Dialectical Perception: A Synthesis of Lenin and Bogdanov

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Ernst Mach (1976, 122) has a story about a savage who was surprised to discover the power of written symbols. The savage was ordered to take a basket of fruit, say, mangoes, from one colonist to another, a basket that, as well as the fruit, contained a piece of paper with marks upon it. On the way the savage helped himself to three of the mangoes. On arrival he was frightened and mortified to discover that, in some way that he did not understand, the scrap of paper magically revealed that he had eaten some of the fruit. It bore upon it, of course, a statement of the actual number of mangoes in the basket.

Take it that this was a savage belonging to a tribe, of which there have been cases, that do not count beyond ten, and that there were more than ten mangoes in the basket, say, fourteen. Though at the end of the journey the eyes of both savage and colonist were able to respond to the light-waves distributions coming from the basket, the colonist was able to divide up that distribution in a way that contributed to his own utility at the expense of the savage’s. The savage could not perceive the actual number of things in the basket although he could see the colours and shapes perfectly well; he could not perform the colonist’s brief assessing glance which took in the 'fact' that there were only eleven mangoes there.

Another ironic oddity. Suppose that the savage knew well which mangoes were superlative in flavour and which were not, because of years of experience in picking them, perhaps a matter of subtle comparison of tint, shape, texture and degree of hardness. Like some-one who tastes wine, he may have developed the discriminating powers without being able to verbalize his criteria. Suppose, too, that the colonists had not yet got to this stage of discrimination. Those that the savage ate may have been worth more than all the eleven remaining, yet the fine meted out to him in punishment by his Masters might only have been equivalent to that of three mangoes of inferior quality. The Slave, in his close sense-perceptible encounter with the Real, often can outdo the Master, even when the Master's words seem to have classified the Real into objective name-able facts. Alexandre Bogdanov, Lenin's rival, can remind us of something relevant here. The learned, the experts, tend to fall, like all masters, into a rigidity of system (Bogdanov, 1913, 207; see Jensen, 1978, 82):

all members of the new technical intelligentsia deal with a largely homogeneous body of physical and psychical tools and materials. Therefore, they have so much in common that it is difficult for them to believe that variations in individual systems of experience could be anything but inconsequential.

Enough has been said, by way of introduction, to suggest that the identity of sensing and perceiving can-not be assumed without argument. One can claim, to take vision as an example, that it is possible to filter out a layer of sensing from the process of perceiving, that is the sorting out from the fields of re-cognitions of things, persons and properties. The aim of this article is to show how some recent work on the philosophy of perception (Maund, 1973; Aldrich, 1980; Wright, 1983a) can support such a division, which, though new, the first to recommend it perhaps being Sextus Empiricus (1955, 1, 13, 17, 197), is novel today since it has been out of fashion for thirty years or more. It can render a systematic ambiguity plain, one that has led to a stubborn opposition of thesis and antithesis trace-able through many a philosophical confrontation, but particularly to that between V. I. Lenin and A. A. Bog­danov, one fraught with a peculiar historical signific­ance. The argument for the existence of that systemat­ic ambiguity thus claims to be a dialectical synthesis of both views, for it should show that from one aspect Lenin is right and Bogdanov wrong, and from another Lenin is wrong and Bogdanov right. The theory of per­ception at the base of this argument is itself a dialect­ical one in the sense that it shows that intersubjective agreements over what it is to constitute a thing or person or property within our sensory fields necessarily involves a dialectical, though not necessarily progres­sive, procedure.

Part I will identify the elements of the debate between views such as Lenin's on the one hand and those like Bogdanov's on the other, in order to sharpen the dilemma by bringing out the inconsistencies in both. Part II will develop the positive elements on each side of the confrontation, and show how the new theory of perception, New Representationalism, can effect a re­conciliation of the two, sixty years or more after the protagonists had left it unresolved.

A beginning can be made with an inconsistency in Ernst Mach's view of perceiving. From the story at the opening it can be seen that he was fascinated with the idea of individual subjective differences in agents' views of the world. Mach allowed that different men can have a
differing sense access to the distributions of energy at their sense-organs, differing not only in angle of perspective and physiological states (for one man man hear higher frequencies than another, have finer colour-discrimination than another, etc.), but in what they choose to call 'a' thing. It is strange, then, that, Mach went on to claim as a positivist that reality is the sum total of facts, of what is the case. There is a gap here between theory and practice. The theory states a comfortable ideal that all experience can in principle be codified, down to the last particle; the practice, with which Mach seems fascinated in spite of himself, becomes involved with a succession of mismatches, somehow suggestive of things 'humorous', as he puts it (Ptolemaic/Copernican, phlogiston/oxygen, Dalton/-Mendeleev, etc.).

Mach argued that all identifications of objects were no more than 'functional relations' that men established within the world of sensory experience; even the ego is in his view no more than one such functional relation established by the relating activity of the brain. Holding to this and wanting to maintain the concept of the unity of science, Mach took the next logical step, as he saw it, of concluding that no assumption need be made of any reality outside experience. The troublesome psychical aspect could thus be equated with the physical; as a result, a satisfactory monism was arrived at that escaped the problems of the old materialisms and idealisms at one stroke. In this he was influenced by Richard Avenarius's theory of 'pure experience', where he found the same rejection of an external cause of perceptions, the Kantian 'thing-in-itself' (Avenarius, 1888). It was felt by both to be a scandal to claim that there were sense-impressions on the one hand and an external cause on the other, when whatever description was made of an object was inevitably couched in sensory terms such that if all descriptive terms were removed from the object nothing remained to be the ghostly 'thing-in-itself'. A special appeal for Mach was that experience could thus be reduced to atomistic 'elements', not further analyzable, on a par with the atomism of earlier materialistic theory. His theory was thus more parsimonious than one postulating an inconceivable flux or noumenon as the stuff out of which everything else is compounded.

Alexandr Bogdanov was seeking a philosophical position that could combine the social emphasis of Marxism with a credible scientific monism. Something of a Da Vinci in his successful versatility of interest (politician, doctor, philosopher, economist, theorist of art, novelist), he turned to Ostwald and Mach for his philosophy and tried to combine Machism and Marxism in modified versions of both (Bogdanov, 1905, 1913). The psychologist Hermann von Helmholtz (1866) had argued that sense-impressions are a kind of sign or symbol occurring within the cortex as a result of the complex transmission from the sense-organs of the distributions of energy which they were only equipped to respond. The trouble with that empiricist version, for Bogdanov, was that it left the door open to dualism, with the Kantian 'thing-in-itself', unnameable and inconceivable, as an impossible cause of those signs and symbols. Bogdanov was attracted by Mach's determination of forging-together of physical and mental, and also by his keeping a place for the development of technique in handling experience, but he judged that Mach had not said enough about how men act in concert upon experience through their labour in order to produce an organization of nature. This stress upon the social aspect of knowledge was what he regarded as a corrective to Mach's philosophy, the Marxist element that could rescue it from idealism. In this he was largely right, but he could not escape from the accusation of solipsism himself merely by asserting it. Ironically, it is perhaps because he did not take up Mach's own interest in the illusions played by the senses and the perceptsible, and because he also ignored Feuerbach's emphasis upon the sensory (Feuerbach, 1966, 51, 59), that he missed the way to defending himself from what was to prove an attack which took on world-historical proportions.

His view of how men act in concert upon common experience and use it to effect a greater adaptiveness to nature can be best seen in his book The Philosophy of Living Experience (Bogdanov, 1913). He considers the mutual behaviour of two men engaged on a common task. He assumes that there is in the reality of experience that which resists the attempts of men to transform it, and, interestingly, he points to Mach's characterisation of the original 'elements' of experience as 'neutral' before that effort of transformation. There are three stages of a dialectic in this procedure. In the first, the men agree on a plan as to how it is to be tackled, but, nevertheless, because of their individual perspectives of understanding, each will already have a different understanding of what is to be done. The second stage consists of their actual struggle with what is in nature, the result being that their different understandings will be tested out. Nature may, at this stage, also produce effects neither of them had bargained for. At the third stage, the conflict of action that results may be resolved either by one man's understanding prevailing over that of the other, or there may come a compromise at a new level of realisation to which both of them can accede. He calls it: 'an organizational process, proceeding by way of opposites, or what comes to the same thing, by way of the struggle of various tendencies' (Bogdanov, 1913, 216-217). It does not proceed, as in Engels's classical dialectic, by a resolution of contradictions, but by a process of conflict and adjustment in the process of labour. Out of such interactions is objectivity born, and it is guaranteed by its being true for everybody. In order to cover himself against the attack upon the Machist that he has reduced everything to mere subjective phenomena, Bogdanov declares that the subjective element fails to achieve the universality that can only be bestowed by such cooperation in labour. He used to protest that he was not a Machist, a claim borne out by this emphasis on objectivity as something socially achieved, and this clearly distinguishes him from Mach and links him to Marx: 'In general, the physical world is socially coordinated, socially-harmonized, in a word, socially-organized experience' (Bogdanov, 1905, 1, 83). Yet he did not wish to deny the actuality of experience for the individual.
The hobgoblin that smothers me in the night has for me the character of objectivity, perhaps not a bit less than the stone against which I bruise myself; but the utterances of others take away this objectively.

The weakness of his argument, however remains the same fundamentally as that of Mach and Avenarius. If all reality is reduced to that of experience, the model in science, of the need to operate with tentative metaphors or 'substitutes', as he called them, in order to elicit further utility-serving 'organisations' from the Real. Even at the level of the operations of human societies he recognised the presence of mutual hypotheses, which enabled human interactions to proceed with trap together with his advantage. Where to a fertile mind pursuing such themes, it was easy for him to neglect the Achilles' heel of his perception theory, and not to anticipate that such talk of hypothesis in engagements with the objective would only intensify the mockery of those who considered his philosophy an idealist illusion.

This is what Lenin, with a keen eye for the weakness of an opponent, having learned from Axelrod's and also Plekhanov's criticisms (Plekhanov, 1973), seized upon in order to discredit him as a true materialist and materialist theory itself made up the contrast he wishes to make, Materialism and Empirio-Criticism (Lenin, 1976), which is as much as to say that the two are distinct. Lenin was determined to regain the control over the Bolsheviks that he had lost to Bogdanov (largely over the issue of whether the Social-Democratic representatives were going to remain in the Duma; Bogdanov was for their being withdrawn), and the effort and energy he put into this scathing attack on Bogdanov and the other Machist-Marxists is a measure of the critical importance it had for him. It would be difficult to find another ostensibly philosophical book which has been produced with such a particular political purpose. Unique though it may be in this regard, one can still say, this is nevertheless an old song, worthy comrade! For Lenin did not do what a philosopher should do, which is to consider the attacks upon his own position in order to defend himself the better. He concentrated his argument on revealing the latent idealism of Bogdanov's case without meeting the accusation of passivity in the old-materialist case of which Bogdanov had made so much. And Lenin certainly did reveal the latent idealism in Bogdanov's case. Listen, Mr Machist!

Lenin wants to know how Bogdanov can explain the existence of a world before man. Avenarius had tried to justify the possibility of such experience by the dubious assertion that to conceive of such a time one always had to imagine an observer of it, so that one can sustain its reality through the potentiality of this imagined perceiving. However, Bogdanov, following Mach, preferred to point out that the hypothesis of such a time can only be sustained through the interpretation of actual experiences, namely, of fossil records and so on. Neither of these defences is successful. Lenin mocks at the claim that a certain 'potentiality' of the co-ordination in experience of self and environment can be based on a foundation where one of the terms, the 'self' in this case, is presumed to be 'potential'. (H. B. Acton (1955, 34) correctly pointed out a parallel in applying the argument to Mill's definition of matter as 'permanent possibilities of sensation'. There is no logical requirement that such a criterion be part of the definition of matter, no more than the possibility that some men can jump seven feet high is part of a necessary definition of man.) The question is what matter can exist without observers, and the fundamental intuition of the ordinary man is that it can. As regards Bogdanov's second point about knowledge of such times always being based upon actual experience (examination of fossil records, etc.), the case is that it may be true that our access to knowledge is through sensory experience for the hypothetical nature of object-identification laid on the consciousness of actual experiences, namely, of fossil records.

One can see how Bogdanov's laudable scientific adherence to the principle of parsimony led him to reject what he considered to be unverifiable 'things-in-themselves', and claim that in his conviction that knowledge was socially constituted, that the existence of the other minds upon which that constitution is based is an irrepressible problem for anyone who postulates phenomenal experience as the ontological base. The question of how the pure experience that came to be shared across different individuals is not openly addressed by either Mach or Bogdanov; so Lenin's attack, bludgeoning in philosophical style, nevertheless has powerful philosophical point. He notes how the Machist bases his objectivity on social agreement and yet claims that experience is the basis of reality. The inconsistency is patent: on the one hand, persons are taken as a given beyond experience; on the other, it is asserted that nothing is given beyond experience. Where Bogdanov declares: 'The subjective character of the physical world consists in the fact that it exists, not for me personally, but for everybody!' (Lenin, 1976, 137). He would agree with Plekhanov's dismissal of Bogdanov's 'social objectivity': 'Must a person who has bruised his leg on a stone wait for some stranger's utterance to be convinced of the objectivity of the stone?' (Plekhanov, 1973, 81). This is like the commonplace reaction of Samuel Johnson, who, when asked how he would refute Berkeley, said, kicking a stone, 'I refute him thus! Solipsism therefore remains the intractable weakness of Bogdanov's case. If he wants to reject the Solipsist label, it is not enough for him to assert, what is undeniably true, that it is the social dimension of man's encounters with nature that establish objectivity, if he has no principled account of how the objectivity of selves, and in particular, other selves, comes to be acknowledged. This is certainly bound up with the problem of how sensory experience comes to be regarded as shared.

But Lenin is not without his own inconsistencies. He is determined to uphold the existence of things external to man; the fundamental principle here is the recognition of the external world, of the existence of things outside and independent of our mind' (1976, 86). Perception for Lenin is a process in which these external things produce a 'reflection' of them-
selves in the brain, in the character of a photograph. There is a direct correspondence between external things and their images in sensation. Sensations, within our brain, are produced by their action on our sense-organs. He rejects Helmholtz's opinion that sensations are signs or symbols of external things, an opinion which had been seconded by Pleikhanov (1961, 514-515). This he viewed as a dangerous concession to the subjective idealist, for it immediately opens a gap between the thing and this 'sign'. An image, in his opinion, implies the objective reality of what it images whereas a sign implies a discontinuity, a divorce of idea from reality. What we see is the object, not some surrogate for it: 'sensations are images of objects, of the external world' (1976: 140). They are not the 'stable complexes of sensory elements' of the Machist, the reason being, as Engels had earlier explained, that we can put to an infallible test the correctness or otherwise of our sense-perceptions. If these perceptions have been wrong, then our estimate of the use to which an object can be turned must also have been wrong, and our attempt must fail. But if we succeed in accomplishing our aim, if we find that the object agreed with our image, and does answer the purpose we intended it for, then that is positive proof that our perceptions of it and its qualities, so far, agree with reality outside ourselves. (Engels, 1951, II, 93)

What Lenin and Engels have not seen is that to allow the notion of false or inadequate images to enter their scheme disrupts the Reflection Theory of perception. It is plain that there cannot be 'copies' or 'photographs' of external things which are somehow false. Lenin attaches the idea of verification to the 'differentiation of true and false images' (1976, 119), but if images are 'mirror-reflections' of things produced by a causal interaction of light-waves and sense-organs the application of a truth and a falsity that can be decided in praxis seems to be impossible. Furthermore, if Lenin holds to this concept of verification, he has to allow that the appearance of things comes away from an uncertain reality beyond, which is what the detested Avenarius argued for, a 'What' that could be distinguished from a variable 'That'. It is not the case merely, as Avenarius realized, that we can mistake Smith for Jones if he is sitting far enough away down the tramcar (one entity mistaken for another entity), but we can take two things for one, or one and a half for one. Among a crowd of starlings sitting silhouetted in a bare tree, how easy to take half an old nest, a projection on a branch and a twig below as 'one' of the starlings if the outline happens to correspond. If Lenin protests, 'but that is a photograph!', then one can answer that it was not a photograph of given things. The 'things' are not given at all, even though what is given is the distribution and character of the light-waves, as registered in sensation in the brain. Lenin was well aware of sensation being caused by light-waves and considered himself more scientific than Mach in holding to a belief in their external existence, but his error was to conflate the registration of that energy-distribution in sensation with a copying of 'things'.

If it is allowable in Lenin's theory for the observer to adjust the boundaries of things according to the deliverances of praxis, which entails that it is always possible for thing-selections to prove to be non-utililty-serving, or, better, maladaptive, then thing-selection is an activity of mind and not a given in experience. Lenin and Engels would therefore have to concede that the registration of energy-distributions cannot be equated with thing-recognition. It is also the case that, as their reflection theory is at present defined, their utility-criterion for verification will not stand up, for it is open to the Machist to ask just how it is that one judges whether we have 'succeeded in accomplishing our aim', and, since the answer is that the result could in principle be reduced to either an increase of pain or an increase of pleasure, both of which are unmistakably sensations, their criterion could be said to be just as phenomenal as any in Machist theory. So Engels' Alizarin argument (Engels, 1958, 371), on which Lenin placed such reliance (as proving a 'fact' about the external of which man had been ignorant but which is now securely confirmed) collapses when the basis for verification, as defined in the theory, is revealed.

II

Thesis and antithesis have both been shown to be flawed. Lenin is right in accusing Bogdanov of not having escape the Solipsist Objection: the Other Minds problem vitiated his attempt to base objectivity on social interaction. Bogdanov is right to accuse Lenin of espousing a passive approach to perception: to conceive of sensations as passive images of things leads to a dilemma when elsewhere in the argument there are claims for praxis as a testing-out of perceptual hypotheses about things. But there is no doubt that it is social interaction that establishes what is to be regarded as an object or a person. Equally there is no doubt that men do communicate and co-operate on the assumption of an external nature distinct from their own perceptions of it. What synthesis can resolve the dispute?

Lenin and Bogdanov were talking past each other.

If each, as good philosophers, had turned his mind to what his opponent regarded as the key refutation of his own position, a move towards an agreement might have been reached. New Representationalism can thread its way through the maze of this argument and show where each contestant was making positive contributions to the theory of perception and, further, to the theory of knowledge.

It can accept, with Lenin, a form of Reflection Theory, saying that indeed the metaphor of photographing the external is applicable, but only according to certain limited criteria. To confine the case to vision, the eye itself can be looked upon as a camera, a TV-camera, as long as we confine the analogy to the following respects: that there is a focussing lens and a light-wave-sensitive matrix upon which light-waves are distributed that (and this is a similarity to a camera not brought out before) there are no colours at the retina and the image is a given wing of objects. Cameras, like eyes, are mere causal mechanisms, and do not register or produce colours: they do both register light-wave distributions and intensities, but these are not coloured, nor are they the objects from which they were reflected. Another similarity to a TV-camera is that
electrical impulses are derived from the matrix and channelled down conducting connectors to a registration-region (take the TV-system to be a closed-circuit one). In both systems, processing of those impulses can take place in order to produce alterations of them before reaching the registration-region. In the TV-set circuits allow the enhancement of what will ultimately be contrast-effects, but which, before registration, are merely specific alteration of certain voltages from parts of the matrix in the camera. Similarly, in the brain edge-enhancement circuits automatically perform upon the neural-impulses changes of potential which will make the boundaries of certain regions sharper than they were at reception at the retina. All this takes place before registration and is thus not a handling of colours and shapes but of the uncoloured impulses only. In neither case has any real colour yet appeared in the system. A final similarity, resisted up to now by those who are against inner representations, is that the impulses from both eye and TV camera end at a registration-region in which the automatically processed and enhanced impulses activate a matrix and produce a similar matrix of the light-waves distribution that was originally picked up. But it is here that the metaphor ends.

The reason is that in the brain the nerve-impulses produce a coloured matrix, the impulses in the cathode-ray-tube do not. TV-screens, being outside brains and part of external matter, are not coloured. Nor is there consciousness of uncoloured, not directly colour-related, neural activities which are reflected from their surfaces. Colour is an experience created by a complex of neurons in the cortex of the occipital region of the brain.

Since no molecules are externally coloured, no molecules are externally coloured in the brain either. Colour is not a property of surfaces at all, either in the brain or out of it. It is certainly a property of colour-creating complexes in the brain, but, since it is emphatically not a property of any surface, it is ridiculous to conceive of a 'visible' screen in the brain and another set of eyes to look at it. This gives rise to an absurd regress. But notice the reason for the absurdity - not, as old anti-Sense-Datum philosophers used to believe, because the colours of real things outside were repeated on a coloured screen inside so that another pair of eyes was required - but it is absurd because real colour is a phenomenal property of uncoloured light-waves which are reflected from their surfaces. Colour is an experience created by a complex of neurons in the cortex of the occipital region of the brain.

What is in the back of the head is a neural experience, not coloured light-waves, and obviously this cannot be looked at, only experienced. Just as the taste of vinegar, as Josef Dietzgen (1928, 88) said is not in the vinegar, so the red of tomatoes is not in the tomatoes: both vinegar taste and red colour are neural experiences. Just as we do not need an extra mouth and tongue in the brain to experience a vinegar taste, we do not need an extra eye inside it to experience red colour.

Philosophers will realise that this approach puts a new cast on the old Vicious Regress Objection much favoured by anti-representationalists. There is no need for any 'homuncul' to be observers all over again in the cortex. Once the idea is grasped that colours and tastes and so on are not properties of matter external to the cortex, it ceases to be strange that they are cortical activities and not direct properties of portions of matter outside the body.

The brain clearly has the capacity to make molar selections from this colour-field. There is a selector-mechanism, again in itself basically non-intentional, which is induced to unify patterns as cognised recurrences by the operation of the pleasure/pain system. To take pain: damage-detecting sensors produce a pain experience in the cortex which triggers immediate sorting activity in the colour-field by the selector-mechanism such that this sorting will be placed in memory-store with its power to command the sensation of fear on its reappearance, and thus desire to retreat. Intention takes its origin from such memory-store, though the possibility always remains open of revising the particular sorting that has been made (see further Wright, 1983b).

So far the theory bears a close resemblance to that of Helmholts, but it makes a significant divergence from it. He spoke of the sensory registration as a 'sign' or a 'symbol', but this was a most confusing metaphor drawn from the field of human communication, and Lenin can be forgiven for rearing at it. The cortical registration can only roughly be called a sign, and that in the sense of being a 'natural sign' according to H. P. Grice's notion of natural meaning (Grice, 1967, 39). Just as spots are a 'sign' of measles, and the movement of a snooker-ball is a 'sign' that the cue has just hit it, so red in the cortex is a 'sign' that certain light-waves have arrived at the retina and that certain processing has taken place upon them. To leave this most distracting metaphor behind - it is no more than the effect of a number of causes. Unlike a symbol, which can be changed in meaning, red is an automatic response of the visual cortex to neural input (neural excitation, frequently during most of the day) produced by sense-organs and the accompanying processors, and at night in states of rest (during mental imaging, hypnagogic visions, dreams, etc.) produced by input from within the brain itself. It can be artificially produced by electric probe (phosphenes) and by concussion ('seeing stars'); it can also result from defects in the neural system (migraine patterns, tinnitus, phantom limbs).

This is the way in which Lenin can be taken to be asserting something correct about the sensing system. As far as sensing goes (and that includes all pre-predicational processes, man is entirely passive. It is an automatic process, but, to keep to vision, it does not produce images of external energy-distributions, for those external distributions are not coloured. It does produce a field of cortical colour that has at most times of daily activity a principled relation of distributions (taking account of adaptive 'distortions' in the Gibsonian neural processing) to the distribution of the uncoloured light-waves that arrive at the eye. If Edwin Land is right (Land, 1977), the cortical colour-distribution does not even correspond directly to the type of light-wave arriving at a particular 'pixel' of the matrix, but is a product of a complex correction-calculation across the whole field, automatically performed in order to retain steady reflectance-values of particular areas (for example, a 'black' area will continue to produce black in the cortex even when the intensity of the light-wave flux coming from it is higher than that of a 'white' paper; this is another 'distortion' produced by the neural circuits that proved adaptive in evolution). This distribution-relation, in no way direct, is what is Lenin's 'photograph' of the external, but Lenin would have been wrong in thinking that the internal red matched an external red, for there is no external red, just as there is no external vinegary taste inside bottles of vinegar or scent from a rose or feelings of warmth from a fire. There have to be eyes, tongues, noses, hands and a cortex for these to occur.

With the Vicious Regress Objection adequately countered, the Solipsist Objection is the next concern.
Even if the account of cortical sensation be allowed to be correct, one can ask how it is that the existence of this uncoloured, unlasting, unsensing, etc. external matter can be ontologically presupposed, when, according to the argument, the only access to it is through those cortical registrations. The parsimony that Mach and Bogdanov insisted upon would seem to regard it as unscientific to make the hypothesis of 'things-in-themselves'. From Lenin's point of view the separation of sensory registration from reality leads directly to solipsism and solipsism, unless, as in Berkeley's argument, one makes appeal to a god to guarantee the sharing of subjective facts. The empiriocrats endeavoured to hold to Esse est percipi, the bond between subject and object, as the guarantee of reality, but Lenin was quite right to believe that object-selections can move about that seriously into question, though he was unable to produce an argument that dealt with their positive claim that objects are bound to subjects. When Nolai Valentinov tried to explain this to Lenin, he was met with cries of 'Grosque! Idiotic claptrap! Obscurantism! Idealistic rubbish! Pathetic drive!' (Valentinov, 1968, 215).

The confrontation can be resolved. The key misunderstanding can be shown as present in Avenarius himself, where it reveals itself as an inconsistency. He writes to the effect that, as Valentinov explained, that subject and object are bound together, that they are two sides of the same process (Carstian, 1897, 470), but he elsewhere asserts, as was seen above, that the 'What' can be distinguished from the variable 'That'; another way of putting it is his saying that 'it makes no difference to experience whether it is true or not' (Bush, 1905, 20). Mach was to take up the same theme: 'the senses represent things neither wrongly nor correctly' (Mach, 1959, 10), influenced as he was by the fact that illusions can occur in the sense fields. What neither Avenarius nor Mach realized was, as the startling example shows, that object-selections can move about freely on the field of sensation, selecting 'things from it according to the outcome of experiment. If the field of sensory registration can be scientifically described without reference to the object-selections that are being made from it, then Avenarius and Lenin have an error in common.

Consider the analogy of the TV screen again. An electronics engineer could give a digital account of the states of the phosphor cells on the back of the screen without any reference to any object-recognition being performed by anybody looking at the screen. This is a 'field-determinate' description (see Aldrich for the distinction of the 'field of the representing device' and the 'field of what is shown in it'; Aldrich, 1980). For example, a digital field-determinate description could be given of a screen that showed a fuzzy white area. Now whether that fuzzy area was a clear picture of a cloud of steam or a blurred picture of a snowball or a patch of interference can only be decided by checks on the context in which that sensed area appeared. If a boiling kettle had just been shown on the screen, then the 'thing' a cloud of steam would be immediately recognized; if it was a play in which a short-sighted man had just lost his glasses and we were being given an impression of how the world looked to him, then the 'thing' could be a blurred snowball. The 'object-determinate' level is thus logically distinct from the field-determinate one. It is clear that the distribution of the regions and shades of a field can be given a description in a scientifically punctiform manner without reference to any things or persons that may be selected from it. Therefore, in principle, the colour matrix in the visual cortex could in the future be given a punctiform description by the neurophysiologist, and such a field-determinate form. It is part of the contention of the present theory that neurophysiologists should be able to account for the way in which the cortex produces the colour-experience. They should be able to compare the field-state in the visual cortex with the distribution of uncoloured light-waves into the eyes and consider the degree to which anything in one hemisphere is like anything in the other. Lenin's 'photograph' can be said to be there in the cortex all right, but, though it is in colour itself, it is not a 'photograph' of external coloured things but of uncoloured light-wave energy-distributions.

This field-determinate representation in the cortex is described as 'honestistic' in the current philosophy of perception. This does not mean that as a field it cannot be described, only that it can exist such that it is possible to perform either a variety of epistemic sortings upon it (i.e. of object-, person- or property-identifications) or none at all. The newly born child, the autistic adult, the sufferers from visual agnosia all sense without perceiving. The normal agent usually experiences the field as divided up into recognisable objects; one says 'usually', because there are many occasions when the field, even for the normal agent, is only sensed and not so divided up into perceptions. For example, if you open and close a door, you can only apprehend from the object-selection point of view there may appear to be no change in what you see, but from the sensed point of view, the field-determinate one, the whole field has changed very slightly at every point, as a field-determinate level is logically distinct from the object-determinate one.

Valentinov tried to explain this to Lenin, he was met with cries of 'Grotesque! Idiotic claptrap! Obscurantism! Idealistic rubbish! Pathetic drive!' (Valentinov, 1968, 215).

The existence of appearance from reality leads directly to idealism and solipsism, unless, as in Berkeley's argument, one wishes to insist, as Valentinov explained, that subject and object are bound together, that they are two sides of the same process. The emptiness that Mach was to take up the same theme: 'the things represent things neither wrongly nor correctly' (Mach, 1959, 10), influenced as he was by the fact that illusions can occur in the sense fields. What neither Avenarius nor Mach realized was, as the startling example shows, that object-selections can move about freely on the field of sensation, selecting 'things from it according to the outcome of experiment. If the field of sensory registration can be scientifically described without reference to the object-selections that are being made from it, then Avenarius and Lenin have an error in common.

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wood, but a wood with a camouflaged tank in it), then a number of features of the intersubjective situation have to be noticed:

(1) If, say, a portion of the nonepistemic visual field not feared before, can now be picked out as fearful, the self will have experienced a kind of existential shock in which his own self-image will have been corrected at the behest of an external agent; his intentional perspective now partakes of a novel element never before cognized although admittedly sensed;

(2) The existence of a private sensed field as having a reality of its own outside the selector-mechanism has thus to be admitted, that is, a caused non-intentional element not so far included in perceptions by or of the self though already experienced and thus existent in the brain;

(3) The fact that the other who applied the correction must have a private sensed field of his own; the Other Minds questions receives here a credible account within the theory;

(4) Most notably for the Lenin/Bogdanov issue the existence of a common material cause of both agents' private fields outside the selector-mechanism (Glasersfeld, 1985); science can give the current description as energy; and/or mass-distributions in space-time;

(5) If the correction is accepted and proves itself in praxis, then a new workable object-hypothesis can be held which should be adaptive to both until new circumstances bring about some other challenge to its viability. Here E. von Glasersfeld's view that evolution produces adaptation by fit to present external circumstances, not by a logically perfect match to all possible circumstances can be appropriately included (Glasersfeld, 1985);

(6) The acceptance of a correction provides a confirmation to the one who corrects, for another's agreement in praxis cannot but strengthen his conviction.

(7) Acceptance of the reality of the sensed field as real-in-itself produces a novel conclusion not before asserted in philosophy: that the sensing is itself a part of materia prima. Not only can we be sure that external material causes exist as the global cause of all our flux, a materia prima or 'absolute process' (to use the term favoured by Wilfred Sellars, 1981), to which science can give the current description as energy; and/or mass-distributions in space-time;

There is yet one corollary to the Solipsist Ob­jection which was used above against Engels and Lenin. If the praxis which sustains new thing-selections from the Real must ultimately be checked by experiences of pleasure and pain, which are themselves sensations, how is it that conviction of the externality of matter can depend on something as subjective as colour? — even more so, for everyone admits to the subjectivity of pleasure and pain.

First, by this argument, the mutual correction process establishes that all subjective experiences, either of the self or others, are real-in-themselves regardless of what they are caused by and, more importantly, for this escapes all the accusations that depend upon the veridical/illusory object distinction, regardless of what the agent is currently perceiving in those fields. If this real-in-itself character of, say, a smell, can be ascribed to, too can the real-in-itself character of a pleasure — Who, except a neurophysiologist in his analysis, could abstract the pleasure of the scent of a rose from the sensory aspect of the scent as such? We can certainly abstract the knowledge of its being that of a rose, for the nose may be that of someone who has never smelled flowers in his life (an Eskimo hermit?), but we cannot abstract the real-in-itself quality from either the sensed smell or the pleasure.

Secondly, there are principled explanations possible of those cases in which the pleasure/pain module is not operating properly in harness with the selector-mechanism. Paul R. Churchland (1979, 164) has suggested the possible case of a creature born with its pleasure/pain spectrum reversed, so that it would rapidly pursue its own starvation and destruction. An interesting implication here that one can tease out is that such a creature would be able to objectify its sensations, albeit conducive to its own damage and death; one can ask the objectivists in epistemology whether these object-selections would constitute knowledge. In the present theory actual knowledge is bound to satisfaction in a praxis (even logicians talk of conclusions 'satisfying' constraints). Psychologists, too, know of the 'psychological solipsist' (Oliver, 1970, 30–32), the schizophrenic in a state of complete withdrawal from the world, who, could, as an empirical possibility, be in a state of total hallucination, which may or may not be objectified. In the severely autistic cases, it is even possible for a body to exist without a self at all. However, within a theory that can take the self to be an epistemic selection of a unique kind from the cortical fields by the selector-mechanism, guided by symbolic interaction from other selves during matura­tion, such empirically selfless cases do not escape the theory without overthrowing it since the mutual correction process can be applied to such contingencies as to any others.

What was positive and valuable about Bogdanov's contribution was not only his stress upon the dialectic that issues between men as they labour in nature, but the dialectic that establishes, maintains, adjusts and some-
times rejects object-sortings from the Real, but also, something that he had learned from Mach, that hypothesis was intimately involved in all such mutual identifications. One can pick out the almost unnotice phrase 'I take to be' in the following as proof of the presence of that hypothesis, but then an inconsistency follows: The objective character of the physical world consists in the fact that it exists, not only for me personally, but for everybody, and has for everybody a particular significance which I take to be the same as that which it has for myself. The 'subjective' element in experience, on the other hand, is that which has no universality, having meaning for only one or more individuals (my italics).

(Bogdanov, 1905, 1, 23)

If the New Representationalist's argument is correct, the Real is distinct from objectivity. Objects are problematic sortings that men make together from the Real, and those sortings can be altered. Mutual correction proves together (1) the reality of the ground from which object-sortings are sorted; and (2) the endless adjustability of the spatio-temporal boundaries and criterial qualities of cognisable entities. Reality is not hypothesised, for the experience of correction guarantees the existence not only of the external as a materia prima-in-itself but of the existence of one's own phenomenal field as a reality-in-itself and of the phenomenal fields of others. What is hypothesised is the superimposition-in-practical-action of private object-sortings. Men 'take it to be' that they have sorted alike.

The inconsistency in the quotation comes from what Bogdanov ignores here, which he should not have done given his Two-Man explanation, namely, that sometimes one man can make a better object-sorting than his partner, even a majority of his fellows. Though there cannot be a private language, there can obviously be private understandings of a public language that are wiser than that of the received opinion (Wright, 1985a, 87). Therefore, it is often the case that a private object-selection from the private sense-field can be of public value when communicated to others. So it is not the case that a private object-sorting can be for 'universal' use. Bogdanov should have remembered what he said about those Hegelian Masters of the 'technical intelligentsia' who too easily consider.imaginary perspectives as 'inconsequential' (1913, 207).

Although the Real as a base for our object-sortings is not hypothesis, every object-sorting is a hypothesis. Such inferences are of course largely automatic and unconscious, until such time as another person forces a correction upon us or there comes a brute surprise out of the Real for all of us, pleasant or unpleasant. What Bogdanov pointed out that societies create models, or, as he called them, 'substitutes' or 'sociomorphs', he was close to what is in fact the case, that all 'common' objects-sortings are maintained by the needful fiction that a complete superimposition of private identifications has been achieved. To effect this epistemic stereopsis, which has been of such evolutionary value to mankind, agents have to assume a complete logical convergence of their object-sortings from their numerically separate cortical fields. Hence the dialectic, when men 'take' an object 'to be' a single entity, it is that very mutual assumption that actually 'singles' the object for them out of the Real. It is by postulation that men reach the coinciding of their intentional perspectives (Schiller, 1962; Schutz, 1962). Although men must play the game of logical convergence from every sorting that they mutually object sort out of that external and undoubtedly real ground, they must never forget that their co-references are achieved by the hypothesis, the postulate, the convenient fiction that they have achieved a perfect overlap, and this, because of the nature of the differences in their private sensory registrations, they can never achieve.

Not only are all object-sortings in the everyday world, what Sellars calls the 'Manifest Image', achieved by this convenient fiction of logical convergence of the mutual fix, but so are the identifications made in the 'Scientific Image'. With Mach we can accept that, whatever model physicists come up with about the micro-objects in materia prima, those are convenient fictions too and must be endlessly adjustable, but none of this upsetting our conviction of the reality of materia prima as a fundamental continuum, whatever metaphor we may find useful with which to analyze it. Remaining wisely sceptical about the success of our current objectifications, we can always equally remain convinced of the existence and the materiality of the Real. Here Lenin's advocacy of the reality of the material base and Bogdanov's understanding of the social nature of knowledge can reach a lasting synthesis. Perhaps, despite Gogol's pessimism, Ivan Ivanovich and Ivan Niko-forich can finally shake hands.

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