of Science,” in *The Road since Structure*, 105-20. In this article Kuhn rethinks his use of the term, revolutions, arguing instead for incremental changes in science. Instead of paradigm shifts, he sees sub-specialties of a research field arising. Thus, in this later work he likens changes in scientific knowledge and thinking to an evolutionary tree where different species can be traced back to a common ancestor.

30 See Margaret Masterman, “The Nature of a Paradigm,” in *Growth of Knowledge* (Cambridge, 1970) and Dudley Shapere, “The Structure of Scientific Revolutions,” *Philosophical Review* 73 (1964), 383-94, cited in Kuhn, *The Structure of Scientific Revolutions*, 174 note 4. Additionally see, Steve Fuller, *Thomas Kuhn: A Philosophical History for Our Times* (Chicago: University of Chicago Press, 2000).

science's historical development that cannot be overlooked.³¹ Kuhn thinks that science is more than a linear accumulation of knowledge. Rather, science includes a more dynamic process of historical development, growth, and transformation,³² consisting of starts, dead-ends, eureka moments, as well as the interplay between scientists themselves and societal, cultural, and religious worldviews, all of which influence new scientific insights.³³ If scientists are formed by social, cultural, and religious worldviews, then scientific discovery and knowledge only partially describe reality. This partial description of reality is due to what one's worldview brings into focus and the inability to foresee all future ramifications, uses, or effects of new information. For example, penicillin's discovery was a boon for treating bacterial infections. However, unknown at the time was the ability of bacteria to develop resistance to pharmaceuticals. Therefore, today we struggle to treat some infections caused by antibiotic resistant bacteria. Whether one views penicillin as a "miracle drug" or a treatment that *may* work against infection depends on one's historical era. Yet, in our era, the capacity to develop treatments for antibiotic resistant bacteria will require both normal and extraordinary science.

According to Kuhn, normal science's foundation is built upon accumulated scientific knowledge, facts, theories, and methods, which furnish a framework for subsequent scientific research. This framework includes operative assumptions about the world, the framing of questions, and a methodology for proceeding.³⁴ Kuhn observes that most questions, and the research to answer them, occur within the context of normal science. Yet, some scientists may engage in what Kuhn calls extraordinary science where attempts to solve or explain anomalies or crises within science often require new assumptions, new perspectives, or new angles of analysis.³⁵

This explanation might appear to indicate that a clear demarcation between normal and extraordinary science exists. In reality, "extraordinary" science still depends on the accumulated insights of the scientific community, while engaging innovative methods of analysis. This brief discussion about Kuhn's work is meant to illustrate that scientific knowledge is conditioned and subject to revision in light of new observations and new insights. As a result, scientific solutions to environmental issues will require drawing on methods both ordinary

31 Steve Fuller states this about his own work. See, *Thomas Kuhn*, 7. For another secondary source that details Kuhn's work and the development of his thought, see Paul Hoyningen-Huene, *Reconstructing Scientific Revolutions*, trans. Alexander T. Levine (Chicago: University of Chicago Press, 1993).

32 Kuhn, *The Copernican Revolution*; idem, *The Structure of Scientific Revolutions*; idem, *The Road since Structure: Philosophical Essays, 1970-1993*

33 Kuhn, *The Copernican Revolution*, 132, 133, 141; *The Structure of Scientific Revolutions*, 1-9, 140-3.

34 Kuhn, *The Structure of Scientific Revolutions*, 10-34. For background to the idea of "normal science," see Thomas S. Kuhn "The Function of Measurement in Modern Physical Science," in *The Essential Tension: Selected Studies in Scientific Tradition and Change* (Chicago: University of Chicago Press, 1977), 178-224. For additional work on paradigms, see Thomas S. Kuhn, "The History of Science," in *The Essential Tension: Selected Studies in Scientific Tradition and Change*, 105-26.

35 Kuhn, *The Structure of Scientific Revolutions*, 82-89.

and visionary, while remaining subject to future adjustments.

As a connection between philosophical discourses regarding science and metaphor and theological ethics, I am briefly going to examine the work of Thomas Kopfensteiner. He accepts the premise that scientific practice and research begin with cultural pre-suppositions, values, beliefs and epistemological structures, all conditioning the scientist's world view, their research projects, and methods. Kopfensteiner then applies this premise to moral theory, arguing that "there is no pre-theoretical observation, all observation is theory-laden."³⁶ Therefore, our observations of the natural world and human nature already have a framework or presuppositions and assumptions behind them. This does not mean, however, that norms or principles arising from our observations lose their relevance and weight for moral action. Kopfensteiner argues that the norm still offers guidance while remaining incomplete and needing further interpretation and explanation. The incompleteness of the norm exists for two basic reasons. First, the formulation of the norm could not foresee all future situations. Second, the meaning of the norm participates in the community's "effective history of moral insight and experience."³⁷ This means that norms as well as history have "an autobiographical dimension." In other words, the norm's meaning, how it is understood, applied, and interpreted, depends on the community utilizing the norm.

Hence, the norm is not always applied in exactly the same manner. Rather, there is an inherent dynamism between the norm and its application to moral situations. This dynamism reveals the need to "[focus] on the creative impulse of moral reasoning," in order to hopefully create "better alternatives of human being and acting in the world."³⁸ In other words, norms function analogously to metaphors, revealing and concealing various approaches to moral concerns and possible courses of action.

Kopfensteiner indicates that a metaphorical structure of normativity allows room for questions of history and new or deepened moral insights, while retaining insights and achievements already arrived at by a community. His argument that norms governing actions are metaphorical, revealing and concealing aspects of reality, require us to ask if our language about the environment functions in a similar manner. Is our language inherently metaphorical even when relaying scientific facts and data? If so, how does the transmittal of scientific information structure our views or interpretations of that data?

PART THREE: APPLICATION

This section explores examples of environmental language framing. This helps show how scientific language can function metaphorically since it evokes particular images, thus highlighting some features of reality or results of scientific research while ignoring or glossing over others. Various case studies illuminate

36 Thomas R. Kopfensteiner, "Science, Metaphor, and Moral Casuistry" in *The Context of Casuistry*, ed. James Keenan, S.J. and Thomas Shannon (Washington, DC: Georgetown University Press, 1995), 208.

37 Ibid.

38 Ibid., 213-14.

how the metaphors we use can help or hinder our ability to perceive moral problems and to motivate changed behaviors.

Many suburbanites have grass surrounding their houses, in other words, lawns. They often apply fertilizer to feed the grass and other chemicals to kill the “weeds.” It is this word weeds that I contend functions metaphorically to convey a variety of assumptions and values often unexplored in suburban America.

The Oxford English Dictionary has multiple definitions for the word weed. The word can mean “any herb or small plant;” it can be applied to “a shrub or tree;” it can describe “a plant that grows wild in fresh or salt water;” and it describes “a herbaceous plant not valued for use or beauty, growing wild and rank, and regarded as cumbering the ground or hindering the growth of superior vegetation.” It is this last definition, listed first in the OED, which has taken root in our imaginations and structures our approach to certain plants. For many, weeds are to be destroyed, uprooted, and eradicated. In the context of a food garden, where the aim is to grow plants for nourishment, eliminating plants (weeds) that prevent cucumbers, carrots, or other plants from thriving makes sense. However, in the case of a lawn the use of the term weed or weeds indicates unexamined assumptions regarding plant functionality, economic status, personal character, approaches to beauty, and our inability to see the ripple effects of our actions.

For example, one weed dreaded by many lawn caretakers is the dandelion. It is seen as disrupting the uniform lushness and height symmetry of the grass. Furthermore, abundant dandelion growth signals to some neighbors either a diminished economic status or a character flaw. The first assumption arises because it takes monetary resources to buy fertilizer and chemicals to control dandelion growth by killing them. Therefore, if one is not killing the dandelions surrounding one’s house, one must not be able to afford the chemicals to maintain the lawn. The second assumption regarding a character flaw stems from the belief that a responsible lawn caretaker will be responsible in other areas of their life. Therefore, if your lawn is not the requisite height, lushness, and green, you must not be capable in other areas of responsibility either. Neither assumption is necessarily correct. People with dandelions surrounding their house might have one or more operating approaches to dandelions. They might appreciate the color the dandelions provide at a particular time of year. They might consider time with family, work, and community activism time better spent than on lawn care. They might be aware of the affect of lawn care chemicals on soil, air, and water quality and therefore decline to use those chemicals. Other people might be making use of the dandelions as food or medicine.³⁹

Subsequently, the term weed, depending on its context of use, functions in different ways. It can describe a plant with a value in its ecosystem, its function as food for certain species (including humans), and its ability to provide splashes of color adding to environmental beauty. However, the term weed can also have

39 See the following article for the various nutritional benefits of the dandelion. <http://www.umm.edu/altmed/articles/dandelion-000236.htm> (accessed August, 2010).

negative connotations as something unwanted, problematic, and to be killed. In either case, the concept weed not only defines a particular aspect of nature, it functions as a metaphorical shorthand to convey a certain worldview inscribed with operating assumptions and values. In order to decrease or eliminate the use of chemicals on vegetation surrounding peoples' homes, their worldviews must shift to include a vision of weeds as beneficial plants, alternative images of beauty, and a new comprehension of middle class economic responsibility. There is evidence that this shift is beginning with the turn in many gardens, municipal areas, and suburban communities toward planting native and hardy species to decrease watering, fertilizing, and to minimize lawn cover.

The second case study is the BP Oil "Spill" in the Gulf of Mexico. I would briefly like to unpack two sets of word choices. The first is the use of the word "spill" and the second is the use of the "waging war" metaphor.

The term spill connotes upending a solid or liquid from a container onto a surface. Spills in common experience, whether at home or work, are visible, small enough to be manageable, quickly containable and they have an identifiable source. On the other hand, a leak may or may not be immediately visible, it might mean finding the source with difficulty, it may be small or large, and may or not be easily containable. Furthermore, the source of the leak might be in a different spot from where the results of the leak appear. Therefore, the use of the word spill to describe the BP oil leak is not only misleading, but it provides a specific framework for thinking about cleaning up the oil. Spill correctly identifies oil on the surface of the water, on vegetation, and animals. It would seem to indicate that when we remove the surface oil we are finished with our task. However, the term spill hides the reality that there is more damage to the Gulf region than simply surface oil to clean.

The term leak on the other hand, indicates not only the type of accident that occurred but reminds us conceptually that once the leak is plugged, work is only beginning. The reason for the leak must be addressed, one must investigate the distance the liquid travelled, and damage away from origination point must be repaired. Anyone who has fixed a leaking pipe at home knows it is usually more expensive and difficult to fix than a spill. Therefore, to speak of the BP oil leak in the Gulf triggers different conceptual frameworks than the BP oil spill. A leak requires a longer-term commitment for repair, a recognition that not all damage may appear immediately, and a larger monetary outlay. Thus, unconsciously or consciously, the more consistent use of BP Oil Spill feeds our collective impatience with the clean up and turns our attention away from the Gulf more quickly than using BP Oil Leak. Furthermore, spill might feed our collective sense that when the surface oil is removed all is normal in the Gulf, when we really have not adequately assessed the environmental damage.

The waging war metaphor to describe grappling with rig explosion, oil flowing from the broken pipe, and the effects of the oil in the Gulf also subtly shapes our comprehension of the problem, solutions, and time needed to recover from Gulf event. The language of war conjures images of battles. Battles are discrete, smaller events in the context of a larger project with a specific goal. They

usually have beginnings and endings. Therefore, this image of fighting a war in the Gulf of Mexico against the oil rightly draws attention to the reality that scientists should (and did) prevail in stopping the leak. There was a beginning and end. However, this battle image, and the idea of an end, conceals the ongoing need to consider our effect on various ecosystems and formulate plans whereby we cooperate with the way ecosystems function rather than in opposition to their functioning. Our relationship with the Gulf of Mexico ecosystem continues into the future, even after the oil is stopped; the relationship persists and does not end.

Furthermore, war has winners and losers. This raises a question regarding approaches to oil in the Gulf (and other technological failings that affect life on the planet): Is the idea of winners and losers the right framework? Scientists won against the pipe when they stopped the flow of oil; the pipe, so to speak, lost. However, winning and losing against a pipe draws attention away from how the water, soil, plant, fish, and avian life, as well as human livelihoods and health were affected by the spill. What does “winning” look like as far as they are concerned? Are they simply the “collateral damage” of war? Finally, war imagery does provide the potential to remind us that sacrifice is necessary to implement and complete a course of action. This can be a positive reminder that approaches to ecological questions and our commitment to changed behavior requires sacrifice.

CONCLUSION

In summary, section one focused primarily on explicating understanding of metaphor as neither a peripheral notion nor a linguistic style to convey information. Rather, metaphor was seen as helping structure both human cognition and meaning. Section two explored how scientific knowledge is not unbiased, but formed by cultural assumptions and values affecting our understanding and interpretation of new discoveries. The last section briefly examined how language affects our interaction with the rest of the created world.

Stemming from this work, our worldview and comprehension of our environment broadly conceived is based upon data and observation, but is also structured by meaning. Moreover, it is our traditions (religious, scientific, and cultural) that transmit meaning. Therefore, while supplying structure and a source of meaning for communities, traditions should not be embraced uncritically, but should be examined for what distorts or hinders genuine discourse and community.⁴⁰ The ability to excise distortions and impediments within traditions remains vital since what a community values becomes the impetus for acting. Thus, distorted values lead to distorted communal structures and patterns of unjust actions. These distorted values are often embedded in the language we use to describe events. As a result, our discourse and reasoning cannot be taken lightly

40 Jürgen Habermas, “A Review of Gadamer’s *Truth and Method*,” 213-44, and “The Hermeneutic Claim to Universality,” 245-72, both in *The Hermeneutic Tradition: From Ast to Ricoeur*, edited with an introduction by Gayle L. Ormiston and Alan D. Schrift (Albany, NY: State University of New York Press, 1990). For a comparison of Habermas and Gadamer on the question of interpretation, knowledge and bias, see David Ingram, “Jürgen Habermas and Hans-Georg Gadamer,” in *The Blackwell Guide to Continental Philosophy*, ed. Robert C. Solomon and David Sherman (Oxford: Blackwell Publishing, 2003), 219-242.

since it not only conveys information—it also conveys our values, assumptions, and motivates our actions. Our discourse also influences our interactions with the rest of creation.

As Gadamer articulates, reason cannot be separated from its historical context, horizons of meaning, or human finitude. Experience and insight turn upon each other.⁴¹ We are required, then, to be open to new experiences and willing to allow them to challenge our previously held beliefs.⁴² In this particular instance, experience would happen first, followed by reflection, insight and deepened self or communal understanding. Experience which opens up beliefs to challenge encompasses affectivity within its structure since the challenge to beliefs frequently manifests itself through affectivity as discomfort. Gadamer, with his hermeneutical approach to rationality and his discussion of the interplay between insight and experience, alludes to the distinction between scientific and moral rationality.⁴³ Thus, environmentalists and those teaching environmental ethics might want to consider how to incorporate experientially based assignments into their courses. Experience can disrupt operative worldviews moving a person to change their mind. Or an examination of how we describe environmental reality would help expose operative values and assumptions hindering moral action.

According to Klaus Demmer, transformation of action begins with transformation of thought patterns. Knowledge needs integration into moral reasoning with attention to both form and content (meaning).⁴⁴ The form would be how we promote knowledge and meaning, the language forms we use. Metaphors are helpful in this instance since they require comparison and contrast, as well as capturing our imaginations. Moral reasoning must be able to see what values and goods need protection and promotion. The result should aim toward the common good and the ability of all to live the gospel good news. Metaphors potentially permit us to tap the fecundity of our experience through their multi-layered complexity of meaning. This complexity of meaning includes the ability to jar us into perceiving reality differently, challenging our paradigms, creating fresh awareness about the world, while leading to transformed engagement and action.

41 Gadamer, *Truth and Method*, 341-79.

42 A theological assessment of this claim is made by Edward Schillebeeckx with his general explanation of experience, and his more specific analysis of contrast experiences. See Edward Schillebeeckx, *Christ: The Experience of Jesus as Lord*, trans. John Bowden (New York: Crossroad, 1993), 30-64, 818-21. For two studies which look at the relevance of this aspect of Schillebeeckx's thought for moral theology see, Brian V. Johnstone, "The Experience of Conversion and the Foundations of Moral Theology," *Église et Théologie* 15 (1984): 183-202; William P. George, S.J., "The Praxis of the Kingdom of God: Ethics in Schillebeeckx's *Jesus* and *Christ*," *Horizons* 12/1 (1985): 44-69.

43 Gadamer, *Truth and Method*. This distinction arises in his discussion of *phronesis* see 20-22, 312, 322, and 416.

44 Kopfensteiner, "Science, Metaphor, and Moral Casuistry," 209; "The Metaphorical Structure of Normativity," 331. However, Klaus Demmer's description of a perichoretic connection between theory and praxis implies more than a reciprocal relationship, indicating instead a penetration, an interweaving whereby the two factors remain unique with particular characteristics, but inseparable. Also see Klaus Demmer, *Moraltheologische Methodenlehre*, 128-133.