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## POLANYI'S THEORY OF MEANING: EXPOSITION, ELABORATION, AND RECONSTRUCTION

In the last 15 years of his life, Michael Polanyi, having demonstrated the importance of the personal element in knowledge, especially in scientific knowledge, increasingly concentrated his philosophical attention on clarifying two issues: (1) the nature of the tacit processes underlying human cognition and (2) the types of meaning which are produced by tacit integrations and become manifest in culture. Polanyi's final work, *Meaning*, which he wrote in collaboration with Harry Prosch, summarizes the results of his inquiry and provides a taxonomy of different types of meaning. I find this to be a highly suggestive work, a compendium of creative insights. Yet little to date has been done either to critique or build upon Polanyi's taxonomy of meaning. One reason which thinkers influenced by Polanyi have given for their neglect of *Meaning* is that it seems to reopen a gap between science and the humanities which *Personal Knowledge* had bridged. Another reason, to which I will attend, is that *Meaning* is not without flaws. I see my task in this article as one of exposition, criticism, consolidation, and reconstruction. This is carried out in the belief that

The "Newsletter of the Polanyi Society," vol. VII:2 (Winter, 1980) contains references to and excerpts from reviews of *Meaning*. Of these, perhaps the most thorough critiques of Polanyi's notions of meaning are offered by L. Jonathan Cohen from an analytic orientation — see *The Times Literary Supplement*, October 16, 1979 — and Robert E. Innis — see *The Journal of Religion*, October, 1977, pp. 420-422. Innis also makes use of some of Polanyi's typology in "Art, Symbol and Consciousness: A Polanyi Gloss on Susan [sic] Langer and Nelson Goodman" in *International Philosophical Quarterly* 17 (December, 1977), especially pp. 467-476. Richard Gelwick helpfully explicates the ideas in *Meaning* but offers little criticism in his *The Way of Discovery* (Oxford: Oxford University Press, 1977); see especially pp. 101-109. Drusilla Scott critically takes account of ideas set forth in *Meaning* at a number of points, but perhaps she is at her most interesting when showing that Polanyi misunderstood what Coleridge meant by "a willing suspension of disbelief;" Polanyi and Coleridge are actually saying much the same thing. See *Everyman Revived: The Common Sense of Michael Polanyi* (Lewes, Sussex: The Book Guild Limited, 1985), pp. 165-176. Andy F. Sanders utilizes Janet Soskice's theory of metaphor as a basis for reflecting on Polanyi's view of metaphor. He appears to appreciate the way Polanyi balances cognitive and emotional factors in metaphor — see *Michael Polanyi's Post-Critical Epistemology* (Amsterdam: Rodopi, 1988), pp. 258-263. Sanders' book is the most philosophically sophisticated critique of Polanyi's philosophy, and he makes a number of interesting comments about issues raised in *Meaning* in passing. Finally, Harry Prosch defends Polanyi's views as articulated in *Meaning*, but he offers no new insights or criticisms of the primary text in his *Michael Polanyi: A Critical Exposition* (Albany: SUNY Press, 1986). However, in his earlier, much briefer "Cooling the Modern Mind: Polanyi's Mission" (Saratoga Springs, NY: Skidmore College Faculty Research Lecture, 1971), Prosch does explore ways of extending the diagrams of meaning found in *Meaning*. I think it is fair to say that no one of these sources offers an extended, substantive assessment of the types of meaning presented in *Meaning*, and I am aware of no other works that do.

This, for instance, is the view of Marjorie Grene — see "Tacit Knowing: Grounds for a Revolution in Philosophy," *Journal of the British Society for Phenomenology*, 8 (October, 1977), pp. 164-171. Sheldon Richmond is also concerned about the differences in this regard between *Personal Knowledge* and *Meaning* — see "On Making Sense: Some Comments on Polanyi's and Prosch's *Meaning*" *Philosophy of the Social Sciences*, 9 (1979), pp. 209-219. But the issue is most vividly addressed in the articles published in the special issue of *Zygon* devoted

Polanyi's theory of meaning, properly modified and developed, is a rich, virtually untapped resource for contemporary thought.

Polanyi's notion of meaning is quite different from the usual sorts of understanding of meaning employed by philosophers. Therefore, several preliminary remarks will be offered to provide some orientation to the ensuing discussion.

It cannot be emphasized enough that Polanyi understands meaning to be *experiential* in nature. Knowledge requires a knower. There is no Platonic realm of meaning which exists apart from the integrative activities of living beings. Yet several precautions are needed when interpreting or applying this basic Polanyian point. First, Polanyi would be misunderstood if he were simply labelled a subjectivist, an idealist, or a constructivist because of his emphasis on the creation of meaning. For, second, Polanyi imputes to the indeterminate powers of tacit knowing a capacity to comprehend significant structures of reality. Although Polanyi does not strongly emphasize the point, he clearly believes, third, that such an intelligent capacity to appropriate key features of an environment and meaningfully respond to them is a survival mechanism which has evolved through time. As experiential, then, meaning has an event-like rather than a substance-like quality, and it allows humans to cope with the realities they face. However, in this essay attention will not be directed to those realities — not to meanings understood in the sense of objects denoted or items referred to — but to the experiential dimension of meaning.

Another preliminary observation about Polanyi's theory of meaning is in order. It is to his everlasting credit that Polanyi broadened the conception of meaning so that it is no longer merely an outgrowth of linguistic theories. The key to meaning is not intension and extension, syntax and semantics, or association and reference. Polanyi places meaning in the context of life as such. It is more than just a characteristic of human rationality or the use of language. When animals sense their prey, detect a storm coming, or build a home, they are engaged in activities endowed with meaning.

The subject of this paper, however, will focus primarily on different types of human meaning construction. Even within this limited range, Polanyi's understanding of meaning

to "Science and Religion in the Thought of Michael Polanyi" (vol. 17:1 [March, 1982]). The articles of Ronald Hall and Richard Gelwick are particularly provocative on this score. Linger in the background of their discussion is the suspicion that *Meaning's* split between self-centered and self-giving integrations may represent Prosch's contribution more than Polanyi's. Each contribution to the *Zygon* issue deals with the relation between the sciences and the humanities (especially religion) in informative ways. See Walter Gulick, "Michael Polanyi's Theory of Meaning and Reality. Prolegomenon to Exploiting Polanyi's Resources on Ultimate Meaning and Reality," *Ultimate Meaning and Reality* 9:4 (December, 1986), pp. 270-273 for an attempt to resolve the difference between Gelwick and Prosch on the status of God in Polanyi's thought.

Usually meaning is analyzed in terms of functions of language. Frege's sense/reference distinction is of this type, as are extension and intension, connotation and denotation, signifier and signified, and similar distinctions. Polanyi's exploration of the way meaning is produced might be pejoratively labeled "psychologism" by some philosophers. Obviously I believe inquiry into the complete experience of meaning is appropriate and fruitful.

is far broader than is usually considered. All sorts of skills, for example, are seen by Polanyi to be meaningful. A dictum of Polanyi's notion of personal meaning is that "we can know more than we can tell" (PK x; TD 4); just so, we are involved in meanings we may not be able to articulate.

In utilizing a broad definition of meaning, Polanyi may be thought to follow the path laid out by Charles Sanders Peirce or semiotic theory. That would be a mistaken inference. Peirce's notion of meaning is even more general than Polanyi's: virtually any relationship of one thing to another is meaningful for Peirce. Meaning may exist apart from one who means. Polanyi avoids this incipient Platonism of Peirce; he restricts meaning to the products of tacit integrations of living beings.

These preliminary remarks are intended to circumscribe the distinctively Polanyian theory of meaning. In the balance of this article I will attempt to survey what lies within those limits but also explore ideas beyond. In a first section, the essential characteristics of his theory of meaning and consciousness will be outlined. This section of critical exposition will be followed, secondly, by an attempt to elaborate upon Polanyi's theory in search of general characteristics of experiential meaning in general. The third and final section will use Polanyi's discussion of meaning in *Meaning* as the inspiration for a taxonomy of the types of meaning. This section will require a certain amount of reconstruction of Polanyi's thought. Thus the essay will lead from exposition through elaboration to reconstruction.

## I.

In articulating his theory of meaning, Polanyi resists any arbitrary separation of philosophy from psychology. In his thought, meaning and consciousness, reason and feeling are interrelated. Unfortunately, there is a certain looseness in Polanyi's discussion of the nature and dynamics of meaning. While usually that which is focal is called the meaning of its conjoint particulars, Polanyi also makes statements such as the following: "The meaning of language, when in use, lies in its tacit component" (PK x). James W. Stines tries to clarify such examples of what he calls "fruitful equivocation" by distinguishing *being* a meaning

The abbreviations of Polanyi's works cited internally are indicated and related to full bibliographical information at the conclusion of the article.

Thus Max H. Fisch claims that "Peirce's general theory of signs is so general as to entail that, whatever else anything may be, it is also a sign" (*Peirce, Semiotic and Pragmatism* [Bloomington, IN: Indiana University Press, 1986], p. 357). However, Peirce also recognizes that there is a hermeneutical dimension to the general theory of semiotic. an intersubjective process he calls semiosis. "For Peirce, some sort of embodiment is required for any instance of semiosis" (Vincent M. Colapietro, *Peirce's Approach to the Self* [Albany: State University of New York Press, 1989], p. 84). Hence Polanyi's general understanding of meaning has affinities to a restricted area of Peircean semiotic. Yet even in this restricted aspect of Peircean semiotic, important differences between Polanyi and Peirce emerge. Peirce develops a pragmatic theory of meaning which differs in emphasis from Polanyi's experiential notion. "Pierce is very clear ..that the meaning of an idea is the sum of the *conception* of the effects. The meaning of an idea, for Peirce, is entirely intellectual" (Robert Cummings Neville, *The Highroad Around Modernism* [Albany: State University of New York Press, 1992], p. 32).

and *having* a meaning. "In general it may be said that to *be* a meaning is, epistemologically speaking, to be an object of focal awareness and, ontologically speaking, it is to be a comprehensive entity; to *have* a meaning is to be an object for subsidiary awareness and, ontologically speaking, it is to be a subsidiary component of a comprehensive entity." I appreciate Stines' attempt at clarification but do not find "being" and "having" felicitous terms for the distinction. Moreover, I do not believe that the distinction captures all elements of experiential meaning. The complete experience of meaning not only includes subsidiary and focal elements but is rooted in feelings and typically involves integrations. These and other aspects of the complete meaning experience will be discussed as the essay unfolds. Meaning in the narrow sense will always be taken to be that conscious part of the meaning experience which is focal.

I find four overlapping, interdependent aspects of Polanyi's theory of meaning and consciousness to be especially worthy of emphasis. Some repetition will inevitably occur in exposition.

First, Polanyi shows that our experience of meaning always depends upon two kinds of awareness: *subsidiary* and *focal*. We are aware of subsidiary items in the appearance of that upon which they bear, the focal awareness which is their integrated meaning. Thus we recognize a face (focal meaning) in terms of its features (subsidiaries), which we may be unable to specify. "In the exercise of a skill, we are aware of its several muscular moves in terms of the performance to which our attention is directed" (TD 11). Something akin to the hermeneutical circle is involved here. The parts are known in terms of the whole and vice versa, only the parts create the whole not additively but through an integration which changes their character.

This first aspect of meaning may be stated in an alternative way. The relations of subsidiaries to their focal meaning comprises what Polanyi calls the *from-to* structure of consciousness. "Acts of consciousness are then not only conscious *of* something, but also conscious *from* certain things which include our body" (KB 214). In this formulation Polanyi makes a significant step beyond other ways of discussing consciousness. For centuries philosophers have dealt with the manner in which our mind constructs its known objects, but typically they direct interpretive attention toward the object about which we think. Thus Husserl followed Brentano in claiming that the intentionality of consciousness is its decisively important characteristic: consciousness is always consciousness the *from* dimension from consciousness. Even when Husserl analyzes the intentional presentation of conscious-

James W. Stines, "Vocation Recalled: Personal Knowledge and Cosmic Re-Enchantment," *Tradition and Discovery* 12:1 (1984), 16.

See Edmund Husserl, *Logical Investigations*, trans. by J. N. Findlay (New York: Humanities Press, 1970), Investigations Five and Six, and Edmund Husserl, *Ideas*, trans. by W. R. Boyce Gibson (New York: Macmillan, 1931), Chapters 9-11. Husserl's thought most closely approaches Polanyi's when Husserl discusses the horizontal structure of intentionality with its founding and founded strata — see *Cartesian Meditations*, trans. by Dorian Cairns (The Hague: Martinus Nijhoff, 1960), sections 20 and 21, for instance. Thus the principal difference is not that Husserl's thought lacks the *from* dimension, but that it does not include embodied qualities like skills as part of its horizontal structure.

ness in terms of its matter, interpretive form, and objectifying quality, or explicates its noetic-noematic correlation he *emphasizes* only one half of Polanyi's from-to structure. In attending to the object of consciousness Husserl leaves the source of its meaning mired in murky discussions of a transcendental ego or mysterious hyletic origins.

Much Anglo-American philosophy in recent decades has incorporated an emphasis on intentionality. John Searle has been especially productive in developing analytic thought in ways available to Polanyians (so long as its limitations are observed). He introduced the useful notion of a Background of mental capacities -which sounds as if it might deal with the *from* dimension of consciousness.

The Background is a set of nonrepresentational mental capacities that enable all representing to take place. Intentional states only have the conditions of satisfaction that they do, and thus are only the states that they are, against a Background of abilities that are not themselves Intentional states.

The biological and cultural know-how which makes up Searle's Background is clearly equivalent to the sorts of skills and abilities Polanyi understands as part of that *from* which we create meanings. Searle introduces other notions which also may function subsidiarily to focal knowledge: the Network of Intentional states, for instance, or indexicals as particularistic expressions of reference. Each specific Intentional state creates conditions which must be satisfied by a particular meaning. Meaning arises when some kind of intentionality is imposed upon words or other signs. However from a Polanyian perspective there are problems with Searle's views. He reverts to notions of causality rather than integration when discussing the rise of meaning. His understanding of Background seems to be developed in a foundational manner rather than unfold according to functional needs.

Many philosophers have discussed the network of presuppositions, assumptions, and practices that constitute a world view in terms of which any meaningful proposition is to be understood. Such a network often functions more like the (perhaps suppressed) premises of a syllogism than like the subsidiaries of an integration. Indeed no Searlean Background, Hegelian dialectic, Heideggerian preunderstanding, Quinean web of belief, or Collingwoodian set of absolute presuppositions makes quite the same point that Polanyi does in explicating the from-to structure of consciousness.

Second, Polanyi shows that meaning is generally created by an *act of synthesis* whereby particulars of which one is aware subsidiarily are *integrated* into a *new whole* of which one is focally aware. "The subsidiaries of from-to knowing bear on a focal target, and

John R. Searle. *Intentionality: An Essay in the Philosophy of Mind* (Cambridge: Cambridge University Press, 1983), p. 143.

<sup>9</sup> Ibid., p. 141.

<sup>10</sup> Ibid., pp. 222-223.

See Mark Johnson's critique of Searle in his *The Body in the Mind* (Chicago: University of Chicago Press, 1987), especially pp. 187-190.

whatever a thing bears on may be called its meaning" (M 35). The ability to comprehend or utilize the meaning of conjoint particulars is a tacit skill rooted in the use of our body. The very act of walking depends upon the integration of signals from our inner ear, our feet, and our leg muscles. We are not even aware of these subliminal signals or the way they are integrated. Such acts as solving a puzzle, riding a bike, recognizing an old friend, or hitting a baseball are also meaningful activities which depend upon tacit integrations. In such cases, we are aware of clues which are marginal to our consciousness in addition to subliminal clues (see KB 139-140). In higher uses of the mind the integrative skill results in the largely spontaneous intuition of new coherences. Polanyi relies upon the gestalt theory of perception to illuminate how we come to discover coherences in nature (KB 138). Whether he attends to actions or comprehensions, practical or theoretical knowledge, Polanyi emphasizes that their meaning is usually a product of integrations.

While meanings generally are generated through integrations, it is important to point out that they need not necessarily so arise. There are several ways meanings may be produced. Polanyi gets at two ways in his distinction between sense-reading and sense-giving (KB 181-207). Sense-reading is to be taken as the process of indwelling and integrating particulars to produce conjoint meaning. Sense-giving is to be taken as attending to an inarticulate meaning and finding the articulate subsidiaries which support it. Both sense-reading and sense-giving involve integration, but their process of unfolding proceeds in opposite directions analogous to the difference in thought between deduction and induction as these have classically been understood. That is, one begins with an integration and the other ends with an integration.

Yet another way of producing meaning seems devoid of integrations. A good example is found in connotation. We may indwell the idea of "mountain" and soon inwardly generate a plethora of images and associated concepts. Or we may take what Polanyi calls a symbol — the flag or the Torah — and find it evokes all sorts of images, memories, thoughts, and feelings. I will call this process of producing meaning "*evocation*."<sup>14</sup> *Evocation* relies upon

His stress on the role of integrations aligns Polanyi's thought with Kant's theory of cognitive synthesis — see Walter Gulick, "An Unlikely Synthesis: What Kant Can Contribute to a Polanyian Theory of Selfhood," *The Personalist*, forthcoming.

Unfortunately, Polanyi's differentiation between sense-giving and sense-reading is not made consistently. As examples of sense-giving he speaks of integrating stereo pictures and recognizing a physiognomy (KB 184), composing a verbal account of an experience (KB 186), endowing language with meaning (KB 193), and technical inventions which make things into instruments for set purposes (KB 205), surely a varied set of performances. Examples of sense-reading include understanding sights and events (KB 186), interpreting verbal accounts (KB 186), recognizing a strange outline at night (KB 187), finding meaning in a text (KB 187), and pure science discovering meaning in nature (KB 205). The items in the two lists overlap and conflict with each other. Consequently, I have stipulated a definition of sense-giving and sense-reading based on functional differences he highlights.

In a *very general way sense-reading* can be correlated with Kantian *synthesis*, and sense-giving and/or evocation can be seen as examples of what Kant calls *analysis* — see Immanuel Kant, *Critique of Pure Reason*, trans. by Norman Kemp Smith (London: Macmillan, 1933), A76-77/B 102-103. This epistemological distinction between synthesis and analysis is not to be confused with the distinction between analytic and synthetic truth which Quine shows to be untenable in "Two Dogmas of Empiricism," *From a Logical Point of View*, 2nd ed. (Cambridge, MA: Harvard University Press, 1980).

*association* rather than integration; it is an important ingredient in reflection and remembering. Evocation sometimes is experienced as an involuntary phenomenon - for instance, when music evokes emotions - but we may voluntarily evoke ideas as well when we separate an item from the stream of consciousness and attend to its associated meanings. There is a spectrum of evocation stretching from the voluntary to the involuntary. But whether willfully evoked or not, that which appears cannot forceably be made to appear. The evoked appearance is experienced as a gift.

Third, in the construction of meaning we  *dwell in* subsidiaries, virtually making them incarnate. Indeed, we normally use bodily sensations as subsidiaries so that our body, necessary for any act of knowing, is not really noticed when we focus on something else. Polanyi discusses the embodiment of meaning as follows: "When we make a thing function as the proximal (subsidiary) term of tacit knowing, we incorporate it in our body — or extend our body to include it — so that we come to dwell in it" (TD 16). The clearest example of the way we may come to extend our body is found in the use of tools: a probe or hammer, for example.

Moreover, we often dwell in the meanings we have just constructed, a process which contributes to the continuity characteristic of much experience. That is, a focal meaning may be enjoyed and then be transmuted into a subsidiary if we wish to utilize its insights or accomplishment. We thereby identify with its lesson and interiorize it; in doing so we extend ourselves and alter our world. The acceptance of a meaning to be used as a subsidiary for the creation of a further meaning may well be the basic act of human responsibility, though one that is rarely raised to the level of conscious decision.

Fourth, our explicit, focal consciousness, which is supported by subsidiaries and integrations of which we may not even be aware, is distinct in kind from the  *tacit knowledge* upon which the explicit knowledge depends but about which we cannot tell. "The essential  *logical* difference between the two kinds of knowledge lies in the fact that we can critically reflect on something explicitly stated, in a way in which we cannot reflect on our tacit awareness of an experience" (SM 14). Polanyi underscores the importance of tacit and indeterminate elements in knowledge so as to combat the wrongheaded allegiance to the ideals of objectivity and explicitness in science and epistemology. We know how to ride a bike without knowing the explicit rules of physics which make this feat possible. Polanyi's explication of the tacit dimension of experience can be taken as a warning about the limits of reductionism. One could know the formulas involved in balancing a bicycle but not be able to ride it.

Drew Letter thematizes the unnoticed involvement of our body in our activities through his term "absence" — see  *Tjua Absent Body* (Chicago: University of Chicago Press, 1990) for a thorough discussion of the several forms absence can take;

18"Whle the Idgic of assent merely showed that assent is an acritical act, 'commitment was introduced from the start as a framework in which assent can be responsible, as distinct from merely egocentric or random. The centre of tacit assent was elevated' to the seat of responsible judgment" (PK 312).

Two points about Polanyi's use of "tacit" should be borne in mind. First, he makes it clear that all knowledge, even the most explicit, is originally brought into being through tacit skills and relies upon tacit skills in being applied (see TD 20-21, for instance). But, second, he also contrasts explicit and tacit knowledge, as we have seen. The basic difference between the two seems to be that explicit knowledge is articulated through language, numbers, or formulas, whereas tacit knowledge is expressed in skills and connoisseurship. Polanyi understands tacit intelligence to be grounded in

an active principle which controls and sustains it. As far down the scale of life as the worms and even perhaps the amoeba, we meet a general alertness of animals, not directed toward any specific satisfaction, but merely exploring what is there; an urge to achieve intellectual control over the situations confronting it. (PK 132)

Thus our tacit skills can be trusted to reveal the nature of reality, although they can also mislead as well (KB 163). I find Polanyi's description of such tacit activities as indwelling, integration, and intuition to be more helpful in understanding human activity than most uses of the "unconscious" as an explanatory tool. That which is subsidiary is clearly a function of a given integration. Consequently, discussion of subsidiaries is less likely to be reified or spatialized than is "the" unconscious.

## II.

Now that the essential characteristics of Polanyi's theory of meaning have been set forth, the ground has been prepared to elaborate on the nature of *experiential meaning*. In this section I shall critique and extrapolate from what Polanyi says in an attempt to work toward a broadly based general theory of meaning. The discussion will be organized into eight major points.

1. First, the *experience of meaning* is, as suggested in the preliminary remarks, *eventlike*. It unfolds in time (often in some small fraction of a second) and has a duration. Unless reinforced by memory, stimuli, or reflection, however, it soon fades into oblivion. The temporal but also fleeting character of meaning has similarities to Whitehead's understanding of process, although I see no reason for applying Whitehead's subjective principle and generalizing the human course of understanding into a metaphysics. Nor do I see any point in breaking up meaning into atemporal atoms of development, as Whitehead does in speaking of actual occasions coming to concrescence. I find Polanyi's method of referring directly to events in the flux of human experience attractive and convincing.

2. While our experience of meaning is transient, it is also, secondly, *dense*. That is, at any given moment a number of types of meaning may be identified. Take driving a car, which requires attention to the road and traffic, and skill in steering and shifting, each of

See the article by Arthur S. Reber in this volume of *Polanyiana* for a most helpful cataloging of psychological evidence supporting Polanyi's notion of tacit knowledge.

which is based upon skillful integrations. In traffic we scratch an itch while scarcely being aware we are doing so. As we drive we may be thinking about what we should accomplish at our job. This articulate reflection will be in the foreground of consciousness, but occasionally we will be surprised, if we pay attention, to find that while we are thinking we are also mentally humming a tune we heard the previous night, or imagining an interaction with a loved one. This mental play at the margins of consciousness may require meaningful integrations, or it may simply represent the appearance, for no discernible reasons, of activated mental schemata. In claiming that our experience of meaning is dense, I am urging that William James's account of the stream of consciousness be transferred to the analysis of meaning with appropriate restrictions and modifications. Speaking of this flow he claims "there is always much-at-once," the point I would make about meaning experiences.

3. The third point also has a Jamesian flavor, for James's thought helps make manifest a view that is implicit in Polanyi's theory of meaning. James understands feeling to be the substratum of consciousness out of which perceptions, impulses, and thoughts arise. All the items in our stream of consciousness are accompanied by *feelings*. "We ought to say a feeling of *and*, a feeling of *if*, a feeling of *but*, and a feeling of *by*, quite as readily as we say a feeling of *blue* or a feeling of *cold*.<sup>19</sup> Susanne Langer expresses the notion of feeling I am endorsing even more vividly. She writes,

I am using the word "feeling" not in the arbitrarily limited sense of "pleasure or displeasure" to which psychologists have often restricted it, but on the contrary in its widest possible, i.e., to designate *anything that may be felt*. In this sense it includes both sensation and emotion — the felt responses of our sense organs to the environment, of our proprioceptive mechanisms to internal changes, and of the organism as a whole to its situation as a whole, the so-called "emotive feelings."

Polanyi also recognizes the importance of feeling as underlying different cultural systems. "Science, by virtue of its passionate note, finds its place among the great systems of utterances which try to evoke and impose correct modes of feeling" (PK 133). If meaning is only achieved through indwelling subsidiaries, if we have a relation to subsidiaries similar to our relation to our body, and if the way we internally know our body is through feeling, then meaning originates in feeling.

Things like our clothes, spectacles, probes and tools, when in use, function like our body and resemble our body closely by the fact that we rarely know them focally. Indeed, whenever we experience an external object subsidiarily, we feel it in a way similar to that in which we feel our body. (KB 183)

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William James, *Some Problems of Philosophy*, in Frederick H. Burkhardt, Fredson Howers, and Ignas K. Skrupskelis, eds., *The Works of William James* (Cambridge, MA: Harvard University Press, 1979 [originally published 1911]), p. 53.

William James, *Psychology: Briefer Course* (New York: Collier Books, 1962), p. 176.

Susanne K. Langer, *Philosophical Sketches* (New York: Mentor Books, 1964), p. 16. I am using feeling to mean how we are internally related to all types of mental and bodily objects prior to thematization in language. Feelings generally function as tacit guides to the construction of meaning.

My concrete suggestion, then, is that we are related to vague prelinguistic conceptions, internal aches, inchoate yearnings, etc. all in the mode of feeling. We may become at least vaguely aware of what some of the subsidiaries are which influence our thought or action by examining our feelings. I suspect that feelings are provoked when interest-laden intentions, projects, or memories impinge upon other tacit components of our mental life. A moral feeling of outrage, for instance, is a result of applying, tacitly or explicitly, our moral standards to a situation not consistent with those standards. Feelings of aesthetic worth arise in a similar way.

This suggested interpretation of feeling merely amplifies a view of feeling already evident at various points in Polanyi's work. For instance, he writes that "indwelling is not merely formal; it causes us to participate *feelingly* in that which we understand. . . . These *feelings* of comprehension go deep; we shall see them increasing in profundity all the way from the 'I-It' relation to the 'I-Thou' relation" (KB 148-149, my emphasis). Even more compellingly, he states, "Authentic feeling and authentic experience jointly guide all intellectual achievements" (PK 321). Such tacit processes of knowing as subception or solving a problem seem to depend upon felt sensitivities. When we attempt to recall a person's name, we can utilize no explicit procedure or algorithm. Rather we must be guided by elusive feelings along a heuristic gradient of meaning to the point of recognition where the sought term emerges into focal consciousness. Intuitions of answers to a problem are accompanied by feelings of satisfaction, of relief.

Our feelings, then, are tacit guides. Their sense cannot be examined and evaluated until they are translated into some objective form, generally through language. But feelings qua feelings are indispensable to intelligence; it is foolish to try to render them all into an explicit form; indeed, it is impossible.

To this point we have seen that meanings arise from integrations, guided by feelings and dependent on skills, all of which take place within a from-to structure of consciousness, Polanyi's discussion of the processes and structures of meaning is especially influenced by his overriding interest in understanding the processes of scientific discovery. Following the lead of Poincare, Polanyi introduces the notions of imagination and intuition into the process of discovery. How are these mental activities related to his view of personal knowledge? Is his basic scheme augmented by imagination and intuition rich enough to illuminate all the sorts of meanings he wishes to explore in *Meaning!* I will set forth two additional terms which, I believe, when incorporated into Polanyi's thought, extend its range and increase its power of explanation. In particular, they provide insight into the dynamics

Most subsidiaries of a focal experience will never be available to consciousness, not even as felt. In recognizing a person's face, we will likely rely upon the person's nose as a subsidiary, but it is unlikely we could ever be aware of the nose as a nose during the act of recognition. If we focus upon the nose we have left the moment of face recognition. We are not likely to feel consciously those elements which contribute to pattern recognition, for what we feel is most clearly related to what is active in the experience, not a passive component. Hence while actively engaged in typing, I often feel when I have made a mistake even though I am not focally observing my fingers.

of what Polanyi rather loosely calls "tacit knowing." These terms are "*symbol* (understood in a different sense than Polanyi understands "symbol" ) and "*schema*".

4. Fourth, a general theory of meaning which focuses, as our's does, on human meaning must give due emphasis to those elements and structures whereby human meaning differs from animal meaning. In *Meaning*, Polanyi explicates some of the basic structures and processes whereby perception, metaphor, myth, and works of art arise, but he does not attend to that element without which human culture could not arise. I'm referring to the *symbol*

One may choose from a vast number of theories of symbol. I have found Susanne Langer's notion of symbol, which is closely related to Peirce's notion, to be reliable in many contexts. "Symbols," she writes, "are not proxy for their objects, but are *vehicles for the conception of objects*."<sup>23</sup> Through symbols we may conceive both that which is and that which is not present. That is, in using symbols we can develop alternatives; human freedom is dependent on the use of symbols. Langer distinguishes between discursive symbols (primarily language) and presentational symbols (images), each of which are involved in conception. Presumably the more complex animals can like humans conceive in terms of images; the distinctively human type of symbol is language, which in schematized form penetrates virtually all forms of human consciousness.

5. How are the lessons of life indwelt according to Polanyi? How can such different qualities as skills, perceptions, verbal instructions, and critical reflections all be integrated into coherent patterns of action? A general theory of meaning needs to have recourse to some common grounds of interchange, some intelligible elements which are capable of being integrated. I suggest, fifthly, that we use the notion of *schemata* to designate those *gestalts/plans/rules* which crystallize the lessons of life we learn and through which we assimilate our daily experiences. The discussion of *schemata*, while utilizing a concept well grounded in current psychological literature, is necessarily rather abstruse and speculative. In discussing them, I have been unable to escape a turgid quality of prose all too reminiscent of Kant.

Speaking of Kant, he introduced the notion of a schema as a rule which would allow a person to generate an image (say of "Fido") which would fit within a conceptual category ("dog"). "Images can be connected with the concept only by means of the schema to which they belong." Thus *schemata* connect percepts and concepts for Kant. We will understand them to work in either direction: concept to percept or percept to concept.

As we shall see, Polanyi's notion of a symbol is a specialized instance of the general category of symbol introduced here.

Susanne K. Langer, *Philosophy in a New Key*, 3rd ed. (Cambridge, MA: Harvard University Press, 1957), pp. 60-61.

<sup>24</sup> Kant, *Critique of Pure Reason*, A 142, B 181.

Mark Johnson expands Kant's notion somewhat through his notion of an "image schema."

In order for us to have meaningful, connected experiences that we can comprehend and reason about, there must be pattern and order to our actions, perceptions, and conceptions. A schema is a recurrent pattern, shape, and regularity in, or of, these ongoing ordering activities. These patterns emerge as meaningful structures for us chiefly at the level of our bodily movements through space, our manipulations of objects, and our perceptual interactions."

I would suggest that Johnson's notion of schema be further broadened to include all the embodied lessons we learn, whether by trick, sign, or latent learning (PK 71-77), or through symbolically mediated insight.

Schemata have a general, gestaltic structure, and they exist, largely in a pre-conscious form, introspectively available only through feeling, at the cusp between mind and body. They constitute the lowest common denominator of interchange within the self and with others and the world. They appear to be highly labile entities, capable of being easily divided and combined.

The foregoing discussion of schemata departs from the norm in Polanyian studies." For Polanyi's examples tend to be practical and this-worldly. Let's look at three of his typical examples and see if it makes sense to incorporate schemata into his discussion.

First: a person learns to use a probe and it thereby comes to function like an extension of her body. Polanyi says the feelings in her hand "are integrated in a way similar to that by which internal stimuli are integrated to form our perceptions: the integrated stimuli are noticed at a distance removed outward from the point where they impinge on us" (KB 127). But on what basis do new feelings in a person's hands come to provide meaningful information about the world? Only insofar as the rules which prove accurate in interpreting the signals felt in the hand are *indwelt*. These rules, which Polanyi properly stresses are indeterminate, are best described as *muscular schemata*.

Johnson, *Body in Mind*, p. 29.

The suggestion that the notion of schema be applied to Polanyi's thought has been offered before. Rom Harre, in an inquiry as to whether it makes sense to postulate the from-to structure as applying to both perception and theoretical conception, wonders if Polanyi's ideas about consciousness might provide a "contribution to the understanding of the Kantian schematism by which the categories inform experience. The 'from-to' theory might be a gloss on the Kantian theory of the schematism" ("The Structure of Tacit Knowledge," *Journal of the British Society for Phenomenology*, 8 [October, 1977], pp. 172-173, quoted in Harry Prosch, *Michael Polanyi*, p. 211). Polanyi's discussion of the tacit dimension does not begin to approach the philosophical subtlety of Kant's transcendental deduction, and it is a reach to connect his notion of the 'from' dimension with Kantian schemata. In any case apparently Harre does not develop the suggestion. William H. Poteat borrows the notion of schema from Joseph Church's discussion of children's construction of reality and applies it to his Polanyi-influenced philosophical perspective. He claims that a schema is "a very rough analogue of my 'picture,'" a term which Poteat uses to delineate a person's world orientation (see *Polanyian Meditations: In Search of a Post-Critical Logic* [Durham: Duke University Press, 1985]. p 155). This is certainly not close to the philosophical neighborhood of my discussion of schemata.

A second familiar example is Polanyi's description of how we recognize a face. The point Polanyi reiterates is that we recognize a physiognomy even though we may not explicitly know its contributory features. True enough; how is this done? "Gestalt psychology has assumed that perception of a physiognomy takes place through the spontaneous equilibration of its particulars impressed on the retina or on the brain. However, I am looking at Gestalt, on the contrary, as the outcome of an active shaping of experience performed in the pursuit of knowledge" (TD 6). I am not sure if there is a real difference here, but if there is, I would side with the Gestalt psychologists. The recognition of a face is a type of abstract pattern recognition, a formal accomplishment. A form is precisely what is schematized and used as a basis of recognition.

Finally, what about two stereo pictures fused to three-dimensional sight? Again, a simple sort of perceptual schema would seem to help explain how this is done. It is well recognized that babies need to learn to perceive. So must a person first presented with a stereoscope. A simple rule of integration would be quickly absorbed internally as a schema, and relied upon in future cases.

Because schemata incorporate what we learn, they ground our memory, concepts, and skills. This statement is intended as a descriptive claim best verified in psychology through research and in philosophy through comparative studies of the explanatory adequacy of alternative theories. It is not profitably viewed as initiating a new form of reductionism; Polanyi's understanding of the pertinence of many levels of analysis seems to the point here. Any particular schema is not a priori in the sense of being a universal and necessary component of experience in the manner of Kantian categories. Most schemata are uniquely derived from a person's experience and can be contributory to limited types of new experience. Schemata are a priori only in the informal sense that some schemata must underlie any experience, as analogously some molecules must comprise any material substance.

How is the sort of freedom associated with language usage to be connected to a theory of schemata? Langer is among many philosophers who have noted the human obsession to order and symbolize experience" — to create mythic explanations where natural explanations cannot be found, to organize the chaos of the sky into constellations, to see omen and portent in random occurrences. What David Tracy calls "the blessed rage for order" is a manifestation of the human urge, unceasing until death, to symbolize experience. In particular, humans need to express themselves in language which is either kept to themselves in thought, uttered, or written. Each word we know, as something learned, is linked to one or more schemata. Schemata of which we are conscious may be called concepts, and words therefore express one or more concepts (although not all concepts are represented by any word). Concepts bonded according to at least minimal grammatical adequacy may be called

"I believe there is a primary need in man. which other creatures probably do not have, and which actuates all his apparently unzoological aims, his wistful fancies, his consciousness of value, his utterly impractical enthusiasms and his awareness of a 'Beyond' filled with holiness. This basic need, which certainly is obvious only in man, is the need of symbolization" (*Philosophy in a New Key*, p. 45).

conceptions. Much floundering in our speech and writing is an attempt to make our explicit language match up with the schematized conceptions we wish to communicate. Some schemata which are concepts in one context may be utilized as, say, skills in other contexts. This would explain why a gymnast or diver who visualizes actions to be performed before an event often increases the success of his or her performance. Biofeedback is a process whereby strictly muscular schemata may be captured also as conceptual schemata.

When they are activated, conceptual schemata exert a kind of vectorial force on our thought. Their existence as a species of preunderstanding is thematized by Heidegger in *Being and Time* as the distinction between discourse (*Rede*) and language (*Sprache*). When organized toward certain goals, such preunderstanding *can function as intentionality*. The integration of particular schematized subsidiaries sets up conditions of satisfaction that may be fulfilled by the appropriate words or actions. The relation between schematized preunderstanding functioning as intentionality and its subsequent linguistic expression is similar to the distinction in the phenomenological tradition between an empty and fulfilled intention.

6. Now we are in a position to interpret Polanyi's notions of *imagination* and *intuition* as a sixth point. That such interpretation is called for can be seen by comparing two of his definitions of imagination. On the one hand, he writes, "It is only the imagination that can direct our attention to a target that is as yet unsupported by subsidiaries" (M 57 — see KB 199-200). On the other hand, he claims that imagination is precisely that mental capacity to integrate all sorts of subsidiaries, even the most incompatible. "The subsidiaries composing metaphors and poems are joined together by an imaginative performance much richer than any imaginative action required for linking a word to its meaning" (M 82). What is the relation of imagination to integration?

Martin Heidegger, *Being and Time*, trans. by John Macquarrie and Edward Robinson (New York: Harper & Row, 1962), pp. 56 and 203-209.

Intentionality is a slippery word. Here are three senses in which it is used, each important in its own way: (1) Intentionality in Brentano's sense is a characteristic of all consciousness that it is about something—consciousness of. This is a statement about the representative/expressive qualities of consciousness. (2) Intentionality may also be used in a sense characteristic of Searle's thought but also found in Dewey, Whitehead, Popper and many others, that thought continually strives for consummations. The other side of the coin, emphasized by Pierce, is that we seek to end the irritation of doubt (see also PK 122). Intentionality is in these cases an expression of human conation: we repetitively set conditions which call out for satisfaction; we are *desiring animals*. (3) Intentionality, at the level of ordinary experience, is expressed as intention, as human purposefulness. This third level of intentionality can be seen as dependent upon the two previous levels.

See Edmund Husserl, *Formal and Transcendental Logic*, trans. by Dorian Cairns (The Hague: Martinus Nijhoff, 1969), Appendix II.

Incidentally, I fail to see why imagination should be invoked to explain how a word is related to a meaning. The word's meaning is ready to hand and does not need to be imaginatively produced; one simply treats its concept as a subsidiary in a context of understanding (a context including indexicals if reference is involved), and its meaning shines forth.

The urgency of the question is rendered more acute by noting that Polanyi defines intuition as "integrative acts taking place at any stage of a scientific inquiry, from start to finish" (KB 201). I would suggest that Polanyi's confusing discourse about imagination is the result of his overlooking an important process which contributes to meaning and which sneaks into Polanyi's thought despite his concentration upon integration as the key to meaning construction. We can identify the neglected process once we gain a clearer fix on the nature of imagination.

The romantic tradition, going back to Kant, sees imagination as the fount of all spontaneous mental activity. This can be accepted as its broad meaning. However, ordinarily imagination should be understood as that process which produces all conceptual integrations. Intuition can then be stipulated to be a term describing striking or particular noteworthy instances of imaginative synthesis. For example, a discovery could be termed a "final intuition" (Poincaré's illumination — KB 202).<sup>32</sup>

The discrepancy between Polanyi's two definitions of imagination just quoted can be at least partially rectified by recourse to specialized subsidiaries such as symbols. The large? projected by Polanyi "as yet unsupported by subsidiaries" is best seen as unsupported by a developed type of subsidiary — for instance, symbols in the case of thought or muscular schemata in the case of movement. If the target is to be understood as more than random associations or disconnected signals — that is, if it is truly to be a *target* and not some accidental collocation of mental debris — it would need to depend upon subsidiaries integrated at the tacit level. The goal of scientific discovery is to replace vaguely felt premonitions, connected schemata not yet analyzable because not yet rendered explicit by symbols, with the explicitness of explanation, formula or law.

So interpreted, imagination becomes a term central to Polanyi's philosophy. It is the active agent underlying all processes of learning, whether incorporated as a skill or expressed in science or the humanities. It vivifies both tacit and explicit learning.

We can now interpret meaningfully this statement: "This is *the dynamics of tacit knowing: the questing imagination vaguely anticipating experiences not yet grounded in subsidiary particulars evokes these subsidiaries and thus implements the experience the imagination has sought to achieve*" (KB 199-200). (1) Our imagination may integrate schemata into a

In *Meaning* Polanyi contrasts the effortless spontaneity of intuition (as integration) with the labor involved in imagination. He states that the phases of scientific inquiry are guided by "intuition's integrative powers, while they are propelled, and also supplied with suitable material, by thrusts of the imagination" (M 96). On the reconstruction offered here, considerable interpretation is needed in order for this quotation to make sense. It doesn't seem to me, first, that all integrations are effortless. A considerable amount of study and trial and error may be required before the transnatural integrations of incompatibles in some works of art can be successfully achieved. This sort of integration would be accomplished by imagination in the narrow sense, whereas imagination in the broad sense would supply the psychic energy for these integrations and indeed all forms of cognitive spontaneity. Schematized content, some of it evoked, would supply the imagination with material for its trial integrations and "final intuition."

desired or anticipated combination which does not yet support any actual performance or comprehension. (2) The vague integration is held apart from the regular course of mental processes and associatively *evokes* potential muscular subsidiaries. (3) Those evoked elements which can *he.felt* to *satisfy* the intended consummation are retained as subsidiary particulars until sufficient particulars are evoked to achieve the intended goal. Presumably partially appropriate schemata (too general, not quite apt) at step (1) could be replaced by more appropriate schemata at step (3) — and the scope of tacit knowledge would expand. If inarticulate schemata were joined with symbols, the scope of articulate knowledge would expand as well. In other cases of articulate learning the reverse may be true: abstract symbols supporting an anticipated solution may be replaced by concrete evidence, conceptual and perceptual, which verifies the initial hunch.

7. We have already ventured onto the territory of the seventh characteristic of a general theory of meaning. As suggested, Polanyi brilliantly shows how integration is involved in the construction of meaning, but he never clearly specifies a second important process, which termed *evocation* in section I of this essay. Evocation occurs when a schematized entity is bracketed out of the normal flow of consciousness and its parts, associations, or connotations explored. This may occur at either the tacit or the explicit level of consciousness. The bracketed entity may be explored along a number of lines of mental organization within the schematized structures of what we shall see Polanyi calls latent learning. It follows that evocation is the process underlying remembering. One may store memories in temporal, spatial, or associative modes. Many memories are related to specific contexts of use. Through evocation we can open ourselves to the influences of the past as we have schematized it. Through evocation personal patterns of *association* can be made available for consideration.

Evocation also underlies the crucial philosophical processes of reflection, induction, criticism, and analysis. In reflection and induction evocation is a moment in a wide ranging mental exploration, whereas in analysis a specific content tends to be isolated and its components and their relationships identified. Criticism falls somewhere between these processes. Actually, the very rise of words or phrases into consciousness, whatever style of thinking is involved, relies upon evocation. We tacitly concentrate upon sense schemata or concepts and the words we need to symbolize the material appear. As a supplement to Ricoeur's well known saying, "The symbol gives rise to thought," our analysis suggests that "Evocation gives rise to the symbol."

Here we come to the phenomenology of evocation: in this manner of thinking things appear. They do not impinge upon us in the form of exterior events, in the guise of signals. Rather they enter our consciousness inwardly. Heidegger's notion of meditative thinking

In his classic book, *Remembering*, F. C. Bartlett argues that what we remember is schematized in the service of an affective attitude, and that recall is loaded so as to justify the attitude. See Jerome Bruner's account in *Acts of Meaning* (Cambridge: Cambridge University Press, 1990), pp. 58-59, where Bruner adds that the rememberer's interlocutor (whether present in the flesh or not) also influences the constructive process of remembering. While it is initiated by evocation, the overall process of recall obviously includes much integration.

can be seen as one mode of evocation. The Husserlian *epoche* is a highly stylized version of evocation.

Polanyi never explicitly analyzes the process I am calling evocation so far as I know (although he mentions evocation in such passages as the quotation from KB 199-200 cited several paragraphs earlier). Perhaps he is closest to giving an analysis of evocation when he speaks about sense-giving:

In the process by which a writer picks his words for describing his experience, we meet an act of *sense-giving*. And in view of the use he makes of universal terms, we may say that this sense-giving is an act of conceptual subsumption. . . . (KB 190)

However, the act of picking words makes it sound as if Polanyi skips over the process whereby the words appear and concentrates upon the proper integration to describe his experience. Moreover, conceptual subsumption involves pattern recognition and schematization. Polanyi discusses heuristic acts, problem solving, discovery, and similar processes, but he never identifies anything quite like evocation as described here. Perhaps this is because in emphasizing the a-critical grounds of commitment and the many indeterminacies involved in knowing Polanyi inoculates himself against an interest in any specific process at this level of thought.

Sometimes we voluntarily open ourselves to events so that some form of evocation may more easily occur, as in reflection or in searching for words. But sometimes external events seem to educe responses from us. For example, a Tchaikovsky movement evokes feelings of loss and sadness. Unless this is an automatic response to a signal, however, the process whereby these feelings arise must still be deemed evocation. We dwell upon the music in a way that the emotional response is elicited. It is important to note that in all cases of evocation it is not willful control that will bring the fruits of receptivity, but the power and connections inherent in the bracketed content in which we dwell. Indeed, the disinterested perception of art, so central to aesthetic appreciation; is really a means of setting oneself outside the normal flow of thought so that feelings may be evoked, forms enjoyed.

8. Eighth and finally, any general theory of meaning should examine the role of *emotion* in the overall experience of meaning. By emotion, I mean to indicate intense feelings, vivid embodied responses to the ways our projects and interests are satisfied, threatened, or thwarted. *Passions* can be seen as projects underwritten by emotional interest. Emotional manifestations tend to be temporary; a passion may last for years or for a lifetime. Polanyi speaks about how intellectual passions underwrite the drive to know in various disciplines.

Scientific value must be justified as part of a human culture extending over the arts, laws and religions of man, all contrived likewise by the use of language. For this great articulate edifice of passionate thought has been reared by the force of the passions to which its erection offered creative scope, and its lasting fabric continues to foster and gratify these same passions. (PK 173)

Our passions create cultural entities which in turn may be enjoyed with emotional intensity.

Notice these two sentences: We verbalize what we mean. We each search for a meaningful life. It may appear that the cognate forms of meaning mentioned in each sentence refer to unrelated entities. What does creating an intelligent remark have to do with experiencing significance in life? In fact, a great deal. The key issue is how the verbal meanings we create relate to the basic drives and interests that guide our lives. When our articulate meanings are enveloped in passions, they are experienced as significant and life enhancing. Then life is experienced as meaningful. Thus Polanyi's experiential version of meaning provides a ground for a theory of *existential meaning*, the significance we experience in life. Existential meaning is a type of experience which is accompanied by feelings that one's very being and doing have intrinsic value.

### III.

In *Meaning*, Polanyi and Prosch present the beginnings of a typology of meaning. Additional works by Polanyi, particularly *Personal Knowledge*, contribute further insights into types of meaning that can be distinguished usefully. The broad framework of Polanyi's thought, as outlined and revised in the previous two sections, provides adequate space for adding to the typology. Just as Polanyi emphasizes knowing as a process rather than knowledge as a final product, so a Polanyian theory of meaning should be dynamic, constantly subject to refinement and elaboration.

The following table is intended as a summary of types of meaning analyzed in this paper. My intention is to present these types as a heuristic challenge, as a lure for revision and expansion. The types of meaning listed will be seen to be a motley group. Not only does the schedule include apples and oranges, but perhaps onions and cashews as well. My defense for presenting such a logically variegated list of meaning types is twofold. I am attempting to integrate into one setting some of the most important types of experiential meaning, most of which Polanyi discussed in differing contexts. I would rather be guilty of overstepping the bounds of categorical purity than shackle the scope of my reconstruction out of a too narrow concern for rigor. After all, the experience of meaning is a rather messy affair. Secondly, Polanyi himself launched us into diversity by lumping together indication, symbol, metaphor, and work of art, and I've just compounded the multiplicity of types. Those who treasure pluralism should be happy.

See Walter B. Gulick, "The Thousand and First Face," in Daniel C. Noel, ed., *Paths to the Power of Myth* (New York: Crossroad 1990), p. 41, for a definition and description of existential meaning. My notion of existential meaning is to be carefully distinguished from the sense of this term employed by Polanyi in *Personal Knowledge*. His description runs as follows: "We may describe the kind of meaning which a context possesses in itself as *existential*, to distinguish it especially from *denotative or*, more generally, *representative* meaning. In this sense pure mathematics has an existential meaning, while a mathematical theory in physics has a denotative meaning. The meaning of music is mainly existential, that of a portrait more or less representative" (PK 58). According to my usage of the term, most people find mathematics a good example of that which lacks existential meaning. Only the dedicated mathematician or those with a Pythagorean enthusiasm for numbers are likely to have emotionally significant subsidiaries educed through the practice of math.

## TYPES OF MEANING

Polanyi's Terminology	Gulick's Terminology	Process Involved
I. Inarticulate Meanings		
1.	autonomic system	Background: controlled by schemata outside conscious choice. Insofar as accessible to consciousness: interoception, proprioception
2. trick learning	trick learning*	schematized contrivance: skills, connoisseurship
3. sign learning	signal learning*	schemata activated by signal; stimulus-response
4. latent learning	latent learning*	Network of learned causal relationships schematized in terms of temporal or spatial location, event type, etc.
	* mediated by signals	
II. Articulate Meanings		
5. indication	indication	perception, description, (symbols explicate data)
6. symbol	existential symbol	evocation of emotionally significant memories, thoughts, perceptions (seeing-as), enactments (rituals), etc.
7. metaphor	metaphor	thinking a subject (tenor) in terms of an imaginative vehicle
8.	empathy	contextual perception of the other in terms of own feelings

9.	narration	events connected by plot, explanation, purpose
10.	work of art	imaginative content with emotional power set in a framework and subject to transnatural integration
11.	science	imaginative explanatory edifices, ideally quantified, verified by empirical evidence
12.	religious acceptance	religious meaning "a sprawling work of the imagination involving rites, ceremonies, doctrines, myths, and something called 'worship'"

1. **Autonomic System.** The various sorts of autonomic and reflex activities are listed in a theory of meaning not as examples of meaning per se. Together with our body, they provide the physiological resources and setting for meaning producing integrations. Digestion, production of sweat, and breathing, to give several examples, usually take place in splendid disregard of conscious projects (although they are not entirely immune from the effects of consciousness).

Insofar as we can be aware of our internal organs and processes, our sensing is an instance of what physiologists call interoception. An allied inner sense is termed proprioception: "our sense of balance, position, and muscular tension, provided by receptors in muscles, joints, tendons, and the inner ear." "The visceral body produces demands for food, drink, sleep, sex, elimination, air - and our meaningful projects often are entwined with the satisfaction of these demands. "Hunger is not just in my stomach but pervades my mouth, my muscles, my mood." Given his background in medicine, it is surely reasonable to think that Polanyi would welcome the extension of his analysis of meaning to the body and its autonomic processes.

<sup>35</sup> Leder, *The Absent Body*, p. 39.

Ibid., p. 51. Leder, who makes use of Polanyi's from-to structure in his analysis, points out that the body in pain functions very differently than the healthy body. "No longer simply a 'from' structure, the painful body becomes that to which [the patient] attends" (p. 74).

Polanyi acknowledges the significance of the autonomic functions of an organism but concentrates his attention on inarticulate and articulate learning. He states, "I shall set aside at this stage the question whether learning may be represented within an extended framework of physiology, either as experimental conditioning or as stimulated maturation" (PK 71).

Drew Leder writes appreciatively of Merleau-Ponty's development of a physiology of embodiment. Yet he also criticizes Merleau-Ponty for restricting his analysis. In his early writings Merleau-Ponty oriented his discussion toward types of consciousness and argued for the "primacy of perception." The influence of the lived body as a producer of meaning is thereby ignored. In his final work, *The Visible and the Invisible*, Merleau-Ponty seeks to take fuller account of embodiment through the use of such terms as "the flesh" (*la chair*) and its "chiasmatic" intertwining (*entrelacs*). But, Leder complains, "All of the chiasmatic relations to which Merleau-Ponty refers are those involving the surface, ecstatic body. . . . The notion of flesh remains, in the broadest sense, an ontologizing of perception." All that Leder says in criticism of Merleau-Ponty could be said of Polanyi, for whom perception operates as the basic model of knowing. Similarly, Polanyi is tempted to assign ontological status to epistemological structures (but see PK 394). The inclusion of autonomic systems in a theory of meaning helps remind us that the body should receive its just due.

**2. Trick learning.** Next we move to the domain of deliberative activities of animals (including humans). "The individual's responses are here no longer restricted to adjusting himself to his environment; they are striving to control it" (SM 75).

Polanyi begins his discussion of trick learning by alluding to Skinner's demonstration of motoric learning in a rat. Once a rat accidentally triggers a release mechanism that feeds it, it may learn to internalize the action that leads to satisfaction. "We may say that the rat has learned to *contrive* an effect that is useful to it, or else that it has discovered a useful *means-end* relationship" (PK 72). Polanyi regards trick learning as a prelude to invention (PK 76). Once learned, a useful means-end correlation is schematized as a rule to be utilized on appropriate occasions. In coordination with signal and latent learning, trick learning is involved in the development of skills which integrate muscular particulars. Although language may be used to teach skills, the skill itself — or connoisseurship (PK 54) — is finally mastered at the inarticulate level. "In the last resort we must rely on discovering for ourselves the right feel of a skilful feat" (KB 126).

**3. Signal Learning.** Polanyi says that sign learning consists "not primarily in the contriving of skilful actions, but in the *observing* of a *sign-event* relation on which the actions follow. Such learning is grafted primarily not on motility but on perception" (PK 73). Signs mark the discovery of useful stimuli which orient an organism to real features of its environment. However, the concept of "signs" has been incorporated into semiotic and structuralist thought with a broader meaning than Polanyi intends, and it would be confusing to retain his terminology. Polanyi's notion of sign-learning has affinities with Peirce's notion of an index, but again I will revert to Susanne Langer's terminology. She distinguishes signals from symbols. A signal is a learned stimulus which is responded to automatically.

Leder, *The Absent Body*, p. 64.

In the first edition of *Philosophy in a New Key* Langer contrasted symbols with signs, but, in harmony with the usage of Charles Morris in *Signs, Language and Behavior*, in subsequent editions she replaced "sign" with "signal" and used "sign" to denote any vehicle of meaning, signal or symbol — see p. x. I follow this usage.

Langer's notion of signal is broader than Polanyi's notion of sign, for signals do not just announce future events, which Polanyi emphasizes, but the actual presence of something, past, present, or future. Indeed, as we shall see, signals are embedded in trick, sign, and latent learning; they provide our primary access at the inarticulate level to the world as a meaningful entity, even as feelings provided primary inarticulate access to our embodied personhood. Thus signals are deeply implicated in tacit knowing.

Within the welter of incoming sensory information, signals are those significant items picked out and responded to. Strictly speaking, the term "signal" designates a *function* — a learned stimulus-response pattern — rather than an entity. Humans share with animals the learning and utilization of signals as a way of coping with the world's demands and of fulfilling desires. In the process of learning a useful causal relationship, a person schematizes the lesson, which may then be relied upon automatically, without any deliberation or reflection. But signals may also offer the mind information of realities to be dealt with subsequently through language — that is, at a symbolic level. Signals fit into networks which may be primarily oriented toward action or thought.

Suppose one is walking outside on a spring day. The feeling of air moving about one's head, the sound of wind, and a sudden feeling of lightness upon one's head would be signals (grounded in the way a context was schematized and thus allowing for a certain range of anticipations) for one to clap one's hands to one's head to prevent a hat from blowing off. A crash of thunder would be a signal of a future event and would inspire one to seek cover or otherwise prepare for rain. The sound or feel of rain would signal a present event, and encountering wet streets would signal that it had just rained. A fresh, pungent smell by a bakery would signal that bread had just been baked. On the golf course, if a person yelled "Fore" at one, it would be a signal to duck. In these cases, it can be seen that signals can be natural (thunder) or humanly contrived ("Fore"). The symbol "Fore" can function as a signal as well as a symbol.

Signals are highly context dependent. Thus the sudden noise of thunder might provoke a number of responses dependent upon one's situation and interests. One might run for cover, but one might run out to close the car windows or save what one had just produced on a word processor. These examples reinforce the point that signals are enmeshed in one's understanding of the causal (and social) relationships that prevail at a given time in one's world. And this point leads to the next category.

Feelings of both a physiological and psychological sort may, of course, function also as signals. A toothache is a signal which may lead to a visit to a dentist. A feeling of sympathy for a sick child may function as a signal to hug the child.

Insofar as we may be born with the ability to respond automatically to signals, these innate responses are usually called instincts and belong to the realm of autonomic responses. In effect, learned signal responses extend the range of causality in our behavior.

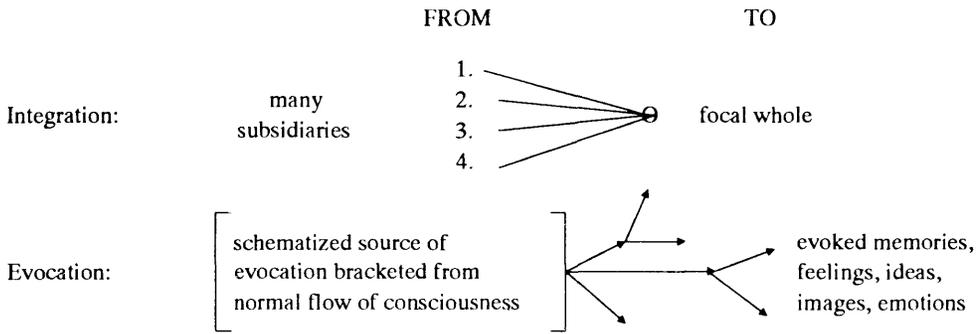
**4. Latent Learning.** Polanyi understands latent learning to be an interpretive framework incorporating, in a sort of mental map, the lessons of trick and sign learning. Latent learning "occurs when the process of reorganization is achieved not by a particular act of contriving or observing, but by achieving a *true understanding of a situation which has been open to inspection almost entirely from the start*" (PK 74). Skills and signals are schematized **into** time sequences and spatial relationships which allow for intelligent responses to signals in contexts different than where they were learned. Routine problems may be solved on **the** basis of latent learning — and the world becomes meaningful even at the **inarticulate** level.

For an illustration of latent learning, we may return to the earlier example of driving a car. Let us suppose that, although we are in a hurry, we are negotiating a twisty road. Our sense of how we should maneuver through each curve will be dependent on a number of signals: the feeling of pressure on the seat of our pants as we turn, our visual estimation of how sharply the road turns, the sound of the engine (determining if we should down shift), our observation of road signs (taken as signals), and so on. Skills and signals involving several senses are integrated into a total meaningful achievement grounded in how **our** previous driving experience has been schematized.

A simple skill may be activated (schema engaged) and played out with little attention to signals. But most intelligent responses to our environment involve complex schemata **that** require that one pay continuing heed to the signals which disclose the realities with which one must cope. Signals are essential to the use of trick, sign, and latent learning. Therefore, it is natural to see if the meaningful responses can be diagramed in a way similar to the models Polanyi and Prosch introduce in *Meaning*.

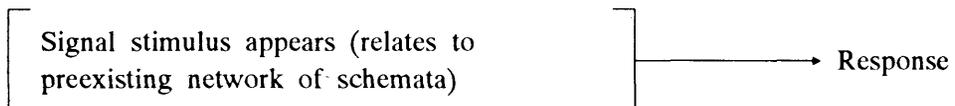
Alas, Polanyi begins his analysis at the articulate level. He diagrams the basic act of meaning as showing subsidiaries (S) bearing upon (-) their focal meaning (F), where integration takes place in the act of bearing upon: S - F. In order better to illustrate the crucial roles of integration and evocation, I would suggest this simple diagram be supplemented by the following diagrams :

**William Poteat, the philosopher who has most creatively extended Polanyi's thought, emphasizes the primitive mindbodily origins of meaning: "It is true: meaning is radical, irreducible, ubiquitous; older than our reflection" (Polanyian Meditations, p. 157).**



In evocation the lines of influence are not shown to coalesce into a unity because the source of evocation generates data which is not itself integrated, although it may be material which in a subsequent mental act is integrated. In evocation the scattering of ideas is indicated by the divergent lines. It is not possible to generalize as to whether the source or the evoked ideas are of greater interest; that depends on the particular values and circumstances involved. The brackets about the source indicates that evocation occurs when a schematized mental entity is separated out from the normal stream of consciousness.

Which of the three diagrams best illuminates the way signals function? Let us return to a previously cited example. We hear someone yell "Fore" at us on the golf course and we automatically duck. Our sense of reality is defined by our present environment — if we heard "Fore" yelled on a city street, we would probably wonder "For what?" or "For whom?" The sound would be schematized in a framework addressed conceptually rather than in terms of a behavioral response. On the golf course, "Fore" has a meaning which requires no reflection; in fact, reflection could be quite dangerous. Here we simply attend from the subsidiary term "Fore" to the focal meaning, which in this case is an action embodied in the form of ducking. The simpler diagram seems most apt for such a case: S → F. To be sure, integrations must occur within muscles, but these would presumably be governed by the complex schema evoked by "Fore." If a person learned the meaning of "Fore" as "protect yourself from being struck by a golf ball," and the person was particularly concerned about protecting his face, then instead of ducking, his learned automatic response might be to throw his hands in front of his face. The lesson we originally schematize determines the nature of our subsequent response, and therefore in this case it seems more appropriate to diagram the governing schema as set forth in the first diagram than relate it to acts of integration, as in the second model, or evocation, as in the third. However, the role of context in determining a response to a signal might be indicated as follows:



Because signals stimulate an automatic response, it is inappropriate to designate either the signal or the response as of greater intrinsic interest. They are of a piece.

5. Indication. Now we cross the ambiguous boundary between the inarticulate and articulate realms. Polanyi thinks that ordinary descriptive uses of language and most perception fall with the category of indication. Words (sense data, maps, formulae) are subsidiaries of no intrinsic interest that are made to bear upon focal meanings which are of interest. The language we use becomes transparent in the process of articulating meanings we wish to communicate, analyze, express, etc. In *Meaning* Polanyi lists twelve types of articulate self-centered integrations. It appears to me that some items on the list are better analyzed as inarticulate than as articulate performances (e. g., "two retinal images fused to three-dimensional sight" or "establishment of part-whole relations" [M 71]). Of course, as noted, human existence is language saturated, and it is difficult to separate neatly the inarticulate from the articulate realms.

Polanyi diagrams indication as follows :

$$\begin{array}{ccc} S & \longrightarrow & F \\ -ii & & +ii \end{array}$$

The symbol -ii indicates that which is not intrinsically interesting in the transaction, +ii that which is.

Polanyi's diagram is instructive in some senses, but puzzling in others. It is most nearly adequate in describing perception. In perception, sense data of interest are schematized. Those schemata of importance in relation to one's projects might be responded to as signals, whereas for those schemata which are merely recognized and not responded to, a word associated with the schema would be evoked. This naming function of perceptual recognition ("rose aroma," "trumpet sound," "suspicious look") would still not quite form an indicative sentence, a grammatically formed entity. Nevertheless, I think perception and description can be grouped together as types of indication without misunderstanding.

However, Polanyi's diagram covers up at least three aspects of indication as descriptive statement which we should surely understand better: the influence of the context, the place of symbols in indication, and the rules governing integration. Polanyi's diagram truncates the full experience of meaning in ways similar to reference theories of meaning.

To illustrate this point, let us examine this sentence, which we may imagine is spoken by one person to a second person or a third person: "His political views are ill-formed." Here, the specific words are indeed of interest only insofar as they contribute to the total conception communicated. But much more contributes to the meaning experience than the focal conception plus the words employed to express it. Many subsidiaries enter in. These might include 1) the memory of the immediately preceding statement, 2) the conception the first person has of the third person, 3) the first person's aim in speaking to the second person, 4) a sense of what will influence the second person in line with the first person's aim, 5) the first person's mood, 6) the first person's perception of visual clues as to the second



Peirce's triad: "A stands for B to C" (KB 181). He continues, "I shall prefer to write instead: A person A may make the word B mean the object C." **But** it is evident that Polanyi's construction is not equivalent to Peirce's. For Peirce, A is normally called a symbol, B an object, C an interpretant (a new sign interpreting the A to B relationship). While a person may be the seat of the interpretant, a person is neither necessarily involved in semiosis, nor does she actively create the meaning as in Polanyi. In fact, I find Polanyi's use of embodiment more appropriate to a theory of experiential meaning than Peirce's more abstract structure of relationships. Yet Polanyi's notion of a person involved in the relationship of meaning is an enigma — a term that conceals more **than it** reveals. What rules govern the integrations? What types of things may be integrated? Polanyi does not specify. A "person" does this. Thus Polanyi's "person" would be an explanatory term more attractive to Tartuffe than to a scientist.

In the diagram I have enclosed within parentheses the relevant words evoked to indicate that they are applied in a coherent form to the schematized subsidiaries which are primary in this process. The dotted line indicates that the descriptive words are themselves evoked from the schematized subsidiaries.

The proposed from-via-to structure of consciousness follows Peirce, Langer and host of others in emphasizing the crucial mediating importance of symbols in the construction of articulate meaning. Yet it is distinctively Polanyian in being rooted in embodied subsidiaries from which we think. And it is consistent with Brentano, Husserl, and more recent philosophers like Searle in making the vectorial, intentional aspect of thinking fundamental. In addition, the proposed model amplifies a recessive theme in Polanyi — one stressed more in Whitehead and process philosophers — that meaning is grounded in and emerges by reliance upon feelings and represents a valuing of some subsidiaries over others.

6. **Existential Symbol.** Polanyi's notion of a symbol must be carefully differentiated from the sense of "symbol," borrowed from Langer, used in this paper. Polanyi says that in symbol meaning "it is the subsidiary clues that are of intrinsic interest **to** us, and they enter into meanings in such a way that we are *carried away* by these meanings" (M 71). He pictures this relation initially as follows:

$$\begin{array}{ccc} \text{S} & \longrightarrow & \text{F} \\ + \text{ii} & & - \text{ii} \end{array}$$

A country's flag is used as an example of a Polanyian symbol: the flag is not intrinsically interesting in itself, but rather because of the valued memories of the nation and its personal significance that the flag evokes. These emotions come to be embodied in the flag. In

Peirce writes to Lady Welby as follows: "I define a Sign as anything which is so determined by something else, called its Object, and so determines an effect upon a person, which effect I shall call its Interpretant, that the latter is thereby mediately determined by the former. My insertion of 'upon a person' is a sop to Cerberus, because I despair of making my own broader conception understood" (in *Values in a Universe of Chance; Selected Writings of Charles S. Peirce*, Philip P. Wiener, ed. [Garden City, NY: Doubleday Anchor Books, 1958], p. 404).

evoking these diffuse memories the flag "carries us away" in surrender to the symbol. The full relationship is diagrammed with a somersaulting arrow to designate being carried away:



Polanyi's account of a symbol is problematic in several respects. Is it appropriate to regard the flag as the *meaning* of certain patriotic memories? I think not. If we integrated the memories they would not cohere in a flag. A flag is the meaning of sensory indicators (colors, shape, pattern). We schematize the pattern and recognize it as our flag. This in turn evokes emotionally colored patriotic feelings. Surely it is more correct to say that these feelings are the meanings of the flag for one rather than that these memories mean the flag (or even the country). Thus the flag serves as an occasion of evocative meaning, functioning more like a favorite aroma attracting pleasurable thoughts than like the source of a new integration.

**Furthermore,** it seems best to regard *Polanyian symbols* as a *special type of Langerian symbols*. Just as significant words educe feeling-laden connotations and have meanings, so do such Polanyian symbols as the flag. The emotions they elicit are of great importance to us. They are bearers of existential feeling. Hence I would suggest they be termed existential symbols. What distinguishes them from ordinary symbols is their richness for individuals (or whole cultures). An existential symbol is to be understood in terms of the dynamics of experiential meaning. That is, a flag is functionally, not intrinsically, an existential symbol. It typically would not carry away a citizen of another country or a self-indulgent citizen with no sense of patriotism. Likewise, if a religious existential symbol like the cross is looked at by a person only in terms of its material form and content (two perpendicular pieces of wood), it would not function as an existential symbol.

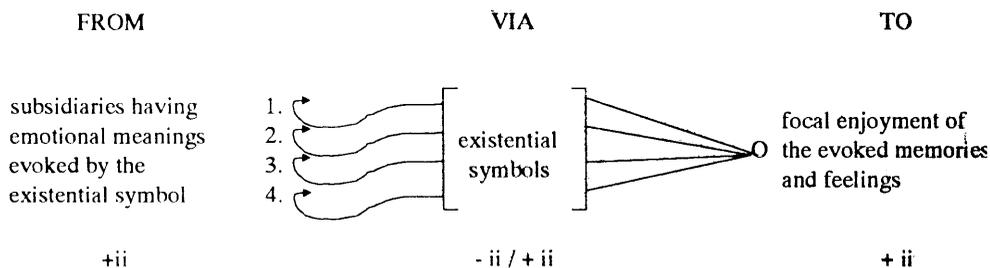
It is also dubious for Polanyi to claim that existential symbols themselves are of negligible interest (-ii). As the bearers of our valued feelings, existential symbols are objects of awe or care. We treat a flag with respect, not as we would a newspaper, tree branch, or clod of dirt. Such existential symbols as the crucifix, Stature of Liberty, or marriage ring are also treated in special ways not accorded ordinary objects. However, it is also true that, during the moments the existential symbol is evoking our feelings, it is transparent in the same way

Polanyi's notion of a symbol reminds me very much of Paul Tillich's understanding: people participate in a symbol in a way that opens up new dimensions of self and world. See Tillich's *Dynamics of Faith* for his clearest expression of the nature of symbols.

In my description of an existential symbol I have been influenced by Dan Sperber's anthropologically informed view of "symbols." He claims of "symbols" — in quotes — that they have two aspects: "one, a displacement of attention, or *focalisation*; and the other, a search in the memory, or *evocation*" (*Rethinking Symbolism* [Cambridge: Cambridge University Press, 1975], p. 119). Focalizations bear universal literal meanings, but evocation has different evocative fields in different cultures and specific individual evocations (see p. 139). Correlations are evident with Polanyi's from-to structure of consciousness and with the subject pole of commitment related to the pole of universal intent in personal knowledge.

that words in use are. The interest of the existential symbol can, consequently, be looked at as both a plus and a minus.

Now we are in a position to diagram the way existential symbols are involved in meaning:



Whereas with indication the subsidiaries evoke appropriate descriptive symbols, existential symbols in contrast evoke significant emotion-laden subsidiaries which come to consciousness as memories, hopes, and values. The structural similarity for the two types of meaning should not obscure their different kind of temporal flow, which is comparable to the contrasting flow of sense-reading and sense-giving. This is indicated by the looping arrows. In contrast to simple evocation, however, these elicited meanings are kept in harmonious coherence by the power of the existential symbol as it draws attention to itself. This is what Polanyi means when he states the meaning is embodied in the existential symbol.

7. Metaphor. The third type of meaning Polanyi discusses in *Meaning* is the metaphor. "When a symbol embodying a significant matter has a significance of its own and this is akin to the matter that it embodies, the result is a metaphor" (M 78). Both the tenor and vehicle of a metaphor are of intrinsic interest and play off each other in this way:



Once again, this manner of interpreting the meaning of a figure of speech is not entirely satisfactory. Much of the problem derives from the misuse of I. A. Richards' notions of tenor and vehicle. The Vehicle of a metaphor is the poetic imagery through which we think a subject matter (tenor) and creatively come to a new comprehension of that subject matter. Here is what Richards says:

In many of the most important uses of metaphor, the copresence of the vehicle and tenor results in a meaning (to be clearly distinguished from the tenor) which is not attainable without their interaction... The Vehicle is not normally a mere embellishment of a tenor which is otherwise unchanged by it but . . . vehicle and tenor in a

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co-operation give a meaning of more varied powers than can be ascribed to either'

Richards makes clear that tenor and vehicle must be integrated in a metaphor to produce a new meaning, but Polanyi's diagram suggests that a vehicle is somehow the focal object of the subsidiary tenor. This is a muddle.

Let us attempt to correct matters by using Polanyi's illustration from Shakespeare's Richard II.

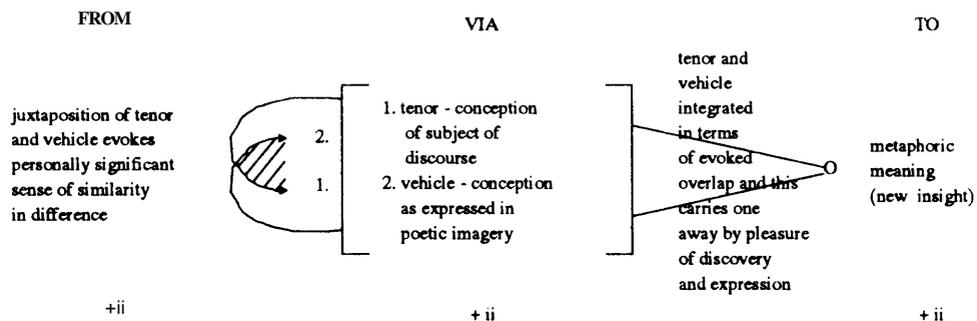
Not all the waters of the rough rude sea  
 Can wash the balm from off an annointed king.

Here the king is the tenor of the metaphor, the image of the sea lapping at the embalmed king the vehicle, and the notion that 'once annointed a king embodies royalty no matter what the turmoil' is the metaphoric meaning as the image is conventionally interpreted. I say "conventionally interpreted" because one of the important characteristics of metaphor is that it invites each reader or auditor to make his or her own interpretation. And here is the source of metaphor's power. Both the tenor and vehicle are of intrinsic interest, but their meaningful integration often presents a challenge of this sort: How can one think the tenor in a way that also makes sense of the vehicle? Each person's interests and experiences get drawn into the interpretive process. Polanyi states this aspect of a metaphor well:

The subsidiary clues — consisting of all those inchoate experiences in our own lives that are related to the two points of a metaphor — are integrated into the meaning of a tenor and a vehicle as they are related to each other in a focal object (a metaphor). The result is that a metaphor, like a symbol, carries us away, embodies us in itself, and moves us deeply as we surrender ourselves to it. (M 78-79)

Polanyi is of course speaking of live and provocative metaphor, much metaphor is strained or tired and does not carry us away.

How is metaphor best to be diagrammed? This attempt is quite different than Polanyi's model:



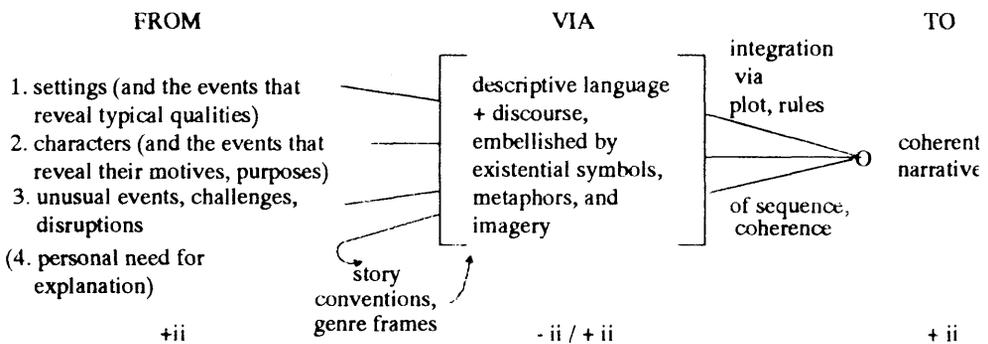
<sup>46</sup> I. A. Richards, *The Philosophy of Rhetoric*, 1936, p. 100.



The empathetic understanding of the other is not a mere projection of myself on another because I must take account of who the other is - what his experiences have been - and the nature of a context which must be in some respects different than anything I have experienced. Thus empathetic meaning is an emotionally rich imaginative achievement grounded in evocative sensitivity.

9. Narrative. Before turning to the fourth and final type of meaning diagrammed by Polanyi and Prosch, I would like to call attention to a type of meaning construction which is of great significance in bringing unity and order into life. I'm referring to narrative. Indication, existential symbols, and metaphor all provide richness of meaning to language use, but it is narrative which links discrete instances of meaning into wholes which make sense of the flow of life. Polanyi gets at the power of narrative to some extent when he discusses myth. But really the use of purpose, motivation, sequence, explanation, and plot which characterizes much narrative deserves a category of its own. Many recent studies — particularly those of Paul Ricoeur — provide fertile ideas for interpreting narrative as a form of making meaning.

Here is a preliminary diagram of narrative meaning:



Herbert Fingarette gives the most carefully nuanced description of the dynamics of empathy of which I am aware. He postulates a threefold sequence of moments as productive of empathy. While my interpretation of empathy according to the model of metaphoric meaning is not fashioned in a way to emphasize temporal process, I think in all essentials my account accords with Fingarette's — see *The Self in Transformation* (New York: Harper Torchbooks, 1965), pp. 257-258.

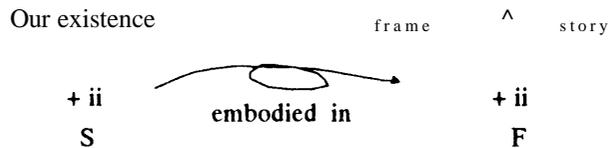
Ricoeur's analysis of narrative highlights some important characteristics that my diagram of narrative tends to obscure. "The act of emplotment combines in various proportions two temporal dimensions, one chronological and the other not. The former constitutes the episodic dimension of narrative. It characterizes the story insofar as it is made up of events. The second is the configurational dimension properly speaking, thanks to which the plot transforms the events into a story. This configurational act consists of 'grasping together' the detailed actions or what I have called the story's incidents. It draws from the manifold of events the unity of one temporal whole" (*Time and Narrative*, vol. I [Chicago: University of Chicago Press, 1983], p. 66). The chronological events are that from which we construct by integration (emplotment) the narrative whole.

10. Work of Art. Polanyi attempts to synthesize all the arts into one category of meaning, a feat of abstraction which may be more harmful than helpful. The sorts of meaning available in jazz are quite different than those found in photography, poetry, ballet, abstract painting, architecture, or opera. Nevertheless, I will follow Polanyi along his abstract trail and hope that the necessary qualifications can be provided by an aesthetician. I would note in passing only that Polanyi's distinction between representative and visionary arts is a helpful one which will not be incorporated into this discussion.

Each of the arts, Polanyi claims, is separated from everyday meaning by its reliance on some artificial framework. This also helps isolate it from entanglement in the subjective uncertainties of an artist's personality. For example, the artificialities which establish a framework for a poem may include rhyme, expressive sounds, peculiar grammatical constructions, meter, metaphor, and even its visual arrangement on a page.

Thus the formal structure of a poem, which has so much of the poem's meaning in it, forms a blockage, insulating the poem from everyday affairs and so also from the poet as a private person. When entranced by a poem, we repeat its words through its lifetime; strictly speaking, it is the poem that speaks to us, not the poet. (M 86)

The way we may experience a poem or work of art as meaningful is indicated by Polanyi in this diagram:



Polanyi seems to be saying that form and content are welded together by the way he relates frame and story with reciprocal curly arrows. But the notion or frame is not identical with the notion or form. Is what Polanyi means by the frame properly seen as part of the focal meaning of the work of art? Surely not, or at least not in many cases. The theater stage, the gallery wall, the symphony hall seats, the picture frame — such framing devices function as cues that we are not to take the transpiring events or artistic objects as part of the ordinary everyday world. Rather they are to be comprehended according to the aesthetic canons appropriate to their artistic genre. Thus the framework should be indicated by brackets because as in empathy and evocation our natural attitude toward things is set aside when we experience art.

Polanyi's view is obviously highly influenced by the New Critics who were so dominant in the middle of this century. While I think Polanyi's emphasis on the frame is important, I also believe that one decreases the likelihood that the poem can communicate something new to one if one sunders it from the cultural context within which it originally took on meaning. Reference to the creator's intentions or to its place in the corpus of the creator's work should not be ruled out *ex cathedra* when evaluating the merit of a poem.



Perhaps Polanyi overdraws the contrast; after all, works of art become familiar and their interpretation conventional without these works becoming quite meaningless, nor are generally accepted scientific facts meaningless. But each does lose much of its existential meaning as it becomes commonplace.

Interestingly, issues of existential meaning come to loom large in Polanyi's assessment of science as a domain of meaning. "The main influence of science on modern man has not been, as is often supposed, through the advancement of technology; it has come, rather, through the imaginative effects of science on our world view" (M 104). The image science has offered to us is a vision of humans as bits of matter on a planet of a minor sun in one of perhaps billions of galaxies. Human suffering and sacrifice, our puny efforts, mean nothing in an unimaginably vast universe which blindly crushes all it creates. This is a scientific vision which Polanyi believes is, to recast a phrase, neither necessary nor sufficient. He sees one of his basic tasks to be that of formulating a many adequate world view, grounded in science, but integrating many of life's qualities into its vision. Existential meaning is most completely addressed in religion.

12. Religious Meaning. If a work of art and a body of science are complex phenomena, they are still relatively simple in their human use compared to religion. Polanyi makes this point well.

Religion, we can see, is a sprawling work of the imagination, involving rites, ceremonies, doctrines, myths, and something called "worship." It is a form of "acceptance" much more complex, therefore, than any of the other forms we have been attending to. (M 152)

A full treatment of religious meaning would not only need to treat the items just listed in the quotation, but indicate how religious meaning originates and becomes institutionalized. Religious meaning can be interpreted as addressing the meaning of existential meaning. It is beyond the scope of this work to explore this "sprawling work of the imagination." Regard its being mentioned here as a kind of promissory note for future work.

#### IV.

And so Michael Polanyi's understanding of meaning has been described, extended, and reconstructed. The result of this process has been to develop a general theory of experiential meaning. It has been shown that meaning is the product of two interconnected processes; integration and evocation. These embodied processes help an organism adjust to and control its environment. Individual experiences of meaning are grounded in subsidiaries which bear on focal meanings at the center of attention. The focal meanings so produced may be dwelt in and internalized so that they come to function much like an extension of one's body. While many of the meanings we produce remain at the tacit level, articulate

I appreciate the criticisms of this article offered by Gabriella Ujlaki and Marta Feher; they have furthered the work of reconstruction.

meanings are best thought of as arising within a from-via-to structure of consciousness. That is, they are grounded in subsidiaries *from* which we think *via* the mediating influence of symbols (language) *to* focal meanings. Thus linguistic meanings (for instance, signal, denotation, connotation) are special types with the comprehensive scope of experiential meaning.

Eight characteristics of experiential meaning were described. The experience of meaning is momentary and dense. We have some direct but limited access to the subsidiary components of meaning via feelings, which guide the processes of meaning construction tacitly. Underlying all meaning and acting as facilitators of division and integration are schemata, indwelt rules by which we assimilate and organize the lessons of life. As humans, we have a continuing need to symbolize what we encounter, and the most important type of symbol is language. Schemata provide rule-bound mechanisms for interchange between images and discursive thought. Imagination in its broadest sense denotes all cognitive spontaneity, but in its narrow sense signifies the acts of integration which, together with the information gathering process of evocation, accounts for the rise of meaning. When accompanied by the emotions related to the array of our interests, meaning construction also provides humans with a sense of existential meaning, the experience of living as significant and satisfying.

Finally, a taxonomy of twelve different types of meaning, inarticulate and articulate, was developed. Beginning from the mute processes of the autonomic system, types of meaning in a roughly ascending order of complexity and scope were described and their processes analyzed. The list culminated in religion, which attempts to grasp the whole in a great transnatural integration. It may be, however, that more important than comprehending the whole with any sort of adequacy is an appreciation that within the fragmentariness of actual lives existential meaning can be experienced, and that makes everything worthwhile.

#### **Abbreviations of Michael Polanyi's works cited in article**

- KB *Knowing and Being*, Marjorie Grene, ed. (Chicago: University of Chicago Press, 1969).
- M *Meaning*, Harry Prosch co-author (Chicago: University of Chicago Press, 1975).
- PK *Personal Knowledge* (New York: Harper Torchbook, 1964).
- SM *The Study of Man* (Chicago: University of Chicago Press, 1959).
- TD *The Tacit Dimension* (Garden City, NY: Doubleday Anchor Book, 1966).