

ISTITUTO ITALIANO PER GLI STUDI FILOSOFICI

HEMSTERHUIS: A EUROPEAN
PHILOSOPHER REDISCOVERED

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LEEN SPRUIT
HEMSTERHUIS ON APPEARANCES
AND IMMATERIAL BEING

Introduction

In the three short texts under examination (*Sur la réalité des apparences, Sur l'immatériel, Suite au traité sur l'immatériel*) Hemsterhuis argued for the existence of appearances and immaterial being, for the perception of the latter and for mental causation. In these texts, which deal with ontological issues as well as with the physiology and psychology of perception and action, Hemsterhuis attempts to go beyond the sensualistic philosophy of his day. This paper examines Hemsterhuis's views on perceptual awareness in a broader historical context, paying special attention to their ontological assumptions and implications.

1. *On the reality of appearances*

Appearances arise in the interaction between man and his environment. This interaction is seen as a "coexistence active". An appearance depends on the essence of the thing that appears; more specifically, in Hemsterhuis's view, appearances and essences run parallel: differences in appearance reflect differences in essence. Thus, for a thing to appear it must first be, and for a thing to appear in such-and-such a way it must first be. These solid links of correspondence ensure that «une chose est ce

qu'elle paraît»¹. Moreover, since constant relations (*rappports*) hold between the object, its way of appearing and the perceiving subject, it is possible to infer the features of one of these three terms on the basis of knowledge of the other two. This entails that the way of appearing of the object can be inferred from knowledge about the modes of being of object and perceiving subject; similarly, knowledge of the object can be derived from the way it appears and the mode of being of the percipient. Thus, from appearances the very existence of objects can be inferred: «avec le même degré de certitude que je conclus de ma perception à ma façon d'être, je conclus du paraître à l'être de l'objet».

Hemsterhuis claimed that an appearance represents one of the object's modes of being: «il est évident que, soit qu'un être sensible juge d'un objet par le tact immédiat, ou qu'il en juge par quelque autre organe, qui a besoin de moyens, l'objet est nécessairement pour lui avec ses organes et ses moyens, ce qu'il paraît, et par conséquent, qu'elle que puisse être son essence d'ailleurs, il contient parmi toutes ses façons d'être cette façon d'être qui paraît»². Yet, all these various claims do not hold, if the existence of extra-mental being is a chimaera. The existence of the external world cannot be doubted, however. If there nothing outside the percipient existed, the percipient's essence could not be modified by any appearance. But the very existence of this type of modifications in the mind shows that the mind is not "alone". Thus, the percipient's essence being modified reveals the existence of external causes generating appearances. Even if one admits the possibility of an «être si simple qu'il *seroit* un, seul et tout» having modifications, one should explain the changes in the latter. Now, cause and effect are distinct; and if they are to be located in the simple being the latter is not any longer simple, but composed; *a fortiori*, it would not be one and only and all. Thus, the modifications of a simple, one and only being could not undergo any change. Analo-

¹ RA, WW, 132 (99).

² Ivi, 134 (100); see also LHR, WW, 16 (13).

gously, the absurd man of the idealist philosophers would be «un Dieu dans l'infiniment petit le plus absolu, sans création et sans puissance, ou bien plutôt un rien parfait»³.

2. *Presocratics to Leibniz*

Hemsterhuis endorsed a strong version of realism: we perceive what really is there. He theorized solid links between the structure of nature, built up from essences, the appearances and our ideas. He never satisfactorily explained what he exactly meant by appearances. From his examples one can make up that he probably meant to use the term in a straightforward commonsense way. Thus, his commitment is probably to everyday observation, even though his studies of optics in Leiden suggest that he was well aware of the impact of physics and physiology on the notion of sense perception. A comparison with the use of appearance in ancient and contemporary philosophy may provide more interesting clues about the nature and role of appearances in his ontology and psychology of perception.

Greek philosophers mention a kind of entity which is, for most of them, different from both the physical universe and its basic constituents, such as elements, ideas, forms. These are appearances in a consciousness or mind, typically referred to in epistemological contexts⁴ and viewed in all lights: as obstacles to knowledge, as the unique avenue to knowledge, and as being themselves identical with the only reality a person can know.

³ RA, WW, 136 (102). For a discussion of the relation Descartes-Hemsterhuis, see J. A. VAN RULER, *Sensing and Judging. Hemsterhuis, Empiricism, and the Cartesian Legacy*, in this volume.

⁴ The role of appearances in Greek science, most notably astronomy, is not analysed here, for discussion, see G. E. R. LLOYD, *Saving the appearances*, in *Classical Quarterly*, LXXII, 1978, pp. 201-22. For a history of the term "phenomenon", see N. W. BOKHOVE, *Phänomenologie Ursprung und Entwicklung des Terminus im 18. Jahrhundert*, Utrecht 1991.

The development of the distinction between the *real* and the *appearances* in early Greek philosophy can be schematized in three hypothetical stages: (1) sensible things exist in their own right and they are (most of the time) what they appear to be; (2) only certain kind of sensible things exist in their own right and are what they appear to be; (3) no sensible things exist in their own right, and they never appear as they are. One of the important features of the actual historical record of this development is that the reasons for abandoning the first stage do not become clear before the second stage and even the third one have actually been reached⁵. At the centre of stage (2), exemplified by authors, such as Anaximenes, Xenophanes and Heraclitus, is an attempt to simplify and to organize the world in a familiar model, formulating hypotheses on what constitutes the *physis* of things: of all things that exist one type comes to be regarded as basic or constitutive of all the rest. This stage is logically unstable, however, since it is not possible to regard a sensible thing of one type as the appearance or manifestation of sensible things of other types. This difficulty motivates the move to stage (3), i.e., to the view that we never perceive things as they are. Thus, Anaxagoras held that «it is not possible for us to discern the true things», and «what manifests itself to us (*ta phainomena*) is the look of things which are not themselves perceptible»⁶. Democritus stressed that the ways in which the things that we perceive appear to us when we perceive them, depend in part upon our own psychological and physiological condition. He took it to imply not only that we do not perceive what it is that we think we perceive, but also that external things are not at all what we believe that they are. «The appearances of things», he said, «change with the condition of our body and the influences coming toward it or resisting it». Accordingly, sensible things are *appearances* of atoms in configuration. We

⁵ See A. P. D. MOURELATOS, *The Real, Appearances and Human Error in Early Greek Philosophy*, in *Review of Metaphysics*, XIX, 1965-66, pp. 346-65, esp. p. 348.

⁶ H. DIELS (hrsg.), *Doxographi graeci*, Berlin-Leipzig 1929², B21, B21a.

do not see the world as it is, because sensation gives us only "obscure" knowledge, while genuine knowledge of the nature of things (atoms and their properties) is something to be apprehended by rational inference⁷. Finally, Parmenide's and Melissus's analysis of the cognitive object made clear what was the assumed criterion which led philosophers to regard sensible things as appearances.

The metaphysical distinction between the real and the appearances, specifically, the world as it is in itself and the world as given in perception, recurred in Plato, who in *Republic* used appearance as a synonym for illusion⁸. Relevant for present purposes is the use of this term in his later works. In later dialogues what appears is seen as a mingling of perception and judgement⁹. Here, appearance is not seen as a basic sensory stimulus, but as a judgement that something is the case. Also Aristotle acknowledged the existence of appearances (*phainomena*) in the mind, occurring in conjunction with various mental operations such as perception, imagination, memory and thought. Appearances are not observed or belief-free facts, as some texts suggest¹⁰; rather they are to be seen as *endoxa*¹¹, that is, they have a judgmental character. Appearances, including perceptive data and common beliefs, record our use and structure of thought. In this sense, they are functional in setting out puzzles and unravelling them¹².

Hellenistic philosophers turned to a non-judgemental concept of appearance. Epicurus argued that what appears may be

⁷ H. DIELS (hrsg), *Doxographi graeci*, cit., B9 and 11.

⁸ PLATO, *Republic*, 602c-603d.

⁹ PLATO, *Sophist*, 263-264b; *Theaetetus*, 152c.

¹⁰ ARISTOTLE, *Posterior Analytics*, 78b39, 79a2-6; *De caelo*, 293a23-30.

¹¹ ARISTOTLE, *Nicomachean Ethics*, 1145b2-6.

¹² ARISTOTLE, *Metaphysics*, 1010b13-4. See M. CRAVEN NUSSBAUM, *Saving Aristotle's Appearances*, in M. SCHOFIELD and M. CRAVEN NUSSBAUM (eds.), *Language and Logos. Studies in Ancient Philosophy*, Cambridge 1982, pp. 267-93; G. E. L. OWEN, *Tithenai ta phainomena*, in S. MANSION (ed.), *Aristote et les problèmes de méthode*, Louvain-Paris 1961, pp. 83-103.

a genuine content of our impressions or what we take that content to be¹³. The Stoics believed that objects produced appearances of themselves through the sensory apparatus on the regent part of the soul. Unlike Democritus and Plato, they held that the sensory apparatus was above suspicion in knowing, and that it was the crucial instrument for coming to know what real things are like. In their view, the appearance is the persuasive content of the impression; in other words, the basic of assent can be expressed as the appearance that something is the case¹⁴. Finally, the Sceptics adopted the language of appearances as an undogmatic way of talking about the world¹⁵.

The abandonment of the claim that sensible things exist in their own right and that they are what they appear to be gave us not only Plato, medieval theology, and, most notably, the dominant outlook of post-cartesian philosophy, but it was also vital to the rise of Western science. Crucial to the development of eighteenth century speculations of appearances and immaterial being are Leibniz's theories on perception of the sensible world.

Leibniz's view of perception was intimately linked up with his doctrine of a pre-established harmony between corporeal reality and the spiritual realm, and also with the monadology developed in his later works. Leibniz saw the human mind as an individual substance or as a "windowless" monad, in which perception is developed from within on the basis of intrinsic, dynamic dispositions. Perceptual knowledge of material reality is possible by virtue of a mutual correspondence between mind and body¹⁶. The perceptions of the soul

¹³ EPICURUS, *Ep. Pyth.* 87, 92, 97, 98.

¹⁴ See J. B. GOULD, *Being, the World, and Appearance in early Stoicism and some other Greek Philosophies*, in *Review of Metaphysics*, XXVIII, 1974-75, pp. 261-88.

¹⁵ According to Sextus Empiricus the Pyrrhonian sceptic adheres to the appearances; cf. *Outlines of Pyrrhonism*, 1.21; for discussion, see R. BARNEY, *Appearances and impressions*, in *Phronesis*, XXXVII, 1992, pp. 283-313, pp. 286-88.

¹⁶ *GP*, II, 115; see also *GP*, IV, 483-84, *GP*, VII, 313, 357.

correspond to states of the body, and more specifically to states of the brain¹⁷.

According to Leibniz, the external world causes our appearances¹⁸. However, through perception the mind grasps properties of the external world, whose real nature remains inaccessible. This means that the human soul perceives material bodies as "phenomena" rather than as extra-mental substances¹⁹. This fits his methodological nominalism: in reality only individual substances and their perceptions exist, while matter and motion are perceived phenomena²⁰. Material bodies are appearances generated by an aggregate of monads. The mind expresses or mirrors the world at a phenomenal level: the phenomena that constitute perceptions inhere in the spiritual substance²¹. The perception of bodies by an individual created substance is more or less confused, because only some of the phenomena are «bene fundata»²².

Leibniz agreed with Berkeley that the distinction between primary and secondary qualities is untenable and that none of

¹⁷ See *GP*, I; 382-83; *GP*, II, 91; *Nouveaux essais sur l'entendement humain*, in *Id.*, *Sämtliche Schriften*, hrsg. von Leibniz-Forschungsstelle der Universität Münster, Bd. VI, 6, Berlin 1962, pp. 115-16, and 145.

¹⁸ *GP*, I, 370.

¹⁹ *GP*, II, 262: «Itaque sic sentio, corpora quae vulgo pro substantiis habentur, non nisi phaenomena esse realia nec magis substantias esse quam parhelia vel irides, nec tactu magis quam visu aliud evinci. Monada solam esse substantiam, corpus substantias, non substantiam».

²⁰ *GP*, II, 270.

²¹ See *GP*, VII, 320: (external) reality is a series of perceptions.

²² See *GP*, II, 268: «Accurate autem loquendo materia non componitur ex unitatibus constitutivis, sed ex iis resultat, cum materia seu massa extensa non sit nisi phaenomenon fundatum in rebus, ut iris aut parheliion, realitasque omnis non sit nisi unitatum. Phaenomena igitur semper dividi possunt in phaenomena minora quae aliis subtilioribus animalibus apparere possent, nec unquam pervenietur ad minima phaenomena. Unitates vero substantiales non sunt partes, sed fundamenta phaenomenorum». See also *GP*, II, 276, 306, and 435-36. For discussion, see M. MUGNAI, *Astrazione e realtà. Saggio su Leibniz*, Milano 1976, pp. 17-21; *Id.*, *Introduzione alla filosofia di Leibniz*, Torino 2001, pp. 76ff; and F. MONDADORI, *Solipsistic perception in a world of monads*, in M. HOOKEF (ed.), *Leibniz. Critical and Interpretative Essays*, Minneapolis 1982, pp. 21-44, on p. 27.

our perceptions are qualitatively similar to the features perceived²³, but he did not join Berkeley in abolishing the "external" world²⁴. Leibniz met with serious difficulties when attempting to develop a convincing criterion for «phenomena bene fundata»²⁵. In general, he held that we may consider as real those phenomena which make up what we call the external world, inasmuch as they correspond to precise laws²⁶. Leibnizian phenomenalism goes hand in hand with what in recent times we call underdetermination of theory by phenomena²⁷.

3. *Phenomenal and physical objects*

Hemsterhuis's views on sense perception and knowledge were clearly influenced by Condillac, who, like the British empiricists, approached the problem of knowledge from a psychological perspective and put forward a sensualist account of mental operations. But unlike authors such as Hartley and Bonnet, Condillac's account is not materialistic. He adopted a dualist framework: mental operations correspond to physical processes, but they are not identical with such processes. In the first part of his early *Les Monadés* (rediscovered and attributed

²³ G. W. LEIBNIZ, *Nouveaux essais*, cit., pp. 130 ff.

²⁴ See the notes in his copy of Berkeley's *Principles*, reported in B. MATES, *The Philosophy of Leibniz. Metaphysics and Language*, Oxford 1986, p. 199. See also G. MACDONALD ROSS, *Leibniz's Phenomenalism and the Construction of Matter*, in *Studia Leibnitiana*, Sonderheft XIII, 1984, pp. 26-36.

²⁵ Cf. *De modo distinguendi phaenomena realia ab imaginariis*, in *GP*, VII, 319 f. He appeals to God in *GP*, II, 495-96; and IV, 492-93. For discussion, see B. MATES, *The Philosophy of Leibniz*, cit., pp. 98-9, and 203; and G. A. HARTZ, *Leibniz's Phenomenalism*, in *Philosophical Review*, CI, 1992, pp. 511-49, esp. pp. 520 f.

²⁶ *GP*, II, 452; *GP*, IV, 523; cf. *Nouveaux essais*, cit., p. 296: the only criterion for the reality of the perceptual objects is the internal coherence of the phenomena.

²⁷ I. HACKING, *Why Motion is only a well-founded Phenomenon*, in K. OKRUHLIK and J. R. BROWN (eds.), *The Natural Philosophy of Leibniz*, Dordrecht 1985, pp. 131-50, esp. p. 147.

only in 1980) he attacks the Leibnizians and claims that knowledge starts with ideas of sensation, but in the second part he accepted the existence of simple indivisible entities, i.e. monades. By contrast in *Essai sur l'origine des connaissances humaines* (1746) Condillac attacked the systems of seventeenth century rationalist philosophy (Descartes, Malebranche, Spinoza, Leibniz) and presented a straightforward empiricist account of knowledge, arguing that not only all ideas, but even all mental operations spring from sensation alone as their ultimate source; all are merely different stages or forms in the development of sensation (*sensations transformées*). For instance, attention is an exclusive impression (standing out by virtue of its vivacity) and memory is an impression which persists²⁸.

In his monograph on Hemsterhuis, Heinz Moenkemeyer argued that the Frisian philosopher avoided subjective idealism and phenomenalism: objects have a real existence independent of their being known, and what is known of them constitutes a real aspect of them²⁹. Since the idea of an object is the result of the "rapports" between the object and the modification of the organ, it follows that among the many ways of being of the object there must also be the one which corresponds to the idea or

²⁸ However, the claim that all impressions and the mind's awareness of them are nothing but modifications seems to entail idealism. In the *Traité des sensations* (1754) he replied to the challenge levelled by Diderot in *Lettre sur les aveugles* (1749) with the thought experiment of the statue. Condillac presented a statue provided only with sensations of smell, claiming that when a rose is presented to the statue, the statue, from its own point of view, unlike that of an observer, will just *be* the smell of the rose. The crucial thing about Condillac's statue, which is organized inwardly like a man, is that its soul has never received an idea before the thought experiment is carried out. Once again, as earlier, he showed how, by successively exposing the statue to appropriately chosen stimuli, we could cause its virgin mind, having no innate ideas, and no built-in faculties, to build up the full range of mental operations. But this does not yet rebut the charge of idealism. Condillac tries to do this by next giving the statue *touch*. If the statue touches itself, there are two sensations of resistance. But if it touches something else, there is only one. From this experience is generated our awareness of the independence of the outer world.

²⁹ H. MOENKEMEYER, *François Hemsterhuis*, Boston 1975, p. 61.

sensation in the sentient being. Thus, objects really are as they appear.

Most Greek and modern philosophers held that what we perceive depends also on our psychological and physiological conditions. Democritus and Plato argued that the appearances of things change with the condition of our body. Descartes and Leibniz distinguished sharply between sensible and intelligible reality. They agreed on the basic view that things are not what they seem to be. By contrast Hemsterhuis had a strongly realist view of perception, like some of the Presocratic and Hellenistic philosophers, most notably the Stoics, that he despised so much³⁰. Like contemporary empiricists, Hemsterhuis thought that all knowledge can be built up from some perceptual stratum free of conceptualisation. Appearances in his view are not distorted by the physiology of our sensory apparatus, as in Democritus and later Greek philosophy. Appearances represent real aspects of the essences of things. Hemsterhuis's account of perceptual awareness simply assumed the workings of neurophysiology. In virtue of the causal chains between the essences of material reality and mental apprehension he conceived of perception as a relatively unproblematic relation between environment, sensory apparatus, and human soul. This explains why he did not specify the mechanisms needed to pick up the information in the stimulus.

We perceive a thing when the essence of the thing, as a stimulus object, has acted upon our sense organs, thereby causing us to be appeared to. The appearances are not stimulus objects that affect our sense organs; they are not themselves anything that we perceive. Although he did not always draw a neat distinction between physical and phenomenal object, Hemsterhuis did not hold that when we perceive a physical thing then we also perceive its appearances. We perceive the object to have the features we do perceive it to have, because of the

³⁰ See A. DESBORDE, *Pourquoi Hemsterhuis n'aimait-il pas les Stoïciens?*, in *QPR*, 161-79.

way it appears to us. Thus, appearances play a role in justification: perception is grounded in the way one is appeared to.

The physical objects are as they appear, but not always so. If experiences are incorrigible and self-intimating, there is plainly no room left to contain a distinction between an experience as it actually is and as it appears to be. Our dreams support a distinction between physical objects and their appearances³¹. This guarantees the possibility of error, which presupposes that the content of sense or imagination may diverge from its causal ancestry, or in other words that our mental faculties are able to produce experiences which are phenomenally like perceptive experiences but with a different content.

According to Hemsterhuis, perceptive awareness requires external objects, some causal proceedings from those objects to specific organs, a consequent neurophysiological action in nerves and brain, a receptive mind, and some undefined process from brain events to awareness. On the ontological theory accepted by Hemsterhuis, the causal power affecting perceivers is located in (sensible and insensible) essences. The perceived qualities are not seen as (primary) qualities of the essences, but rather as (some of) their modes. In order for either material or immaterial qualities to become visible, there must be present a cognising perceiver. The perceiver does not cause the qualities to appear, although without a perceiver, there will be no appearance. In other words, as perceivers, we do not create appearances, although they are dependent on us in part, i.e., on the physical processes in the brain and the nervous system.

The appearances are products of sensible and insensible structures (essences) and the perceiver. The causation of appearances does not determine ownership. Similarly for the other partner in the genesis of perceived qualities: there seems no reason why perceiver-dependence makes what appears properties of the perceiver. So even if appearances require perceivers (they appear to a perceiver), the ontic status of the appearances

³¹ *LHR, WW*, 34 (28).

need not change from modes of being of objects to subjective states. If they are not subjective states, if perceiving them does not change their ontic status, their reality is preserved. Appearances, the dual products of objects and perceivers, inhabit an intermediate domain between subjective states and (in-)sensible essences³².

4. *On immaterial being*

We perceive what touches our sense organs, and, by consequence, our ideas are the effects of the relations between external reality and our sense organs³³. In his note *Sur l'immatériel* Hemsterhuis argued that reality does not coincide with the possible objects of sensation, since it cannot be excluded, that matter possesses attributes not to be grasped by our senses. In this context, he attacked some of Newton's followers, because they endorsed a too strict idea of matter³⁴. The possibility of "extra-sensorial" perception is corroborated by three hypothetical cases, or more precisely thought experiments: (1) a man deprived of the sense of touch would not perceive matter as impenetrable; (2) analogously a blind man would not perceive matter as extended, while (3) an entity with a hundred other types of organs would entertain other and different relations with matter and thus would grasp other attributes.

The digression on matter and its perception serves as introduction to the main argument. When one takes into consideration that the soul is immaterial, it follows that the soul does not have an essence in the sense of essence related to touch, sight etc. And once it has been shown that man is gifted with an organ distinct from the other five, it follows that there are

³² See J.W. YOLTON, *Realism and Appearances. An Essay in Ontology*, Cambridge 2000, pp. 138-40.

³³ *LHR, WW*, 28 (23).

³⁴ *I, WW*, 140 (104).

essences which have relations with us that manifest themselves through other channels than sight and touch. Now, this is the moral organ³⁵.

In this quite enigmatic and essentially apodictic way Hemsterhuis introduced one of the central concepts of his psychology of perception and knowledge: man has an organ for moral sensations and, implicitly, for the apprehension of immaterial being. In the second half of this note, he developed arguments for this view. First, he formulated two series of assumptions regarding perception. He stated (a) that not all essences that may manifest themselves to us through our organs, have a relation with the latter; and that similar essences may act upon our organs through the intermediation of other essences with whom we do entertain relations. Then he observed (b) that sensation arises under three interrelated conditions: when an essence can act upon the medium intervening between essence and sentient being, when there is such a medium that may serve as «vehicle of action», and when there is an organ capable of receiving the impressions from medium and object³⁶. When one of these conditions is lacking there is no sensation (a perfectly transparent body does not reflect light, a bell in the void does not ring). These considerations corroborated Hemsterhuis in his conviction of the existence of certain essences that, although having no or only a tiny relation with our organs, may manifest themselves to us. Experiences by people who lack one of the traditional five senses show, according to Hemsterhuis, that in nature there are causes whose correspondence with the effects is totally veiled for us and our actual organs, or else, whose actions, though producing sensible effects on our organs, have nothing in common with our ways of perceiving.

Thus, an essence may act upon another essence through a quality inaccessible to our organs, such that the other essence

³⁵ See *LHR*, *WW*, 50 and ff. (41 and ff).

³⁶ *I, WW*, 142 (106). See also *LHR, WW*, 22 (18).

manifests its relation to us through one of our organs. And it is highly probable that what we call the immaterial, manifests itself in a similar fashion.

In *Suite au traité sur l'immatériel*³⁷, Hemsterhuis returned to analyse the same problematic, but now from the point of view of the relation between soul and body. Things interact in virtue of their relations, that is, when they have in common qualities, modifications or modes of being. Now, soul and body have nothing in common, as was shown in *Lettre sur l'homme et ses rapports*. Yet, soul and body interact and thus, they should have something in common, be it a quality, modification or mode of being. According to Hemsterhuis, the concept of intermediate agents in the perception of the immaterial, formulated in the precedent essay, may explain soul-body interaction³⁸. Soul acts upon the body through unknown qualities and modifications in such a way that the body propagates known qualities and modifications. This interaction raises an issue. If the soul acts really (*réellement*) on the body, it evidently possesses qualities, modifications and ways of being in common with the body. But this is impossible, since the soul is immortal while the body is not. And it would be even more absurd to suppose that the body is immortal. Referring once again to the supposed dynamics of sense perception, Hemsterhuis argued that the qualities, which the senses detect, such as visibility, consist principally in the relation between certain essences and the sense organs. Analogously, the relation between the nerves and the cerebellum, on the one hand, and the soul, on the other, consist in a common quality, modification or mode of being. Thus, this specific relation between the soul and the central nervous system not only explains the perception of immaterial being, but it also accounts for mental causation.

³⁷ *STI, WW*, 150-2 (111-14).

³⁸ On mental causation, see also *LHR, WW*, 36 and ff. (30 and ff.) for the theory of the "velléité".

5. *On what there is*

Hemsterhuis asserted that besides the five senses, man has also an immaterial organ that operates at a level transcending the other sense organs. The need for such an organ was pressed by Hemsterhuis to account for a particular feature of man, namely, his capacity for knowledge of the immaterial. The moral organ is linked to brain, however, and for the knowledge of the immaterial it requires the intermediation of essences with whom the traditional sense organs entertain relations to perform its operations. In this sense, Hemsterhuis's idea of a moral organ is somehow similar to the assumption of a divine or immortal soul by Renaissance and seventeenth century empiricist philosophers, such as Bernardino Telesio and Pierre Gassendi³⁹.

Hemsterhuis's views in the aforementioned texts raise several issues. His argument for a moral organ is apparently affected by circular reasoning: the claim for immaterial being and a moral organ are clearly interrelated⁴⁰. Moreover, the perception of non-material being presumes 'intermediary' qualities and modifications which seem to be invoked *ad hoc*. In this section I attempt to demonstrate that his claims for a moral organ and immaterial being are not necessarily inconsistent with his broader assumptions concerning the structure of reality and perception, more precisely, with his ideas on «what there is» and how we perceive it. A brief analysis of Hemsterhuis's ideas in Quinean terms reveals that, although he stretches the empirical method

³⁹ See B. TELESIO, *De rerum natura iuxta propria principia*, a cura di L. De Franco, 3 vols., Cosenza 1965 and Firenze 1980, books V and VIII; P. GASSENDI, *Syntagma philosophicum*, in ID., *Opera omnia in sex tomos divisa*, Lyon 1658, vol. II, 440A-454B. Telesio and Gassendi in turn seem to resume the scholastic distinction between the seed-soul and the immaterial intellect, recurring in A. THE GREAT, *Liber de natura et origine animae*, cura B. Geyer, in ID., *Opera omnia*, tomus XII, Monasterii 1955, tr. I, c. 5, p. 14a; see also R. BACON, *Opus maius*, ed. by J. H. Bridges, 3 vols. London 1900, pars V, p. 9.

⁴⁰ In this sense his views were already sharply criticized by Diderot (see CD, 297).

beyond its own limits, he does not extend reality "*ad libitum*". Finally, his views on intermediary qualities and modifications are reasonable when interpreted within the historical and doctrinal context from which they stem.

Quine argued that one's ontology is basic to the conceptual scheme by which one interprets all experiences, even the most commonplace ones. Judged within some particular conceptual scheme an ontological statement stands in need of no separate justification at all. According to Quine, to be assumed as an entity is, purely and simply, to be reckoned as the value of a variable. In terms of the categories of traditional grammar, this amounts roughly to saying that to be is to be in the range of reference of a pronoun: the variables of quantification, "something", "everything", "nothing" range over our whole ontology, whatever it may be. This entails that we are convicted of a particular ontological presupposition if, and only if, the alleged presupposition has to be reckoned among the entities over which our variables range in order to render one of our affirmations true⁴¹. By consequence, we cannot significantly question the reality of the external world, or deny that there is evidence of external objects in the testimony of our senses; for, to do so is simply to dissociate the terms "reality" and "evidence" for the very applications which originally did most to invest those terms with whatever intelligibility they may have for us. These terms owe their intelligibility to their applications in archaic common sense⁴². Thus, it is a fiction that there exists a clear line of demarcation between the given as such and the subsequent theoretical additions.

Applying the Quinean scheme to Hemsterhuis, one may conclude that immaterial being is to be assumed as an entity, purely and simply, since it is to be reckoned as the value of a

⁴¹ See W. V. O. QUINE, *On what there is*, in *From a Logical Point of View. Logico-Philosophical Essays*, Cambridge Ma. 1964, pp. 1-19, on pp. 12-4.

⁴² W. V. O. QUINE, *The Ways of Paradox and Other Essays*, Cambridge Ma.-London 1976², pp. 229-33.

variable "essence". In Hemsterhuis's view reality is made up of essences. With our five senses we detect the material world as it is. Yet, the material world does not exhaust reality as such. Central in Hemsterhuis's conception of immaterial being is that much more can be known about reality than the mere materialistic aspects. With his theory of the moral organ he tried to account for the autonomy of the realm of spiritual experience that had either no place in scientific philosophy or was not recognised as autonomous. The figurative use of the term "organ" in a non-physiological sense (while not anatomically identified) enabled him to ascribe to phenomena outside the grasp of usual sense perception an evidence that is on a par with that of the so-called physical world. Thus, the moral organ discloses suprasensory, spiritual aspects of the universe⁴³. Hemsterhuis's claim for immaterial being is related to his view of the essentially empirical limits of sense perception⁴⁴. Though presupposing an infinity of types of objects not grasped by the human soul, Hemsterhuis did not develop a clearcut ontology of unobservables. He just argued that the existence of entities is not relative to our physiology, although evidently the human epistemic attitude towards certain claims about the structure of reality depend on the human physiology.

At this stage a final problem remains: Hemsterhuis is rather vague about the intermediary role of qualities and modifications in the apprehension of immaterial being. His short remarks on interaction between body and soul in *Suite au traité sur l'immatériel* suggest a Cartesian-like view, that is, brain and the nervous system exert a role similar to that of the pineal gland⁴⁵. However, though preserving a strict distinction between body and soul, Hemsterhuis's overall approach to the psychology of

⁴³ See H. MOENKEMEYER, *François Hemsterhuis*, cit., p. 31.

⁴⁴ See *I, WW*, 144-46 (108-9).

⁴⁵ For discussion, see U. NIEWÖHNER, *Comment Hemsterhuis reprenait l'idée de la glande pinéale, ou la fable médicale dans les réfutations du démocritisme cartésien*, in *QPR*, 379-401, esp. pp. 388-9.

perception differs essentially from that of Descartes, since he endorsed a full-blown empiricism. Descartes's explanation of knowledge of the sensible world involved a neurophysiological account of the complex motions leading up to the formation of brain patterns in the pineal gland, along with a metaphysical account of the mind's producing perceptual ideas on the occasion of, and attending to, these patterns in the pineal gland. In Descartes's view, knowledge of immaterial objects was entirely based on innate ideas. According to Hemsterhuis, by contrast, knowledge of the sensible world stems from sense perception, while the apprehension of immaterial being presupposed the intermediation of qualities and modifications regarded as capable of communicating objects not grasped by the five senses. It is reasonable to presume that with respect to the moral organ Hemsterhuis saw the function of these qualities and modifications as complementary, rather than as alternative. The moral organ was indeed seen as some sort of mental faculty grasping determinate objects, while the before mentioned qualities and modifications are designed as having a function preliminary to actual apprehension. The assumption of distinct psychological faculties for different objects resumes implicitly a traditional view recurring among Aristotelian authors since the Middle Ages. Also the intermediary qualities and modifications recall the ontologically unstable sensible and intelligible species of the Peripatetic psychology of cognition, rather than Descartes's physically conceived «*ésprits vitales*». Thus, Hemsterhuis's idea of mind-body interaction in the apprehension of immaterial being appears as an updated version of views which at his day seemed definitely supplanted by seventeenth century rationalist and naturalist psychological programs.