

# Respect and Empathy in the Social Science Writings of Michael Polanyi

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**ABSTRACT** Key Words: appraisal, anthropogenesis, calling, the determinist fallacy, evolutionary biology, fallacies, fourfold classification of deliberate choice, historicism, method, moral judgments, morphogenetic field, morphological rightness, Napoleon, natural respect, personhood, the rational person standard, the rationalist fallacy, rationality, responsibility, vitalism.

*This essay first explains Polanyi's theory of the evolutionary genesis of humanity's distinctive calling to strive to be rational. It shows how Polanyi envisioned human rationality as necessarily entailing a natural respect for other people. Finally, the essay shows how Polanyi shapes a method for a critical social science, which is consistent with his understanding of human rationality.*

## Introduction

Michael Polanyi's writings on human nature entail a theory of respect as a natural human passion. That is, human beings have both an innate sense of respect for one another, and an innate need to feel respected by other people. I defend this thesis in this essay. Polanyi's theory of respect, of course, has implications for what is traditionally known as "normative social theory," or theories as to how societies ought to organize themselves. I show that Polanyi's opinion on this matter is consistent with his theory of natural respect.

However, Polanyi's theory of respect also plays another central role in his thought on social science, which some readers may find surprising. While social scientists writing on methodology have often stressed "value-neutrality," Polanyi's approach to social science is shaped to its core by the principle of respect.

Much of Polanyi's writing is in opposition to what he called the "positivistic conception of science."<sup>1</sup> Polanyi understood this approach to knowing to assume, among other things, a mechanistic theory of nature, and the possibility of "objective," value-free knowledge, which can be obtained and verified by a set of methodological rules that any scientist could apply in a routine and mechanical fashion.

Polanyi rejected this idea of knowledge and of science as a "massive modern absurdity" (PK, 9). For him, the notion that scientific knowledge is different than, or superior to, the knowledge of values is way off base. Indeed, the positivistic "premises of science" are themselves a system of values (PK, 160 f). Across the fields of knowledge, including natural and social science, and the humanities, "the act of knowing includes an appraisal" (PK, 17). This appraisal is never "objective," but is always a matter of *personal skill and judgment*. Others may disagree with it, and it could be mistaken.

Polanyi understood this misguided positivistic theory of science to shape the premises of both natural and social science. He warns that positivism's "universal mechanistic conception of things may threaten completely to denature our image of man" (PK, 160). Thus, in Polanyi's view, there is not a sharp separation in the approach to the study of man, one "factual" and the other "valuational." He wrote, "our powers of understanding control equally both these domains."<sup>2</sup>

I define “social science” as the systematic effort to understand and explain human behavior. This aim is shared by the various fields of social science. Each field focuses on a distinct aspect of human behavior. Traditionally, these fields include anthropology, economics, geography, history, political science, psychology, and sociology. There is by no means complete uniformity of agreement as to the methods by which the social sciences are to carry out their task. Indeed, some have argued that there is no uniformity at all.<sup>3</sup>

Nevertheless, Polanyi assumed that, at the time of his writing, a standard theory of methodology existed for the social sciences. This approach was exemplified for him by what he called “behaviorism.”<sup>4</sup> By this term he meant to include all those approaches to the study of human, and animal, behavior that relied upon the “positivistic conception of science.” Polanyi rejected behaviorism especially because it imposes a “crippling mutilation” on its sentient, intelligent, and resourceful subject matter (PK, 381). He was not shy about stating the magnitude of his project for reshaping humanity’s understanding of knowledge and of science. He hoped that his writings would help “to establish a stable alternative to the objectivist position” (PK, 315).

I will argue that Polanyi has gone a long way toward fulfilling his project, at least for the social sciences. The materials needed to formulate a general approach for social science already exist in Polanyi’s writings. However, it is a “method” in a very qualified sense. For Polanyi, a method consists of a set of “rules of art,” or “maxims.” “Maxims are rules, the correct application of which is part of the art which they govern” (PK, 31). Polanyi asserts that the interpretation and application of methodological “rules” is always a personal act, depending on the education, skill, and other personal qualities of the person (PK, 123).

Thus, he does not preclude the possibility of a common approach for social science, but only warns his readers not to expect a mechanical application of that approach’s maxims. What then would the maxims, or rules of art, be for a Polanyian social science?

One maxim is that “indwelling, or empathy, is the proper means of knowing man and the humanities.”<sup>5</sup> Indwelling entails the “pouring of oneself” into the subject matter one seeks to understand (PK, 60 f). I examine Polanyi’s main book on the conduct of social science, *The Study of Man*. This short work models how his approach is carried out in practice. Among other things, he shows what it means to have a social science based on *appraisal*. The standard for this appraisal is humanity’s *calling*, including humanity’s natural respect for the members of its species.

My discussion will shed some light on what Polanyi meant when he wrote to Raymond Aron:

Let me confess, first of all, to the perhaps childish pleasure of being taken so seriously by a man of your distinction. But there is a good deal more than that in my reaction to your essay on *Personal Knowledge* in relation to Weber’s work. You will better appreciate the service which you have done to my thought by developing it in this direction if I tell you that the whole enterprise of *Personal Knowledge* was undertaken with a view to reconsider the social sciences.<sup>6</sup>

To make my case for how Polanyi has “reconsidered the social sciences,” I will have to start at the beginning – that is, the emergence of life from inanimate matter.

## I: Man's Morphogenetic Field

### A) Anthropogenesis

Among the most outstanding features of Polanyi's theory of evolution are his humanizing of the process, and his great enthusiasm for it. Polanyi portrays evolution not as a dry, mechanical process of chance mutation and natural selection, but as a grand drama, full of noble striving, success, and failure. Life did not arise from inanimate matter as an accidental confluence of causal factors, but as a "rebellion against meaningless inanimate being" (PK, 389). From its inception, life has emerged "to challenge the surrounding deserts of deathless inanimate matter" (PK, 389). Hence, although tinged with tragedy, due to the inevitability of death, life has a heroic purpose.

For Polanyi, "the first rise of living individuals overcame the meaninglessness of the universe by establishing in it centers of subjective interests" (PK, 389). By such "centers," he means organisms which can *feel* their needs and which have the agency and resourcefulness necessary to pursue the satisfaction of those needs. Self-interested pursuits gave them something to live for. However, this "first revolution was incomplete, for a self-centered life ending in death has little meaning" (PK, 389).

The emergence of humanity constitutes "the second major rebellion against meaningless inanimate being" (PK, 389). Polanyi distinguishes humans from other forms of life chiefly by our superior capacity for abstract and creative thought, the responsibility that gives us, and the enduring cultural works we have created. Human culture can be understood as an emergent property of human interaction. Indeed, the "calling" of man is to participate in the life of human culture. "When man participates in this life his body ceases to be merely an instrument of self-indulgence and becomes a condition of his calling" (PK, 389). While animals find meaning as "centers of subjective interests, the rise of human thought in its turn overcame these subjective interests by its universal intent" (PK, 389). Thus, human culture consists largely of understandings and practices that strive to transcend individual life.

What are the key elements of Polanyi's notions of "calling," "universal intent," and "responsibility"? Because our human calling is to strive for knowledge and beliefs that we can hold with universal intent, this "second revolution [i.e., man's emergence] aspires to eternal meaning" (PK, 389). Of course, human mortality and "the finitude of man's condition" render his aspirations hazardous. "Yet the precarious foothold gained by man in the realm of ideas lends sufficient meaning to his brief existence" (PK, 389).

Polanyi's theory of evolution as the "rebellion" of meaning against the meaningless entails a vision of the organic material of life as far richer in significance than the dominant "objectivistic" theory of organic matter as being no more than physio-chemical stuff. His is a theory of "living matter," as opposed to the lifeless matter contemplated by the positivistic sciences (PK, 343 f). For Polanyi, the very material of which a multitude of individuals are made is the living base for the emergent property of embodied meaning. In other words, there is purpose in living matter.

At its most basic level, the growth, development, and maturation of individual organisms entail a striving for "morphological rightness." This striving is an aspect of the organism's meaning. Clearly, living organic matter is not amorphous. Individuals always come in distinct forms, and follow a general pattern for their species. The

growth of individuals within a species, then, can be understood as “operating under the direction of a morphogenetic field” (PK, 389).

This “field” is contained within the “germ plasm,” or gene pool, of its species. The individual’s development follows “a line of force in such a field” (PK, 389). Each individual exists as a particular stage of realization along the lines of “the gradient of a potentiality” (PK, 389). Each individual’s form is made of the organic material of which it is constituted. This form, then, is “a biotic achievement” (PK, 402 f). That is, this shape is the current result of *the material’s* continuous striving to become what it naturally intends to become. In the individual, this is the process of maturation. Polanyi also suggests that the same principle of striving for morphological rightness can explain a wide diversity of biological events, such as the growth of an embryo, the repair of an injury, or recuperation after an illness.

In Polanyi’s “field concept,” the “morphogenetic field … is then defined as the agency,” which evokes and guides growth, etc. using “morphological rightness as its standard of achievement” (PK, 389). Polanyi seems to envision the impetus of fields as a base from which self-reflective consciousness (i.e., the capacity to feel needs), and deliberate efforts at need satisfaction, have emerged. “Though these [field induced] strivings [such as growth, recuperation after an illness, etc.] are continuous with the conscious strivings of higher animals, they are, of course, in general, neither conscious nor deliberate” (PK, 404). Therefore, “All the operations of the ‘tacit component’ … will be subsumed under this field conception” (PK, 389).

The aims of acting individuals, then, can be understood as operating within a nest of mutually supportive gradations of emergent levels of purpose. The higher level of aims includes such self-conscious deliberate activity as that of an animal hunting. Polanyi notes that “at the upper levels … centers are called upon to exercise responsible choices” (PK, 402 f). But the lower level of purpose, as we have seen, is more in the nature of organic matter itself. Starting from their conscious aims, living individuals, then, are animated by “ever further descending levels of sentient effort” (PK, 397). Or, to reverse the sequence, organic aims merge upwards into conscious purposes. In general, these aims share a life-affirming tendency in the organism.

Polanyi is fully aware that his account of the emergence of life as a “rebellion against meaningless inanimate being” (PK, 389), and of organic matter as aiming at “morphological rightness” attributes a form of intentionality, or purpose, to these processes. Such intentionality is strictly prohibited within positivistic biology, and generally dismissed as “vitalism.” But Polanyi is not apologetic about his stance. Indeed, he is as defiant of wrongheaded convention as life is defiant of meaningless death. “If this be vitalism,” he declares, “then vitalism is mere common sense, which can be ignored only by a truculently bigoted mechanistic outlook” (PK, 390).

Positivistic biology is unable to explain this awesome drama of intentional growth, regeneration, and action. So, Polanyi calls attention to this failure to account for the obvious mental dimension of living organisms, and sketches in some of the aspects of his new focus for biology. This new approach to evolutionary biology focuses on what Polanyi calls “the emergence of sentience and personhood” (PK, 402). Polanyi’s conception of “personhood” combines, like the Taoist Yin and Yang, the mental and physical dimensions of an astonishingly wide array of organisms.

In his examination of evolution, Polanyi is primarily concerned with “the contemplation of anthropogenesis” (PK, 393). That is, with the “rise of man,” as the self-conscious creator of human culture. Polanyi

acknowledges that scientists “do not know at what stage of evolution consciousness awakened” (PK, 388). But at some point it must have emerged. “Already some 400 million years ago, at a stage represented by worms, our ancestors had formed a major ganglion in the forward tip of their elongated body,” which could, among other things, “direct locomotion” (PK, 388). Gradually, as this section “acquired a controlling position,” a “gradient” was established “between the higher and lower functions within the organism” (PK, 388). In the process, a supportive “nervous system is formed to carry out ever more extensive and elaborate operations of self control” (PK, 388). An active center emerged, “which uses the other parts of the body for its sustenance and as its tools. Within this active center, the animal’s personhood is intensified in relation to a subservient body” (PK, 388).

Clearly, this process of evolutionary emergence was not all physical. Indeed, the emerging nervous system became the base from which mental operations emerged. Polanyi observes that over the long course of evolution there has been “a cumulative trend of changes tending towards higher levels of organization, among which the deepening of sentience and the rise of thought are the most conspicuous” (PK, 384).

Sentience is the feeling, or experience, which an organism has of itself. Therefore, when Polanyi mentions “the deepening of sentience,” he is referring to the gradual enrichment of the self-reflective experience of itself within individual organisms. As I indicated above, Polanyi admits to not knowing just when, in the course of evolution, an organism began to distinguish itself from its environs. Nonetheless, this capacity for self-reflection would eventually rise from the mere awareness of such simple needs as hunger, to the human contemplation of its own origins.

In “personhood,” then, there emerged an increasing capacity for means-end reasoning, and problem solving, based on the organism’s felt needs and knowledge of its environment. As examples of what the earlier stages in the evolution of personhood may have been like, he notes that contemporary protozoa “engage in a variety of deliberate purposive activities.” And, citing experts, “the amoeba hunts for food” (PK, 387). Such deliberative action presupposes, at least, a body with the capacities to feel its needs, and to learn how to act so as to satisfy those needs. Such action also entails a notion of agency, or self-guidance, which includes the ability to make choices based upon a combination of perceptions, learned knowledge, and personal judgment. As personhood evolved, more sophisticated animals became capable of feeling intellectual joy and frustration (PK, 388, 367).

Polanyi sees in the process of evolution, not mere clues, but “direct evidence” of the “rise of human consciousness” (PK, 386). This creative realization of life’s potential for self-reflective personhood has thus far resulted in “the cranial dominance which gives rise to the characteristic position of the mind in the body of man” (PK, 388). Thus, from “a seed of submicroscopic living particles – and from inanimate beginnings lying beyond these – we see emerging a race of sentient, responsible and creative beings” (PK, 387).

“Personhood,” for Polanyi, then, refers to the mental/physical complex system, which is the hallmark, the Yin and Yang, of every sentient creature. Its essential element is embodied mental capacities. It is a general conception in which humanity participates, not as the final realization, but only as the current stage of evolution. Because evolution is a process entailing a large measure of creativity, what the future will bring must remain uncertain.

A central theme in the story of evolution, then, is about the “growth and hardening of personhood” (PK, 388). If the evolution of personhood is understood to entail ever intensifying mental capacities in an

increasingly complex organism, then “man’s sudden rise from mute beasthood” (PK, 388) can be appreciated as an astonishing creative leap in evolution. Humanity’s capacity for symbolic representation, as seen in our thought and language, for example, have resulted in the creation of “a lasting articulate framework of thought” (PK, 388); in other words, human culture. It is this new capacity for language and thought, which are only developed in human society, that results in individuals with the ability to rise above “the self-centeredness of animal personhood” (PK, 388), to the unprecedented level of “the responsible personhood of thoughtful man” (PK, 395).

When he refers to humanity’s “responsible personhood” he means that, in his view, the human mind has an innate, or natural, orientation towards other members of its species that is quite unlike any other form of personhood. Thus, “at the highest level of personhood we meet man’s moral sense” (TD, 51). This capacity marks a unique stage in the evolution of personhood. In the rest of this essay we will explore some of the main implications of this difference in human personhood.

## **B) Man’s Calling and Responsibility**

In Polanyi’s view, humanity’s mental capacities *set for them* a distinctive human “calling.” He notes that “we are not responsible [for] our calling” (PK, 379, cf. 65 f). It is a part of our genetic inheritance. In other words, our calling is “determined … by our innate faculties” (PK, 379). Chief among these are our capacities for abstract and creative thought, and for language.

His notion of calling refers to the individual’s experience of “morphological rightness.” That is, our calling is an innate aim towards which we humans strive, at least when we are acting distinctively as humans. Humans act distinctively, or *rightly*, as humans when they engage in the pursuit of knowledge or beliefs which they can authentically hold with “universal intent.” This aim is in our organic form.

This calling emerged in evolution as a part of, as mentioned above, “the second major rebellion against meaningless inanimate being.” I have also quoted Polanyi’s statement that while animals find meaning as “centers of subjective interests, the rise of human thought in its turn overcame these subjective interests by its universal intent” (PK, 389). Thought is most distinctively human when it is “an active mental process, aiming at universality” (PK, 318). Thus, man differs from animals largely because he alone “aspires to eternal meaning” (PK, 389).

Man’s calling is most fully answered when he is dwelling in beliefs he holds with universal intent. This satisfies the “morphological rightness” for humans. Of course, no one can do this every moment. To be in the distinctively human state is an achievement, which cannot be constantly sustained. The alternative to that state seems to be conditions we share with animals. Several activities, such as sex, eating, drinking, eliminating, playing, and sleeping are obvious examples of aspects of living that humans share with animals. These events are different from dwelling in beliefs held with universal intent. However, these aspects of life are not necessarily degrading because they are shared with animals; indeed, some are quite noble. Animals and people experience a common pleasure at problem solving (PK, 122). Across species, a solution can be “something inherently satisfying” (PK, 127). Because of our superior capacity for abstract problem solving, we humans can, after making an effort, experience the “joy of grasping mathematics” (PK, 321). That is an elevated form of the pleasure in problem solving that we share with animals.

Thus, people have what might be called their “animal side.” While Polanyi does not use that exact term, he does make the distinction: “In a conflict between our appetitive and our intelligent person we may side with one or the other” (PK, 320). Thus, humans can *choose* to be in their distinctively human state, and this above all distinguishes humans from the animals. For, animals appear to be incapable of holding themselves to abstract moral principles, or of dwelling in an articulated belief with universal intent.

People may experience the calling of their morphogenetic field in various ways, and to various degrees, depending on the individual’s natural, and especially neurological, constitution. As part of their “morphological rightness,” some people may feel, as Polanyi strongly did, “an innate affinity for making contact with reality” (PK, 403). Other persons may experience this “affinity.” They may feel what Polanyi calls a “natural urge for achieving coherence” (PK, 301). Others may experience their calling less as an urge or an affinity, and more as a “sense of responsibility” (PK, 323, 324f). Thus, the “sense of a pre-existent task makes the shaping of knowledge a responsible act” (SM, 36). In any case, the individual, who is acting in his or her distinctive capacity as human, will strive to experience himself or herself as morphologically *right*. This striving is all we humans are called by our nature to do.

Polanyi also distinguishes between animals and humans by their respective responsibilities in life. The members of all species with the capacity to act are responsible for sustaining their lives. One decision to disregard a movement in the grass and to keep on grazing may cost a gazelle, for example, its life. Humans can make such misjudgments, too. But humans are also responsible for finding and articulating their beliefs as to what may be true and right.

“Human responsibility,” as with animals, involves the liability “to failure. For no responsibility is taken where no hazard is to be met, and a hazard is a liability to failure” (SM, 67). The distinctively human hazard is that one’s efforts to fulfill one’s calling may fail. One may strive, yet find nothing to believe in with universal intent. Or, one’s beliefs, held with universal intent, may turn out to be wrong. Knowing the risks, one can have beliefs held with universal intent, and “admit they could be mistaken” (PK, 145).

Polanyi realizes that finding the universal truth may appear “on reflection impossible of achievement” (PK, 324). Paradoxically, our striving to know with universal intent can only be undertaken within the limitations of our historical conditions. Our acculturation, or “our early upbringing within our culture” (PK, 379, cf. 322-324, 346), determines to a large extent what intellectual instruments we will have for the pursuit of our calling. Of course, we are also “limited by our innate capabilities” (PK, 322). Despite these limitations, the individual retains his autonomy, and can pursue his calling in his own way within a “milieu which conditions but never fully determines [his] actions” (PK, 397).

Speaking for himself, as he often does, Polanyi shares his self-understanding that “in spite of the hazards involved, I am called upon … to pursue knowledge and to declare it responsibly, within my own limited possibilities” (PK, 315, 373). Further:

I started as a person intellectually fashioned by a particular idiom acquired through my affiliation to a civilization that prevailed in places where I had grown up, at this particular period of history. This has been the matrix of all my intellectual efforts. Within it I was to find my problem and seek the terms for its solution (PK, 252).

Thus, for the rest of us, as for himself, the “historical setting in which we have grown up” can be accepted “as the assignment of our particular problem” (PK, 324).

Man’s calling does *not* require the *achievement* of “objective universal truth.” Instead, a sincere commitment is of itself “legitimate grounds for the affirmation of personal convictions with universal intent” (PK, 324). In other words, our personhood does not require a final achievement, but only that we *aspire* responsibly to understand what is true and right with universal intent. “Our personhood is assured by our simultaneous contact with universal aspirations which place us in a transcendent perspective” (PK, 324).

### **C) Respect as an Aspect of Universal Intent**

One of the theses of this essay is that, for Polanyi, human respect is an essential element of human personhood. That is, to act in one’s distinctively human capacity is to have respect for others, and to expect respect from them. This is not an “exchange theory.” For Polanyi, respect is not given, like a commodity, with an equal value expected as of right in return. On the contrary, for Polanyi, respect is naturally given in the very act of holding beliefs with universal intent. Respect for others, and the desire for respect from them, is a natural orientation of the human mind when it is operating as quintessentially human. Indeed, respect for all other human minds is a tacit component of universal intent.

This respect can be seen implicated by the communicative element in Polanyi’s theory of “universal intent.” Universal intent, for Polanyi, is one way by which individual humans relate to one another. That is, it is a way by which a person addresses other rational minds. The person engaged in thought is participating in human culture. This culture is largely the product of intelligent minds, sometimes great minds, acting to the best of their ability to, among other things, establish the idioms within which other persons may participate and contribute to, cultural meanings. Great minds have also set the standards by which knowledge is to be attained and validated. Humanity and human culture, or our “noosphere,” are of a dynamic piece; that is, the two interdependent dimensions of human personhood. “Our race as a whole achieved such personhood by creating its own noosphere: the only noosphere in the world” (PK, 389). Because of this participatory creative activity, human culture is a great communicative enterprise.

When understood empathically, Polanyi’s conception of “universal intent” is not just a *logical* category, for it entails a wide range of human emotions. For Polanyi, the communicative motive in universal intent includes a reaching out to others for their fellowship, or companionship. Such companionship need not be of an immediate physical presence, but can be only an intellectual agreement. The “conviviality” of this motive is a tacit component of humanity’s natural “intellectual passions,” as Polanyi understands them. For example, one of the primary intellectual passions in Polanyi’s understanding of the human mind is the “persuasive passion.” He calls it “the mainspring of all fundamental controversy” (PK, 159).

For instance, once a discovery in science has been made, “the ardor of discovery is transformed into a craving to convince” (PK, 171). That is, when a belief is held with universal intent, the holder becomes an advocate for its truth. This passion is a part of “a process of verification in which the act of making sure of one’s own claims is coupled with the efforts of getting them accepted by others” (PK, 171). A scientific researcher, then, who makes and declares a discovery, “endows … the results of such acts with a claim to universal validity. For when you believe that your discovery reveals a hidden reality, you will expect it to be recognized equally

by others" (SM, 36). The fruits of our "intellectual passions ... demand recognition" (PK, 195). People, it seems, appreciate recognition for having fulfilled their calling to contribute to human culture. Thus, the discoverer of a new truth may feel like "converting everybody to his way of seeing things" (PK, 150).

The "persuasive passion" faces a "logical gap." The discoverer with a new insight is separated from those who do not have that insight. His new knowledge distances him or her from the fellowship of others. Thus, his "persuasive passion spurs him now to cross this gap by converting everybody to his way of seeing things" (PK, 150). So, knowledge or beliefs held with universal intent are held with a concern for the companionship of others. This intention to bring others into the purview of one's truths is a key element of "the participation of the speaker in any sincere statement of fact" (PK, 254). The very assertion of a fact as a "fact," contains within it a "persuasive feeling" as a tacit coefficient of the assertion. Without that feeling, such an assertion "is a mere form of words saying nothing" (PK, 254).

To assert that "p is true" can be understood as a declaration to all other rational minds "that I identify myself with the content of the factual sentence p" (PK, 254). Thus, speaking for discoverers whose findings have been rebuffed, Polanyi writes, "we suffer when a vision of reality to which we have committed ourselves is contemptuously ignored by others" (PK, 150). The frustrated desire for recognition and respect can be painful.

The persuasive passion can "vary over all possible intensities" (PK, 305). In its most intense form, one feels that one's "vision must conquer or die" (PK, 150). The term "conquer," as used here, may seem more Nietzschean than Polanyi means. Rather than an expression of the "will to power," Polanyi's use of "conquer" leans more towards the sense of a suitor conquering the one whose heart is sought. It is companionship that one seeks, not prisoners of war.

Another important intellectual passion for Polanyi is the heuristic passion. This is the passion to solve problems, and to discover new insights. Like the passion to persuade, due to its universal aspirations, it, too, is oriented towards others, and not simply a self-indulgence, or for one's private self-satisfaction. In science, "the discoverer seeks a solution to a problem that is satisfying and compelling both for himself and everybody else" (PK, 301). Unlike the persuasive passion, the heuristic passion "sets out not to conquer, but to enrich the world ... it asks that its gift to humanity be accepted by all" (PK, 150). Clearly, both the persuasive and the heuristic passions entail an individual acting in a special kind of relation to other rational minds, a relation which both gives and expects respect.

There is another *communal element* involved in asserting a scientific fact, which Polanyi finds in himself, and observes in others. "I cannot speak of a scientific fact, ... of what is just or unjust, [etc.] without implying a reference to a consensus" (PK, 209). In all such matters, "I express what I believe the consensus ought to be in respect to whatever I speak of" (PK, 209). The phrase "reference to a consensus" suggests that, in Polanyi's understanding, when the individual scientist, or any other person, asserts a belief as true or right, he or she always acts with other people in mind, as a reference group.

As in romance, the passion to persuade others of one's truths may result in social conflict. In Polanyi's view, "All our cultural values are the deposit of a succession of past upheavals" (PK, 201). The accepted principles of science today are, therefore, largely the result of "great controversies and upheavals" in the past (PK, 170, 181). One consequence of these competitions to persuade is that our scientific outlook has been molded by "generations of great men, who overwhelmed the whole of modern humanity by the power of their convictions"

(PK, 171). Our society's current understanding of "science" consists of "a vast system of beliefs, deeply rooted in our history [which are] cultivated today by a specially organized part of our society" (PK, 171). These elites of science often act as arbiters in controversies, and determine how recognition is to be distributed.

Respect plays a crucial tacit role in Polanyi's theory of the transmission of culture. Much of culture is transmitted by the example of adults to youth. Young people absorb their cultural forms and lore by "pouring their minds into its fabric" (PK, 173). This requires a submission to authority. "To learn by example is to submit to authority" (PK, 53). The art of speaking, which is a large part of culture, is tacitly transmitted "from an authoritative person to a trusting pupil" (PK, 206). Such trusting submission constitutes the "fiduciary" relationship the young have with those teachers, masters, or other authorities (PK, 207 f).

Arts and crafts, including scientific research, are best learned through "personal contact" (PK, 53). As an apprentice to any kind of cultural achievement, you follow the master because "you trust his manner of doing things" (PK, 53). Clearly, authority without respect would lack legitimacy, and without respect trust could not be extended. Therefore, cultural teachers, as transmitters of a "fiduciary framework," are "listened to as a voice which commands respect" (PK, 174).

This discussion of intellectual passions suggests that universal intent may be an operation of cognitive faculties which have their roots in basic human social emotions. There are several threads tying universal intent and social emotions together in Polanyi's writings. Polanyi acknowledged the peak of social emotions when he wrote that "we know man to be the most precious fruit of creation" (PK, 385). He wrote more generally of "conviviality" as being rooted in "the primitive sentiments of fellowship that exist previous to articulation among all groups of men and even among animals" (PK, 209). Insofar as universal intent tacitly assumes an individual predisposed to experience care, concern, or positive regard for the thoughts and understandings of other members of his or her species, it may be an extension of social emotions into cognition.

There are many books on the neuro-bases of the human moral predisposition. Among these is Richard Leakey's *The People of the Lake*.<sup>7</sup> Leakey suggests that following the divergence from the common ancestor of hominids and primates roughly six million years ago, primates and hominids, while both highly social, took different paths in their modes of survival. Primates followed the path of individuals foraging in groups as their primary mode of survival. Today, as Franz DeWaal shows, primates do very little sharing of food among adults. They are still individual foragers, in effect separating economics from politics.<sup>8</sup>

But hominids have blazed a different trail. Just as social as primates, if not more so, hominids uniquely developed a division of labor for food collection, and food sharing among adults within their primary group. Individuals may have tended to breed selectively for characteristics for sharing, thus intensifying the natural care for others. Some selfish and uncooperative individuals may have been banished from the group, or shunned as less desirable breeding partners. In this way, sharing and cooperation could have become species characteristics bred into the hominid brain, just as species characteristics have been bred into the typical brain of any species. As humans emerged with their distinctively massive cortex, they inherited the social emotions typical of hominids. The capacity for abstract thought would, then, have emerged within a caring intentional structure as an extension of our innate social emotions.

In other words, Polanyi seems to complement such views as those of Leakey and DeWaal by envisioning respect for others as an integral process of human cognition, which naturally occurs as one person recognizes

the other as a human individual. The knower's recognition of another human *as human* is a cognitive achievement, while the other's ontological status as an individual human is a biological achievement. Natural respect is not a freely given reward for an achievement, but an innate cognitive function. (This notion of natural respect differs from prescriptive "natural law" theories in that it does not say how persons *ought* to regard one another, but how they do so, at least in the absence of a desensitizing socialization – which will be discussed further below, in Part II, B.)

#### **D) Indwelling with Respect**

Polanyi's account of anthropogenesis leads into his understanding of man's calling and responsibility. He acknowledges that his depiction of life striving for the intensification of meaning implies a type of vitalism. He knew painfully well that this view is anathema to the dominant paradigm in biology. Yet, he had the courage to declare that his "vitalism is mere common sense," and that the dominant school of biology has a "bigoted mechanistic outlook." In making these assertions, he seems quite sure of himself. He then goes on to *instruct* the dominant biologists that "biology would gain greatly in scope and depth by addressing itself more candidly to the fundamental features of life" (PK, 399). The principal feature he has in mind is personhood, the complex mental/physical unity that we humans share in various degrees with other living organisms.

Polanyi not only rejects the lifeless mechanistic "laws of nature" that positivistic biology relies upon, but he boldly proposes "new laws of nature, which would allow for the rise of consciousness in material processes" (PK, 397). Included among these "new laws of nature" must be "the assumption that living beings have peculiar faculties for achieving biotic success" (PK, 399). These "peculiar faculties" sustain the natural striving of an organism for "morphological rightness." Accepting this dimension of all organisms as fact is essential for explaining growth, regeneration, etc.

After considering the magnitude of such statements, one may wonder how he can know so much more than the securely entrenched, well rewarded, highly esteemed dominant school of biology. How is it that his "common sense" illuminates new vistas on life about which the positivistic biologists are apparently in denial?

The old saying, "what you see depends upon where you stand," helps to explain why Polanyi has such confidence in his new "suggested explanatory framework" (PK, 400). Polanyi takes a very different approach to knowing than the positivists. He refers to his approach as "indwelling." "All understanding is based on our dwelling in the particulars of that which we comprehend. ... Indwelling is also the instrument by which comprehensive entities are known throughout the world."<sup>9</sup>

This is a very empathetic approach. The observer makes an effort to dwell within the particulars of that which he is observing. He allows these particulars to become a part of himself in his effort to make sense of the subject as a whole (PK, 59 f). A skilful, personal integration of particulars is central to this process of observation.

In contrast, the positivist strives for detachment, as an alien observer who insists that the object is "out there," to be described and only known objectively. All he sees is the physical surface – whether things in motion, or living organisms. The extremists do not even allow themselves to imagine any sort of mental component in the objects they observe, not even the higher animals or other humans! For them the very thought of empathically dwelling in the mental component, or intentionality, of a subject is strictly prohibited by the rules of their interpretive framework. They only acknowledge the physical half of human personhood. But Polanyian

integrative indwelling permits awareness of mental components as natural parts of the whole of a living subject (PK, 372f).

One essential element of Polanyi's empathic approach is mutuality. That is, he does not address the living subject as an alien object with no human connections. To the contrary, he addresses other forms of life as manifestations of natural principles of which he too is a manifestation. "Biology is life reflecting upon itself" (PK, 347, 363). From this point of view, an embodied mental component, containing such factors as self-awareness, intentionality, resourcefulness, and agency, however rudimentary in scale, ties the human observer to all the life forms he encounters. As he writes, "Such indwelling is a participation of ours in the existence of that which we comprehend" (PK, x). A recognition and acknowledgement of some degree of mutuality between observer and subject, then, is an element of this participation. As I will show, Polanyi also uses the word "companionship" to refer to this intimate relationship between scientist and subject matter.

His theory of evolution as a process of "emergence," then, is not known to him in some alien, detached way; instead, this "kind of emergence is known to us from the inside" (PK, 395). In the Polanyian "method," the human observer *identifies* himself or herself with the embodied mental components of the subject. This *indwelling* enables the observer to comprehend the "sentient effort," or strivings, of other living organisms.

As an accomplished scientific researcher, Polanyi conveys his understanding of the intentionality of organic matter by reference to his personal experience. Anyone who has striven to solve a problem can use his or her personal experience to empathize with individual growth and the intentionality of "organic evolution" (PK, x). Thus, to understand these events "from the inside," Polanyi invites us to consider "the process of scientific discovery."

In that process, the creative discoverer "is guided by his intimations of a hidden knowledge. He senses the proximity of something unknown and strives passionately towards it" (PK, 396). Where this deliberate effort results in discovery, "it is achieved by a supreme intensification of uniquely personal intimations" (PK, 396). Such personal intimations, effort, skill, and creativity cannot be accounted for mechanistically, for, machines are insentient. (Cf. PK, 389 *passim*.)

As we have seen, the growth of individual organisms entails a kind of striving to fulfill the "morphological rightness" of their species. Empathic biologists can understand the experience of such a developing individual as analogous to "mental unease that seeks appeasement of itself" (PK, 398). In other words, the "sentient effort" of a maturing organism is like our own "sense of approaching the unknown solution of a problem, and the urge to pursue it" (PK, 398). Polanyi also suggests that one consider one's own experience of "the approach of a recollection" (PK, 400). One may experience these approaches as if on a line of gradations, like a sought word or name just on the tip of one's tongue. Often, "we can experience such gradients internally" (PK, 400).

Thus, Polanyi's way of knowing starts from different premises than those of the positivistic biologists. Such premises as the mutuality of personhood and embodied mental processes, make indwelling possible, and this indwelling leads to all sorts of new understandings. "It is from the logic of indwelling that I have derived ... the conception of a stratified universe and the evolutionary panorama, leading to the rise of man ..." (PK, xi). In "the logic of indwelling," Polanyi, as a living being, employs an empathic interpretive framework for understanding other living beings. His notion of "common sense" includes an appreciation for the mutuality

in the constitution of all living beings. Of course, this is a hierachal mutuality; that is, out of lower organisms a hierarchy of increasingly more complex and sophisticated organisms has emerged. Here, then, is the reason why he can know so much more about the nature of organic matter than the members of the dominant school of biology. He is committed to a different point of view. What you see depends upon where you stand.<sup>10</sup>

I have illustrated Polanyi's approach to understanding living organisms in my discussions of his theory of evolution and personhood. This approach can also be applied to the study of animals and humans.

Applying that approach entails bringing the particulars of a subject into one's own personhood, and absorbing and integrating the subject into oneself. Again, this process is highly empathic and personal in its application. Because the conduct of science relies on the personal judgment and personal characteristics of the particular scientist, it is "impossible to formulate any precise rule" of method, which can be carried out mechanistically and in the same manner by anyone (PK, 153). The methods of a science can only be stated as maxims, "the application of which itself forms a part of the art of knowing" (PK, 153).

In *Personal Knowledge*, Polanyi reinterprets behavioral studies of animal learning and problem solving from his own point of view. This provides numerous instances of how he applies his method of indwelling. First, he "disregards" their mechanistic model of explanation. Then he interprets the animal learning reported in their studies as "the process of discovery resulting from intelligent effort" (PK, 121).

One of Pavlov's experiments with dogs is an apt example. Pavlov deliberately frustrated dogs by presenting them with problems they thought would lead to food rewards if solved. But he made the problems too difficult to solve. The animals strained their ability to solve the problems to such a degree that it drove some of them into states of neurosis.

Without commenting on the ethical implications of the experiments, Polanyi interprets the behavior of the dogs with empathy. By extending a mutuality of personhood to them, he sees their behavior as showing "the depth to which the animal's person is involved" in such problem solving efforts. Through this indwelling "we realize ... that the intelligence of the animal and our appreciation of it was *convivial*: it formed a link between his person and ours" (PK, 367-368). Such "conviviality" entails an empathic integrating of the subject into one's human personhood, so as to understand, as Polanyi says, its "person." The application of this indwelling method "is thus accompanied by an expansion of our fellow feeling which makes us aware of the animal's sentience" (SM, 76). This "fellow feeling" is a direct result of assuming a *proportional*, or appropriate, mutuality of personhood. Polanyi says of his indwelling method that the "feelings by which we appreciate the achievements of beings lower than ourselves, involve an extension of ourselves by which we participate in their achievements" (PK, 378).

Polanyi acknowledges that indwelling from within the framework of human personhood entails "anthropomorphic imputations." These imputations are required in his method of interpreting animal behavior. He states that they are "deliberate," and can "be justified ... against behaviorist objections" (PK, 72). He provides some of these justifications in his discussion of evolution and personhood. We humans emerged from the same stock as our animal cohorts. Another justification is that the knowledge of animal behavior is far richer, and more commonsensical, from the Polanyian perspective than it ever could be from the alienated behaviorist view.

Polanyi's common sense leads him to his own notion of what it means to be a "person." Positivistic science attempts to study people with the methodological premises of physics and chemistry. But Polanyi rejects

this approach as only appropriate for lifeless matter. For him, a “science dealing with living persons appears now logically different from a science dealing with inanimate things” (PK, 344). A person has the capacities, among other things, “for understanding a meaning, for believing a factual statement … for reflecting on problems and exercising originality in solving them” (PK, 263). These, and other mental acts, all involve “an act of personal judgment” (PK, 263). Polanyi rejects positivistic efforts to reduce the functions of the human mind to those with the uniformity of a machine, like “a robot.” No such machine “can be said to think, feel, imagine, desire, mean, believe or judge something” (PK, 263, 389 f.). Polanyi insists upon a respectful model of man, and rejects any dehumanizing model of humanity, on the grounds of both factual truth and respect.

Polanyi’s method of indwelling begins with extending mutuality *from* the knower *to* the known. Already one can see in this extension of mutuality a strong suggestion of respect. Respect seems implicated because indwelling entails both an extending of oneself into the subject, and an allowing of the subject to become a part of oneself. Such *intimacy* creates an empathic relation, which Polanyi calls “companionship.”

For example, biologists can appraise the normal or abnormal characteristics of a specimen, its health or disease, with relative detachment; but when they consider the “sentience” of a creature, this “elevates our knowledge of the living being into a *critical meeting* of it” (PK, 363, 366). Then a “measure of companionship” exists between observer and subject (PK, 346). While Polanyi does not make the point explicitly, to me it seems that such companionship could not likely exist without some measure of respect for the subject.

The role of respect in indwelling becomes most apparent as the biological study of animals passes to the social scientific study of humans. For, “interpersonal relations become ampler as we deal with higher animals, and even more as we reach the inter-human level” (PK, 346). In this transition from the animal to the human subject, there is an “ascending from the I-It to the I-Thou and beyond it to the study of human greatness.”<sup>11</sup> This constitutes a qualitative change in the scientist’s “relation to his subject matter” (PK, 348). Now, the scientist encounters a fellow participant in man’s calling to know with universal intent through the idiom of his particular culture (PK, 348). “Mutuality prevails to such an extent here that the logical category of an observer facing an object … becomes altogether inapplicable. The I-It situation has been gradually transformed into an I-Thou relation” (PK, 346).

Respect, then, appears to be implicit, or a tacit coefficient, in the normal operations of our minds when encountering another human being with mutuality. In this person-to-person relationship, that is, when we study another person, “our knowledge of him has definitely lost the character of an observation and has become an encounter instead” (SM, 95, cf. PK, 346). Here, Polanyi uses “observation” to imply an artificial disregarding of the mutuality between observer and subject matter; not unlike, perhaps, a snub. He uses “encounter” to imply a more respectful and engaging relationship. He makes the same point when he notes that an empathic biologist engages in a “critical meeting” of sentient organisms (PK, 363). A psychiatrist, for example, takes an “I-It” superior position in relation to his disturbed patient so as to “observe the pathological mechanism in question” (PK, 263). “By contrast, to acknowledge someone as a sane person is to establish a reciprocal relation to him” (PK, 145). Likewise, “the characteristic encounter of an historian with an historical personage is continuous with the relation between the biologist and his living object” (SM, 93); i.e., steeped in the recognition of mutuality.

## II: Normative Social Science

### A) Respect in Human Rationality

As I have suggested, Polanyi's idea of what is morphologically right for humans entails the notion of individuals seeking knowledge or beliefs about what is true and right, which they can hold responsibly; that is, with universal intent. I have also indicated that one tacit coefficient of universal intent is the expression of respect for other rational minds, and the desire for their respect. In his main work, *Personal Knowledge*, Polanyi dwelt mostly on articulating the implications of knowing what is *true*. He only addressed the problem of knowing what is *right* as incidental to his primary concern. After the publication of *Personal Knowledge*, he started publishing essays, based on lectures about the problem of knowing what is "right." Here, he displayed the same boldness of thought that he showed in his thinking on science, evolution, and human nature. In these writings, Polanyi's conception of respect emerges into a central position.

For example, in *The Tacit Dimension*, he observes, "man's moral decisions form but a particular instance" of the general principle of "responsible human action" (TD, 52). This proposition is fundamental to Polanyi's moral thought. In this context, he means that "responsible human action" is aimed at answering man's calling to know what is *right*, in the sense of civic morality, as well as what is true, with universal intent. And in either case, one must operate within one's personal limitations, and with the idiom of one's culture. As I noted earlier, Polanyi has observed that "at the highest level of personhood we meet man's moral sense" (TD, 51). Thus, man's moral sense is one of the factors which distinguish human personhood from animal personhood. While "self-preservation" has been the rule among animals, the human "moral sense" opens up the "potentiality for obedience to higher demands" (TD, 52).

Polanyi never propounds specific "moral demands." Since he is clearly aware that morality, like scientific knowledge, must be articulated within the limitations of one's cultural idiom, he writes that "man's moral sense" is "guided by the firmament of his standards" (TD, 51). This "firmament" includes the individual pursuing his or her calling within his culture, and with his personal skills, limitations, etc. As in science, great minds can contribute insights that lesser minds would have never known without them. Thus, as people act within their distinctively human calling to know what is *right* with universal intent, their natural respect for other rational minds will rise, or intensify, to include "the capacity to feel reverence for men greater than oneself" (TD, 52).

As I have suggested, Polanyi's notion of universal intent contains within itself a natural respect for others as a tacit coefficient. In his comments on morality, Polanyi elevates that tacit component to the level of an articulated principle. People acting in their distinctive human capacity display their natural respect for one another. Of course, Polanyi was aware, as are we, of the all too numerous instances of humans failing to demonstrate their capacity to respect one another. Nevertheless, "Even when this appears absent, its mere possibility is sufficient to demand our respect" (TD, 51). In other words, for Polanyi, the mere status of human personhood is sufficient grounds for a person to be worthy of the respect of others. For, "however greatly we may love an animal, there is an emotion which no animal can evoke and which is commonly directed toward our fellow men" (TD, 51). That emotion is respect. I will expand upon this thesis in the remainder of this section.

"Respect" is a form of positive regard. Of course, positive regard can take many forms. For example, to have an interest in something is to show some positive regard for it. Simply by focusing one's attention on

one subject out of the multitude, one gives preference to it. But, respect is a different kind of positive regard. Polanyi distinguishes “respect” from other forms of positive feelings. Polanyi sought in several different forms of expression to distinguish his notion of respect for humans from the positive regard one may feel towards an animal, or a thing, or an idea. He distinguished “animal love” from human respect a second time when he wrote, “Animals may be lovable, but man alone can command respect, and in this sense we humans are the top of creation” (SM, 59). Later, in the same essay, he emphasized the point by commenting, “I have said before that man is the only creature to whom we owe respect” (SM, 86).

Even in *Personal Knowledge*, where he was not directly concerned with exploring man’s moral sense, Polanyi wrote that unlike with animals, “we owe respect to our fellow men. Hence we know man to be the most precious fruit of creation” (PK, 385). This quotation also shows that his conception of human respect had long been a part of his thought.

Polanyi tied to make clear that human respect was special. After he wrote, “man is the only creature in the world to whom we owe respect” (SM, 86), he added that this “respect” is a different “appreciation” from “that accorded to the harmonies of the inanimate world or to the excellence of lower forms of life” (SM, 86). Again, Polanyi distinguishes between respect for the truth and respect for the person when he writes, a man will “demand respect for himself on the grounds of his own respect for the truth” (SM, 62). Thus, Polanyi clearly intends to focus on a special kind of positive regard, different than that we feel for animals or ideas, and which humans “owe” only to one another.

As I have noted, Polanyi does not regard respect as a kind of commodity that people exchange, or withhold, from one another. Yet, his use of such phrases as “man alone can command respect,” or can “demand respect,” or that “we owe respect” to other people, may seem to put his notion of respect for persons on a deontological basis. But Polanyi does not regard respect merely as a duty. So, one may ask, what does he mean by “owe”?

First, let us be clear about what his conception of owing respect is *not*. His use of the word “owe” is not, like a debt, an obligation one voluntarily incurs, as by making a promise. Nor is this “owing” of respect simply his own humanistic, yet arbitrary, personal commitment. He does not base this “owing” on any articulated religious belief, although he does observe that for some Europeans “Christian aspirations spilled over into man’s secular thoughts” (TD, 57). Nor is it a pragmatic principle based on the assumption that social and economic order would not be possible without mutual respect. His theory that respect is “owed” between persons is not grounded on a social contract theory; although his special theory of the “republic of science” perhaps has social contract implications. Respect is not given as a kind of reward for good behavior. Instead, as we have seen, respect is a natural part of man’s “moral sense” as a “higher demand” than the biological strategy of “self-preservation” (TD, 52).

What, specifically, then, is the basis for Polanyi’s use of the word “owing”? His use of the word “owe” is unlike the uses of that word in many other moral theories. In common practice, that word does have other uses. For example, one might say “owing to the weather we did not go hiking.” In this sense, “owe” means “because of.” Polanyi, then, can be understood as meaning “because of” a person’s humanity, respect is due him or her; thus, “we owe respect” to man *because* he is “the most precious fruit of creation” (PK, 385).

In this usage, “owe” can also be read to imply “merit,” or that which is “fitting,” or “appropriate;” and, I suggest, “natural.” In other words, as I discussed earlier, the feeling that respect is apropos of another person emerges unconditionally, when one rational mind recognizes the human rationality, or “sanity,” in another. Indeed, “We acknowledge the sanity of another man’s mind by paying respect to him. By this act of *appreciation* we enter into a *fellowship* with him and acknowledge that we share with him the same firmament of obligations. This is how we come to *understand* it and accept it that he is a person capable of responsible choices” (SM, 66).

Thus, respect naturally *flows* between those people who acknowledge one another’s human rationality. Such an acknowledgement requires empathically extending one’s own rationality to the other, and this places one person in an I-Thou relation with the other. For, to know another person as rational, one must dwell intimately in the particulars of that person, and, as we have seen, such indwelling implies respect.

Human rationality, for Polanyi, is both the aim of man’s calling, and the means by which people can answer their calling. Hence, “Man’s responsibility to standards of truth and rightness establish him as a rational person” (SM, 90). But this is not the rationality implied in Aristotle’s aphorism “man is the rational animal.” That “rationality” contemplated an Aristotelian conception of detached, logical thought, such as “A is not non-A,” the law of consistency in syllogistic reasoning, etc. Later, in the early days of science, “rationality” became a program of systematic doubt.

For Polanyi, humans can and do use logic, but within the context of a vast “tacit dimension.” This dimension contains indeterminate aspects, such as personal judgment, personal skills, intellectual passions, and hunches and intuitions, which one cannot fully articulate. Within Polanyi’s broader conception of “rationality,” people pursue knowledge that they need not doubt, but which they can *believe in* with universal intent. And, as we have seen, striving for such beliefs necessarily entails respect for others.

Such respect also distinguishes human rationality from the problem solving, practical, means-ends rationality, which is prefigured in animals. Human practical reasoning is not different in kind from that in animals, except that it may be used in abstract thinking, and may be tempered by man’s moral sense. Therefore, distinctively human rationality necessarily involves human respect, and to be “a rational person” is to make decisions, and undertake actions, which manifest such respect.

The foregoing discussion has shown that Polanyi ties the human moral sense to human rationality in many ways. Indeed, for Polanyi, to be *rational* is to be *moral*, just as to be moral is to be rational. This is what is *morphologically right* for humans. It is the ultimate answer to “man’s calling.” In other words, Polanyi is suggesting a non-supernatural, biologically evolved, basis in human nature for the future articulation of moral systems within the idiom of particular times and places. As he says, “modern man’s critical incisiveness must be reconciled with his unlimited moral demands, first of all, on secular grounds.”<sup>12</sup>

Thus, questions as to what is moral can be answered rationally. Both morality and rationality, like matters of fact, are subjects of appraisal. And this is the link to normative social science. For, if, as Polanyi says, “Man’s responsibility to standards of truth and rightness establish him as a rational person,” then the term “rational person” can serve as a standard of appraisal for all human behavior.

## B) The Desensitization of Respect

If a Polanyian social science is to claim that respect is a natural predisposition for humans, then it must also explain why there are so many instances of human behavior that seem to show little or no respect between people. Nazis certainly showed no respect for the Jews and others whom they executed.

But evidence of malice need not be interpreted as refuting the claim of natural respect between people. It only shows that the natural respect can be easily overridden by cultural factors. Campaigns of hatred, scapegoating, and persecution are commonplace throughout history. Desensitization to one's natural fellow feeling for others can be taught and learned – for both good and ill. On the good side, medical students must learn to become desensitized to what Polanyi calls the “physical sympathy” naturally occurring at the sight of another person's terrible suffering. Surgeons and their nurses must become desensitized to the sight of surgical operations. Trained as a physician, Polanyi knew that even “experienced doctors may faint or get sick at the sight of a deep incision in the eye of a patient” (PK, 205). Such “physical sympathy” seems to be an expression of a natural compassion, caring, and respect for others, to which one must become desensitized if one is to successfully function in certain social roles. Professional detachment can also be seen in the psychiatrist or physiologist who regards his or her patient as a mechanism so as to help the patient.

Similar training may be required for otherwise ordinary people to be capable of engaging in *evil* actions. Polanyi comments that “the most determined criminals are liable to be effected by physical compassion” (PK, 205). The Nazi, Heinrich Himmler, was the son of a pious, Roman Catholic schoolmaster who had once been tutor to the Bavarian Crown Prince. Before World War II, Himmler was an ordinary fellow who studied agriculture and raised chickens. After becoming the head of Hitler's Gestapo, he decided to test the process of killing Jews. So he ordered that 100 Jews be killed in his presence. Citing historical records, Polanyi relates that Himmler “came near to fainting at the sight” (PK, 205). Polanyi goes on to explain that one of the reasons for adopting the gas chamber method of executions was to reduce the bad feelings of *the executioners* (PK, 206). Ironically, natural compassion seems to have been so ubiquitous among the Germans that the engineers of the death camps felt compassion for the executioners, even as the executioners were unable to fully suppress their natural compassion for their victims!

The very necessity of using cultural methods to thus desensitize people, strongly suggests that the persons so trained originally had a natural compassion that comes with having a natural respect for other members of the human race. Of course, learning can be a two-edge sword. That is, while desensitization of compassion, or physical sympathy, can be learned for good or for ill, as for example from a pathological teacher, so can the refinement of respect be learned.

Polanyi often acknowledged the capacity of humans for learning. He wrote, for instance, that “Although our fundamental propensities are innate, they are vastly modified and enlarged by our upbringing” (PK, 267). Humans can educate their natural desires and emotions, such as “when we control and refashion our appetites in conformity to social custom” (PK, 320). The study of art and music shows the possibility for “the improvement of sensuous discrimination by training” (PK, 319, n. 2).

We read Polanyi's comments on sensitivity refinement, then, as setting the agenda for his normative social science. Indeed, he was quite explicit about this educational function in *The Study of Man*, where he

modeled the method that a normative social science must follow, if it is to be rational. Let us, then, examine that model.

### C) Respect in Dramatic History

For Polanyi, “the study of man must start with an appreciation of man in the act of making responsible decisions” (SM, 71). He adds that the “most striking examples of human decisions are recorded by history” (SM, 71). He is especially concerned with those “political actions profoundly affecting the framework of existing power” (SM, 72). Great persons often spearhead these moments. Polanyi refers to the study of their careers as “dramatic history.” Hence, “it is dramatic history that represents the most intimate approach to [understanding] the responsible decisions of man” (SM, 78). Polanyi’s discussion of “dramatic history,” then, is his vehicle for illustrating how a normative social science can proceed.

One “distinctive task” for the historian “is to understand the responsible decisions of historic personages” (SM, 91). This first requires that a decision be appraised as “responsible.” When an historic figure does act responsibly, the main explanation for this action is that he or she has acted naturally as a “rational person;” hence, their actions will have had *reasons*, which other rational persons can agree were *rational*. The historic person can be understood as having answered his or her particular calling to fulfill the elements of human morphological rightness.

When a decision is appraised as not being rational, the historian may then leave to others the task of explaining the *causes* of this aberration from the norm for man. Understanding and explaining the causes of “pathological behavior … lies outside the historian’s distinctive task” (SM, 91). A neurologist or psychiatrist is better suited to explain the “pathological behavior of a Tiberius or a Hitler” (SM, 91). Thus, when behavior “cannot be understood at all in terms of reasons,” the skills of another profession may be necessary to find the aberrant behavior’s causes.

A quotation given above is worth repeating as an important maxim of a Polanyian social science. That is, “Man’s responsibility to standards of truth and rightness establish him as a rational person” (SM, 90). The historian, then, first looks for the rationality in the behavior of the actor under study. In effect, humans are presumed rational, until proven otherwise. In the very act of identifying behavior as “rational,” the historian is appraising that behavior. Historians must ask several probing questions in the course of their inquiry. These will include asking whether the behavior on record is the sort of behavior that “a rational person” would have engaged in under these circumstances. If that behavior rises to the level of “rational,” the historian may further ask whether it does so only minimally, or brilliantly exceeds the minimum of rationality, or falls along a gradient somewhere in between.

What I call “the rational person standard,” then, is universal in the sense that human nature is universal. But it is not an ethical commandment. It is a descriptive category, in the same sense as a biologist determining when a tadpole has become a frog. The application of this rational person standard requires the personal judgment of the historian. That judgment will have been educated by the historian’s apprenticeship to the traditions of the field. And the field will have been enriched by the great minds that have contributed to it. Although opinions may vary, it is the general agreement of the connoisseurs, or experts, in the field that determines whether the historic person has acted rationally.

All fields of inquiry create their own standards. For example, as Polanyi points out, animal psychologists have developed standards for the appraisal of an animal's behavior as "feeding." This action can be described as correct or mistaken. "Good feeding," then, would be the act of eating nutritious food. But eating some substance with no nutritional value would not be considered a proper act of "feeding," especially if it was poisonous! Sometimes only an expert can tell the difference. For example, an expert might recognize that an animal eating soil is actually ingesting minerals it does not obtain from plants. But an untrained observer might think that the animal had lost its mind (PK, 361 f). Hence, the setting of standards is not an arbitrary process, but based upon experience and reason. In the same way, historians can develop an eye for gradients of rational behavior.

Normative social science, then, must develop standards by which to appraise the rationality of the historic person's behavior. Polanyi has modeled how this is to be done. In *The Study of Man*, he sets out maxims to guide the historian's judgment as to whether, and to what degree, a decision can qualify as that of a rational person. This is his "fourfold classification of deliberate choice" (SM, 77). I will illustrate these principles with examples that are not Polanyi's to highlight some of the difficulties involved in the application of the principles to actual events.

The first category, as I mentioned above, is for those decisions that have been identified as rational. To win the American Revolution, for example, George Washington sometimes paid soldiers out of his own pocket. This was a self-sacrifice he endured for a larger cause. It was rational in a "means-end" sense, because he needed Colonial soldiers to fight the British. But he was not *required* to pay them himself. He could have ordered them, at bayonet point, to fight. Instead, the respect for others that is tacit in normal human reasoning led him to make that personal sacrifice. Rather than callously command, he considerably facilitated the participation of his soldiers.

The next three categories constitute "fallacies" the historian might find in the decisions of historical actors, when the historian is "evaluating historical actions" (SM, 87). The first of these is for decisions that constitute "an error based on an otherwise correct interpretation of experience" (SM, 77, 87).

While Polanyi does not give this example, I will use a current event to illustrate his point. That is, political leaders in the United States knew from past experience that Iraq's Saddam Hussein was a dangerous dictator. He used weapons of mass destruction on his own people. A man who is a danger to his own people may be a danger to the United States; especially since the US recently drove his military out of Kuwait. When purported clues appeared suggesting that Saddam was stockpiling more weapons of mass destruction to use against the US, or its allies in the region, the US military was ordered to engage in a preemptive war. Later, the reasons for the war were found to be in error.

Of course, this matter is controversial. Was the 2003 invasion of Iraq a rational decision? Some historians have suggested that if the responsible decision makers had had more respect for the lives of Iraqis, they would have shown more caution in reaching their conclusions about the reality of the danger facing the US. Other historians do not fault US leadership for its lack of rationality. Just as Churchill said of Neville Chamberlain, timidity at a time like that could cost American lives. In this view, the US government indeed acted quite rationally to protect American lives, given the available information at the time. Notice that respect for human life is an element for both pro and con arguments as to the rationality of the invasion. This matter is currently unresolved. However, as I have suggested, science often proceeds by controversy and history no less so.

The next fallacy of historical actors involves the “rational applications of an unacceptable framework” (SM, 87). For example, Aztecs once thought that their gods required human sacrifices in exchange for good crops and good fortune generally. While this is widely regarded nowadays as an unacceptable framework, historians might attempt to argue plausibly that the Aztecs *rationally* applied that framework by offering their gods human sacrifices. But this raises the question as to when, if ever, killing other people is “rational.” A good faith and reasonable belief that killing someone was necessary for self-defense may be justifiable, and considered “rational.” But to the extent that “rationality” entails respect for other people, one may question whether any killing of another is “rational.” The case of the Aztecs appears to leave the question unresolved as to whether they acted along the lines of a “gradient” of rationality, as the man who kills in self-defense; or, did they, like Hitler, act pathologically?

The last fallacy is for “pathological actions” (SM, 77, 87). For example, Hitler’s claim that the Jews were responsible for all the economic woes of Germany at the time is an unacceptable framework, based on the facts alone. Numerous bad decisions by German leadership, not the least of which were the choices resulting in World War I, were the causes of Germany’s economic decline. But even if there were Jewish bankers who engaged in unfair lending practices, Hitler’s “final solution” was so far from being a rational application of an unacceptable framework that it was entirely pathological – a complete breakdown of rationality.

Of course, historical actors are not the only ones who may commit fallacies. Historians, too, can think fallaciously. As we have said, for Polanyi, one “distinctive task” for the historian “is to understand the responsible decisions of historic personages” (SM, 91). This “task … to understand,” of itself, implies standards for rational professional conduct. Polanyi outlines three ways by which these standards may be breached. He calls them the “three types of historical fallacies” (SM, 87).

One is the “rationalist fallacy” (SM, 88). “History may be written by applying our own standards, without allowing for the differences in the historical setting of the acting persons” (SM, 88). This is poor “history” because it avoids the special task of the historian which is *to try* to understand the rationality in the actions of historical actors, who acted in the context of their own time. This is a fallacy because it lacks any effort at empathetic indwelling. In short, such lazy “Monday morning quarter-backing,” with the benefit of “20/20 hindsight,” does not make good history writing.

“Historicism” is a second fallacy. Polanyi calls this “an extreme … relativism.” It simply judges “past action by the standards of their own time” (SM, 88). This is unacceptable because one of the historian’s responsibilities is to appraise the “rationality” of the actor’s decisions. To uncritically accept all decisions as rational amounts to an abdication of the professional responsibility *to try* to understand the rationality in the actions of historical actors. While Polanyi does not use the term, historicism seems to be another type of intellectual laziness. As Polanyi observes, all normal people, including historical actors and historians, have some mental ability for formulating their own opinions as to what is true and right, and their calling is to exercise that natural capacity. Also, responsible action may sometimes have to rise above convention in order to qualify as rational. One of the historian’s tasks is to recognize such moments.

Third is “the determinist fallacy” (SM, 88). Here, all moral responsibility is effaced, and “all actions appear determined by impulses of power and profit” (SM, 88). This is a complete abdication of the historian’s task to try to understand the rationality of human behavior. Human behavior is merely clockwork. Thus, human

agency and rationality are mutilated in the process of making mechanistic explanations of historical actions, and otherwise sane people are made to appear insane by their one-dimensionality.

Each of these three fallacies fails to apply Polanyi's method of empathic indwelling. However, Polanyi advises historians that a "balanced respect for man avoids all three fallacies" (SM, 89). The rationalist fallacy can be avoided "by admitting the indispensable biological and cultural rootedness of all free actions" (SM, 89). Every rational person must act through the medium of his or her body, and times. A people can act in a rational manner, even though their actions might not conform to the ideals of a much later culture. While Polanyi does not use this example, consider the "democracy" of the Ancient Athenians. It was dependent upon slave labor to give the citizens time to participate. Clearly, this political system lacked a full measure of respect for mankind. However, the Greeks surely acted along some substantial "gradient" of rationality in shaping their system of self-government. For modern folks to deny that the Greek system qualified as "rational," because it rested upon slavery, would be to commit the "rationalist fallacy."

The relativist fallacy is avoided "by acknowledging that each man has some measure of direct access to the standards of truth and rightness" (SM, 89). In other words, every sane person has the capacity, based on his or her natural respect for others, to judge whether current policies or practices rise to the level of rationality. Making such judgments is man's calling. In this sense, a rational person can reasonably be held to a standard that transcends his own time. To deny this human calling and capacity, and simply judge actions by the standards of their time is to commit the "relativist fallacy." And, of course, the "determinist fallacy" is avoided simply by acknowledging the agency, resourcefulness, and responsibility of the human mind.

Polanyi only offers some limited examples of the application of his historical method. He comments that a "correct judicial decision is an action that can be explained by its reasons" (SM, 91). It is well known in the practice of law that reasonable minds can disagree. In such cases, each side can acknowledge the rationality of the other. But if a judge has some neurological disorder, or perhaps even indigestion, the gradient of rationality in his decision may be diminished. And where there is a clear miscarriage of justice, one can look for its causes. These may include a severe mental disorder, or a succumbing to a "degrading temptation," such as racism or corruption.

Polanyi engages in a critical application of the rational person standard when he turns his attention to Napoleon. When historians study a great person's career, they may do so with "reverence" (SM, 96) for the actor's genius. "Historians are," however, "concerned predominantly with the moral and political greatness or shortcomings of historic personages" (SM, 87). Responsible historians, then, will not simply admire all that Napoleon has done, but will ask whether Napoleon acted as a rational person would have acted under the circumstances.

One of the questions that Polanyi confronts Napoleon's behavior with is, "how far Napoleon was responsible for the wars waged by France under his leadership" (SM, 78). One must also inquire as to Napoleon's reasons for his actions, and appraise their rationality. Also, "to appreciate Napoleon's motives you must put yourself in his position and re-live his thoughts" (SM, 79). Of course, "the result of such indwelling will depend to some extent on the person who enters on the indwelling" (SM, 79). Each historian has to exercise his or her "own moral and political judgment in respect of these subjects" (SM, 87). Studies of the writings on Napoleon show that historians who write with feelings "of national pride or anti-clericalism favor Napoleon, while anti-

militarism and religious feelings speak against him" (SM, 79). In this sense, unlike in the natural sciences, "the writing of history is itself a process of history" (SM, 79).

Characteristically, Polanyi is not shy about expressing his personal judgments about Napoleon and the historians who praise him. Polanyi is contemptuous of the "admiring historian" who "studies Napoleon as his disciple" (SM, 205). Their error is a type of "historicism." Rather than thinking for himself, that kind of historian "participates, in fact, in a cult" (SM, 95, cf. 98). These historians irrationally raise "Napoleon's figure" to that of "an ideal of ruthless greatness" (SM, 95). This image has inspired numerous anti-heroes in "Continental literature." Nietzsche irrationally portrayed Napoleon as "the embodiment of the noble ideal of uniting the brutish with the more than human. From Nietzsche the cult passed on to our own days, right down to the frown of Mussolini and the forelock of Hitler" (SM, 96). While reverence is an appropriate feeling for greatness, such "an admirer may be mistaken in his choice of a hero" (SM, 96).

Polanyi does not offer a systematic evaluation of Napoleon's career. His use of such terms as "ruthless," "brutish," and "cult," and his mention of Mussolini and Hitler, clearly suggests that Polanyi sees Napoleon as having failed to measure up as a "rational person." However, Polanyi does not reach the finer points of assessing whether Napoleon acted upon an error in the application of a reasonable set of beliefs; or, a correct application of an unreasonable set of beliefs; or, was moved by a pathological personal ambition.<sup>13</sup> Such an intricate analysis, however, was not his purpose in *The Study of Man*. His main point in that little book was to show the means by which historians can lead the way in the formulation of reason-based moral standards. And this he did well.

## Conclusion

As mentioned earlier in this essay, the study of human morphogenesis in evolution (i.e., "anthropogenesis") leads to the comprehension of man's morphological rightness, as determined by our species's morphogenetic field. This field operates in human consciousness as man's calling. Since man's calling is to strive to be rational, every actor's behavior constitutes an *achievement*, which can be described along a gradient of "rationality." Therefore, how well man fulfills his biological form is, at least in principle, measurable.

Man's calling — to use his powers of reason to find beliefs, which he can hold with universal intent — governs all of man's intellectual endeavors, including science and morality. Polanyi states that in his discussion of morality, he has not crossed "the frontier which is said to separate sharply the knowledge of facts from the appreciation of values" (SM, 37). Scientific judgments are based on the appraisal of factual claims, and moral judgments are based on the appraisal of the *rationality* of actions. Hence, "our powers of understanding control equally both these domains."<sup>12</sup> In science, claims to know, made with universal intent, imply respect for other persons. The judgments of morality are based on the very same respect for others.

Polanyi humanistically envisions "man himself as the seat of all knowledge; and ... man as the source of moral judgment and of all other cultural judgments" (SM, x). But Polanyi is no moral relativist. Man's personhood, which includes his calling, provides the premise of natural human respect to guide both the formulation, and appraisal, of moral principles.

Although our calling is rooted in our biological embodiment, Polanyi notes that the "distinctive qualities of man are developed by education" (SM, 59-60). Hence, man's moral sense can be educated. One means of moral

education is to find heros, or great persons, to emulate. Thus, in dramatic history, “the study of man is definitely transformed into a process of self-education” (SM, 98). Polanyi emphasizes “how independent we are” in our freedom to choose whom to admire and emulate (SM, 97). But such freedom comes with a heavy responsibility. Polanyi warns of “how hazardly self-reliant” we are in making our choices (SM, 98). By choosing the persons whom we will revere as “great,” we apprentice ourselves to their instruction. They become examples for us of right action in the pursuit of our common calling to be rational.

As noted above, for Polanyi an “admirer may be mistaken in his choice of a hero” (SM, 96). As if to underscore the lesson here, he adds, “I have purposely chosen as my example the figure of Napoleon to remind us that this process of education may amount to a corruption” (SM, 97). His point seems to be that if warlord-like “ruthless” and “brutish” persons are to be the ideal we hold with universal intent, then the human race itself is put in danger. Polanyi understood that we live in a Nuclear Age. This makes it all the more urgent for humanity to realize that “even to contemplate actions which may lead to the extinction of humanity … is sacrilege” (SM, 69). Such is Polanyi’s respect for humanity.

Polanyi reminds his readers that teachers, especially in universities, “are today the chief transmitters and interpreters of the heritage which defines the duties of men and sets up the standards that society must respect” (SM, 99). Human self-respect, then, obliges universities “to teach young people, and among them our future leaders, the basic truths to the service of which a free society is dedicated” (SM, 99). Chief among these truths is that political power must be sufficiently limited to enable individuals to seek the beliefs they can responsibly hold with universal intent.

## Endnotes

<sup>1</sup> Michael Polanyi. *Personal Knowledge: Towards A Post-Critical Philosophy*. (Harper Torchbooks, NY, 1964), 6, hereafter “PK.” This paper will focus on Polanyi’s efforts to create his own vision of the social sciences as a means of making sense of the human social experience. A comparison of his views to other writers on social science, for reasons of economy, must be deferred.

<sup>2</sup> Michael Polanyi. *The Study of Man*. (The University of Chicago Press, 1959), 37, hereafter “SM.”

<sup>3</sup> <http://plato.stanford.edu/entries/feyerabend/>

<sup>4</sup> *Personal Knowledge*, 72, 364, 369-373 passim. Polanyi’s characterizations of social science as “positivistic” and “behaviorist” do not, of course, do justice to the vast range of social science views in the first half of the twentieth century, when he was writing. Polanyi was likely aware that other views of social science existed, particularly various Marxist writers who had their own takes on normative social science. Some Marxists were overtly humanistic, while others covertly indulged in the “moral inversion” that Polanyi criticized. However, Polanyi seems to regard his characterizations as apt for the *prevailing* model of social science in Britain and the US at the time of his writing. This model, most visible in Skinner’s writings, centered on a mechanistic image of both human and animal mental processes, and pretended, in a self-deceiving way, to be “objective” and “value-free.” It is this model for which he seeks to establish an alternative. (Also, see his discussion of historiography at SM, 100 – 102.)

<sup>5</sup> Michael Polanyi. *The Tacit Dimension*. (Anchor Books, NY, 1967), page 16, hereinafter “TD.”

<sup>6</sup> This quotation comes from Polanyi’s letter to Raymond Aron, 28 March 1961, Box 6, Folder 1, Polanyi Papers, Department of Special Collection, University of Chicago Library. Thanks to Phil Mullins for pointing out this letter.

<sup>7</sup>Avon Books, NY 1978.

<sup>8</sup> In Franz De Waal, *Good Natured* (Harvard University Press, Cambridge, 1996).

<sup>9</sup> *Personal Knowledge*, Preface to the Torchbook Edition, page x.

<sup>10</sup> Polanyi's theory of emergence in evolution is unique, and quite controversial. After the emergence of life, every existing organism was then a form of living matter; or, an instance of material life embodying a mental component. Both individual and species contain the potential needed for a novel form of life to emerge. In sexual reproduction, two individuals can reproduce a unique individual, new to the world. On a larger scale, a new species can emerge from its prior species. The potential for a novel form can be spontaneously and creatively realized. While the necessary material conditions must be present, the thrust behind the creative leap into the new form is a result of the vital character of living matter, and not a mechanistic "cause." The intentional structure of material life, its vital thrust, for Polanyi, is to strive towards an intensification of meaning. Humanity is currently at the top of the hierarchy of life forms precisely because meaning is most intense in us.

As I have suggested, Polanyi seems to understand the natural predisposition of humans to respect one another as an emergent and distinguishing property of human personhood, or nature. Prior to its realization, the potential for this predisposition came from a series of incremental creative leaps in evolution, which resulted in a new species with these novel characteristics. In this essay I have suggested that the first instance of this new species likely emerged when hominids and primates broke from their common ancestor, several million years ago. Socially shaped breeding practices probably intensified the development of this natural predisposition.

Polanyi regards his theory of emergence, resulting from a creative leap, as meriting the status of "scientific knowledge." The unpredictability of such creativity is a major part in the indeterminacy of scientific knowledge, as Polanyi understands that knowledge. The indeterminacy of creativity in organic life, plus its "vitalism," distinguishes Polanyi's theory of evolutionary emergence from those theories with a more positivistic bent. These uncertainties also challenge the capacity of knowers for self-reliance upon their judgment as to what is true. Cf. PK, 265, 317f.

<sup>11</sup> PK, 348. While reminiscent of Buber, Polanyi does not cite him in *Personal Knowledge*.

<sup>12</sup> TD, 62. However, at the very end of the same essay he uncharacteristically hedged a bit on that point: "Perhaps this problem cannot be resolved on secular grounds alone" (TD, 92). Here, he seems to be leaving the door open for secularism to team up with religion in the effort to articulate morality.

<sup>13</sup> In his last book, *Meaning* (University of Chicago Press, 1975), published posthumously, Polanyi observes that ambition is "a nonmoral principle" that can be "harnessed for a moral end" such as in the process of scientific discovery (196). Or, it can operate as a private obsession, "banishing the moral meanings altogether from one's vision" (209).

## Electronic Discussion List

The Polanyi Society supports an electronic discussion group that explores implications of the thought of Michael Polanyi. Anyone interested can join. To join yourself, go to the following address: [http://groups.yahoo.com/group/polanyi\\_list/join](http://groups.yahoo.com/group/polanyi_list/join). If you have difficulty, send an e-mail to Doug Masini (masini@etsu.edu) and someone will see that you are added to the list.