

# Between Two Images? An Introduction

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## 1. A Tale of Two Images

The relationship between common-sense representations of man and the world and scientific representations of them were widely debated in XX<sup>th</sup> century culture. This, of course, largely depends on the increasing and systematic development of scientific-experimental knowledge which now ranges over a huge amount of phenomena.

What makes this issue especially awkward is the fact that these two accounts do not seem to harmonize or be easily integrable in a unitary conception. Rather they convey two very different, and seemingly opposite, worlds: Eddington's more than famous "two tables" have become the icon of this diversity. If this is true and relevant when we deal with *objects*, it is even more true and relevant when *subjects* are concerned, when the scientific-experimental methods which were created for the study of nature from an "objective" point of view are then applied to the study of the conscious minds of persons, for instance.

This is not simply a theoretical issue; the way we describe and explain the world and man have a deep influence on the kind of person we eventually become. The understanding of the world and ourselves in fact plays an essential role in the shaping of our identity, and, as Arnold Gehlen once wrote (in a passage that in a certain measure anticipates Sellars): «there is a living being, one of whose most significant characteristics is the need for self-explanation, for which an "image", an interpretative formula, is necessary» (Gehlen, 1940/1988, p. 4).

Fifty years ago Wilfrid Sellars's essay *Philosophy and the Scientific Image of Man* was first published.<sup>1</sup> It is a classic analysis of this problem and

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<sup>1</sup> Sellars (1962). The essay appeared as the second chapter in *Frontiers of Science and Philosophy*, the first volume of the *University of Pittsburgh Series in the Philosophy of Science*. It was then published (PSIM), the following year, in Sellars's *Science, Perception and Reality* (1963). The early

articulated very influential categories for dealing with it, while at the same time offering a much discussed interpretation and controversial answer to it.<sup>2</sup> Sellars's essay «consists of two lectures given at the University of Pittsburgh in December, 1960, as part of a series of lectures in the history and philosophy of science by various contributors» (1963, p. vii).<sup>3</sup>

Sellars's essay begins with a famous definition of philosophy that has been endorsed by many philosophers (see for instance: Putnam, 2012, ch. I) and that essentially contributes to explaining why philosophy is fully entitled to deal with the problem of the relationship between scientific and non-scientific representations of man and the world: «The aim of philosophy, abstractly formulated, is to understand how things in the broadest possible sense of the term hang together in the broadest possible sense of the term» (PSIM, p. 1).

It is common knowledge that, according to Sellars, philosophers are confronted today «by *two* pictures of essentially the same order of complexity, each of which purports to be a complete picture of man-in-the-world, and which, after separate scrutiny, he must fuse into one vision» (PSIM, p. 4). The first picture is the «'manifest' image of man-in-the-world» (PSIM, §II), I will point out here three of the features with which Sellars characterizes it:

draft of this text and the handwritten notes concerning it are now at the Pittsburgh Archives: Wilfrid S. Sellars Papers, 1899-1990, ASP.1991.01, Archives of Scientific Philosophy, Special Collections Department, University of Pittsburgh. Collection Inventory: Section: Lectures; Box: 16; Folder: 03–07 “Philosophy and the Scientific Image of Man,” c. 1962. They are also freely accessible on-line: <<http://www.library.pitt.edu/libraries/special/asp/sellars.html>> (accessed on: May 13<sup>th</sup> 2012). In *Frontiers of Science and Philosophy* Sellars's essay was preceded (p. 35) by an excerpt from Ernst Cassirer's *An Essay on Man*.

<sup>2</sup> The essay has been translated into many languages. Some examples: Spanish translation by V. Sánchez de Zavala: *La Filosofía y la Imagen Científica del Hombre*, in: J. Muguerza (ed.), *La Concepción Analítica de la Filosofía*, Alianza Editorial, Madrid 1981, pp. 645–691; French translation by Y. Bouchard and D. Boucher: *La philosophie et l'image scientifique de l'homme*, in: D. Fiset-P. Poirier (eds.), *Philosophie de l'esprit. Tome I: Psychologie du sens commun et sciences de l'esprit*, Vrin, Paris 2002, pp. 55–115; Italian translation by A. Gatti: *La filosofia e l'immagine scientifica del mondo*, Armando Editore, Roma 2007.

<sup>3</sup> The other contributors of this series were: C. G. Hempel, M. Scriven, E. Caspari, A. Grünbaum, P. K. Feyerabend, and E. Nagel (all their essays, except Nagel's one, were published along with Sellars's paper in *Frontiers of Science and Philosophy*). This Annual Lecture Series was a first step towards the establishment of the (now famous) *Center for Philosophy of Science* of the University of Pittsburgh (cf.: <[http://www.pitt.edu/~pittcntr/About/history/history\\_1.htm](http://www.pitt.edu/~pittcntr/About/history/history_1.htm)> – accessed on: May 13<sup>th</sup> 2012). The University of Pittsburgh was then to be Sellars's own University from 1963 to his retirement.

- «the conceptual framework which I am calling the manifest image is, in an appropriate sense, itself a scientific image. [...] There is, however, one type of scientific reasoning which it, by stipulation, does *not* include, namely that which involves the postulation of imperceptible entities, and principles pertaining to them, to explain the behaviour of perceptible things», the “manifest image”, therefore, «limits itself to what correlational techniques can tell us about perceptible and introspectible events» (PSIM, pp. 7 and 19);
- «primary objects of the manifest image are *persons*», the manifest image, indeed, is seen as a «refinement of the ‘original’ image of man-in-the-world» (intended, in turn, as «a framework in which *all* the ‘objects’ are persons»), through a «gradual ‘de-personalization’ of objects other than persons» (PSIM, p. 10; cf. p. 12);
- «man is that being which conceives of itself in terms of the manifest image. To the extent that the manifest does not survive in the synoptic view, to that extent man himself would not survive» (PSIM, p. 18).

The second picture is the «scientific image of man-in-the-world» (PSIM, §IV) and also in this case it is worth underlining three of the main aspects of it:

- it obviously contrasts with the manifest image because it «postulates imperceptible objects and events for the purpose of explaining correlations among perceptibles» (PSIM, p. 19);
- it has to be interpreted, according to Sellars, in a non-instrumentalist way: «systems of imperceptible particles» introduced by the “scientific image” are *not* considered as «‘abstract’ or ‘symbolic’ ways» of representing manifest objects (see: PSIM, p. 26 and 32);
- «although the image is *methodologically* dependent on the world of sophisticated common sense, and in this sense does not stand on its own feet, yet it purports to be a *complete* image, i.e., to define a framework which could be the whole *truth* about that which belong to the image [...] the scientific image presents itself as a *rival* image» (PSIM, p. 20).

The aim of philosophy is to overcome this fragmentary situation, reaching the «eye on the whole» through a «fusion», a «synoptic vision», a «stereoscopic vision», a kind of «binocularity» (on these metaphors see also Stanford, *infra*, §2).

Sellars notoriously confers a kind of primacy, *as far as describing and*

*explaining* are concerned, to the scientific image: from this point of view, an ideal, accomplished scientific image will thus be the best inventory of what really exists in our world, and the best explanation of how it works.

The manifest image, on the contrary, does not adequately describe reality. But neither is it entirely wrong and massively nonreferential. Indeed, the main aspects, features, and phenomena that belong to the manifest image must be accounted for in the scientific image with scientifically well-grounded *successor concepts* of those applied in the manifest image. There are intentional states or «raw feels» as the manifest image tells us, but their ultimate nature is not such as it is represented within that image. So, the scientific image must provide us with a scientific conception of them which is not a kind of elimination.

Regarding the intentional states (and the real «mind-body problem») Sellars (PSIM, §VI) seems confident that the pathway towards an identification of conceptual states with objects of the scientific image is open: «if thoughts are items which are conceived in terms of the roles they play, then there is no barrier *in principle* to the identification of conceptual thinking with neurophysiological process» (PSIM, p. 34; but on this point, see deVries's essay in this volume).

On the contrary, as far as raw feels (and the so-called «sensorium-body problem») are concerned, things are more difficult from Sellars's perspective, because it seems impossible to him to reconcile the «ultimate homogeneity» of the qualitative states with the «particulate» foundation of the present scientific image. A scientific account of raw feels is not impossible, but it requires a conceptual refoundation of the scientific image – a very demanding project that Sellars himself will endorse in the last period of his career.

But within the framework of the manifest image we do not simply describe and explain things, we also find in that image «categories pertaining to man as a *person* who finds himself confronted by standards (ethical, logical, etc.)» (PSIM, p. 38; cf. p. 6). The conceptual framework of our normative notions, standards, rules and intentions, in the various fields of our discourse and rational practice as members of a group, is not something that, from Sellars's perspective, can be reduced to our scientific conceptual framework; rather, it should be «joined» (PSIM, p. 40) to the scientific image in order to reach a synoptic view – and «from this point of view, the irreducibility of the personal is the irreducibility of the ought to is» (PSIM, p. 39). One might then see

Sellars as a naturalist without a “naturalized epistemology”<sup>4</sup>, or, as O’Shea (2007) put it, as the proponent of a «naturalism with a normative turn».<sup>5</sup>

## 2. The Conceptual Framework of Sellars’s Analysis: Objections and Presuppositions

It is probably useful to recollect some objections that have been raised against the very categories or the very structure of Sellars’s account. Here, I will only present three main critical aspects of Sellars’s analysis: the first concerns the very concept of an “image”, the second the scientific image, the third the manifest one. I do not want to worry about whether they are effective or inappropriate towards Sellars’s account, I will only say that certain formulations of them may find an immediate answer in Sellars’s original text, while other formulations and arguments seem to represent *at least* serious objections to his vision and should be discussed further.

### 2.1. Imaginary Images?

The first point immediately concerns Sellars’s use of the term “image”. While image metaphors have been widely used in 20<sup>th</sup> century culture in order to refer to the scientific conception of the world, the adequateness of this choice has been criticized in many ways.

In a certain way, this kind of criticism already existed before Sellars’s analysis was conceived. Moritz Schlick, for instance, wrote in 1925:

[T]he expression ‘world picture’ is itself not the best one to use; it would be preferable to say ‘world concept’. For in philosophy the world ‘picture’ is better confined to the intuitively representable, whereas the physical representation of the world, although conceptual, is entirely non-intuitive. (1925/1974, §32, p. 294)<sup>6</sup>

<sup>4</sup> The project of a «naturalized epistemology» may have many forms and meanings. I suppose that Sellars’s philosophy is incompatible with strong forms of naturalized epistemology such as those characterized by Susan Haack as «scientific» naturalism, which «make epistemology an enterprise internal to the natural sciences» and may assume a «reformist» or a «revolutionary» aspect (1993, ch. VI, p. 119).

<sup>5</sup> This is the subtitle of his book on Sellars’s philosophy, where the discussion on the two images, introduced in chap. I, is the basis of the structure of the entire volume. The analysis of PSIM is the starting point also for deVries (2005, ch. I).

<sup>6</sup> And Herbert Feigl writes: «I would prefer to contrast the manifest image with the scientific

Sellars does not ignore that science is not a matter of pictures which can easily be imagined, but, rather, one of conceptual accounts and he explicitly says: «I'm using 'image' as a metaphor for conception» (PSIM, p. 5). Indeed, he is certainly not the kind of philosopher who confuses what has a conceptual status with what doesn't.<sup>7</sup> Nevertheless, it is important to analyse the role and influence of this metaphor in Sellars's essay, and even more to discuss the idea of two main conceptual matrixes which shape our view of the world and ourselves.<sup>8</sup>

## 2.2. The Scientific Image: One, Many, Practically None

Firstly, there is a deep problem concerning the idea of *an* image, and especially the idea (even if metaphorical) of *a* scientific image. It is worth remarking that the "image" Sellars speaks about is explicitly intended as an «idealization» and as an «ideal type» in Weber's sense.

Nevertheless, many philosophers have remarked that such a thing as *the* scientific image does not exist (and will probably never exist); rather, what we have are many different and partial scientific theories, concerning different types of phenomena, which operate on different levels and use different instruments, procedures and conceptual frameworks. Therefore, the idea of a unified scientific image would resemble a kind of neopositivistic relic within Sellars's philosophy. From this point of view, it has also been asserted that we should not look for one, single attitude towards all scientific theories and, accordingly, we should not expect there to be one, single solution concerning the relationship between science and common-sense perspectives (see Stanford's essay in this volume).

In fact, Sellars himself addresses a similar problem in his essay, speaking of

conception of the world. More strongly than ever before, I am convinced that it is primarily the concept of the "physical" that requires reinterpretation and reconstruction. The imagery that is so helpful heuristically and didactically is not and cannot be part of the cognitive meaning of physical concepts and hypotheses» (1967, p. 142).

<sup>7</sup> In EPM (§47) Sellars speaks of «the classical tradition» on thought and he writes of «a number of confusions, perhaps the most important of which was the idea that thoughts belong in the same general category as sensations, images, tickles, itches, etc.».

<sup>8</sup> From this point of view it is worth remarking that the title of this Issue expresses the theme around which it is built and the categories that characterise Sellars's analysis, but their adequacy and adoption is not presupposed in any way. At the same time, as deVries remarked, «this distinction has now taken on a life of its own, although the terms are not always used in accordance with Sellars's original intention» (2005, p. 9).

«the constitution of *the* scientific image from the several scientific images of which it is the supposed integration» (PSIM, p. 21). It is unlikely that Sellars's strategy will be convincing for those who endorse this line of criticism, but his point is that it is certainly possible to acknowledge a multiplicity of experimental sciences and their methodological differences: he does not want «to equate the sciences, for as sciences they have different procedures and connect their theoretical entities via different instruments to intersubjectively accessible features of the manifest world» (p. 21). But this kind of pluralism, from his point of view, would not preclude the possibility of an ontological identification of the different objects the various sciences speak about and the reduction of the higher level objects to aggregates of basic objects («the objects of biochemical discourse can be equated with complex patterns of the objects of theoretical physics» (p. 21); concerning the reasons for this identification, see also below the “principle of reducibility”).

The issue seems to me still open: if Sellars's proper view on the unifying of «*some* of the ‘partial’ images into one image» (p. 21) seems at least highly problematic and dependent on very controversial metaphysical underpinnings, its failure does not directly imply the impossibility to make sense of a *weaker* idea of a scientific image, intended as one general, common matrix that generates some *structural commonalities* among the different sciences or scientific theories, and contributes to determining their mutual relationships. Otherwise, why do we designate all those sciences and theories with *one* adjective such as “scientific”, “experimental”, “naturalistic” and the like? From this perspective, the existence of an ideal conceptual framework and matrix that they all belong to could be what would allow us to speak of a scientific image as an ideal type (but in a sense which is no longer that of Sellars, because the unification depends on epistemological commonalities, and not on ontological identifications).

The other problem that, in any case, still remains completely overt is that of interpreting the status, significance and ontological import of this “scientific image”. This obviously depends mainly on the status of scientific realism, but, even for those who adopt scientific realism, there are relevant problems to face here, both on a diachronic and on a synchronic level. On a diachronic level, a relevant aspect is the fact that each generation sees «the Scientific Image inherited from the older generation as open, vague, ambiguous in the light of our new understanding (that is: in the light of alternatives not previously conceived)» (van Fraassen, 1999, p. 36). But also on a synchronic level, a

problem of interpretation of the very ontological commitments implied by accepted scientific theories seems to arise:

How can we ask our fundamental physical theories to tell us about what there is in the world when each of those theories is subject to multiple interpretations, interpretations that often radically disagree with one another about what kind of a world the fundamental theory is really describing? (Sklar, 2001, p. 47)

### 2.3. The *Truth* About the Manifest Image

As we have seen, Sellars maintains that «the conceptual framework which I am calling the manifest image is, in an appropriate sense, itself a scientific image» (PSIM, p. 7). This seems to confer a theoretical status to the manifest image and its terms. For this reason (and especially because of the analysis proposed in EPM) Sellars is generally also regarded as one of the forerunners of the “theory view” on common-sense psychology, a fundamental component of the manifest image. On this view, common-sense psychology constitutes a body of knowledge with theoretical status and explanatory aims, and the referents of its “mentalist” terms are our mental states individuated on the basis of the functional roles they play. This common-sense psychology is therefore a kind of naive theory called “folk psychology” and can be confronted with science.

This point is extremely relevant also because various forms of reductionism or eliminativism overtly influenced by Sellars (see below §3) are essentially based on the thesis that our mentalistic and manifest image is a (science-like) theory, and for this very reason can also be confronted with/reduced to/preserved within/eliminated by succeeding scientific theories. At the same time, the theoretical status of the manifest image seems to represent a complex and problematic issue and deVries (2006, §3), for instance, has emphasized also several «disanalogies» between theoretical concepts and folk psychological concepts in Sellars’s thought.<sup>9</sup> Here, it is worth remarking above all that the “scientific” status of our common-sense psychology does *not* imply an *overall* «homogeneity» (cf.: Elton, 2003, pp. 103–105) between itself and the scientific image. The manifest image, indeed, also includes those aspects concerning evaluations, norms, and standards that are in principle outside the

<sup>9</sup> deVries (2006) has argued that for several reasons «There is [...] no sense of “theory” in which Sellars would have conceded that folk psychology is an eliminable theory, not even as a consequence of his claim that the manifest image is ultimately to be superseded by the scientific in matters ontological» (p. 67). On this issue cf. also: Garfield (1988) and (1989). See also footnote 18.



range of the scientific image. And this dishomogeneity is exactly the reason why we should “*join*” «the conceptual framework of persons» (PSIM, p. 40) to the scientific image. Thus, it seems that not even an ideal scientific image could substitute or eliminate *those* concepts; and, at the same time, they seem to constitute a very relevant component of our common-sense psychology.

Nevertheless, *as far as describing and explaining are concerned*, it is also possible to compare the manifest and the scientific image, as the former also actually includes truth-apt descriptions and explanations and, thus, constitutes a corpus of empirical beliefs. Ultimately, however, in the dimensions of description and explanation, it is likely, from a Sellarsian point of view, that the manifest image (folk psychology included) turns out to be a false image, and will not survive – «*there is truth and error with respect to it even though the image itself might have to be rejected, in the last analysis, as false*» (PSIM, p. 14).

It is then clear that the status of the manifest image, and especially that of common-sense psychology within it, requires further reflections and many questions still appear to be open, both on an exegetical and on a theoretical level. For instance: in what sense and to what extent can the manifest image really be considered theoretical? What is the relationship between the explanatory and the normative roles of their categories? And, if common-sense psychology were also a theoretical component of the manifest image, what kind of theory is it? A scientific theory, or not? Must it be interpreted in a functionalist way, or not? Should we rather understand the theoretical status of folk-psychology in a weak and broad sense: simply being a truth-apt propositional corpus? Again: what is the impact of “simulationism” on the debate concerning realism and antirealism in common-sense psychology? And, when we discuss the theoretical status of folk psychology, are we adopting an *internalist*, or an *externalist* reading of it (see: Ravenscroft-Stich, 1994)?

It is worth briefly remarking also on the (explicit) assumptions that lie behind Sellars’s interpretation of the relationship between the two images, which make his diagnosis and answer to the threat of a «clash» plausible. I would like to underline at least three main relevant and controversial options:

- 1) *scientific realism*. «As I see it, to have a good reason for holding a theory is *ipso facto* to have a good reason for holding that the entities postulated by the theory exist» (PHM, p. 91). That is to say that scientific theories are capable of truth value and if we regard them as

good theories and accept them, we should also believe in them as *approximately* true, maintaining that the (so-called) non-observation terms really refer to imperceptible entities that exist in our world. Sellars, therefore, refuses an instrumentalist or empiricist interpretation of the ontological commitments of accepted scientific theories. Scientific objects do not only exist, but, according to Sellars, at least *in principle* (that is, considering an ideal, accomplished scientific image), «it is ‘scientific objects’, rather than metaphysical unknowables, which are the true things-in-themselves» (Sellars, 1968, ch. V, §79, p. 143; while, if these Kantian categories are used, «the world of common sense is a ‘phenomenal’ world».<sup>10</sup>

- 2) *the principle of reducibility*: this principle «makes impossible the view that groups of particles can have properties which are not ‘reducible to’ the properties and relations of the members of the group» (PSIM, p. 35; cf.: pp. 21 and 27; in PSIM this principle is «accepted without argument»); this ontological assumption implies that to consist of micro-physical particles also means to be entirely reducible to these basic constituents. *Strong* forms of *emergentism* are, accordingly, excluded within the scientific image (but on Sellars’s own emergentism, see below). At the same time, a minimal kind of *intrascientific* pluralism is allowed *as far as* procedures, methodologies etc. are concerned. This principle also contributes, from Sellars’s perspective, to making it extremely difficult to describe and explain sensible qualities in our *present* scientific categorial framework (where they are candidates for identification with groups of particles).

<sup>10</sup> «If [...] we replace the static conception of Divine Truth with a Peircean conception of truth as the ‘ideal outcome of scientific inquiry’, the gulf between appearances and things-in-themselves, though a genuine one, can in principle be bridged» (1968, ch. II, §51, p. 50); but on the “phenomenality” of the manifest image see: deVries (2005, pp. 157–161, and 269–271). On this point John McDowell has noted: «Sellars reads Kant as a scientific realist *manqué*; in Sellars’s view, had Kant only been sophisticated about the possibilities for scientific concept-formation, he would have cast the objects of the scientific image in the role of things in themselves. But for Kant, objects as they appear in the scientific image would be just another case of objects as they appear, with a transcendental background for that conception just as necessary here as anywhere. Sellars’s attempt to be responsive to Kantian transcendental concerns goes astray in his idea that an appeal to science could do the transcendental job; here Sellars’s scientism is seriously damaging» (2009a, p. 42, n. 30).

- 3) “*scientia mensura*”: «[S]peaking as a philosopher, I am quite prepared to say that the common sense world of physical objects in Space and Time is unreal – that is, that there are no such things. Or, to put it less paradoxically, that in the dimension of describing and explaining the world, science is the measure of all things, of what is that it is, and of what is not that it is not» (EPM, IX, §41).<sup>11</sup> Sellars’s famous paraphrase of Protagoras’s *dictum* shows that he not only endorses scientific realism but he also sees no limits, *in principle*, for science; that is to say that there are no phenomena, events or entities that are *in principle* outside the scope of scientific inquiry. From this perspective, something in principle irreducible to any future scientific description of the world would not actually be irreducible, but nonexistent. O’Shea has thus rightly spoken of an «omnivorous scientific image» (2007, p. 3). It is extremely relevant to note, as Willem deVries remarks in this volume, that this kind of *primacy* of the scientific image and its «explanatory adequacy» (to use David Lewis’ expression) does not only entail that it holds «an adequate ontology of basic objects» but something more, that is that such a framework «must contain (or be able to construct) all the predicates necessary to describing and explaining the world. In Quine’s usage, the framework must be ideologically complete as well». At the same time, Sellars is not saying that our *present* science is such an adequate *mensura*. On the contrary, its present categorial arrangement in Sellars’s view is inadequate to account for the intrinsic characters of sensible qualities and their «ultimate homogeneity». For this reason a different, «non particulate foundation» of the scientific image is required, one based on «‘absolute processes’, [...] subjectless (or objectless) events» (Sellars, 1981, §50, p. 48; see also pp. 85–87; cf. on this point: deVries, 2005, ch. 8). Besides, his scientism does not seem to imply the reducibility of the conceptual framework, within which we describe and explain the *living* world, to the conceptual framework that would have been enough for a *non living* world (what Sellars labels «*physical<sub>2</sub>*»).<sup>12</sup> Therefore, we should not expect, for

<sup>11</sup> Cf. deVries and Triplett (2000, pp. 108–116). «Note that the key terms here are ‘describing’ and ‘explaining’ [...] for Sellars there is more to say and do than to describe and explain» (Bernstein, 1966, p. 120).

<sup>12</sup> Sellars proposes two different and complementary characterizations of the “physical”. “Physical” according to the first sense of the term (*physical<sub>1</sub>*) «also includes the entities and attributes required

instance, to construct the scientific image using only those primitives that would have been sufficient for a mindless world. This is the (*weak*) form of emergentism, «the emergence form of the identity approach», defended by Sellars since his early writings: «Emergence is one form taken by a negative answer to the question: ‘Could a world which includes minds be described with the same primitive predicates (and laws) as a mindless universe?’» (1949, pp. 453–454; cf.: Rosenberg, 1982, p. 334). Finally, it is worth remarking that the thesis according to which science is «the measure of all things» – as well as that of its descriptive and explanatory «primacy» (PSIM, p. 32) – does not seem to be science, but *philosophy*: it is indeed the synoptic view of the philosopher which may express and justify this judgment.<sup>13</sup>

Therefore, it seems evident to me that the entire analysis of the relationships between the two images rests on Sellars’s very articulated and controversial philosophy of science, and every advance in our understanding of them depends on a deeper insight into these theses, or on a radical challenge to them. Most importantly, *and problematically*, these theses seem to configure, together, a «stance» (van Fraassen) according to which (our) science is ideally regarded as a «neutral» (Marsonet, 2000, pp. 26–27), perspectiveless view «from nowhere» (Nagel, 1986) on the furniture of our world – a view that one should allow to determine what is ultimately *real* (cf.: deVries, 2005, pp. 278–279).

There is another extremely relevant and controversial aspect of this analysis and of Sellars’s philosophy in general that I want to mention (and which is also related to the former). I refer to the general relationship Sellars draws between the descriptive/explanatory moment and the normative moment. This is a very complex point and I would simply like to briefly discuss two aspects of it.

for the scientific description and explanation of the behaviour of living organisms (provided only that these entities do not have the irreducible intentionality...). “Physical” according to the second sense of the term (*physical<sub>2</sub>*) includes «objects and attributes which are necessary to and sufficient for the scientific description and explanation of the behaviour of non living matter, or which are definable in terms of such items and attributes» and according to it «sense impressions and their counterparts in an ideal neurophysiology would not be ‘*physical<sub>2</sub>*’ (but they are “*physical<sub>1</sub>*”; 1971, pp. 401–402, see also: 1981, pp. 85–87; cf. deVries (2005, pp. 225–226 and 235).

<sup>13</sup> This could raise a question concerning *where* Sellars’s analysis is located. As van Fraassen noted: «In telling his story of those images, Sellars was [...] speaking from a perspective *located neither in the Manifest Image nor in the Scientific Image*» (1999, p. 42).

First, Sellars seems to envisage a very sharp distinction between description/explanation, on the one hand, and normative judgments based on standards, on the other. But this can be regarded as problematic. The idea that to evaluate is conceived as «something more» (PSIM, p. 39) than describing and explaining, something *over and above* descriptions and explanations, or that begins *after* them, seems to configure a kind of *dichotomy* not too distant from that between facts and values last criticized by Putnam (see De Anna's Commentary in this volume). If the «language of norms» is for Sellars «a mode of discourse which presupposes, but is irreducible to the “language of fact”» (1952, p. 516), couldn't a converse presupposition regarding *our* language of fact also be asserted? In other words, Sellars's idea that «the identity and individuation conditions of a scientific object should be resolutely non-normative, purely factual» or that things regarded «as physical objects» are «all capable of value-free description» (deVries, 2005, pp. 273 and 275, but see the entire ch. X) is worth examining and discussing further, as well as the consequences concerning our metaphysical judgments of reality and our ontological commitments which Sellars draws from it.<sup>14</sup>

Secondly, and most importantly, it is no less problematic to maintain that a fully naturalized description and explanation of man and the world would be possible, while at the same time maintaining that it would remain in principle impossible to logically reduce our normative notions, discourses and practices to the scientific framework. This *equilibrium* between a fully naturalized ontological (and «ideological») image of man within the space of causes, and a «space of reasons» (and «persons»), which is a normative standpoint that could never be logically and conceptually naturalized and reduced, is indeed regarded by some scholars as one of the main merits of Sellars's philosophy. On the other hand, there are those who regard this equilibrium as highly problematic and ultimately unsatisfactory, or at least as open to further developments. But, here the interpretations may diverge. For some of them, this means that, moving from a fully naturalistic image of man, it will be legitimate to also look for a naturalized normative space of reasons, or, at least (and much more in the spirit of Sellars's thought), for a full-fledged causal-naturalistic account of our inferential and normative practices (even if our intentional concepts still remain in principle irreducible). From this

<sup>14</sup> In his contribution to this volume, for instance, deVries himself claims that no language can «be purely descriptive, independent of all normative, prescriptive or practical elements» and draws some conclusions concerning our ontological commitments from this fact.

perspective, the naturalistic side of Sellars's philosophy should be *extended* or *deepened*. For others (and I would put myself among them), on the contrary, the idea that our normative-inferential practices cannot be naturalized and reduced to the scientific conceptual framework presupposes (and is intertwined with) the thesis that also the *description* and *explanation* of persons and the world *cannot* be fully naturalized, and thus also presupposes a fundamental incompleteness of the scientific image even on this very level. From this perspective, the naturalistic/scientific side of Sellars's philosophy had already gone *too far*.<sup>15</sup>

### 3. A Plural Heritage: The Many Legacies of Sellars's Philosophy

As is characteristic of many great philosophers, Sellars's philosophy has considerably influenced, and continues to influence, many diverse thinkers all over the world who use his insights to support various lines of argument. Recently, like for Hegel, a distinction between "right-wing" and "left-wing" Sellarsians has been proposed (especially focusing on the adoption or rejection, respectively, of his "*scientia mensura*" claim).

John McDowell, for instance (see: 1999, 2009), especially puts value on Sellars's account of knowledge and the intentional states as belonging to a «space of reasons» (as opposed, for instance, to «the space of placement in nature», or «the space of subsumption under [...] natural law»), where they are regarded «in the light of norms of justification». In his interpretation, this may secure a «special irreducibility» to the epistemic and normative concepts (very broadly conceived), saving epistemology and philosophy of mind from the pervasive (and typically modern) risk of a «naturalistic fallacy»: «When Sellars warns of a naturalistic fallacy, he is implying that the structure of the space of reasons is *sui generis*, by comparison with the kind of structure that the natural sciences find in nature» (1999, p. 260).<sup>16</sup> This is regarded by him as one of the

<sup>15</sup> Besides, this may also have led Sellars astray in examining the relationships between *reasons* and *causes* and the changes that a fully naturalized causal account of man would likely also have on the categories and status of our evaluations and judgments concerning persons, as well as on the space of reasons they are framed within.

<sup>16</sup> From this point of view, a passage of EPM such as the following is obviously very relevant (§5): «Now the idea that epistemic facts can be analysed without remainder – even 'in principle' – into non-epistemic facts, whether phenomenal or behavioral, public or private, with no matter how lavish a sprinkling of subjunctives and hypotheticals is, I believe, a radical mistake – a mistake of a piece with the so-called 'naturalistic fallacy' in ethics».

great philosophical lessons of Sellars's thought. At the same time, to appreciate and develop this lesson may require, in certain cases, to take distance from what McDowell regards as Sellars's infelicitous *scientism* (see for instance footnote 10, above).

But it is very easy to find Sellars's influence on the opposite side, where a kind of "neurophilosophy" is dreamt. Paul Churchland (who wrote a dissertation on "Persons and P-Predicates" under Sellars in 1969) overtly embraces scientific realism (1979, §1), and he finds himself especially indebted to Sellars for the theoretical account of folk-psychology, which is essential for his idea of an elimination, or imperfect (not Nagelian) reduction of it by science.<sup>17</sup> But at the same time he overtly rejects a conviction by Sellars that is regarded by many others as evidence for Sellars's equilibrium: the fact that he maintains folk psychology, inadequate as it is, as being massively referential, and assumes that the substitution of the manifest image by the scientific image in explaining our world is in general a matter of adequate «successor concepts», and not of elimination.<sup>18</sup> As Churchland himself wrote recently in an interesting footnote:

«The reader will here [i.e., in the exposition of his interpretation] recognize Wilfrid Sellars' well-known account of the origins and nature of our Folk Psychology, as outlined in the closing sections of his classic paper, "Empiricism and the Philosophy of Mind," chap. 3 of *Science, Perception, and Reality* (London: Routledge, 1963). Ironically (from our present perspective), Sellars was blissfully convinced that Folk Psychology was an *accurate* portrayal of our inner cognitive activities. (I recall finding it advisable to down-play my own nascent eliminativism during my dissertation defense, a meeting chaired by that worthy philosopher.) But Sellars' conviction on this point notwithstanding, Folk Psychology had invited systematic scepticism long before the present, and for reasons above and beyond the recent flourishing of cognitive neurobiology.

<sup>17</sup> «The first explicit portrayal of our collective self-conception as importantly theory-like appears in a landmark paper by Wilfrid Sellars [the reference is to *Empiricism and the philosophy of mind*]. [...] The bare possibility of a wholesale rejection of F[olk] P[sychology] is of course a simple consequence of FP's speculative theoretical status» (Churchland, 1994, pp. 308 and 310).

<sup>18</sup> From a Sellarsian point of view (as we have seen) the manifest framework is not simply reducible to an explanatory theory and, even as far as descriptions and explanations are concerned, the scientific image *must* in general account for the main features of the manifest image, thus, as deVries and Triplett have remarked «though he [Sellars] maintains that the manifest image is inadequate and will have to be rejected as a whole, he also thinks that it poses a major constraint on what an adequate scientific image could be» (2000, p. 114). Cf. Garfield (1988, ch. 2 and 6); Marsonet (2000, ch. 1.3); deVries (2006, pp. 65–67). See also footnote 9.

See, for example, my “Eliminative Materialism and the Propositional Attitudes,” *Journal of Philosophy* 78, no. 2 (1981), now twenty years old. (Churchland, 2000, p. 294, n. 4; cf.: 1979, pp. 4–5 and 91, n.1).

But Sellars’s lesson has also been relevant for those who refused the very aspects of scientific realism and scientism dear to Churchland. Bas van Fraassen was a graduate student at the University of Pittsburgh in the first few years that Sellars taught there and during the ‘70s he debated scientific realism at length with Sellars himself.<sup>19</sup> The *locus classicus* of his “constructive empiricism” is a famous book whose title explicitly depends on the essay we are discussing: *The Scientific Image*.<sup>20</sup> Subsequently, however, he also developed an analytical critique and “deconstruction” of the very categories of Sellars’s analysis – a deconstruction which in some way was implicitly present in his constructive empiricism from the beginning.<sup>21</sup> And constructive empiricism probably also represents the most interesting and systematic attempt to escape from Sellars’s interpretation of science and the principles listed above (scientific realism, “*scientia mensura*” etc.): but obviously to deepen and reconceive the relationship between scientific theories and common-sense points of view from an «empirical stance» would require a monographic volume on its own.

#### 4. This Issue

This issue of *Humana.Mente* aims to present:

- theoretical and original contributions on the problem of the encounter or «clash» between the two, broadly conceived, images and on the very idea of scientific and manifest “images”. From this perspective, any

<sup>19</sup> On van Fraassen’s confrontation with Sellars’s philosophy, see van Fraassen (1975, 1977), a response to Sellars (1977, part I; 1999); and for his general approach to science: 1980, 2002. See also: Gutting (1982); O’Shea (2007, pp. 38–41).

<sup>20</sup> «The title of this book is a phrase of Wilfrid Sellars’s, who contrasts the scientific image of the world with the manifest image, the way the world appears in human observation. While I would deny the suggestion of dichotomy, the phrase seemed apt» (van Fraassen, 1980, p. vii).

<sup>21</sup> «*there are no such things as the Manifest and the Scientific Image at all*. Is that possible? Yes, in fact I can think of some very good reasons for that conclusion. If you agree to them, you may even find some reason to generalize this skeptical conclusion to all those – what shall I call them? – world-pictures, conceptual frames, worlds (as in “the world of science”, “the world of the physicist”, “the Ptolemaic world”) which have so easily and smoothly crept into our discourse» (1999, p. 38).



aspect of the relationship between the scientific and common-sense/non-scientific understanding of man is relevant.

- critical re-examinations of Sellars’s elaboration of this topic, and an analysis of his relevant texts;
- overviews of contemporary debates on this topic, as well as on the related topic of the relationship between philosophy and the sciences.

I would like to say that many essays in this issue give a contribution to more than one of these three aims. At the same time, many theoretical questions outlined above are analysed in depth in these papers, along with many others.

In his very insightful paper (“Ontology and the Completeness of Sellars’s Two Images”) Willem deVries focuses on the problematic character of Sellars’s account of intentionality within the scientific image: this may sound surprising because ‘raw feels’ are rather regarded by Sellars as the very “hard problem” (at least for our present scientific image), while the «identification of conceptual thinking with neurophysiological process» (PSIM, p. 34) seems to Sellars relatively smooth, in principle. But, as deVries persuasively argues, things are much more problematic. Firstly, as he recollects, «intentionality is irreducible in the sense that we cannot define in any of the vocabularies of the natural sciences concepts equivalent to the concepts of intentionality». Now, if the scientific image has to give us a complete description and explanation of a world involving intentional phenomena, then a problem arises concerning the possibility of providing, *within* the scientific image, adequate «successor concepts» of those basic normative concepts, as well as adequate resources for the essentially first-person «expressive use of intention-talk». Otherwise, it seems that we should always add at least extra predicates to the scientific image. The problem posed by intentionality (and persons) seems, then, no less relevant and not too distant from that of *sensa*. Having clearly stated this problem, deVries tries to sketch the outlines of a Sellarsian response to it, i.e., that of embedding the conceptual framework of persons within the «more encompassing, impersonal framework» of the scientific image. But he eventually finds it unsatisfying and concludes that the scientific image cannot either be completely separated from the manifest one, or eliminate it, or stand alone.

P. Kyle Stanford (“The Eyes Don’t Have It: Fracturing the Scientific and Manifest Images”) analytically reconstructs the central argument of Sellars’ essay while highlighting the main (visual) metaphors around which it is built.

He argues that those metaphors are in part responsible for the ultimate failure of the argument, insofar as they lead Sellars to neglect the possibility that there may be a variety of heterogeneous ways in which various elements of the two images are related: some parts of the scientific image might represent mere conceptual tools or instruments, for example (even if it is implausible to so regard the entire scientific image). He goes on to suggest, however, that Sellars arrives at the manifest and scientific images themselves through a process of idealization, abstraction and construction in which we should decline to follow him: the idea that we face exactly two fundamental images which must be reconciled with one another ignores crucial differences between the various points of contrast.

In his very interesting theoretical contribution “Identifying and Reconciling Two Images of ‘Man’” David Hodgson proposes (i) to re-articulate the distinction between two different kinds of images of man and the world, using a criterion based on the presence (or absence) within them of subjective components (instead of the one based on the presence/absence of imperceptible entities): on the one hand, we will have a «subjective folk-psychological image», and on the other an «objective scientific image».

Secondly, (ii) he articulates and defends an approach to the reconciliation of the two images which is different from Sellars’s approach, because, as he argues, «representation of reality requires both the subjective [...] image and the objective scientific image», while the latter alone cannot in principle provide us with a complete *description* and *explanation* of man and the world.

In his paper “Of Time and the Two Images” Steven Savitt discusses the relationship between the scientific and the manifest image from the point of view of the account they give of time. Sellars does not deal with this topic in PSIM, but it obviously has an enormous relevance for the appreciation of each image and of their mutual connection. Sellars confronted himself with the difficulties concerning time in a previous essay, *Time and the World Order* (1958). Savitt clearly presents the relevance of the topic, as well as Sellars’s attempt to locate the manifest or “folk” time within the framework of Special Theory of Relativity: a project, he argues, that is not the best option available for Sellars and should be eventually regarded as an unsuccessful one.

Keith Lehrer (“The Unity of the Manifest and Scientific Image by Self-Representation”) deepens here his long-term philosophical elaboration on representation and self-representation, and its analogies with Sellars’s view. In

so doing, he analyses the distinction between the two images and their respective conceptual frameworks, identifying the problematic feature of the distinction in Sellars's theory of inner episodes as theoretical entities. Sellars's account of our non-inferential knowledge is a very relevant aspect of his philosophy and in Lehrer's analysis it also becomes a key for interpreting the relationship between the manifest image and the scientific image, and the transition from the first to the second. In particular, according to Lehrer, self-representation and reflexive self-description may «provide an arch of representation connection between the conceptual framework of the manifest image and the scientific image».

Giacomo Turbanti ("Normativity and the Realist Stance in Semantics") starts a series of papers concerning the debate on normativity (and its relationship with naturalism). He especially deals with the normativity of meaning and semantic notions (like *reference* and *truth*). In so doing, he defends the compatibility of « a realist stance in semantics and a non-reductive account of the normativity of meaning», arguing that skepticism is not triggered by the normativity of meaning and that the rejection of the "Myth of the Given" is compatible with realism in semantics. Then, in a Sellarsian spirit, Turbanti aims at clarifying « how the normative analysis of linguistic roles may fit into the explanation of linguistic behavior provided by formal semantics». He sees this problem as a «particular instance» of the problem of fusing the two images by joining the normative vocabulary of shared intentions of a community of rational agents to the scientific image.

Jay Garfield ("Sellarsian Synopsis: Integrating the Images") interestingly draws our attention to a third 'image' in Sellars's essay which could be very relevant, but has been neglected: the «*original*» image. According to Sellars, this original image is, as we have seen, «a framework in which all the "objects" are persons» (PSIM, p. 10). Garfield underlines that this image is not only a relic from our past, but an expression of our «innate fundamental propensities to attribute intentionality». This capacity would contribute to the «ontogenesis of communities» and the birth of communities would, in turn, contribute to the birth of a space of norms and reasons which would eventually lead to the birth of science. From this perspective, «The original, from the standpoint of the scientific, hence explains the manifest», that is, that a naturalistic reconstruction of the capacities that generate the original image, and of the transition from one to another of the three images, might not only explain their consistence, but also their mutual «entailing» and how «naturalizing the

normative» also means «norming nature».

Owen Flanagan and Stephen Martin (“Science and the Modest Image of Epistemology”) also deal with the problem of epistemic normativity and justification within Sellars’s naturalistic framework, and the problem of a “naturalized” epistemology. What about truth, reasons and standards “in a world of causes”? And what about the role that they have within science, in order to make scientific claims genuine episodes of knowledge? But the point we are faced with is also «whether an ability, a sort of freedom to decide how to act and what to believe, respectively, remains available to us in light of information we have about how the world – including most relevantly, the mind – works». Flanagan and Martin underline the relevance of an accurate phenomenology of our epistemic and reasons-based practices as the basis for a reconciliation of them with the scientific image, and then, in the spirit of Dewey, propose a “compatibilist” and naturalistic account of these practices, arguing that the scientific image does not undermine the common-sense conceptual framework of reasoning and responsibility (“responsibility” with an ‘a’ being the ability to produce differential responses to future circumstances based on feedback about past successes and failures).

James O’Shea, with his great expertise in Sellars’s philosophy, in his paper (“Prospects for a Synoptic Vision of our Thinking Nature: On Sellars, Brandom, and Millikan”) analyses the crucial problem of providing a philosophical account of «norm-governed conceptual thinking within the natural world». That is: how is it possible, in a Sellarsian spirit, to “stereoscopically” combine an inferential, normative account of thought and a naturalist image of the world? O’Shea examines this task discussing the (very different) philosophical points of view of Robert Brandom and Ruth Millikan. He especially deals with two questions, namely:

(1) How is it possible to account for animal representations and, more generally, for a causal-naturalistic notion of representation within a normative framework? The issue seems extremely relevant to O’Shea also because he maintains that in Sellars’s thought the naturalistic dimension of representation is neither underrated, nor effaced by the normative one;

(2) Is it possible to develop a naturalistic attitude even towards our conceptual activities themselves (at the same time preserving the irreducibility of normative terms)?

*Philosophy and the Scientific Image of Man* also outlines Sellars’s view on

the nature of philosophy and on the relationship between philosophy and science. His way of conceiving this relationship has been an influential one, but other very relevant models were present in the same period within analytic philosophy. Diego Marconi's essay ("Quine and Wittgenstein on the Science/Philosophy Divide") clearly analyses and contrasts Wittgenstein's and Quine's perspective on this very subject. He especially focuses on the issue of *continuity* or *discontinuity* between philosophy and science. After analysing Quine's arguments for "continuism", he shows why they are not conclusive from a Wittgensteinian point of view, and which arguments Wittgenstein may advance *against* this continuity. From Marconi's reconstruction it also emerges that, even if Wittgenstein's rejection of continuity between philosophy and science can be regarded as a constant feature of his thought, in the very late period of his career, new questions and new perspectives emerge concerning the relevance of scientific facts to philosophy.

In the section devoted to the Commentaries, Massimo Marraffa, Raffaella Campaner and Gabriele De Anna analyse and discuss three books, published after *Philosophy and the Scientific Image of Man*, which constitute very relevant contributions on key aspects concerning the relationship about the two images: from transcendental arguments (Strawson), to the theory of causation and explanation (Salmon), to the dichotomy or distinction between facts and values (Putnam).

The volume ends with Luca Corti's Review of a recent recollection of studies on Sellars's philosophy (*Empiricism, Perceptual Knowledge, Normativity, and Realism: Essays on Wilfrid Sellars*, edited by Willem de Vries) – another testimony of the interest in Sellars's philosophy, which was also eventually confirmed by the foundation in 2012 of the Wilfrid Sellars Society (WSS).<sup>22</sup>

I am extremely grateful to all the philosophers who have generously contributed to this Issue, in spite of their numerous commitments, and also to all those who responded to our call for papers. Many thanks to Silvano Zipoli Caiani, Executive Director of *Humana.Mente*, for giving me the possibility to freely plan and put together this monographic volume, and thanks also for all the support I received from him and Marco Fenici. The work of referees has

<sup>22</sup> See: <<http://wss.categorymistake.com/wp/>> (accessed on May 13<sup>th</sup> 2012). For many materials concerning Sellars's thought, as well as his texts, see also the web-site "Problems from Wilfrid Sellars": <<http://www.ditext.com/sellars/sellars.html>> (accessed on May 13<sup>th</sup> 2012).

been attentive and precious. Last, but very much not least, I'm very grateful to Alice Giuliani for her expertise and willingness to do the final *mise en page* of the entire volume.<sup>23</sup>

## REFERENCES

- Bernstein, R.J. (1966). Sellars' Vision of Man-in-the-Universe, I. *The Review of Metaphysics*, 20(1), 113–143.
- Churchland, P.M. (1979). *Scientific Realism and the Plasticity of Mind*. Cambridge: Cambridge University Press.
- Churchland, P.M. (1994). Folk Psychology. In S. Guttenplan (Ed.), *A Companion to the philosophy of mind*. Oxford: Blackwell, 308–316.
- Churchland, P.M. (2000). Rules, Know-How, and the Future of Moral Cognition. *Canadian Journal of Philosophy (Supplementary Volume)*, 26, 291–306.
- deVries, W.A. (2005). *Wilfrid Sellars*. Chesham: Acumen.
- deVries, W.A. (2006). Folk Psychology, Theories and the Sellarsian Roots. In M.P. Woolf & M. Nn. Lance (Eds.), *The Self-Correcting Enterprise. Essays on Wilfrid Sellars*. Amsterdam-New York: Rodopi, 53–84.
- deVries, W.A., & Triplett, T. (2000). *Knowledge, Mind, and the Given. Reading Wilfrid Sellars's "Empiricism and the Philosophy of Mind"*. Indianapolis-Cambridge: Hackett.
- Elton, M. (2003). *Daniel Dennett. Reconciling Science and Our Self-Conception*. Cambridge-Malden, MA: Polity Press.
- Feigl, H. (1967). Postscript after Ten Years. In H. Feigl, *The "Mental" and the "Physical": the essay with a Postscript after Ten Years*. Minneapolis: University of Minnesota Press, 133–170.
- Garfield, J. (1988). *Belief in Psychology*. Cambridge, MA: MIT Press.

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- Garfield, J. (1989). The Myth of Jones and the Mirror of Nature: Reflections on Introspection. *Philosophy and Phenomenological Research*, 50(1), 1–26.
- Gehlen, A. (1940/1988). *Man: His Nature and Place in the World*. New York, NY: Columbia University Press. First German ed. by Klostermann, Frankfurt am Main 1940.
- Gutting, G. (1982). Scientific Realism vs. Constructive Empiricism: A Dialogue. *The Monist*, 65(3), 336–349. Reprinted in P.M. Churchland & C.A. Hooker (Eds.), *Images of Science. Essays on Empiricism and Realism with a Reply by Bas C. van Fraassen*. Chicago: The University of Chicago Press, 118–131.
- Haack, S. (1993). *Evidence and Inquiry. Towards Reconstruction in Epistemology*. Oxford: Blackwell.
- Marsonet, M. (2000). *I limiti del realismo. Filosofia, scienza e senso comune*. Milano: Franco Angeli.
- McDowell, J. (1999). *Naturalism in the Philosophy of Mind*. Now in J. McDowell (2009), *The Engaged Intellect. Philosophical Essays*. Cambridge: Harvard University Press, ch. 15, 257–275.
- McDowell, J. (2009). The Constitutive Ideal of Rationality: Davidson and Sellars. In J. McDowell, *Having the World in View*. Cambridge, MA: Harvard University Press, ch. 11, 207–220.
- McDowell, J. (2009a). The Logical Form of Intuition. In J. McDowell, *Having the World in View. Essays on Kant, Hegel and Sellars*. Cambridge, MA: Harvard University Press, ch. 2, 23–43.
- Nagel, T. (1986). *The View from Nowhere*. New York-Oxford: Oxford University Press.
- O’Shea, J. (2007). *Wilfrid Sellars. Naturalism With a Normative Turn*. Cambridge-Malden, MA: Polity Press.
- Putnam, H. (2012). *Philosophy in an Age of Science. Physics, Mathematics, and Skepticism*. Ed. by M. De Caro & D. Macarthur. Cambridge-London: Harvard University Press.

- Ravenscroft, I., & Stich, S. (1994). *What Is Folk Psychology?* Now in S. Stich (1996), *Deconstructing the Mind*. New York-Oxford: Oxford University Press, ch. 3, 115–135.
- Rosenberg, J.F. (1982). The Place of Colour in the Scheme of Things: A Roadmap to Sellars's Carus Lectures. *The Monist*, 65(3), 315–335.
- Schlick, M. (1925/1974). *Allgemeine Erkenntnislehre*. Berlin: Springer. Engl. transl.: *General Theory of Knowledge*, Open Court, La Salle.
- Sellars, W. (1949). Realism and the New Way of Words. In H. Feigl & W. Sellars (Eds.), *Readings in Philosophical Analysis*. New York: Appleton-Century-Crofts, 424–456. First pub. in *Philosophy and Phenomenological Research*, 8(1948), 601–634.
- Sellars, W. (1952). Obligation and Motivation. In W. Sellars & J. Hospers (Eds.), *Readings in Ethical Theory*. New York: Appleton-Century-Crofts, 511–517.
- Sellars, W. (1962). Philosophy and the scientific image of man. In R.G. Colodny (Ed.), *Frontiers of Science and Philosophy*. Pittsburgh, PA: University of Pittsburgh Press, 35–78.
- Sellars, W. (1963). *Science, Perception and Reality*. London: Routledge & Kegan Paul.
- (EPM) Sellars, W. (1963). Empiricism and the Philosophy of Mind. In W. Sellars, *Science, Perception and Reality*. New York: Humanities Press, 127–196. First ed. by University of Minnesota Press, Minneapolis, 1956.
- (PSIM) Sellars, W. (1963). Philosophy and the scientific image of man. In W. Sellars, *Science, perception, and reality*. London: Routledge & Kegan Paul, 1–40.
- (PHM) Sellars, W. (1963). Phenomenalism. In W. Sellars, *Science, perception, and reality*. London: Routledge & Kegan Paul, 60–105.
- Sellars, W. (1968). *Science and Metaphysics: Variations on Kantian Themes*. London: Routledge & Kegan Paul. Reissued by Ridgeview Publishing Company, Atascadero, CA, 1992.



- Sellars, W. (1971). Science, Sense Impressions, and Sensa: A Reply to Cornman. *Review of Metaphysics*, 24, 391–447.
- Sellars, W. (1977). Is Scientific Realism Tenable?. In F. Suppe & P. Asquith (Eds.), *PSA 1976, Volume II (Philosophy of Science Association, East Lansing)*, 307–334.
- Sellars, W. (1981). Foundations for a Metaphysics of Pure Process. *The Monist*, 64(1), 3–90.
- Sklar, L. (2001). Naturalism and the Interpretation of Theories. *Proceedings and Addresses of the American Philosophical Association*, 75(2), 43–58.
- van Fraassen, B.C. (1975). Wilfrid Sellars on Scientific Realism. *Dialogue*, 14(04), 606–616.
- van Fraassen, B.C. (1977). On the Radical Incompleteness of the Manifest Image (Comments on Sellars). In F. Suppe & P. Asquith (Eds.), *PSA 1976, Volume II (Philosophy of Science Association, East Lansing)*, 335–343.
- van Fraassen, B.C. (1980). *The Scientific Image*. Oxford: Oxford University Press.
- van Fraassen, B.C. (1999). *The Manifest Image and the Scientific Image*. In D. Aerts (Ed.), *Einstein Meets Magritte: The White Book – An Interdisciplinary Reflection*. Dordrecht: Kluwer, 29–52.
- van Fraassen, B.C. (2002). *The Empirical Stance*. New Haven: Yale University Press.

