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Some reflections on psychologism, reductionism, and related issues leading towards an epistemological dualism of reason and experience

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SOME REFLECTIONS ON PSYCHOLOGISM, REDUCTIONISM, AND RELATED ISSUES LEADING TOWARDS AN EPISTEMOLOGICAL DUALISM OF REASON AND EXPERIENCE

Abstract. The present paper offers some speculations which were inspired by the lecture of Husserl's 'Vom Ursprung der Geometrie' and by the author's psychological research on human information processing. A central theme of the paper is that there may be two relatively independent modes of knowledge, tentatively referred to as 'experience' and 'reason'. They constitute an 'epistemological dualism' which may allow to avoid certain circularities in the foundation of knowledge and provide an avenue towards the integration of scientific and prescientific (phenomenological) knowledge. This duality involves two horizons which were noted yet by Husserl, but we do not know whether he went so far as to connect them with two modes of knowledge of which one has a meta-status relative to the other making that it can found as well as relativate the other. Finally, having an infinite character, both horizons may offer distinct perspectives on ultimate reality and meaning.

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1. From Psychologism to Phenomenological Reductionism as Foundations of Knowledge

1.1. Psychologism: A case in point of Scientism.

When proposing 'reflections on psychologism' we had a broader scope in mind than just 'psychologism'. Indeed, 'psychologism' is to be considered as only one case in point of a more general philosophical attitude we want to deal with and which may be referred to as 'scientism'. According to this attitude scientific knowlegde is more valid than the 'prescientific' knowledge which includes the ordinary knowledge of the man in the street as well as the apparently 'deeper' understanding associated with, for instance, art, poetry, music, myth, religion, etc. Only science provides 'true' representations and explanations in accordance with reality the way it 'really is'. Thus the ultimate understanding of reality should be in the nature of scientific understanding.

1.2. The vicious circle of Psychologism and Scientism.

One reason for taking 'psychologism' as a case in point is that it provides maybe the most obvious way to demonstrate the untenable nature of the scientistic view. The rationale goes as follows:

1.- Only science guarantees valid knowledge about reality.
2.- Science relies on logics (reason) and observation (experience).
3.- Logics (reason) and observation (experience) are manifestations of psychological functions such as thought and perception.
4.- Only science guaranteeing valid knowledge about reality (see 1), the validity of logics and observation can only be founded on the scientific study of thought and perception which is carried through by psychologists.
5.- Psychology, as a science, relies on logics and observation (point 2) which are manifestations of psychological functions (point 3) making that their validity is founded on psychology (point 4). Thus, psychology is founded on psychology, which is a vicious circle.
6.- Hence 'psychologism' is untenable because founding science, and knowledge in general, on psychology, it founds them on a vicious circle. It follows that also scientism is untenable because it implies 'psychologism' making that 'validity of science' is founded on 'validity of science'.

1.3. The alternative way of phenomenological reduction.

In order to break through the circle, one has to abandon the idea that the validity of logics and observation are founded on psychology, which means that one has to give up 'psychologism' and consequently 'scientism' as well. However, if psychologism is rejected, how then logics and observation can be founded? A well-known answer to this question has been provided by Husserl(1) according to whom the validity of logics and observation -- of reason and experience -- are founded on self-evidence. Unfortunately, self-evidence is not that self-evident. What seems evident to one person may not seem so to another. Even if people agree, then the agreement may be based on cultural bias, shared prejudice, etc. In order to reach the primary unbiased intuitions by which authentic self-evidence is realized, a phenomenological reduction is required. This means that thought and experience are cleared of

mental constructions and other interpretative additions that were built up in the course of history restoring the original beholding of the 'phenomena' that constitute the 'essences' from which all other knowledge has proceeded. This 'phenomenological' reduction should not be confounded with a 'logical' reduction or axiomatization. The Euclidean postulates are not the original basic intuitions of geometry. Rather they belong to the mental constructions and interpretative additions that were realized relatively late in the history of geometry. In order to grasp the original basic intuitions we should look for a sort of evidences from which the first geometrist in history may have proceeded. Similar evidences reside, according to Husserl, in the experience of a world of 'things' which are bodily phenomena shaped in time and space, having physical features such as color, warmth, heaviness, etc.

2. From Phenomenological and Scientific Reductionisms towards an Epistemological Dualism

2.1. Phenomenological and scientific reductionism.

The term 'reduction' in 'phenomenological reduction' reminds us of the notion 'reductionism' which, however, is usually not associated with phenomenology but with the scientistic view. It then means that the experienced world is exhaustively reducible to the principles and laws stressed by science. These laws and principles constitute the 'real' world whereby laws and principles of one science still may be reduced further to laws and principles of another 'more fundamental' science (e.g.: ordinary experience and behavior reduce to psychology, psychology reduces to biology, biology to chemistry, chemistry to physics). According to the phenomenological view, however, scientific laws and principles do not have the fundamental status accorded to them by the scientistic view; instead they are mere mental constructions that have instrumental value for manipulating reality, however without revealing the true essence of this reality. In order to approach the true essence of reality one should focus on the original knowledge from which scientific laws and principles were derived. This original knowledge resides in the ordinary experience of existence after this experience has been cleared -- by phenomenological reduction -- of

residues from science and other culturally determined mental constructions that claim to be representations of reality. It is evident that this clearing deserves the label 'reductionism' as well, the difference with scientific reductionism being only that the reduction is not directed towards an ultimate level of scientific knowledge but towards a sort of default level of knowledge which has a prescientific character.

2.2. Discussion of the phenomenological reductionism.

The phenomenological reductionism has the merit of highlighting the relativity of scientific knowledge. However, we doubt whether it can be substituted for scientific reductionism as the royal avenue towards absolute knowledge as some enthusiastic phenomenologists may have claimed. Arguments for this doubt are the following two.

A first argument concerns the attainability of the proposed default level of knowledge. Is it possible to get rid of any mental construction? Does it make sense to assume a sort of 'natural' knowledge unaffected by culture, or is 'culture' part of human nature? In addition, phenomenological reduction is a mental operation. Does it not follow that the product of this operation is a mental construction as well as scientific theories are mental constructions? Does the phenomenological doctrine not just provide another theory about reality? This theory may be valuable because it gives full credit to provinces of human experience that constitute the main contents of ordinary life but were disregarded by traditional sciences. However, as a theory it may not have a privileged epistemological status.

The second argument concerns the conditionality of knowledge. Rational constructions such as scientific theories do not apply unconditionally to reality. Take, for instance, geometry which is was handled by Husserl as an exemplary case of rational thought as it is practised in science. For instance, within the scope of Euclidian geometry, the sum of the angles of a triangle measures unconditionally 180 degrees. However, this does not mean that also in the real world the sum of the angles of a triangle measures unconditionally 180 degrees. The application of geometry to real space is conditional: in real space, the sum of the angles of triangles measure 180 degrees only if real space is in agreement with the Euclidian postulates. However, what is 'real space'? The current answer to this question may be that

it is the space we experience by our senses. Hence, in order to check whether real space is euclidian, we might draw triangles and measure their angles. In this way navigators experience that the earth's surface is not like a flat Euclidian plane, the shortest trajectory between two remote harbors being curvilinear rather than rectilinear, and it is by similar dialogues between reason and experience that science proceeds. In this dialogue, conditional evidences estblished by reason are confronted with evidences from experience that, at a first glance, look unconditional in that they seem to anchor the constructions of reason on 'reality'.

However is experience that unconditional? If it is, why then did Descartes distrust the senses so much? Even, assuming that an adequate phenomenological reduction of experience would be possible, could we accept the resulting default knowledge as unconditional as compared with the conditional mental constructions of reason? Is it not possible that the conditional character of experience escapes us because experience lacks the transparancy of reason? Is 'experience' not to be regarded as the 'then' of an 'if then' of which the 'if' is obscure?

There is a phenomenological tradition to give negative answers to these questions. It is argued that only the 'then' being given, it does not make sense to look for an obscure 'if', which means that the 'then' is unconditional. For instance, if a world of things (shaped in time and space, etc.) is given as a primitive phenomenal experience, then this world is unconditional. It does not make sense to to make claims like "If the real world consists of things then I experience it as a world of things" if the "real world" is either to be considered as the unknown "Ding an sich" or as identical with the "world of experience".

The latter rationale could be accepted if the knowledge gained from primitive phenomenal experience (eventually after phenomenological reduction) is more valid than the knowledge gained by reason. The argument to consider the former knowledge as more valid resides in its primitive character: it is primarily given while rational knowledge is constructed. However, can it not be reasonably argued that phenomenal experience is constructed as well? The world of things (shaped in time and space, etc.) can be considered as a 'model of reality' just like the world of quantum physics can be. The difference between both constructions is that the former is established largely automatically as part of our psychobiological constitution while the latter is a product of delibarate thought. Both can be argued to be valid

representations of reality to the extent that they enable us to deal adequately with this reality: we can survive, undertake successful actions, build up a more or less happy life. The model of the world revealed by phenomenological reduction is the one that underlies most of our ordinary dealings with reality. It is the model by which we eat, drink, love and feel at home. The models constructed by reason often look very bizarre and completely inhospitable. However, they allow for successful actions of a sort that within the scope of the ordinary model could only be dreamt of such as the transformation of one metal into an other and even walking on the moon.

2.3. Conclusion: a dualism of experience and reason.

Given the above arguments, we are inclined to accord no privileged epistemological status to 'phenomenological' reductionism as compared to 'scientific' reductionism. Both reflect valid modes of knowledge we may refer to as experience and reason. In spite of the dualistic character of this conclusion, we think that it is in agreement with Husserl(1) who founds knowledge on 'evidences' some of which, such as the emergent 'world of things', refer to experience, while others, such as the evident nature of logical deduction, refer to reason. The huge qualitative difference between the 'models of the world' generated by both modes does not mean that the one is right and the other is wrong. It shows only the vesatility of reality and of our cognitive power which is part of this reality.

3. Experience and Reason as Foundations of Knowledge

3.1. Comparison of experience and reason.

Although both experience and reason are valid modes of knowledge, this does not mean that there are no differences between them. In the subsequent paragraphs we summarize some differences showing tentatively how each mode has its own status and how they relate to each other.
1.- Experience is connected with the senses, reason rather with thought. In comparison with experience, reason is more flexible, more under the control of the subject. The primary evidences of reason do not concern contents but rather formal aspects of knowledge such as the

self-evidence of logical rules which can be applied to a wide variety of 'contents' deliberately choosen by the subject. Primary evidences of experience concern contents of knowledge such as perceived things which are imposed to the subject as agents from an objective world beyond the subject and this in a way falling largely beyond the cognitive control of the subject. The red wall in front of me cannot be perceived deliberately as green. If I want to perceive it as green, I have to intervene in the objective world taking actions like repainting the wall.

2.- Reason has a meta-status relative to experience. The contents it operates on are drawn from experience. Because of this meta-status, reason can deal not only with the content of experience but also with experience itself as object of knowledge without ending up in the paradoxes due to self-reference. Even within the range of reason, there may be provinces of knowledge relating to each other as theory and metatheory making that the former can be explained by the latter. This means a partial rehabilitation of psychologism. Psychological theories of perception, and of human information processing in general, cannot provide the ultimate foundation of knowledge but nevertheless lead to valid partial insights into how knowledge is generated.

3.- Experience and reason differ by content[2]. Experience shows us a world of 'things'or 'objects'. A thing appears to us as a 'being in itself' , an autonomous entity showing a kind of 'personality' characterized by a certain power and potential for desired and undesired consequences. The most advanced realization of this sort of entity is found in the human person for which reason the corresponding discourse of reality might be qualified as a 'personalized discourse' anchored on the distinction between 'I' and 'Thou'. Reason deals with things as members of classes defined by 'features'. The focus being on the features, the autonomous status of the thing (object, animal, human) is disregarded, the thing being reduced to a set of features. Features are more manageable than the obstinate 'thing in itself' that is imposed by experience and hence they can be reorganized in different ways than they appear originally in the experience of things. In this way, reason can establish new sets of features that do not correspond to the sets reflected by the originally experienced objects. In this way alternative 'models of the world' can be constructed. As the basic

units are features rather than the 'being in itself' the corresponding discourse can be qualified as 'depersonalized' and it is no longer anchored on 'I' and 'Thou' but on the impersonal pronominal category called 'of the third person' (he, she, it). However, once an alternative model of the world has been established, subjects feeling not at home in the depersonalized model, may start 'personalizing' the newly established sets of features by assigning to them the status of 'being in itself'. In this way, atoms were viewed as miniature solar systems, particles as minuscule cobblestones and energy as something like a breeze rippling the water of a lake. In the current philosophical literature, terms such as reification, objectification and nominalization, may refer to this process of 'repersonalization'.

3.2. Horizons of experience and reason.

Given the meta-status of reason relative to experience, there must be a break between them which should transpire into a break between feature and object (being, thing, etc.). Indeed, proceeding from feature to object is like the transgression of a limit. Defining an object as a set of features, the number of features that can be considered within this set is infinite. In this respect, and as it was observed already by Husserl, the object constitutes the horizon of the feature, the latter being is only one of an infinite potential of features or aspects ("Abschattungen") of the object.

However, the feature constitutes in turn a horizon for the object. Here we refer to the paper on "A topological view on the structure of meaning" presented at this colloquium by Dhooghe & Peeters. In the light of the semiotic theory presented in that paper, the abstract 'feature' can be defined as a 'complex term' that transcends the more concrete terms -- or concrete objects -- it is derived from. The concrete object is transcended in that the feature represents an 'essence' of which the object is only one of many possible realizations. Hence, also the transition from object to feature is like the transgression of a limit. Indeed, the class of possible objects that might be realizations of the feature is infinite. For istance, the feature 'human' does not only refer to all human beings that exist, have existed and will exist, but also to all human beings that could be imagined among whom are those imagined as having never existed. A complete enumeration of all possible individuals (real and imaginary

ones) that might be realizations of the feature 'human' turns out to be infinite. Hence a feature such as 'human' constitutes a horizon, at least if the concrete hic et nunc experience of meeting human beings is transcended in the establishment of the abstract category. Also this horizon has been noticed by Husserl. In 'Vom Ursprung der Geometrie' he points out that in the establishment of 'theoretical' knowledge about the world, the familiar objects experienced in this world are viewed as "finite" entities in the "horizon" of an "open infinity".

4. The Perspective of Ultimate Reality and Meaning

The present speculations stress a dual view on the nature of knowledge, namely a dualism of 'reason and experience' implying a dualism of '(abstract) feature' and '(concrete) object' being basic content-categories of knowledge. As both, the 'feature' and the 'object' involve a 'horizon' they both offer a perspective of the ultimate. Both perspectives are found back in traditions of philosophical thought such as those associated respectively with Plato and Aristoteles.

In the search for ultimate reality and meaning, the avenue of the 'features' may lead to concepts such as the Platonic 'ideas' and practices such as the mystic contemplation of an ultimate abstract principle.

Taking the avenue of the 'object', one might argue that each object being a horizon, the absolute is present in each object. A corresponding practice may be to live one's life dealing with the objects in the way animals do who presumably have 'experience' but lack 'reason'. This means that we deal with the objects in the way set by our psychobiological constitution, with minimal interference from reason (which does not exclude that the decision to act in this way can be reasonably premeditated). One might think of the ecologist's 'back to nature' but also of certain monastic rules of contemplative orders which stress contact with the objects by simple manual work as part of the mystic practice. Further, one may think of the ecocultural theory in cultural anthropology and related research suggesting that people find meaning in their lives by performing daily routines such as preparing meals, eating dinner, cleaning up, etc.(3). Thereby we should not forget that the 'object' by excellence is the human person. Hence, we should include intersubjectivity, many people finding the

sense of life in love, care for the other, gratitude, etc. (4).

Finally, there is a third avenue which may be specified as an interaction between the two former ones. First, Insights gained by reason may be 'objectified' by reification. This process may result in mythological and religious representations of the ultimate reality which resemble the ordinary world we are familiar with. In addition, there is the material creation of new meaningful objects such as pieces of art which can be regarded as materializations of higher ideas and thus of 'reason'. Thereby 'reason' should perhaps not be limited to the analytic 'left-hemispheric' rationality based on language but as well to holistic 'right-hemispheric' ways of understanding which seem involved in esthetic activity. This issue should be explored further.

Notes

(1) For the preparation of this text we have consulted a Dutch translation by J. Duytschaever of Husserl's 'Vom Ursprung der Geometrie', introduced and annotated by R. Boehm, published by 'Het Wereldvenster', Baarn (The Netherlands), 1977.

(2) The present ideas are largely based on psychological research showing two independent modes of information processing in human cognition. For more information we refer to our articles 'Person and non-person as basic concepts underlying alternative discourses about reality' (Ultimate Reality and Meaning, 1989, 12, 113-132) and 'Good and evil as softwares of the brain' (Ultimate Reality and Meaning, 1986, 9, 210-230).

(3) See: T.S. Weisner, 'Ecocultural niches of middle childhood: A cross-cultural perspective.' (in W.A. Collins (Ed.), Development during middle childhood: The years from six to twelve (p. 335-369). Washington, DC: National Academy of Sciences Press) and 'R. Gallimore, T.S. Weisner, S.Z. Kaufman, & L.P. Bernheimer, 'The social construction of ecocultural niches: Family accommodation of developmentally delayed children.' (American Journal on Mental Retardation, 1989, 94, 216-230).

(4) A penetrating depiction of life-fulfilment through careful and conscious dealing with the immediate circumstances of daily life may be found in Sten Naldony's novel 'Die Entdeckung der Langsamkeit' (München: Piper, 1983).