

Sellars: “Philosophy and the Scientific Image of Man”

Section I: The Philosophical Quest

- 1) 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. [369]
- 2) For he is confronted not by one picture, but, *in principle, by two and, in fact, by many*... For the philosopher is confronted not by one complex many-dimensional picture, the unity of which, such as it is, he must come to appreciate; but 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. Let me refer to these two perspectives, respectively, as the *manifest* and the *scientific* images of man-in-the-world..... First, by calling them images I do not mean to deny to either or both of them the status of ‘reality’. [372]
- 3) The term ‘image’ is usefully ambiguous. On the one hand it suggests the contrast between an object, e.g. a tree, and a projection of the object on a plane, or its shadow on a wall. In this sense, an image is as much an existent as the object imaged, though, of course, it has a dependent status.
In the other sense, an ‘image’ is something imagined, and that which is imagined may well not exist, although the imagining of it does—in which case we can speak of the image as *merely* imaginary or unreal. But the imagined *can* exist; as when one imagines that someone is dancing in the next room, and someone is. This ambiguity enables me to imply that **the philosopher is confronted by two projections of man-in-the-world on the human understanding**. One of these projections I will call the manifest image, the other the scientific image. [373]
- 4) But in addition to being confronted by these images as existents, he is confronted by them as images in the sense of ‘things imagined’—or, as I had better say at once, *conceived*; for **I am using ‘image’ in this sense as a metaphor for conception**, and it is a familiar fact that not everything that can be conceived can, in the ordinary sense, be imagined. [373]

Section II: The Manifest Image

- 5) The ‘manifest’ image of man-in-the-world can be characterized in two ways, which are supplementary rather than alternative. It is, first, the framework in terms of which man came to be aware of himself as man-in-the-world. It is the framework in terms of which, to use an existentialist turn of phrase, man first encountered himself—which is, of course, when he came to be man. For it is no merely incidental feature of man that he has a conception of himself as man-in-the-world, just as it is obvious, on reflection, that ‘if man had a radically different conception of himself he would be a radically different kind of man’. [374]

6) ...**the paradox of man's encounter with himself**, the paradox consisting of the fact that man couldn't be man until he encountered himself. It is this paradox which supports the last stand of Special Creation. Its central theme is **the idea that anything which can properly be called conceptual thinking can occur only within a framework of conceptual thinking in terms of which it can be criticized, supported, refuted, in short, evaluated. To be able to think is to be able to measure one's thoughts by standards of correctness, of relevance, of evidence.** In this sense a diversified conceptual framework is a whole which, however sketchy, is prior to its parts, and cannot be construed as a coming together of parts which are already conceptual in character. The conclusion is difficult to avoid that **the transition from pre-conceptual patterns of behaviour to conceptual thinking was a holistic one, a jump to a level of awareness which is irreducibly new, a jump which was the coming into being of man.** [374]

7) **There is a profound truth in this conception of a radical difference in level between man and his precursors.** The attempt to understand this difference turns out to be part and parcel of the attempt to encompass in one view the two images of man-in-the-world which I have set out to describe. For, as we shall see, **this difference in level appears as an irreducible discontinuity in the *manifest* image, but as, in a sense requiring careful analysis, a reducible difference in the *scientific* image.** [374]

8) ...for it suggests that the contrast I am drawing between the manifest and the scientific images, is that **between a pre-scientific, uncritical, naive conception of man-in-the-world, and a reflected, disciplined, critical—in short a scientific conception. This is not at all what I have in mind.** [375]

9) [T]he conceptual framework which I am calling the manifest image is, in an appropriate sense, itself a scientific image. It is not only disciplined and critical; it also makes use of those aspects of scientific method which might be lumped together under the heading 'correlational induction'. **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.** [375]

10) [W]hat I have referred to as the 'scientific' image of man-in-the-world and contrasted with the 'manifest' image, might better be called the 'postulational' or 'theoretical' image...[375]

11) It is not only the great speculative systems of ancient and medieval philosophy which are built around the manifest image, but also many systems and quasi-systems in recent and contemporary thought, some of which seem at first sight to have little if anything in common with the great classical systems. That I include the major schools of contemporary Continental thought might be expected. That I lump in with these the trends of contemporary British and American philosophy which emphasize the analysis of 'common sense' and 'ordinary usage', may be somewhat more surprising. [376]

12) [Let me introduce] another construct which I shall call—borrowing a term with a not unrelated meaning—**the perennial philosophy of man-in-the-world**. [376]

13) I *am* implying that the perennial philosophy is analogous to what one gets when one looks through a stereoscope with one eye dominating. The manifest image dominates and mislocates the scientific image...For I have also implied that man is *essentially* that being which conceives of itself *in terms of the image which the perennial philosophy refines and endorses*. [376]

14) But if in Spinoza's account, the scientific image, as he interprets it, dominates the stereoscopic view (the manifest image appearing as a tracery of explainable error), the very fact that I use the analogy of stereoscopic vision implies that as I see it the manifest image is not overwhelmed in the synthesis. [377] [BB: This must be reconciled with the *scientia mensura*, by taking the protasis of the latter seriously.]

15) A fundamental question with respect to any conceptual framework is 'of what sort are the basic objects of the framework?' This question involves, on the one hand, the contrast between an object and what can be true of it in the way of properties, relations, and activities; and, on the other, a contrast between the basic objects of the framework and the various kinds of groups they can compose. [377] [BB: Here we get a **distinction between ontology and ideology** (Quine), and between *basic* and *non-basic* objects.]

16) Now to ask, 'what are the basic objects of a (given) framework?' is to ask not for a *list*, but a *classification*. [377]

17) Thus we are approaching an answer to the question, 'what are the basic objects of the manifest image?' when we say that it includes persons, animals, lower forms of life and 'merely material' things, like rivers and stones. The list is not intended to be complete, although it is intended to echo the lower stages of the 'great chain of being' of the Platonic tradition. [377]

18) [T]here is an important sense in which **the primary objects of the manifest image are persons**. [378]

19) [T]he refinement of the 'original' image into the manifest image, is the gradual 'de-personalization' of objects other than persons. [378]

20) [O]riginally to be a tree *was a way of being a person*, as, to use a close analogy, to be a woman is a way of being a person, or to be a triangle is a way of being a plane figure. That a woman is a person is not something that one can be said to *believe*; though there's enough historical bounce to this example to make it worth-while to use the different example that one cannot be said to believe that a triangle is a plane figure. When primitive man ceased to think of what we call trees as persons, **the change was more radical than a change in belief; it was a change in category**. [378]

21) [I]n the construct which I have called the ‘original’ image of man-in-the-world, all ‘objects’ are persons, and all kinds of objects ways of being persons. This means that the sort of things that are said of objects in this framework are the sort of things that are said of persons. [379]

22) [W]e shall see that **the essential dualism in the manifest image** is not that between mind and body as substances, but between two radically different ways in which the human individual is related to the world. [379]

23) [T]o understand the manifest image as a refinement or de-personalization of the ‘original’ image...[379]

24) [I]t is important to note that no one who distinguishes between causation and predictability would ask, ‘what *caused* the billiard ball on a smooth table to continue in a straight line?’ The distinctive trait of the scientific revolution was the conviction that all events are predictable from relevant information about the context in which they occur, not that they are all in any ordinary sense, caused. [381]

Section III: Classical Philosophy and the Manifest Image

25) [S]ince this [the manifest] image has a being which transcends the individual thinker, *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.* [382]

26) [T]here is a correct and an incorrect way to describe this objective image which we have of the world in which we live, and it is possible to evaluate the correctness or incorrectness of such a description. [382]

27) [I]t is proper to ask, ‘to what extent does manifest man survive in the synoptic view which does equal justice to the scientific image which now confronts us?’ [383]

28) I think it correct to say that the so-called ‘analytic’ tradition in recent British and American philosophy, particularly under the influence of the later Wittgenstein, has done increasing justice to the manifest image, and has increasingly succeeded in isolating it in something like its pure form, and has made clear the folly of attempting to replace it *piecemeal* by fragments of the scientific image. By doing so, it is made apparent, and has come to realize, its continuity with the perennial tradition. [383]

29) Two things are to be noticed here: (1) **The manifest image does not present conceptual thinking as a complex of items which, considered in themselves and apart from these relations, are not conceptual in character.** (The most plausible candidates are images, but all attempts to construe thoughts as complex patterns of images have failed, and, as we know, were bound to fail.) (2) Whatever the ultimate constituents of conceptual thinking, the process itself as it occurs in the individual mind must **echo**, more or less adequately, **the intelligible structure of the world.** [383]

30) The perennial tradition long limited itself to accounting for the presence in the individual of the framework of conceptual thinking in terms of a unique kind of action of reality as intelligible on the individual mind. The accounts differed in interesting respects, but the main burden remained the same. **It was not until the time of Hegel that the essential role of the group as a mediating factor in this causation was recognized**, and while it is easy for us to see that the immanence and transcendence of conceptual frameworks with respect to the individual thinker is a social phenomenon, and to find a recognition of this fact implicit in the very form of our image of man in the world, it was not until the nineteenth century that this feature of the manifest image was, however inadequately, taken into account. [384]

31) [T]he essentially social character of conceptual thinking comes clearly to mind when we recognize that there is no thinking apart from common standards of correctness and relevance, which relate what *I do* think to what *anyone ought to* think. The contrast between 'I' and 'anyone' is essential to rational thought. [385]

32) [C]onceptual thinking is a unique game in two respects: (a) one cannot learn to play it by being told the rules; (b) **whatever else conceptual thinking makes possible—and without it there is nothing characteristically human**—it does so by virtue of containing a way of representing the world. [385]

33) The manifest image must, therefore, be construed as containing a conception of itself as a group phenomenon, the group mediating between the individual and the intelligible order. But **any attempt to explain this mediation within the framework of the manifest image was bound to fail**, for the manifest image contains the resources for such an attempt only in the sense that it provides the foundation on which scientific theory can build an explanatory framework; and while conceptual structures of *this* framework are *built on* the manifest image, they are not definable within it. Thus, the Hegelian, like the Platonist of whom he is the heir, was limited to the attempt to understand the relation between intelligible order and individual minds in **analogical terms**. [385]

34) It is in the *scientific* image of man in the world that we begin to see the main outlines of the way in which man came to have an image of himself-in-the-world. For we begin to see this as a matter of evolutionary development as a group phenomenon, a process which is illustrated at a simpler level by the evolutionary development which explains the correspondence between the dancing of a worker bee and the location, relative to the sun, of the flower from which he comes. [385]

35) My primary concern in this essay is with the question, '**in what sense, and to what extent, does the manifest image of man-in-the-world survive the attempt to unite this image in one field of intellectual vision with man as conceived in terms of the postulated objects of scientific theory?**' The bite to this question lies, we have seen, in the fact that **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**. Whether the adoption of the synoptic view

would transform man in bondage into man free, as Spinoza believed, or man free into man in bondage, as many fear, is a question that does not properly arise until the claims of the scientific image have been examined. [386]

Section IV: The Scientific Image

36) **Summary:** I devoted my attention in the previous sections to defining what I called the ‘manifest’ image of man-in-the-world. I argued that this image is to be construed as a sophistication and refinement of the image in terms of which man first came to be aware of himself as man-in-the-world; in short, came to be man. I pointed out **that in any sense in which this image, in so far as it pertains to man, is a ‘false’ image, this falsity threatens man himself, inasmuch as he is, in an important sense, the being which has this image of himself.** I argued that what has been called the perennial tradition in philosophy—philosophia perennis—can be construed as the attempt to understand the structure of this image, to know one’s way around in it reflectively with no intellectual holds barred. I analysed some of the main features of the image and showed how the categories in terms of which it approaches the world can be construed as progressive prunings of categories pertaining to the person and his relation to other persons and the group. I argued that the perennial tradition must be construed to include not only the Platonic tradition in its broadest sense, but philosophies of ‘common sense’ and ‘ordinary usage’. I argued **what is common to all these philosophies is that acceptance of the manifest image as the *real*. They attempt to understand the achievements of theoretical science in terms of this framework, subordinating the categories of theoretical science to its categories.** I suggested that the most fruitful way of approaching the problem of **integrating** theoretical science with the framework of sophisticated common sense into **one comprehensive synoptic vision** is to view it not as a piecemeal task—e.g. first a fitting together of the common sense conception of physical objects with that of theoretical physics, and then, as a separate venture, a fitting together of the common sense conception of man with that of theoretical psychology—but rather as a matter of **articulating** two whole ways of seeing the sum of things, two images of man-in-the-world and attempting to bring them together in a ‘**stereoscopic**’ view. [386]

37) [T]he contrast I have in mind is not that between an *unscientific* conception of man-in-the-world and a *scientific* one, but between that conception which limits itself to what **correlational techniques** can tell us about perceptible and introspectible events and that which **postulates imperceptible objects and events** for the purpose of **explaining** correlations among perceptibles. [387]

38) Our contrast then, is between two ideal constructs: (a) the **correlational and categorial** refinement of the ‘original image’, which refinement I am calling the manifest image; (b) the image derived from the fruits of **postulational theory construction** which I am calling the scientific image. [387]

39) [W]hen we turn our attention to ‘the’ scientific image which emerges from the several images proper to the several sciences, we note that 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 I which belongs to the image**. Thus **although methodologically a development *within* the manifest image, the scientific image presents itself as a *rival* image**. [388]

40) To all of which, of course, the manifest image or, more accurately, the perennial philosophy which endorses its claims, replies that the scientific image cannot replace the manifest without rejecting its own foundation. [389]

41) **I distinguished above between the unification of the postulated *entities* of two sciences and the unification of the *sciences*. It is also necessary to distinguish between the unification of the theoretical *entities* of two sciences and the unification of the theoretical *principles* of the two sciences.**

42) There is, consequently, an ambiguity in the statement: The laws of biochemistry are 'special cases' of the laws of physics. It may mean: (a) biochemistry needs no variables which cannot be defined in terms of the variables of atomic physics; (b) the laws relating to certain complex patterns of sub-atomic particles, the counterparts of biochemical compounds, are related **in a simple way** to laws pertaining to less complex patterns. The former, of course, is the only proposition to which one is committed by the identification of the theoretical objects of the two sciences in the sense described above. [389]

Section V: The Clash of the Images

43) How, then, are we to evaluate the conflicting claims of the manifest image and the scientific image thus provisionally interpreted to constitute *the* true and, in principle, *complete* account of man-in-the-world? [393]

44) Three lines of thought seemed to be open:

- (1) Manifest objects are identical with systems of imperceptible particles in that simple sense in which a forest is identical with a number of trees.
- (2) Manifest objects are what really exist; systems of imperceptible particles being 'abstract' or 'symbolic' ways of representing them.
- (3) Manifest objects are 'appearances' to human minds of a reality which is constituted by systems of imperceptible particles. Although (2) merits serious consideration, and has been defended by able philosophers, it is (1) and (3), particularly the latter, which I shall be primarily concerned to explore. [394]

45) [A]bout (1). There is nothing immediately paradoxical about the view that an object can be both a perceptible object with perceptible qualities *and* a system of imperceptible objects, none of which has perceptible qualities. [394]

46) Thus there is no trouble about systems having properties which its parts do not have if *these properties are a matter of the parts having such and such qualities and being related in such and such ways*. But the case of a **pink ice cube**, it would seem clear, cannot be treated in this way. It does not seem plausible to say that for a system of

particles to be a pink ice cube is for them to have such and such imperceptible qualities, and to be so related to one another as to make up an approximate cube. *Pink* does not seem to be made up of imperceptible qualities in the way in which being a ladder is made up of being cylindrical (the rungs), rectangular (the frame), wooden, etc. The manifest ice cube presents itself to us as something which is pink through and through, as a pink continuum, all the regions of which, however small, are pink. It presents itself to us as *ultimately homogeneous*; and an ice cube variegated in colour is, though not homogeneous in its specific colour, ‘ultimately homogeneous’, in the sense to which I am calling attention, with respect to the generic trait of being coloured. [394]

47) Now reflection on this example suggests a principle which can be formulated approximately as follows:

If an object is *in a strict sense* a system of objects, then every property of the object must consist in the fact that its constituents have such and such qualities and stand in such and such relations or, roughly, every property of a system of objects consists of properties of, and relations between, its constituents.

With something like this principle in mind, it was argued that if a physical object is *in a strict sense* a system of imperceptible particles, then it cannot as a whole have the perceptible qualities characteristic of physical objects in the manifest image. It was concluded that manifest physical objects are ‘appearances’ *to human perceivers* of systems of imperceptible particles which is alternative (3) above. [395]

48) This alternative, (3), however, is open to an objection which is ordinarily directed not against the alternative itself, but against an imperceptive formulation of it as the thesis that the perceptible things around us ‘really have no colour’. Against *this* formulation the objection has the merit of calling attention to the fact that in the manifest framework it is as absurd to say that a visible object has no colour, as it is to say of a triangle that it has no shape. However, against the above formulation of alternative (3), namely, that *the very objects themselves* are appearances to perceivers of systems of imperceptible particles, the objection turns out on examination to have no weight. The objection for which the British ‘common sense’ philosopher G. E. Moore is directly or indirectly responsible, runs:

Chairs, tables, etc., as we ordinarily think them to be, can’t be ‘appearances’ of systems of particles lacking perceptible qualities, because we *know* that there are chairs, tables, etc., and it is a framework feature of chairs, tables, etc., that they have perceptible qualities.

It simply *disappears* once it is recognized that, properly understood, the claim that physical objects do not really have perceptible qualities is not analogous to the claim that something generally believed to be true about a certain kind of thing is actually false. **It is not the denial of a belief within a framework, but a challenge to the framework.** It is the claim that although the framework of perceptible objects, the manifest framework of everyday life, is adequate for the everyday purposes of life, it is ultimately inadequate and should not be accepted as an account of what there is *all things considered*. [395]

Section VI: The Primacy of the Scientific Image: A Prolegomenon

49) Is the manifest image, subject, of course, to continual empirical and categorial refinements, **the measure of what there really is? I do not think so.** I have already indicated that of the three alternatives we are considering with respect to the comparative claims of the manifest and scientific images, **the first, which, like a child, says 'both', is ruled out by a principle which I am not defending in this chapter, although it does stand in need of defense.** The second alternative is the one I have just reformulated and rejected. I propose, therefore, to re-examine the case against the third alternative, **the primacy of the scientific image.** [400]

50) Thus our concept of 'what thoughts are' might, like our concept of what a castling is in chess, be abstract in the sense that it does not concern itself with the *intrinsic* character of thoughts, *save as items which can occur in patterns of relationships which are analogous to the way in which sentences are related to one another and to the contexts in which they are used.* [402]

51) It is worth noting that we have here a recurrence of the essential features of **Eddington's 'two tables' problem**—the two tables being, in our terminology, the table of the manifest image and the table of the scientific image. There the problem was to 'fit together' the manifest table with the scientific table. Here the problem is to fit together the manifest sensation with its neurophysiological counterpart. And, interestingly enough, the problem in both cases is essentially the same: *how to reconcile the ultimate homogeneity of the manifest image with the ultimate non-homogeneity of the system of scientific objects.* [404]

52) Now we are rejecting the view that the scientific image is a mere 'symbolic tool' for finding our way around in the manifest image; and we are accepting the view that the scientific account of the world is (in principle) **the adequate image.** [404]

53) We are confronted, therefore, by an antinomy, *either, (a)* the neurophysiological image is *incomplete*, i.e. and must be supplemented by new objects ('sense fields') which do have ultimate homogeneity, and which somehow make their presence felt in the activity of the visual cortex as a system of physical particles; or, *(b)* the neurophysiological image is complete and the ultimate homogeneity of the sense qualities (and, hence, the sense qualities, themselves) is *mere appearance* in the very radical sense of not existing in the spatio-temporal world at all. [405]

Section VII. Putting Man in the Scientific Image

54) Summary of the task: Even if the constructive suggestion of the preceding section were capable of being elaborated into an adequate account of the way in which the scientific image could recreate in its own terms the sensations, images, and feelings of the manifest image, **the thesis of the primacy of the scientific image** would scarcely be off the ground. **There would remain the task of showing that categories pertaining to man as a person who finds himself confronted by standards (ethical, logical, etc.)**

which often conflict with his desires and impulses, and to which he may or may not conform, can be reconciled with the idea that man is what science says he is. [406]

55) Assuming, in accordance with the drift of the argument of this chapter, that none of these alternatives is satisfactory, is there a way out? I believe there is, and that while a proper exposition and defense would require at least the space of this whole volume, the gist can be stated in short compass. **To say that a certain person desired to do A, thought it his duty to do B but was forced to do C, is not to describe him as one might describe a scientific specimen. One does, indeed, describe him, but one does something more.** And it is this something more which is the irreducible core of the framework of persons. [407]

56) In what does this something more consist? First, a relatively superficial point which will guide the way. To think of a featherless biped as a person is to think of it as a being with which one is bound up in a network of rights and duties. **From this point of view, the irreducibility of the personal is the irreducibility of the 'ought' to the 'is'.** But even more basic than this (though ultimately, **as we shall see, the two points coincide**), is the fact that **to think of a featherless biped as a person is to construe its behaviour in terms of actual or potential membership in an embracing group each member of which thinks of itself as a member of the group.** Let us call such a group a 'community'. [407]

57) Now, the fundamental principles of a community, which define what is 'correct' or 'incorrect', 'right' or 'wrong', 'done' or 'not done', are the most general common *intentions* of that community with respect to the behaviour of members of the group. It follows that to recognize a featherless biped or dolphin or Martian as a person requires that one think thoughts of the form, 'We (one) shall do (or abstain from doing) actions of kind A in circumstances of kind C'. To think thoughts of this kind is not to *classify* or *explain*, but to *rehearse an intention*. [408]

58) Thus the conceptual framework of persons is the framework in which we think of one another as sharing the community intentions which provide the ambience of principles and standards (above all, those which make meaningful discourse and rationality itself possible) within which we live our own individual lives. **A person can almost be defined as a being that has intentions. Thus the conceptual framework of persons is not something that needs to be reconciled with the scientific image, but rather something to be joined to it.** Thus, to complete the scientific image we need to enrich it *not* with more ways of saying what is the case, but with the language of community and individual intentions, so that by construing the actions we intend to do and the circumstances in which we intend to do them in scientific terms, we *directly relate the world as conceived by scientific theory to our purposes, and make it our world and no longer an alien appendage to the world in which we do our living.* We can, of course, as matters now stand, realize this direct incorporation of the scientific image into our way of life only in imagination. But **to do so is, if only in imagination, to transcend the dualism of the manifest and scientific images of man-of-the-world.** [408]