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## THE PERSONAL AND THE SUBJECTIVE

The distinction named in my title is fundamental to Polanyi's philosophy of science and, more generally, to his theory of knowledge. Yet on the rare occasions when philosophers of science mention his work at all, they seem to misunderstand this basic theme. An honourable exception is John Ziman, who in his little book *Public Knowledge* (Ziman, 1968) acknowledges his debt to *Personal Knowledge*. But Lee Buss in *The Evolution of Individuality* (Buss, 1987) seems to me more typical, when he celebrates the "fact" that Polanyi has shown scientific knowledge to be subjective. Since the contrast between the personal and the subjective forms one of several basic theses carefully woven into the texture of Polanyi's argument in *Personal Knowledge*, it may be worth looking at that text again with this central theme in mind, and also worth reflecting along the way on possible reasons for the misunderstanding of what appears, or appeared, so plain a distinction. In rereading *Personal Knowledge*, however, for the first time, I must confess, in twenty years or more, I have also found some difficulties in interpreting Polanyi's use not of the concept of the personal, but of the subjective. So in going through the text in search of clear statements of the crucial distinction, I will point out as well, on the contrary, some ambiguities in the use of "subjective" and "subjectivity", and also, as I proceed, suggest reasons for the neglect of this work by the philosophical community in general — even though some of its themes are by now being independently rediscovered (and sometimes stolen, but that is not my topic here).

First, then, let's look at some of the passages in which the personal and the subjective are distinguished. The chief sources are chapters 6 (Intellectual Passions), 8 (The Logic of Affirmation) and 10 (Commitment), but there are important, and also in part puzzling, statements along the way.

The Objectivity chapter, to begin with, explicitly denies the alleged objectivity of a theory to be "subjective": "A theory on which I rely is ... objective knowledge in so far as it is not I, but the theory, which is proved right or wrong when I use such knowledge." (PK, p. 4). The major claim of the whole work is in fact stated at the close of this chapter (and, indeed, of each chapter, except perhaps Probability, which ends with a forward reference, but a less inclusive one). At the close of Chapter One, Polanyi writes:

. . . the act of knowing includes an appraisal; and this personal coefficient, which shapes all factual knowledge, bridges in doing so the disjunction between

Israel Scheffler is one of the most conspicuous in totally misreading Polanyi's argument in this way (Scheffler, 1967).

subjectivity and objectivity. It implies the claim that man can transcend his own subjectivity by striving passionately to fulfil his personal obligations to universal standards". (PK, p. 17)<sup>2</sup>

Although chapters 2-4 are intended to exhibit increasing degrees of the personal component in knowledge, there is nothing directly on our topic in the Probability chapter (ch. 2). In Order, a propos of the thoughtful station master, Polanyi points out that orderly patterns are not subjective unless they are mistaken (p. 37). This passing remark really raises, indirectly, the whole problem of self-set standards, and it also suggests a sense of subjectivity that will be introduced officially only in Part IV. I shall return to that point later.

Meantime, the chapter concludes:

We see emerging here a substantial alternative to the usual disjunction of objective and subjective statements, as well as to the disjunction between analytic and synthetic statements. By accrediting our capacity to make valid appraisals of universal bearing within the exact natural sciences, we may yet avoid the sterility and confusion imposed by these traditional categories. (PK, p. 48)

At first sight this statement, like the concluding statement at the Objectivity chapter, seems to make the status of the personal already plain; on the other hand, if personal knowledge is presented as evading the contrast of subjective and objective, the two seem to be fused rather than contrasted. So one can perhaps see how readers like Buss could misunderstand the point. If we are fusing subjective and objective, everything might be said to be subjective in the sense of containing a subjective component.

As a matter of fact, I now see that we should distinguish here two concepts of the subjective that are interwoven in Polanyi's argument. On the one hand, the subjective is recurrently the passive, the merely mine that makes no claims beyond immediacy, almost like Hegel's here and now. Such subjectivity contrasts with the objective in the ordinary meaning, what is out there, independently of me. On the other hand, if we take the personal as fusing subjective and objective then the subjective becomes an aspect of commitment, hence of the personal. It seems that I, as a subject, responsibly and actively make an assertion and also by the very same act submit myself to something beyond me - something objective - that compels me to do so. Here also "objective" takes on its only self-consistent meaning: it is the objective of a commitment through aiming at which I claim to come into contact with reality: with what is objective in the sense of being other than my self-centred

There is one slip in this chapter. In claiming greater objectivity for the Copernican theory, Polanyi says: "We do imply that its excellence is, not a matter of personal taste on our part, but an inherent quality deserving universal acceptance by rational creatures." (PK, p. 4). "Personal" here is a misnomer; matters of taste in this context, one would think, are indeed subjective and not personal. I don't believe the central term "personal" is misapplied in this way again.

little self. So subjectivity is either 1) the passive and immediate or 2) that component of commitment, at once active and passive, that marks it out as *mine*.

The Skills chapter makes two contributions. In its account of tradition, it seems to me to show clearly that science is *not* subjective, since it matters where research is carried on: geography is surely independent of subjective whim. On the other hand, the need to rely on authority, the importance of the master-pupil relation in science, on which the geographical point depends, would be taken by many as a "subjective" matter — if "subjective" is whatever is decidable only by some means other than an algorithm: and of course that's how, especially in this day of AI and information processing, many people take it. A standard view of the history of Western thought tells us that in the Middle Ages every one relied on authority, and that was arbitrary, non-objective and bad, and then along came Copernicus, Galileo and Newton and everything was scientific, objective and good. Or in reaction to this: do your own thing. Those are the alternatives. Still, to a thoughtful reader, the notion of tradition should convey a hermeneutical thesis, which is social, historical and therefore involving an aspect of contingency, but surely not therefore "subjective". Tradition limits the individual, even while providing to him (her) a home for growth and fulfilment, even for modification and rebellion. It allies itself rather with the positive than the negative concept of freedom.

Second, the conclusion of the chapter again summarizes Polanyi's position as far as he has gone, adumbrating the development to come — and here the contrast of personal with subjective is straightforward and emphatic: "It is the act of commitment in its full structure," he writes,

that saves personal knowledge from being merely subjective. Intellectual commitment is a responsible decision, in submission to the compelling claims of what in good conscience I conceive to be true. It is an act of hope, striving to fulfil an obligation within a personal situation for which I am not responsible and which therefore determines my calling. This hope and this obligation are expressed in the universal intent of personal knowledge. (PK, p. 65)

That, of course, is the whole work in a nutshell, and its message could not be more clearly stated.

Part II, The Tacit Component, exhibits our distinction chiefly in the account of Intellectual Passions. However, there is one disturbing statement in the Articulation chapter: Polanyi refers to "our subjective self confidence in claiming to recognise an objective reality." (PK, p. 104) This statement perhaps echoes those quoted earlier from the Objectivity and Order chapters: subjectivity and objectivity are here being blended; but this does, again, seem to obscure the contrast between the subjective and the personal. Does an intellectual commitment combine objective with subjective or does it ground objectivity in a new way in a personal claim and so evade subjectivity? It seems to do the first if we think of subjectivity (2), but the second in terms of subjectivity (1) — and it is in that sense that the subjective is most clearly contrasted with the personal.

On the whole, it seems to me, it is that contrast that is emphasised in the chapter on Intellectual Passions, which surely makes crystal clear the other than subjective nature of the personal. It opens with a retrospective on the account of exploratory activity that Polanyi has found pervasive in the animal kingdom. "Here," he writes, "in the ... structure of such exploring .... we found prefigured that combination of the active shaping of knowledge with its acceptance as a token of reality, which we recognise as a distinctive feature of all personal knowing." (PK, p. 132). What we find anticipated here, in turn, is the ecological epistemology, as we might call it, that Polanyi was to develop in terms of his conception of knowledge as "from-to" in structure. As I put it in my introduction to *Knowing and Being*, "all knowing ... is orientation. The organism's placing of itself in its environment, the dinoflagellate in the plankton, the salmon in its stream or the fox in its lair, prefigures the process by which we both shape and are shaped by our world, reaching out from what we have assimilated to what we seek." Trying to find out where one is, one may fail; but the effort is surely not "subjective". An animal in search of food is hungry; but the food is real, whether or not he finds it. Even if there is none, it is a real target of his search.

Yet as the chapter proceeds, with its rich examples from the history of science, an unsympathetic reader may again be given the impression that the activity involved in the epistemic claims of scientists is "subjective", when he (she) reads, for example, that "(t)raditions are transmitted to us from the past, but they are our own interpretations of the past, at which we have arrived within the context of our own immediate problems." (PK, p. 160). True, as the argument develops, it should be plain that such interpretations are not arbitrary or whimsical. For one thing (p. 163), they are social, thus interpersonal and not in each case subjectively "mine". And then the section on "Passions, Private and Public" sets out in the most emphatic terms the contrast between appetites and intellectual passions: appetites die (for the moment) with their satisfaction, while intellectual passions "leave behind knowledge, which gratifies a passion similar to that which sustained the craving for discovery. Thus intellectual passions perpetuate themselves by their fulfilment." (PK, p. 173) And of course appetites, satisfied, gratify only the individual; the knowledge that satisfies an intellectual passion is there for any one to share. That is a corollary, I suppose, of the "universal obligation" a seeker after mental excellence believes him(her)self to be fulfilling. Purely subjective desire or satisfaction carries no such component of universal intent.

The next sections of this chapter expand the perspective to mathematics, the arts and religion — in the last two cases presumably, to tough-minded scientific types, a double foray into the merely subjective! As a matter of fact, I regretfully find by now the theistic theme so carefully woven into the texture of the whole misguided and misleading; I'll return to that question when I come to the chapter on Commitment. As far as the impression of subjectivity goes, however, at this point Polanyi himself, in speaking of "a personal component, inarticulate and passionate, which declares our standards of values, drives us to fulfil them and judges our performances by those self-set standards," explicitly stresses "the paradoxical structure" that prevails in all the practices he has been examining. (PK, p. 195)

The paradox is deepened, moreover, in the section on "Dwelling in and Breaking Out", both by the incursion into religious mysticism and by the ambiguity, or almost interchangeability, of the concepts of interiorization and indwelling. When am I assimilating something into me and when am I "pouring myself into it"? "Since the impersonality of contemplation is a self-abandonment," Polanyi writes, "it can be described either as egocentric or as selfless, depending on whether one refers to the contemplator's visionary act or to the submergence of his person." (PK, p. 197) No wonder some readers take him to be a "subjectivist." Indeed, so far he admits that "(a) personal knowledge accepted by indwelling may appear merely subjective." (PK, p. 201) The implication is that this danger will be dealt with later; I shall return to that question in connection with the chapter on Commitment, and also Part IV, where it is presumably overcome.

Even here, however, the theme we are following is not only reiterated, but stabilised, in the threefold distinction that concludes this chapter: between *verification* of factual and scientific statements or systematic networks of statements and/or beliefs, *validation* of other systems, such as mathematics, art styles or religious creeds and *authentication* of experiences that make no claims beyond themselves. As Polanyi puts it:

Our personal participation is in general greater in a validation than in a verification. The emotional coefficient of assertion is intensified as we pass from the sciences to the neighbouring domains of thought. But both *verification* and *validation* are everywhere an acknowledgement of a commitment: they claim the presence of something real and external to the speaker. As distinct from both of these, *subjective* experiences can only be said to be *authentic*, and authenticity does not involve a commitment in the sense in which both verification and validation do. (PK, p. 202)

Surely nothing could be clearer than this. Admittedly, Popperians and other classic philosophers of science (alas, there are still a few extant) will decry the use of "verification"; but this is neither a verification theory of meaning nor of truth. It is simply a reminder of the importance of verification procedures in ordinary life as well as in the sciences. We are always doing what J. J. Gibson calls "reality checking" in our perceptions and in the context of more intellectualized readings of reality. The intent of "validation" for logic and mathematics is clear, and the concept "authentication" seems to me an excellent innovation to mark out the merely subjective from both the major areas in which personal commitment takes place.

In fact, a propos of the notion of the "subjective" here, it is worth remarking that in Polanyi's view, contrary to the chief philosophical tradition, it is only the subjective that provides certainty. Whatever is objective is uncertain, since objectivity can be claimed only within a commitment, a personal act that carries risk, fallibility, in its very nature. *Pace* part IV and chapter 13, of which more later, a commitment is at best, in Cartesian terms, "morally certain," never metaphysically so. Again, for a thought style dominated by the subject-object dichotomy, where everything is either just mine and in here, or irrelevant to myself and really out there, this is a paradoxical thesis and likely to be misunderstood.

Since I am wandering through the text in a very informal way, I may also suggest here that perhaps another ground for the misunderstanding of Polanyi's thought may lie in his insistence, as in the beginning of the passage I have just quoted, on the emotional component of commitment, or, as he puts it there, "the emotional coefficient of assertion". (PK, p. 202) It has been, in my view, one of the tragic errors of our tradition to demand a sharp division between reason and passion. One need not, in Humean fashion, make reason the slave of the passions in order to understand, on the contrary, that all reason must be in some sense impassioned if it is to function at all. For those who persist in what Polanyi called critical thinking, however, only reason devoid of emotion is worthy of the name. The passionate is the irrational, the unthinking, the non-cognitive. It is precisely that false and fatal distinction that the doctrine of commitment seeks to overcome.

Before we go on to the two further major sources for the subjective-personal distinction, the chapters on the Logic of Affirmation and on Commitment, let's look briefly at some passages in the last chapter of Part II, the Conviviality chapter, that add some evidence for our theme, in making more explicit the structure of the personal as distinguished from the merely subjective. In the section on the Transmission of Social Lore, Polanyi writes:

This assimilation of great systems of articulate lore by novices of various grades is made possible only by a *previous act of affiliation*, by which the novice accepts apprenticeship to a community which cultivates this lore, appreciates its values and strives to act by its standards. (PK, p. 207)

In speaking of the learner, a fainter image of the discoverer, he says:

Such granting of one's personal allegiance is — like an act of heuristic conjecture — a passionate pouring of oneself into untried forms of existence. The continued transmission of articulate systems, which lends public and enduring quality to our intellectual gratifications, depends throughout on these acts of submission. (PK, p. 208)

This is a passivity inextricably tied to an activity, scarcely resembling those subjective, "secret inner somethings," to borrow Wittgenstein's term, that empiricist philosophers were long in search of.

The chief theme of this chapter, of course, is the social character of science — now a too fashionable topic in sociologically oriented philosophy of science. Indeed, most of the writers in this new tradition stress so exclusively the sociality of science, that they miss its existence as science, that is, as a unique family of practices whose aim is, not winning games or getting rich or enlarging one's ego, but coming to understand how something in the real world really works. Polanyian personal knowledge, rooted in society and demanding active submission to a tradition, even if sometimes in partial rebellion against it, is nevertheless knowledge: a claim to be in touch with a reality beyond and independent of the claimant. The account of the administration of science, or more generally what Polanyi calls "individual culture," repeatedly stresses this double character of science as a society whose *raison d'être* is the search for understanding some aspect of nature. Let me just quote here a passage from the concluding section of the chapter:

The recognition granted in a free society to the independent growth of science, art and morality, involves a dedication of society to the fostering of a specific tradition of thought, transmitted and cultivated by a particular group of authoritative specialists, perpetuating themselves by co-option. To uphold the independence of thought implemented by such a society is to subscribe to a kind of orthodoxy which, though it specifies no fixed articles of faith, is virtually unassailable within the limits imposed on the process of innovation by the cultural leadership of a free society. (PK, pp. 244-5)

There is no need, for this audience, I should think, to comment on this expression of *our* personal commitment; commitments by members of other societies will involve other premises. But though all "virtually unassailable," they are all equally fragile. For traditional thinkers in search of *simon-pure* objectivity, of course, that won't do — and in addition, the position is elitist, so bad in every conceivable way.

Yet there it is. To put the thesis bluntly and briefly: *conviviality* is a necessary condition of personal knowledge. *Conviviality*, however, transcends the individual and hence the subjective (sense 1). But let me move on to Part Three, the Justification of Personal Knowledge, especially the first and third chapters of this part. The middle chapter, the elegant Critique of Doubt, which I heard Polanyi present in London at a meeting chaired, with inimitable rudeness and no understanding, by Karl Popper, is perhaps especially liable to such a mistaken reception. It is hard to say what distinguishes this argument from a defence of relativism. The Zande's intent is as universal as ours, so how can we accredit our own use of evidence and discredit theirs? The answer lies only in the larger context of the work, and, as I see it, especially in this part, in the establishment of the fiduciary programme (in chapter 8) and its solidification in the concept of commitment (in chapter 10).

First, then, the Logic of Affirmation. The fallibility of confident utterance is here confirmed, as is the necessary reliance of "precise" terms on a test that cannot be precise in the same sense as the word it serves to test (pp. 250, 252). The section on the Personal Mode of Meaning, moreover, while insisting on the self-contradiction of an alleged total objectivism, reiterates the appearance of subjectivity that the program of personal knowledge may assume for those who fail to grasp its force: "It might seem that we have saved the concept of meaning from destruction by depersonalization, only to expose it to being reduced to the status of dogmatic subjectivity." (PK, p. 253) This danger will be mitigated, presumably, in the accounts of the fiduciary programme and of commitment, but of course it can never be

This title, I fear, is a misnomer. It is a question of structure, not "logic." I was put right about this usage when I gave a talk at Queen's, Belfast in my first year there, under the title, if I remember rightly, "The Logic of Biology." There was a time when the term "logic" could refer rather vaguely to any relatively formal account of any structure — not even then to the structure itself. One of the problems in *Personal Knowledge* is that it sounds amateurish to professional philosophers; I'm sorry I didn't know enough to correct this easily corrigible error.

radically eliminated, at least as I believe. Later in the chapter, Polanyi points out that in the critical tradition, as he calls it, "all belief was reduced to the status of subjectivity." (PK, p. 266). If we now "recognize belief once more as the source of all knowledge," (*loc. cit.*) we accept by that very act the danger that those still committed to the "critical" thought style will see our claims to knowledge, or to knowledge about our knowledge, as subjective. Indeed, there is always the risk that we ourselves, in some moods, will so see it. "Who is convincing whom here?" Polanyi asks (p. 265), and answers, "I am trying to convince myself." "This," he writes,

is our liberation from objectivism: to realize that we can voice our ultimate convictions only from within our convictions — from within the whole system of acceptances that are logically prior to any particular assertion of our own, prior to the holding of any particular piece of knowledge. If an ultimate logical level is to be attained and made explicit, this must be a declaration of my personal beliefs. I believe that the function of philosophic reflection consists in bringing to light, and affirming as my own, the beliefs implied in such of my thoughts and practices as I believe to be valid; that I must aim at discovering what I truly believe in and at formulating the convictions which I find myself holding; that I must conquer my self-doubt, so as to retain a firm hold on this programme of self-identification. (PK, p. 267).

This is a delicate position to maintain. I recall that when I was working with Michael on *Personal Knowledge*, and most deeply committed to my commitment to commitment as a central concept in the philosophy of science, the whole fabric would sometimes just seem to dissolve, like a dream in daylight. If everything is a commitment, from perception to the understanding of a work of art, to worship, what does it mean to use the concept? It's hard to keep the right focus to maintain the fiduciary programme, and one can understand why those unsympathetic to the effort see it as stressing the arbitrary, the irrational — as a flight from scientific objectivity, not an explanation of it.

It is obvious, too, by the way, why the philosophical establishment in general, not only philosophers of science, wanted nothing to do with a work filled with such pronouncements. Philosophy is supposed to be conceptual analysis pure and simple and to have nothing to do with beliefs of any kind whatsoever, let alone "fundamental" ones.

There are other passages in this chapter that are worth reflecting on, particularly the brief account of mind and the knowledge of mind (pp. 262-4), which is one of Polanyi's best statements of this problem, contradicting as it does his flatly dualistic pronouncement in his lecture to the American Psychological Association some years later. But this question is beyond the range of my present concern. Let us move on to Commitment.

Recognizing at the start of chapter that the fiduciary programme as so far formulated "threatens to sink into subjectivism" (a clear sign, of course, that that is not its author's intention) (PK, p. 299), Polanyi distinguishes explicitly, in section 2 (pp. 300-306), between the subjective, the personal and the universal. Of the first two he states:

we may distinguish between the personal in us, which actively enters into our commitments, and our subjective states, in which we merely endure our feelings.

Here it is the first sense of subjectivity that is referred to; this plainly makes the subjective and the personal quite different; but then they are merged again, as "subjectivity" takes on again its second meaning, or perhaps the inverse of it. "This distinction", Polanyi goes on,

establishes the conception of the *personal*, which is neither subjective nor objective. In so far as the personal submits to requirements acknowledged by itself as independent of itself, it is not subjective; but in so far as it is an action guided by individual passions, it is not objective either. It transcends the disjunction between subjective and objective." (PK, p. 300.)

Or, as we noticed earlier, we could say as well, it is both subjective and objective at once: as non-subjective it tends to objectivity; as not objective, it belongs to the subject. Thus the two meanings are blended in this single passage.

Some such fusion is indeed demanded if we are to overcome what Plessner called the Cartesian alternative; but to a thoroughgoing objectivist, there then remains no distinction: the person is in a sense subjective, and is not wholly objective. Therefore it is subjective! It is clear to us, I hope, what Polanyi means here, but one can understand the misunderstanding of others. Yet I don't see, at this juncture, how his formulation could have been bettered. The subjective, as just my passive experience, is other than the personal; but the personal contains an aspect of subjectivity, of mineness, in fusion with objectivity, the thrust toward something other than myself.

And of course the account of the impersonal aspect of the personal, the component of universal intent, in the first section on the Structure of Commitment, further articulates the transsubjective character of the person, in particular, in the argument of this work, the person in search of truth. A desire for truth is my desire, but since it is a desire for something impersonal, it has "an impersonal intention." (p. 308) The chapter on Intellectual Passions has already made this clear. As Polanyi states it here, "*(t)he freedom of the subjective person to do as he pleases is overruled by the freedom of the responsible person to do as he must.*" (PK, p. 309). The next section stresses the active aspect of commitment, and the concept of "competence" is introduced in order to eliminate the merely arbitrary:

To accept commitment as the framework within which we may believe something to be true, is to circumscribe the hazards of belief. It is to establish the conception of competence which authorizes a fiduciary choice made and timed, to the best of the acting person's ability, as a deliberate and yet necessary choice. The paradox of self-set standards is eliminated, for in a competent mental act the agent does not do as he pleases, but compels himself forcibly to act as he believes he must. (PK, p. 315)

The competent, which is expressed in personal performance, is here distinguished from the "illusory and incompetent," which is classed with passive mental states, "as purely subjec-

tive." (p. 318) Competent mental acts, commitments, are to be found, Polanyi argues, all the way from perception through the most complex intellectual practices. Even though, necessarily, given the date of his writing, his account of perception is inadequate, this extrapolation of perception to other forms of knowledge is significant.

Finally, the last section stresses the contingent, historical location of commitment: "Our believing is conditioned at its source by our belonging" (p. 322), and it identifies our acceptance of the accident(s) of our existence "as the concrete opportunities for exercising our personal responsibility." (p. 322) "*This acceptance is the sense of my calling.*" (p. 322) Again, and more emphatically than ever; the contrast between the personal and the subjective comes to the fore:

Commitment offers to those who accept it legitimate grounds for the affirmation of personal convictions with universal intent. Standing on these grounds, we claim that our participation is personal, not subjective ... Our subjective condition may be taken to include the historical setting in which we have grown up. ... Our personhood is assured by our simultaneous contact with universal aspirations which place us in a transcendent perspective. (PK, p. 324)

Note: "Commitment offers to those who accept it.." To those who do, such statements, and the chapter as a whole, present a firm foundation for reflection on knowledge, and more widely, on the nature of the person. I don't know how to persuade those who do not. The paradox of self-set standards is eliminated for those who find it so — or else it becomes at most an uncomfortable tension; others will still persist in pushing the paradox into self-contradiction and resolving responsibility into information processing or some such mechanical procedure.

Before looking sketchily at Part Four, and particularly at the treatment of subjectivity in those chapters, however, I must say with regret — and regret for my past credulity here — that I find the last paragraph of this chapter, in which Polanyi likens the setting of the scientist's commitment to the "Christian scheme of Fall and Redemption," (p. 324) triply unfortunate. First, the theistic theme woven through the text and stressed again at the close of the work, as well as at the close of this definitive chapter, was bound to alienate any philosophers of science who may have read it. Surely, they would say, 'tis not time to talk of God yet. Second, although I still recognize, very loosely, an analogy between a quasi-Augustinian faith and the scientist's faith in his heuristic groping toward a coming discovery, as well as between the concept of grace and the fact that a successful discovery is given, not violently wrested from nature — despite that recognition, I believe by now (and this is now my commitment) that religion does so much more harm than good in the world that it is differences from it rather than similarities that need stressing in practices we

In a note here, Polanyi anticipates the further subdivision of subjectivity (or of incompetence) which we will have to look at in skimming briefly through Part IV.

wish to accredit. Third, moreover, and most important: the analogy with the Fall I now see to be utterly misguided. "The historically given and subjective condition of our mind" as Polanyi puts it — that is, finitude and contingency — are not to be equated with sin. And the doctrine of original sin, of human beings as suffering from a disease of which an all-powerful and all-good (!) God may see fit to cure them through any conceivable or inconceivable form of suffering — that doctrine I find to be morally repugnant, as well (in terms most famously stated by Hume) as incoherent. If one wants an analogy for the scientist on the verge of discovery, I much prefer Jacob's statement that the situation resembles that of French soldiers (like himself) in North Africa during the War: one felt instinctively, he says, that *somehow* one would get back to Paris! (Jacob, 1987) In my present agnostic if not atheistic frame of mind, that's more like it.

Purged of its Christian over- or undertones, however, the Commitment chapter with the argument that builds up to it still seems to provide an appropriate foundation for a philosophy of science, a theory of knowledge, and a perspective on the nature of responsible personhood. As I have already noted, it is a precarious foothold rather than a firm foundation, but in our situation I believe that is the best we can do. Polanyi believed, however, that in the last part of his argument he had provided a more sweeping ontological location for the act of commitment. It is not germane to the topic of this essay to consider this question; I need only say in passing that while these chapters raise some important points against reduction in biology, the effort to locate *homo sapiens* as the apex of evolution is hopelessly mistaken. The ontological aspect of tacit knowing, proposed in *The Tacit Dimension*, being more limited in its import, is much more convincing. Commitment, however, has, I should think, to retain its precarious ontological position as the stance of a given embodied person, cast ephemerally into the flow of history, and pre- and posthistory, self-obliged to obey a calling that takes him (her) beyond the confines of subjective preference.

Be that as it may; it is the distinction of the personal from the subjective that concerns me here, and I must look, in conclusion, at the meanings of "subjective" that we have met along the way and that are complexified in the last part of Polanyi's argument. On the one hand he maintains to the end — or again at the end — the distinction between the subjective as the merely passive and the personal as active: active in submission to a demand that takes me beyond myself, but active nevertheless, (p. 403) And here we meet again the fusion of subjective and objective as of active and passive in a single nexus. At the same time, Polanyi now introduces a third concept of subjectivity, that is, correct use within an incorrect system: this is "subjectivity" allied, perhaps, to the sense of mistaken self-confidence that we met in passing in the Articulation chapter.

To begin with, in working through the application of "rules of Tightness" to a series of levels of organisation in the living world, Polanyi introduces subjectivity as distinct from error, (pp. 361-2) Thus a rat drinking saccharin solution is undergoing a subjective experience while a fish taking the angler's bait is committing a reasonable error. This seems to fit the concept of the subjective that we have met in most of the passages cited so far: it is what belongs to my "inner" life, with no implications of universality and so with little interest for more than my momentary satisfaction. But matters are complicated by the

"classes of appraisal" introduced in the same section and restated in reference to human knowledge. In the latter context Polanyi lists

- (1) *Correct* inferences reached within a *true system*.
- (2) Erroneous conclusions arrived at within a true system (like an *error* committed by *competent* scientist).
- (3) Conclusions arrived at by correct use of a fallacious system. This is an *incompetent* mode of reasoning, the results of which possess *subjective validity*.
- (4) *Incoherence* and *obsessiveness* as observed in the ideation of the insane, especially in schizophrenia.

Now it is important to notice that under (3) Polanyi refers us in a footnote back to the Zande, whose reasoning now turns out, therefore, to have only subjective validity. This appears to provide us with a new sense, and a new reference, for subjectivity: it is whatever is out of accord with the canons of our modern, liberal, science-sponsoring and science-grounded society. Indeed, in terms of the final chapter, on the Rise of Man, it is that particular society toward which, since the origin of life, the whole creation can said to moved. Allegedly, the personal is saved from its precarious status by an ontology that places *our* commitment uniquely within a universe somehow meant to culminate in this very society, with these very fundamental beliefs. Then, from within our commitment to commitment, we can class the objectivist's arguments as subjective, since his system is fallacious and so his reasoning has only subjective validity. We can understand why he sees our commitment as merely subjective, and why he cannot understand the more-than-subjectivity of our position. And we need worry no more about the Zande or supporters of apartheid or Arab or Christian or Jewish fundamentalists or anybody we happen to disagree with. That sounds fine on the face of it, perhaps. But where has historical contingency, where has fallibility gone? At the very close of the work Polanyi describes our intellectual heritage as "everything in which we may be totally mistaken." (PK, p. 404) That is a saying I cherish; but, despite that remark on the penultimate page of the book, the ontological dogmatism and the hopelessly anthropocentric evolutionism of the final chapter, as well as its closing Christian apologetic, must be discouraging, in my view, to supporters of the model of commitment for epistemology and the philosophy of science. Polanyi's later work on tacit knowledge, being cosmologically less ambitious, may help to correct this imbalance. That is not my theme here, however; I have just been trying to search through *Personal Knowledge* for clues both to the distinction between the subjective and the personal and to the sources of the misunderstanding by others of that distinction. That distinction itself, sometimes involving two concepts of the subjective, is more complex than I had thought. If in addition one must take seriously the ontological tenor of Part IV, with its third concept of subjectivity, my whole reading may prove to be mistaken and the responses of other readers would also have to be reread in that light. Commitment is precarious.

## References

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