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AN APPROACH TO EPISTEMOLOGY, LITERATURE, AND THE POET'S POLITICS

In memory of Umberto Eco, our meetings and discussions: Bologna-Milano-Montréal-London

My presupposition is that the common sense or *doxa* we inherited from High Modernism has failed in, and because of, Post-Modernism and the Post-Fordist triumph of predatory capitalism. This would include the mass misuse of modern sciences in wars and impoverishment of peoples as well as the intellectual destruction of the presuppositions both for a practical Left in Stalinism, as manifested in the disasters after 1968 and 1989, and for a genuine freedom-loving liberalism.

But this is a large subject-matter that should be developed separately, while refusing the Post-Modern „weak thought“ abandonment of reason. I propose in this essay to suggest, first, what might be some foundations and salient aspects of epistemology, that branch of philosophy which asks how do we know what we (think we) know, and to propose an orientation in it (toward a „soft“ skepticism). I then draw a parallel between sciences and arts, including their institutional anchorage, and in particular insofar as narration is concerned. I end with a brief glimpse of how the art and cognition of poetry may intervene in a politics of freedom and survival: importantly but indirectly.

Key words: Epistemology, Narration, Science, Poetry, Politics

1. APPROACHING EPISTEMOLOGY

1.1. On Some Fundamentals

What we can and must today see as epistemology is: what is cognition/knowledge/understanding or not, and how can we know that, and what, we know. These problems are as old as philosophy, but epistemological theory as its recognised branch is relatively recent. It treats of many knots, the first of which may be where to find the decisive presuppositions for cognition (*Erkenntnis*). Is it in „consciousness“ (together with the important psychoanalytical addition of the unconscious into its topology), so that the proper discipline to deal with cognition would be psychology? Is it in „thought“ (whatever that might be, but surely not only neurobiology), so that the discipline would be logic; or in systematic understanding of the world and its structure, so that it would be based in and flow from the natural sciences and what they have to teach us about ontology? And who is the subject of cognition, the cogniser? It is obviously not the empirical individual nor any mechanical sum of individuals but a kind of

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allegorical subject or collective person, akin to (say) Protagora's Man or Feuerbach's Humanity as a whole – but just of what kind? Could it perhaps be a correlative of class consciousness, the self-understanding of a sufficiently important societal group? To stop at the outer limit, where are the *a priori* limits of a cognition that cannot, as Leibniz still did, recur to divine perfection but is inescapably historical? This begins with any actual cognition being co-shaped, and thus restricted, by not always conscious but weighty preconditions, mainly situated in the allegorical cogniser, and also in the cognitive and semiotic apparatus used to steer cognition; but it is not exhausted by this fact.

Cognition is best understood as flowing out and determined by the binary Subject–Object relationship of cogniser and cognised (*der Erkennende und das Erkannte*), which means their practical interaction. It should be freely conceded and indeed underlined that neither this Subject nor this Object are exhausted by their binary relationship, so that there remain vast and most desirable fields of investigation about either alone. We have learned that neither Subject nor Object are simply mechanical, empirical, or „positive”, never mind solidly unitary or monolithic, but that they are most rich and complex, with internal divergencies and contradictions: they contain realities, irrealsities, and surrealities, they form possible and imaginable worlds. Yet to focus within epistemology only on one member of the cogniser-cognised binary leads to grievous and wholesale errors: the navel-gazing of so much psychology and logic, the reification of so much „positive” science; even the most admirable, immeasurably rich, and central discipline of mathematics, a sovereign in its artificial universe, is prone to cocoon itself off.

Here is also the place of four further interacting, quite fundamental and radical problems.

First, what is cognition's Object, in the sense of subject or topic cognised to which cognition applies and from which the cogniser draws generalising conclusions? I follow the tradition that does not reductively base epistemology on the achievements of natural sciences, and often calls itself gnoseology (that to me is rather a synonym of epistemology). These achievements and insights are no doubt huge and in good part admirable, but leave out whole continents: indeed scientism is prone to leave out life values and institutionally embedded into militarism and all variants of domination. To confine oneself to natural sciences alone would be as if one wanted to base biology on what was originally found only in the Americas without the Old World: most suggestive but also most erroneous because of a too narrow basis. Without pretending to exhaustiveness, I suggest that these left-out continents contain cognition flowing out of arts and out of human living together in general (which the Greeks called *sophrosyne* and

the best Marxist tradition *praxis*). The atomic bomb has created a paradigm for astronomy's Big Bang, but it is primarily an irrefragable witness to where „value-free” sciences, borne by those that have internalised subservience to class power, lead when isolated (see for much more Suvin, 2012). This does not diminish the need to constantly learn from as well as criticise the paradigms of natural sciences. To take but one example, they exemplarily demonstrate how the cognitive Object „prescribes,” or at least limits and suggests, the roads of cognition.

Second, a very old puzzle, brought to a head by Kant and Hegel, is the relationship of phenomena or appearances, the familiar objects and relationships (*Erscheinung*), to theory. The roots of systematic cognition are in distinguishing what appears to our senses – plus common sense – from reflecting on them and analysing them in a formally manageable and consistent theory. Sensual data always relate to something real and present, they are in an initial and insufficient way always immediately „true”. But they are also always approximate, often strongly bent by prior significations and current societal (class) prejudices, and in some cases mainly internal to the Subject rather than residing primarily in the binary cognitive relationship. Of course, as the Greeks put it, a theory must save – account for and explain – the phenomena. But then, as I argue in *On the Horizons*, when appearances metamorphosise into „facts”, strange aspects appear. It is not only that cognitive theories are underdetermined by facts: „Many, indeed infinitely many, different sets of hypotheses can be found from which statements describing the known facts can be deduced...” (Harré, 1972: 87). More radically, the „facts” of scientific theories are not independently „there” and univocal but always already conceptually elaborated (which also means bent and partial); and furthermore those concepts themselves depend upon the prevailing categories used in systematic cognition, which are very often less than univocal (Castoriadis, 1984: 175–77, 218–9, and *passim*). Furthermore, the Descartes-to-Hume problem about how the mind contacts reality seems an unnecessary red herring if we adopt the „inferentialist” stance (from one aspect of Kant to Frege and the later Wittgenstein) that judgments and actions are not reflections *of* but on reality, decisively bound up with „the special way we are responsible for them” (Brandom, 1994: 8), as explained to begin with by Hegel, Marx, and Dewey in philosophy. In sum, as a philosophical tradition has maintained since Gassendi, theories are not true or false – these terms are fossils of theology – but good or bad instruments for research. Reality is in principle prior to human thought, yet it is co-created by human understanding, in a never-ending feedback. Cognition is thus not only open-ended but also codetermined by the social subject and societal interests looking for it. It is therefore always open to novelty, the not-earlier-known, Bloch's Novum (Suvin, 2010b: chap. 3 and 8, and Piaget, 1970: 110).

Third, in any cognitive problem and especially in a theory, what are its unavoidably, constitutionally present limits and qualifications? To begin with, a) what are the limits of the Object studied, always a cut-out from a vaster pragmatic context?; and b) what is the causal nexus of the object „being thus” or for being seen as thus? While we can no longer generalise, for example in so-called human sciences, the monocausal answer favoured by much older physics, we would lobotomise epistemology if we gave up the quest for complex causal explanations. that would prominently include model and feedback. A true cognition hinges on complex but operative causality. But obviously, it is co-determined by the Object-limit in a feedback. This limit is historically a movable one, as the cognitive process broadens and enriches the Object, while the feedback may also change the concepts used in cognising. Causality is conceived in adequate richness only when arising out of the needs of reasoning meshing with a tendency found in the object’s structure (Piaget, 1970: 119 and *passim*). Thus, a problem is well defined as „the unknown anticipated as a known” (Stache, 1962: 58 – or at least classified as a knowable in a Pascalian bet, I would say).

Fourth but not least, subjects and objects, theories and facts, their limits and causes not only exist in history but are intimately created, shaped, and limited by it. Even „natural” sciences do not exist outside such historical forms and uses: to begin with, what is „natural”? This is *a fortiori* more obvious for „human” sciences: are humans outside natural history? Whewell’s pioneering title about inductive sciences that has their „philosophy... founded upon history” indicates the proper path, but it depends on how „founding” is interpreted – much more intimately than the basis vs. superstructure metaphor indicates, for it is a feedback that redefines both levels (Piaget, 1970: 122-23).

Finally, a huge matter that I can only mention: assuming all the above caveats are satisfied, how do we compare valid theories in terms of their interest for a given set (class) of people in given situations? My basic criterion would be how rich in material (*material erfüllte*, Stache, 1962: 53) they are, that is, how broadly do they apply to urgent and neuralgic relations of large groups of people to each other and their environment. As I found in investigating metaphor (Suvin, 1986: esp. section 1.4), richness is inextricably wedded to the novum, its novel stance that allows new understanding of such relationships. Given that I consider metaphor in the widest sense to underlie any narration or explanation, this would also apply to theory.

1.2. Further Salient Aspects of Cognition

The first is the relationship of what is often called reason vs. emotion, but I would like to call it

an intricate interaction between *conceptual thought and emotions*. I have written about this extensively (for example is Suvin, 1994), and would recapitulate here only this:

What can count as understanding, cognition or knowledge (the multiplicity of terms is a testimony to the obscurity of this domain)? Anything, I would posit, that satisfies two conditions, or two aspects of one condition. First, that it can help us in coping with our personal and collective existence. Second, that it can be validated by feedback with its application in that existence, modifying it and being modified by it. I see no deep „anthropological” reason to allot – or withdraw – a special privilege to any human activity or faculty here, be they words, numbers, geometrical figures, sounds, concepts, metaphors, movements or what have you; though it might almost go without saying that particular social classes and particular historical chronotopes will always have specially privileged activities, sign-systems, etc.

Human relationships to other people and the world are always already „emotional” in the sense that they involve direct and usually strong participation of value attributions carried by deep feeling/s. Emotions may be just as strongly cognitive as concepts, if in different ways comprising not only feeling but also orientation or *intention* as well as judgment (Jaggar, 1989: 149 and passim). Thus, they can be cognitively correct or incorrect in all possible proportions. Refusal and denial, appreciation and approval, and a thousand other emotional nuances, usually systematised under a dozen main emotions, carry an often intuitive understanding of, say, the general situation as well as the interests and values involved in particular actions or mental assessments. In particular, I believe that even the few highly specialized pursuits which claim pure conceptuality – such as philosophy and theoretical sciences – necessarily include also such non-conceptual modes of cognition as, for example, intuition, evaluation, and passion. This may be so far best studied in the case of the verbal cognition that scrambles up conceptualizing, namely metaphoricity, to which I shall return.

Importantly, „emotions provide the experiential basis for values”, so that these two induce each other (Jaggar, 1989: 153); both particular values or value judgments as well as any personal and collective *sense of value/s* are in close feedback with emotions and interests. This is a key hinge for all cognition, pertaining to the complex matter of topological imagination, into which I cannot enter here.

As to the *form or method of reasoning*, all positions in reasoning depend on sometimes partly overt but always also covert *presuppositions*, that should be sufficient, mutually compatible, and not tautological in relation to each other (Piaget, 1970: 82). This holds, to my mind, for all cognitive domains. Mathematics and mathematisable sciences have since Euclid been hegemonic, and have formalised their presuppositions as axioms and their method as

deduction. This method was historically considered the noblest, but with the predomination of modern natural sciences it was from Bacon and Galileo on supplemented by the plebeian induction and example, wherever possible based on experiment. The final mode, reasoning by analogy, was marginalised as non-formalisable. Yet it is not clear why any of them should have an *a priori* inferior cognitive status. All of them formalise social experiences and relationships in highly specific ways; all owe their efficacy to cultural and ideological verisimilitude. Just what is the difference between the verisimilar on the one hand, and the true and necessary on the other, has never been clarified, for it reposes on the ideological maxims or common sense of a given period. We have rightly learned to suspect the self-evidence of any ahistorical stance, useful thought it may analytically be, for example a god-given distinction between agent and action (Yeats's knowing the dancer from the dance).

Of course, any proof by analogy is only as right as its constituent parts and relational presuppositions – but the same holds for reasoning by deduction and induction. I would conclude with Angenot, that

reasoning by analogy is not a less rigorous type of reasoning than deduction; it corresponds to a different way of thinking and a different establishing of proof, which is here regarded as a transfer of evidence.... It constructs around the object being proved a relational structure capable of being perceived as isomorphic to another structure situated in a quite different field.
(Angenot, 1982: 197. transl. DS)

In its clearest form, it is a rigorous homology of the rule of three (A:B = C:D) kind, and it can render much more closely the sinuosity, yin-yang infixes, and contradictions of people's relationships to each other and their universe, of their institutions, and indeed of their natural languages, than can grand universal constructions.

A word about the „human sciences” and even more about art – though I can talk with confidence only about the language arts (poetry and narrative). For me, they occupy a special place in the cognitive endeavours of mankind from cave painting to the present. Their understandings are not (or at least not fully, and I would think not essentially) based on a methodical reference by measure or number back to general theories or principles, but rely much more strongly on the specific cognitive paradigm/s used. In other words, the role of ideological interests and practical human relationships, which have always lain in the very fundaments of cognition in class society, is after Galileo rather larger in human than in natural sciences. In *sciences humaines* the Subject is supposed to look at the Object from outside, as in natural sciences, but in arts it looks partly from within, thus with a larger role of sensuous

immediacy. Poetry and narrative, and possibly some other arts too, are undergirded by metaphorical systems (Suvin, 1986), and, as Blumenberg precisely notes, „analogy is the realism of metaphor” (Blumenberg, 1988). The undoubted affinities between analogical thinking and emotion-suffused evaluation can be seen as qualitatively different from deductive conceptualization but no less (potentially) cognitive.

At the end, I would like to enter a plea for *epistemic openness* or porousness. Goodman and Elgin argue that any point-like knowledge, even if it may possess an equally point-like truth, is only valid if connected to other propositions which „tether” it, that is, which make it part of a consistent and justifiable argument. Epistemologists divide according to the nature of this indispensable tether. „Internalists” believe the tether is purely formal: knowledge is anchored by justification epistemically accessible to the knower, usually as propositions in natural language, possibly buttressed by mathematics. They employ only concepts and categories, plus various operations by which they form a system. „Externalists” believe knowledge is anchored to a fact or set of facts that makes it true, and there is a debate as to the anchor, which could be arrived at inductively or deductively. From where I stand (Suvin, 1986), epistemic absolutism, or a reduction of being to knowledge, carries the danger of wonderful closed systems of statements chasing each other's tail but with insufficient purchase upon practice; while ontological absolutism, a short-circuit between knowledge and being, carries the danger of unjustifiable anchoring, usually in some certainty of a religious kind. I have argued for a Solomonic melding: without something ontologically „out there”, to be available as at least a check and an obstacle to action in any practice following from knowledge, there might be discussions of method but there is no knowledge. But I think knowledge must pass also through *epistemic justification*, especially if it is to be attained within language (and is thus akin, in ways still to be elucidated, to arts such as poetry and narration). A fortified city with gates in two concentric walls, maybe.

1.3. Central Orientation Points for Epistemology: For a „Soft” Skepticism

I am not aware of a systematic basis for epistemology we could today use, but I postulate that our interpretations of what is knowledge or not, and how can we know that we know, are largely shaped by the „framework of commitments” we bring to them. Catherine Z. Elgin usefully formulated in 1982 a strategic „soft” skepticism that still allows such commitments:

Philosophy once aspired to set all knowledge on a firm foundation. Genuine knowledge claims were to be derived from indubitable truths by means of infallible rules. The terms that make up such truths were held to denote the individuals and kinds that constitute reality, and the

rules for combining them ... were thought to reflect the real order of things. This philosophical enterprise has foundered. Indubitable truths and infallible rules are not to be had.

Instead, thinking always begins with working approximations based on „our best presystematic judgments on the matter at hand” (Elgin, 1982: 183). As we advance toward understanding, we often discover these approximations are untenable or insufficient – but there is no other ensemble to be had. Even „scientific evidence”, in the sense of proof, is always „theory-laden”, determined by „our conception of the domain and... our goals in systematizing it...” (Elgin, 1982: 184-85). Alternatively, a tradition from the more radical Skeptics through the Post-Modernists and extreme constructionists has questioned whether there is a reality to be known and whether, if it is there, we could know it or talk about it.

Neither the absolutist (Objectivist) nor the nihilist tradition is satisfactory. The horizon I am sketching is characterized by Elgin and Nelson Goodman in 1988 as „reject[ing] ... both unique truth and the indistinguishability of truth from falsity” (Goodman & Elgin, 1988: 3). A univocal world – *the* fixed reality out there – has been well lost, together with the Unique Final Truth (divine or asymptotically scientific) and other Onenesses of the monotheist family. A sense of panic at the loss of this clear world, at the loss of theological certitude, not only permeates dogmatists of all religious and lay kinds, but has also engendered its symmetrical obverse in an absolutist relativism. How is a third way possible beyond this bind?

It can begin by recognizing that right and wrong persist, but that rightness can no longer be identified with correspondence to a ready-made, monotheistic Creation, but must be created by us, with skill and responsibility, *within contingent historical situations*. Goodman and Elgin think that the term and concept of truth as usually conceived is too solidly embedded in faiths and certitudes of monotheistic allegiance to be safe and useful; to the contrary, categories and argument forms that are products of changing human cognition are better instruments for practical use, testable for situational rightness. Truth is strictly subordinate to rightness in this approach, and this rightness is dependent on our various symbol systems (Aronowitz, 1988: vii–xi and *passim*). One consequence is that science loses its epistemic primacy: like art and everyday perception, „[it] does not passively inform upon but actively informs a world” (Elgin, 1982: 52–53). Both arts and sciences overtly repose on intuitions, it is only that for sciences these are buried in their axioms as indubitable certainties. Whether you prefer Marx's or Balzac's description of 19th-Century France will depend on your general or even momentary interests, but they're in no way either incompatible or subsumed under one another: and both are cognitive.

Sketching an operative epistemological realism can further proceed by recognizing

that there are still some logical ways if not of defining truth then at least of defining untruth (Goodman & Elgin, 1988: 136). All opinions are constructed and relatively wrong or limited, but even so some are valid within given limits (this needs a sense of relevance or pertinence, impossible to detach from the situation and context of the knowing subject – cf. also Prieto, 1975), and some are more wrong than others. This holds pre-eminently for those I would call *monoalethist* (from *alethé*, truth): all those — from monotheists to lay dogmatists (Fascists, Stalinists, and believers in the Invisible Hand of the Market) — who hold they have the Absolute Truth, including the belief that relativism is absolute. Only belief in the absolute right (Haraway's „God-trick” , „Situated”1988: 589) is absolutely wrong.

2. ON NARRATIONS IN SCIENCE AND FICTION

2.1. Not Only Conceptual Understanding

The Kantian tradition has a major difficulty with judgments: they deal with particulars, but how is one to account for any particular, notoriously contingent and as it were anarchic, for which the general concept has still to be found? Kant sometimes finessed this by using examples, which hide a generalized allegory: the particular Achilles is the example of Courage in general. This welcome subterfuge pointed already to how untenable were claims for science as *the* best (or only) knowledge, since an example partakes both of image and of an implied story, as Achilles before Troy. It reintroduced history as a story, enabling us to understand why the *Iliad* was an unsurpassed cognitive fount for the Hellenes. It follows that science and other ways of cognition – say art – do not relate as „objective” vs. „subjective” (or strong male vs. weak female), but as human constructions elucidating the human species' traffic with aspects of the universe or nature. All of them share some overlapping aspects, for example: a) a striving for *understanding*: literary knowledge, say, was posited by Auerbach as an attempt „to designate man's place in the universe” (Auerbach, 1969: 17); b) fundamental *assessments* – suggested and in some cases constricted but not determined by „facts” – which are epistemologically indispensable but not specifiable as a proposition or argument (see 1.); c) a sense of relevance, which Grene (following C.F.A. Pantin) calls *recognition of pattern* in all acts of knowing, that includes awareness of *Gestalt* (Kekulé's dream of the benzene ring, Maxwell's equations that add one missing term) and intuitive perception of form (Grene, 1966: 204; cf. Gendlin, 1991). Unspecifiable may be also called *esthetic*, as in Dirac's comment that the Theory of Relativity was accepted for two reasons: agreement with experiment and a „beautiful mathematic theory [or simple mathematic concepts that fit together in an elegant way] underlying it, which gives

it a strong emotional appeal" (cited in Grene, 1966: 205). The pattern may also be statistical, or an analogical model as Darwin's transfer of pigeon- & stockbreeding to origins of all species.

2.2. Sciences and Art/Poetry

What are then a few of the relevant differences and similarities between the cognitive horizon and route of sciences and of arts, including creative writing (poetry in the wider sense)? I think there might be at least two, an immediately sociopolitical and power one, and an epistemological (that is, long-duration political) one.

2.2.1. On Pragmatic Anchorage

One major difference appears to be that these two ways of cognition are guided by different constraints for coherence and different conventions of anchoring or „entrenchment”. For one thing, sciences may have a „long duration” additiveness and deal with univocal and stereotypic contrivances or arrangements – that is, those in theory repeatable with identical effects. Nonetheless, every engineer knows practice is different: we touch here upon Geertz's „local knowledge”, best dealt with precisely in arts such as literature but also unavoidably foregrounded in social sciences such as precisely anthropology.

Sciences are thus supposed to be cumulative and self-correcting, and whatever is not such is non-science, which in this exclusive optic means non-cognitive. Yet first of all, this is denied by Kuhn's theory of interpretive paradigms in science which are exclusive and not cumulative, depending as they do on a powerful institution supporting it – that might change; I propose to return to this. And second, the non-cumulative or non-subsumptive characteristics are well represented within disciplines such as philosophy, theory and criticism of arts (including literature), and many „human sciences”, including some kinds of theology. Their coherent duration is often as long or longer as that of Baconian experimental and Galileian or Cartesian mathematized science, and they „exhibit all the features we require for making rational appraisals of the relative merits of competing ideologies within them”. Such „nonsciences, every bit as much as the sciences, ... both have criteria for assessing the adequacy of solutions to problems; both can be shown to have made significant progress at certain stages of their historical evolution” (Laudan, 1978: 191). The crucial element here seems to be ongoing institutional anchorage, decisive for science though not unknown in art: think of Athenian or Renaissance performance, supported – like science – by institutions geared to foreseeable and applicable results. An anchorage is also the ideal horizon of the more decentralized institutionalization of publishing of poetry or the novel in periodicals and books, operating with statistical projections. The supposed cumulative progress seems thus to be an

epiphenomenon of stable historical anchoring in strongly organized social interests.

The differences between sciences and nonsciences as long-duration cognition are of a piece with their institutional political and financial patronage, which entails a stable overall paradigm. The patronage, and thus the loyalty (or if you wish subservience) to the reigning ideology and the *patrons*, is in sciences unbroken from, say, the Royal Society on, whereas – despite the attempt of Richelieu's *Académie française* and its successors in many States, down to Stalin – it is intermittent and scattered in the arts. This leads to the second difference in their internal power-structures. It is more hierarchical, from top down, in S2 as a strong institution; while the tradition of S1 and almost all art is from bottom up. Of course, in both cases the univocity wavers for the non-institutionalized creator or artefact. In the case of people, the projects and stereotypes within which they work (for ex., genre conventions, from the epic poem to Science Fiction) are enmeshed with the creator's complex past and present histories, with not quite foreseeable choices. In the case of artefactual tradition, the novel has since its birth, and poetry has since the Romantics, played off constant paradigm shift against generic enablement and anchorage, the New against the recognizable. A computer is foreseeable, a human brain is not. Science is what can be fully repeated, art is what cannot.

To repeat about the similarities: the general horizon, source, and finally the aim – the Supreme Good – of both sciences and arts is to my mind the same: making life, that precious and rare cosmic accident, richer and more pleasurable; fighting against entropy by making sense, in different ways, of different segments of nature, including very much human relationships. In brief, both are cognitive tools and pursuits. More particularly, both deal, against a horizon of human interest and evaluation, with situations or with Bakhtin's chronotopes – significantly taken from a popularizer of Einstein, Ukhtomsky – which then, most importantly, imply a whole Possible World.

As Bruner argues, the arts are differently entrenched from sciences: the arts implicitly cultivate hypotheses, each set of which requires a Possible World but not the widest possible extension for applying that set in our World Zero, that is, testability in the scientists' sense; rather, they must be recognizable as „true to conceivable experience” or verisimilar (52 and *passim*). In the words of de Beauvoir: „It is necessary that I, the reader, enter into the author's world and that his world should become mine” (de Beauvoir, 1965: 82). Institutionally speaking, at least since the Romantics the community at large of authors and readers is NOT required to be the immediate tester and judge of a new artistic chronotope, though a smaller – sometimes very small – group usually does take up such a function. This situation is formalized in the notion of a specific „voice” indispensable for every literary author: it would be difficult

to use this notion in physics or biology, though things get trickier when the product is a literary work about science (and all scientific reports are such hybrids, nearer to literature as they get longer, say in Marx or Darwin). The detailed description of what a quality of life (or its lack) may be is what fictional cognition in much narrative deals with, say in the best Science Fiction such as Le Guin's (Suvin, 2010). In general, the different genres of literature „can provide us with knowledge of how to live (in the novel), of how people have lived (in biography), and of how to try to transform one's own performed life into knowledge for living (in autobiography)” (Ette, 2010: 988).

The formalizations of S2 try to taboo this horizon and to erect the very specialized, fenced-in lab as *the* exemplary situation-matrix, the only allowed chronotope, and quantitative precision as the only horizon, insofar as both are extrapolatable to reality. Yet both the lab and full quantification fail immediately and obviously in all social and biological studies, say primate research, not to speak of sociopolitical research. The chronotope of an S2 experiment is manipulated so as to be mathematically explainable, which usually means quantitatively predictable; the human agents must be kept out.

Furthermore, formally speaking, „atom” is the name of an agent in a story about „chemistry”, just as „Mr Pickwick” is the name of an agent in a story about „the Pickwick Club” (Harré, 1972: 89), though there are different rules of storytelling in the two cases. „[Theoretical f]ictions must have some degree of plausibility, which they gain by being constructed in the likeness of real things”, concludes the middle-of-the-road historian of science Harré (1972: 98). If we take the example of literary and scientific „realism”, we find they are consubstantial products of the same attitude or bearing, the quantifying thisworldliness of bourgeois society. This is a contradictory stance, with great strengths – obvious from Cervantes and Fielding on – based on looking steadily at this world as a whole, and increasingly great dangers based on possessive reification of bourgeois atomized individualism. The dangers surface when institutionally sanctified science stakes out a claim to being the pursuit of the *whole truth* in the form of *certainty*, while the apparently weaker and certainly more modest Dickens escapes them. S2 science likes to think of itself as inductive. However, as a planet's map is regulated and shaped by the grid of cartographic projection, so is any system based on a deductive principle, for example the Aristotelian excluded middle or the Hegelian necessarily resolved dialectical contradiction. And this principle is also a kind of meta-reflection about, or methodic key of, the system that is in its (obviously circular) turn founded on and deduced from it. When a philosophical or scientific system exfoliates in the form of a finite series of propositions *culminating* in a rounded-off certainty, its form is finally not too different from the 19th Century

„well-made”, illusionistic stage play; no wonder, for they both flow out of the Positivist orientation, where decay of value leads to despair. The Lady with the Camelias and the Laws of Thermodynamics are sisters under the skin: both show a beautifully necessary death.

However, the situational or situated hypotheses of both fiction and today's science are constructed or taken up for (different but converging) purposes co-defined by the interests of the subject constructors. Each has necessarily a formal closure –involving among other matters a beginning, middle, and end, as Aristotle's *Poetics* phrased it for plays – but many are open-ended, and their multiplicity is always such. Further, a longer work (a theory or a novel) is articulated like a chain or a tapeworm, in a series of delimited events which stand together (this is a literal translation of Aristotle's *systasis pragmaton*) as segments to result in a final unity. When, in several branches of quantum mechanics, and similarly in catastrophe theory, a whole battery of models is regularly used, and „no one thinks that one of these is the whole truth, and they may be mutually inconsistent” (Hacking, 1983: 37), the differences to Balzac's *Comédie humaine* series or the set (the macrotext) constituted by the poetry of – say – Byron, Shelley, and Keats remain obvious, but the overall formal similarities as cognitive pursuits do not deserve to be slighted either.

2.2.2. On Porous Boundaries between Form and Actuality

Here I wish to briefly introduce a second factor for evaluating cognitive artefacts, profoundly epistemological and enduringly political, which I would call *internal richness allowing for a richer bite on reality (intensity)*. I could buttress this with a number of authorities, say Spinoza, but to remain economical I shall do so basing myself on Michael Polanyi mentioned above, who calls it „levels of reality”: an entity is more real when it has „the capacity to reveal itself in unexpected ways in the future”, with a greater range of interesting consequences. This means the entity's significance is not exhausted by our conception so far, it has untapped depth and a power of manifesting itself in yet unthought ways. A problem or a person have greater depth or a deeper reality than a cobblestone, even though the stone is sensually more tangible in its Sartrean *facticité*, the sheer being there (Polanyi, cited in Grene, 1966: 219-20). A mineral's tangibility, its meaning or uses, is more publicly or collectively anchored, thus subject to much slower change. To the contrary, significant art is as a rule much richer, in the above double direction of inward and outward: the three-dimensional solidity Berenson described in Giotto's bodies as felt by the beholder *exists for us* more intensely than most perceptions in our everyday World Zero (Grene, 1966: 223), and so does the psychological three-dimensionality of Tolstoy's 1812 soldiers.

But I would claim for the best science often the same status, usually called the „fruitfulness” of a theory. However I would divorce this from the (surely basic) predictability. Important insights in both conceptual-cum-mathematical theories are much more fruitful than usually predicted. In Grene’s words, „It is not predictability, but unpredictability that distinguishes the more powerful & most interesting discoveries...” (Grene, 1966: 221).

3. THE POET’S POLITICS AS SEMANTIC POSITIONING: THINKING WITH SENSE

Poetry and fiction always imply a reader standing for a collective audience, ideally his whole community (this is foregrounded in plays). It was the accepted norm not only for ancient Greece but also for Leibniz or Kant that such creations in words reach some transmittable understanding of human relationships, so that Baumgarten called his foundational *Aesthetica* of 1750 the „science of sensual cognition”. For many poets it then became logical and ethical to think of translating such cognition into politics as concrete human relationships of power.

How may artistic creators *professionally* participate in politics? This was no problem for poets in the era of Homer, Alcman or Solon but became complicated when political units grew larger as well as more obviously based on divergent class interests and the attendant oppression of a major part of the body politic. Plato clearly felt poets as worrisome competitors to his philosopher-king and advocated banning all those who didn’t fit his norms. There followed many painful historical experiences, including in Europe the splendid but today not often applicable attempts of the Romantics either to participate directly as bards of revolt, albeit by means of altered language – as in Victor Hugo – or to turn away totally from politics – which means leaving it to the *status quo*. we may today follow the lead by Rancière (but cf. on poetry as cognition also Spivak, 1988: 115ff.) and posit something like the following:

The poet-creator can – in fact, cannot but – participate in politics, though I shall argue with Fortini and Rancière that he can do so only paradoxically. This means, literally, that she is one who doubts the reigning commonplace views, opinions, and structures of feeling (cf. Williams, 1977), one who *swerves* from them by infringing old usages and meanings and, implicitly or explicitly – this is a matter of situation and personal temperament – creating (or at least groping for, foreboding) new ones. Epicure’s ruling principle of the atoms swerving from the automatically straight path may stand as the great ancestor of all creative methods and possibilities (Suvin, 2010). As a place of truth-bearing thinking – not sundered from feeling – verse and prose poetry have often filled in the voids left by institutionalized science and

institutionalized philosophy, and of course by most institutionalized politics, inimical to humanity because enmeshed in oppressive and exploitative class rule. All of these use generalization, irremediably wedded to concepts, which cannot fully account for the relationship between people and nature, the finite and the infinite. Poetic creation sutures conceptual thought to justification from recalled immediate sensual, bodily experience which is, thus far, much more difficult to falsify or disbelieve. As important is its ranging through richer time-horizons, recalled in Williams's categories of the dominant, emergent, and residual in culture (Williams, 1977: 121ff.): remembering supposed qualities within human relationships, absent today, in the past and expecting them in the future. Centrally, this is bound up with topological (one could metaphorically call this also „metaphorical”) cognizing. In the stronger case of the so-called absolute metaphor – one that cannot be fully and economically replaced by existing conceptual propositions – I propose that such topological imagination has equal cognitive dignity to the conceptual one (Blumenberg, 2005: beginning with 10–13). I proceed to buttress and unfold this by reading Hölderlin and Fortini.

One possible crown witness to this procedure, an example of major cognitive dignity, may be found in the opus of Friedrich Hölderlin, and I'll take as example his great poem *Brod und Wein* (*Bread and Wine*, 1801), and focus on the last 11 lines of its famous stanza 7:

Nur zu Zeiten erträgt göttliche Fülle der Mensch,
Traum von ihnen ist drauf das Leben. Aber das Irrsal
Hilft, wie Schlummer und stark machet die Not und die Nacht,
Bis daß Helden genug in der ehernen Wiege gewachsen,
Herzen an Kraft, wie sonst, ähnlich den Himmlischen sind.
Donnernd kommen sie drauf. Indessen dünket mir öfters
Besser zu schlafen, wie so ohne Genossen zu sein,
So zu harren und was zu tun indes und zu sagen,
Weiβ ich nicht und wozu Dichter in dürftiger Zeit?
Aber sie sind, sagst du, wie des Weingotts heilige Priester,
Welche von Lande zu Land zogen in heiliger Nacht.

Only at times can mankind bear the divine fullness.
Dreaming them is life from now on. But roaming about
Helps, also sleep, and the need and the night make for strength,
Until heroes enough in cradles of brass have grown to be,
With hearts as strong as once were, like to the heavenly ones.
Thundering they come nearer. Meanwhile it seems to me often

Better to sleep, than as now to be so companionless,
So to await and what's to do in this while and to say,
I do not know and what poets are for in an age of want?
Yet they are, you say, like to the wine-god's holy priests,
Who wandered from land to land on through the holy night.

(Translation by Susan Ranson much emended by me;

<https://sites.google.com/site/germanliterature/19th-century/hoelderlin/brot-und-wein-bread-and-wine>)

Now “dürftige Zeit” is a richly compressed syntagm. The “Zeit” is obviously an historical epoch: in this case the bitter reflux of the great French Revolution and its attendant hopes – in that way analogous to the great October Revolution and its longer reflux for us today, finally sealed in 1989. “Dürftig” can be translated as of dearth, of distress, a destitute, hard, meagre, scant, paltry, miserable, feeble, wretched, impoverished, insubstantial, jejune, necessitous, straightened or penurious age. Centrally this is an age of deep and radical, moral and material, need (*Not* – also *Bedarf*, *Bedürfnis*: also requirement, lack, want, desire). For the moment I translate it as “an age of want” as most suggestive.

The fragment chosen thus centrally speaks to the needy 95% of us in the age of the great turbocapitalist distress pivoting on finances as the Supreme Good (which is both fake and lacking). It is the unbearable day: the poem opens with a first stanza praising the night and sleep as against the dominant daily awareness and impact (published separately as a short poem *The Night*). To escape this day, night-cum-sleep and wandering without fixed abode or certainties are at the moment the only means of minimal defence, while awaiting the new age of heroes worthy of “divine fullness.” In today’s language, we are living in a dystopia that is also an anti-utopia, while remembering, perhaps vaguely, an age of concrete utopia. In this dystopia we are all atomised individuals, “companionless” (“*ohne Genossen*,” perhaps we could translate this “without comrades”), and it is most remarkable that the poem never uses “I” or “my,” only “we” or impersonal forms. The poet’s voice – or I should say the poem’s voice, the poem -- deeply disbelieves in sundered individuals outside of great impersonal (or divine) powers, and on the daily human level outside of a “we.”

This is only one possible interpretation not pretending to exhaust the riches of this text. However, for us today, what is the “divine fullness” that people can only fitfully bear, yet that Hölderlin is here yearning for? Regardless of what the author might have meant, the poem most probably means by this a poetically transformed French Revolution with its heroes. Little illusion remains as to its necessary harshness, it was a cradle of brass (not gold, silver of wood);

yet it is one that we hope for again, while waiting in dearth and distress, destitute, miserable, wretched, impoverished, necessitous, and penurious: “and what’s to do in this while and to say, / I do not know and what poets are for in an age of want?” Well, obviously the poem is “for” being written as it was, as a witness, mourner, and herald; the answer to the momentarily – for a long moment lasting decades – unanswerable question is first of all to speak (locution), and to speak about the question’s context and reason (illocution), which brings at least the basis or foretaste of the answer (perlocution). And having spoken it, the poets are already participating to some degree in this fullness, in the seminarist’s Hölderlin lingo they are holy, and they already wander in the holy night firmly disbelieving the certainties of the day. They too are itinerant, geographically or nationally rootless witnesses, mourners, and heralds.

Franco Fortini, one of the 20th Century’s best Italian critics of poetry – himself a significant poet, and an intimately political one to boot – defined „the literary use of language” as a homology to „a formalised [that is, conscious and conscientious] use of life that is the end and goal of communism” (2003: 184). This homology (to my mind, part annunciation-cum-denunciation and part prefiguration) necessarily transgresses the hegemonic discourse, in our times sadly clichétised; I would call it cognition constituted by memorable pleasure. It remembers the past, disputes the present, „use of life into which we are forced by alienation of labour” (Fortini 2015: 35), and carries their lessons into projects of possible lives reaching for the future. What he means by form can be briefly characterised as an interpretation of the world by means of what constellations of words both say and leave unsaid but suggest and give clues to, always suffused by firm if dynamic values shared by a societal class. It is therefore diametrically opposed to the prevailing obscurantist use of „form” as a demolition of meaning and sense, as a ghetto instead of a lookout (in lyrics most often by looking inwards): „form is a tension to incorporate, confront, and elaborate what is outside the frontiers of poetic form” (Fortini, 2015: 38; cf. now also Suvin, 2016). This constitutes a horizon for poetry that is both clearly political and also as it were cosmological, for its greatness and misery deal – as he spelled it out in an interview – with human „resistance to death by means of a systematic project and therefore as a self-education of which artworks are exemplars” (De Filippis 2006: 160).

This creative attitude, however, immediately leads to an intimately personal paradox of living in politics as an anti-politics. All that is commonly taken for politics – for us, say, since the effects of the antifascist wars, such as peace and the Welfare State, have been largely or fully expunged – is alien and inimical, where not actively threatening and deadly. Where personality is valued for and as consumption in view of profit, and carefully shaped phrases or images pertain increasingly to mendacious and death-inducing advertising (Suvin, 2009), art

has to upset. Our immediate major poetic ancestor, Rimbaud – in a filiation beginning with many Romantics and Baudelaire – was led to exasperation at having to reconcile his deep hatred of the bourgeoisie and existing society with the irrefragable fact of having to breathe and experience within it:

... industrialists, rulers, senates:
Die quick! Power, justice, history: down with you!
This is owed to us. Blood! Blood! Golden flame!
All to war, to vengeance, to terror... Enough!

- - - - -
...I'm there, I'm still there. („Qu'est-ce pour nous ...,” 113)

The obverse of this aporia (the *assez* vs. *j'y suis toujours*) is Thomas More's great coinage of utopia: the radically different good place which is in our sensual experience not here, but must be cognized – today, on pain of extinction. What is not here, Bloch's Yet Unknown, is almost always first adumbrated in art and fiction, most economically in verse poetry. From many constituents of the good place, I shall here focus, as does Rancière (Rancière, 1992: 92–93), on freedom – Wordsworth's „Dear Liberty” (*Prelude* l. 3) which translates the French revolutionary term of *liberté chérie* – that then enables security, order, creativity, and so on. The strategic insight here seems to be that the method of great modern poetry from Rimbaud on (and prose too, in somewhat differing ways), if you wish its epistemic principle, is freedom as possibility of things being otherwise; this is to be understood by means of the interaction of what is being said and how it is being said, a consubstantiality of theme and stance. This is also of a piece with the fact that the eye cannot function without the brain; there is no brain without socialized presuppositions; therefore there is no innocent eye. Every reading will establish its own, value-laden meaning out of the text's sense. Every reading is a denial (suppression) of other readings, meanings & values. Any „positive” act is also the negation of a negation; any truth a denial of opposed „untruths”. Collective human freedom is today our supreme truth and Supreme Good.

Poetic freedom is a historically situated, political experience of the sensual, which is necessarily also polemical swerve from and against the *doxa*, in favour of fresh cognition. This freedom is intimately melded with knowledge or cognition. The work of narrative art and poetry gives shape and voice to a previously uncognised, mute and non-articulated, category of being (in that strictly notional sense, the final sediment of all fiction and art is the thesaurus ad the encyclopedia). All shaping and articulation entails the suppression of alternative shapings and articulations for the relationships it refers to: it can never exhaust such relations.

The common-sense, brainwashed understanding includes much that has in the past truly been liberating politics but has retained only a few impoverished slogans from its heroic ages (the liberal, communist, and antifascist ones) when it directly flowed out of human senses. Therefore, “creators have to retrace the line of passage that unites words and things” (Rancière, 1992). And in prose, I would add, the line that unites human figures and spacetimes by means of plot and of metaphoric clusters (Suvin, 1986, and 1994).

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