A CONFUSION IN POPPER'S PHILOSOPHY OF SOCIAL SCIENCE

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Abstract:

This paper argues that there is a confusion or inconsistency in Popper's claiming both that the social sciences should adopt the principle of methodological individualism and that they should maintain a unity of method with the natural sciences. Conjointly with the argument and in an appendix, a survey of Popper's philosophy of social science is presented. First, Popper's individualism is given an exegesis and elaboration, being characterized by me as 'the autonomy position'. Second, suggesting unity of method requires minimally the general application of the principle of falsifiability, I show the failure of two arguments apparently suggested by Popper that falsifiability entails individualism. To fill the lacuna I then propose other arguments for individualism Popper may have had in mind. But finally, I show the inconsistency by arguing that individualism must on Popper's own assumptions be regarded as an empirical rather than a metaphysical position, thus rendering its stipulation by Popper as methodological incompatible with the application of falsifiability.
A Confusion in Popper's Philosophy of Social Science

The writings of Sir Karl Popper on the social sciences are primarily a discussion of methodology. This is not surprising, for in speaking of the task facing these sciences he has said, "the best I can do as philosopher is to approach the problems armed with the weapons of a critic of methods". But it has been noted, e.g. by Prof. Noretta Koertge, that there is at least a prima facie incongruity between different elements in Popper's methodological position. He claims on the one hand that the natural and social sciences share a unity of method, while he argues on the other hand for social science method having features with no apparent parallel in natural science method. I argue in this paper, more than a mere incongruity, there is a full blown inconsistency or confusion in claiming both that there is a methodological unity among the sciences and that the social sciences should adopt the principle of methodological individualism. Much of my argument is made in the context of an examination of Popper's earliest work on social science, The Poverty of Historicism. But the confusion is not I think bound to the peculiarities of this work, as my inclusion in the argument of many of his later works should show. Indeed, an examination of some of his more recent writings will indicate both why the inconsistency is inherent in his position and how his position ought to be altered to resolve it.

Before beginning, it is important to understanding both the point and direction of my argument to see the problem out of which it arose. Under such general rubrics as 'methodological individualism' and 'situational analysis', Popper has made a number of interesting remarks concerning the nature of human agents. I have been attracted to his position, not primarily from an interest in philosophy of science, but from an interest in action theory and the concept of a person. Popper coming from the direction of a different set of problems, offers solutions similar to those attained in recent philosophical investigations into personhood and human action, and he shows how the results of these investigations can serve as a basis


for social science theorizing. It seems to me, e.g., that his individualism meshes very neatly with a want-and-belief explanatory model of action, where the 'belief' factor provides reference to the institutional social whole. Also, Popper's doctrine of situational analysis has many affinities with the much-discussed notion of the practical syllogism.

While being attracted to this aspect of Popper's thought, there is a related aspect with which I cannot find favor. It is the disapproval Popper shows for a priori methods with which these philosophical investigations are frequently pursued, methods sometimes referred to as 'conceptual elucidation' or 'ordinary-language analysis'. Popper argues against such methods in the English-edition preface to The Logic of Scientific Discovery. To be fair, he is here explicit in his expressed concern not to exclude any method philosophers may find helpful in handling their problems. But he does argue that ordinary-language analysis investigates common-sense knowledge. If our interest is in such problems as the growth of knowledge, he suggests, our concern should more properly be a study of the sophisticated form of knowledge of the sciences. The implication that common-sense knowledge is relatively stagnant—that it would tend, much more so than scientific knowledge, to be seen as the final word—would in Popper's view incline a study of it toward essentialism, i.e. the doctrine that it is possible to arrive at final explanations. I have little doubt that Popper would in general regard conceptual analysis and its cognate methods as forms of essentialism, and therefore to be avoided. He has emphasized that ordinary language is full of theories. But when these theories are treated as concepts to be analyzed, he would argue, essentialism is the almost inescapable result.

Being in this way at the same time attracted and repelled, I attempted to shift the conflict onto Popper, i.e. to see these opposing tendencies as a reflection of a confusion in Popper's position. This paper is the result of that attempt. It is thus a form of internal criticism, within the bounds set by Popper's thought itself.

What is the confusion? It is, broadly speaking, that Popper has a well developed set of assumptions concerning the nature of human agents, when his general methodological approach is that no assumptions with the a priori status he grants these should be allowed. These assumptions are contained in his

4 e.g. Conjectures and Refutations, p. 130.
doctrine of methodological individualism or situational analysis, and his general methodological approach to which they are opposed is falsifiability, testability, or more specifically, anti-essentialism. Thus my case could be put schematically as follows: there is an inconsistency in holding both the methodological principles of individualism and of anti-essentialism. Popper argues that the social sciences should follow the lead of the natural sciences in avoiding methodological essentialism, i.e. they should apply the principle of falsifiability; this should be one of the minimum conditions placed on the claim of unity of method. But it can be argued that methodological individualism is a form of methodological essentialism, so that there is a confusion in Popper's prescribing the former while proscribing the latter. Popper in fact grounds social science in the concept of a human agent, when all he should permit himself to have are theories concerning agents.

The argument in the paper will be set out in the following order. First, I will give an account of methodological individualism or situational analysis as the doctrine is set out in The Poverty of Historicism and elaborated in subsequent writings. Second, the weak case will be presented, wherein I will argue, negatively, that The Poverty of Historicism fails to provide as argument sufficient for establishing individualism as a methodological principle. Third, it will be suggested in response that my negative case has been somewhat insensitive to the main line of argument in Popper's work: there are in fact good reasons brought forth by him for regarding individualism as a methodological principle, though these reasons may be more loosely connected with his general theory of method than the ones I argued were lacking. Finally I will argue the strong case that, despite the apparent satisfactoriness of the Popperian response just offered, there are positive and conclusive reasons offered by Popper's methodology itself to reject individualism as a methodological principle.

The weak case and the strong case are interrelated. The weak case by itself would establish that there is an important lacuna in Popper's argument. Although the response I offer in Popper's name appears to substantially ameliorate the charge of lacuna, the strong case shows that the ostensible lacuna in fact masks a thoroughgoing confusion. The reason that Popper's methodological arguments for individualism are less than satisfying, is that Popperian arguments in fact refute the claim that individualism is a methodological principle. Because my criticism is internal, I will be in the position of arguing against individualism in the name of the doctrine of unity of method, when in fact individualism is the aspect of Popper's thought I would endorse. I will suggest at the conclusion that Popper purge the inconsistency in his social
science methodology by disavowing not individualism but anti-essentialism, i.e. the view that natural science and social science share completely in a falsificationist method.

I. Methodological Individualism

What is Popper's doctrine of methodological individualism? It is closely related to such notions as those of situational analysis, situational logic, rational (re)construction, and the rationality principle, so we shall be considering these all as parts of a single position.

Considering the position as set forth in The Poverty of Historicism, the following is a characteristic expression of it. "Methodological individualism [is the] doctrine that we must try to understand all collective phenomena as due to actions, interactions, aims, hopes, and thoughts of individual men, and as due to traditions created and preserved by individual men." Thus, as the term 'individualism' suggests, Popper is siding with those who oppose any attempt to explain collective social phenomena independently of the activity of individuals. But what is significant in Popper's position is the insight that such opposition need not commit one to an absolute social atomism. This insight is a development of his rejection of psychologism, the doctrine that would regard all social phenomena as reducible either to human nature in general or to the particular propensities and experiences of all individuals involved. What for the individualist should replace psychologistic reductions of the latter sort, and how such replacement would avoid absolute atomism, are questions to a large extent addressed only implicitly in this early work. But the answers are present in nascent form in his discussion of the logic of the situation (p. 149) and rationality (pp. 140-1). We will examine these two elements as developed in his later writings to see how they provide an individualistic alternative to psychologistic reduction. A clue to how this will be done is given in his suggestion that social phenomena should be given an institutional analysis rather than psychological analysis (p. 154).

In opposition to psychologistic reduction, Popper asserts "our actions are to a very large extent explicable in terms of the situation in which they occur." Any psychological aspect of the explanation "is very often trivial as compared

with the detailed determination of [the] action by what we may call the logic of the situation. In the analysis of an agent's action (relevant to some social science hypothesis), psychological elements should be replaced by situational elements in the following sort of manner. "The man with certain wishes ... becomes a man whose situation may be characterized by the fact that he pursues certain objective aims; and a man with certain memories or associations becomes a man whose situation can be characterized by the fact that he is equipped objectively with certain theories or with certain information." What is the import of this shift from 'psychological' to 'situational' idiom? For one thing, situational elements, as the quotation indicates, are objectively determinable, whereas psychological elements in general are not. The two principal types of situational element are, one, aims or goals, and two, theories or beliefs concerning the situationally appropriate means for achieving those goals. Both types of element are objectively determinable precisely because they are exhibited in the agent's actions. Prof. Jarvie points out that desires or wishes only become aims when an agent acts socially to achieve them. But of course the range of actions in which the relevant aims and beliefs are exhibited must be wider than that of the action or actions for which an analysis or explanation is being sought. For the aims and beliefs are objectively determinable when the hypotheses concerning them in our explanatory theory of the behaviour are criticizable, i.e. when they can be tested in light of other of the agent's behaviour. Popper suggests the following example of this procedure. A situational analysis of an action of Charlemagne's could be criticized by the discovery of a letter he wrote indicating that his beliefs relevant to the situation in which he acted were different than those hypothesized in the analysis.

But an equally important aspect in this crucial shift of idiom is that situational factors would be seen as determining an agent's action in a radically different fashion than would psychological factors. Psychological factors are frequently regarded as causing a person's behaviour; they are typical candidates for the immediate efficient causes of human activity.

10 "Logic of the Social Sciences", p. 103.
Situational factors, on the other hand, cause or bring an agent to choose to do the actions he does. When it is said that the situation determines an action, what is meant is that the agent chooses in light of his situation to act as he does. On the situational-analysis model, human action would be viewed as chosen, whereas holding an exclusively psychological model would incline one toward seeing human behavior as the result of a causal or quasi-causal interplay of psychological states. In the former the role of the agent is emphasized, but in the latter the agent tends to be dissolved into the psychological states themselves. Many philosophers would, of course, regard such a distinction as illusory. But for Popper, as well as for most action theorists and moral philosophers, this kind of distinction is central. The distinction is central for Popper, not only in regard to his metaphysical view of the person, but more importantly, in regard to his account of explanation in the social sciences. Concentrating on the situational, choice factors in an action, rather than on the psychological, causal factors, allows Popper to present a forceful theory of social science happily free of the extremes of both holism and reductionistic or psychologistic individualism. The manner in which the elements in his theory can be seen to result from the situational view of action as chosen, I shall now proceed to explain.

An agent chooses his action in light of his situation, which means of course, in light of the situation as he perceives it, i.e. in light of his beliefs and theories concerning his situation. But of course an agent's perception of his situation is never perfect, for it can fall short in two respects: in its verisimilitude and in its extension. Even if an agent's theories concerning his situation have a high degree of verisimilitude, there is no way they can be even nearly comprehensive of the indefinitely large number of situational elements that could have a bearing, direct or indirect, on the results of what the agent does. At worst, the agent's theories may be radically false (the case of the madman). Since it is the elements of a situation which determine the consequences, near and remote, of an action, the fact that an agent's perception of his situation is imperfect entails that whenever he chooses to act there will be a distinction between those consequences of his action he did foresee and those he did not foresee. This is of course the distinction between intended consequences and unforeseen, so unintended, consequences. This distinction is central for Popper's theory, for "the main task of the theoretical social sciences . . . is to trace the unintended social repercussions of intentional human actions." Only on a model in which action is seen as chosen, i.e. only on a situational analysis and not on a psychological analysis, can there be a distinction between the intended and the unintended

11 Conjectures and Refutations, p. 342, originally italicized.
effects an agent's action has in the world.

As a result of the emphasis on action as chosen, there is another important respect in which a situational analysis differs from a psychological, reductionistic analysis. This is seen in consideration of the following question. In a situational analysis, what kinds of factor are the subject of the agent's beliefs and theories? "In general, situational logic assumes a physical world in which we act. . . . Beyond this, situational logic must also assume a social world, populated by other people . . . and, furthermore, social institutions. These social institutions determine the peculiarly social character of our social environment. These social institutions consist of all the social realities of the social world, realities which to some extent correspond to the things of the physical world,"12 In addition to the physical factors, there are the social, institutional factors that the agent perceives in his situation. In contraposition to the absolute atomism of a psychologistic reduction, Popper grants a form of existence to institutional social wholes. Institutions are elements of the situation, they have existence, because agents take them into account in their choice of action. Prof. Agassi makes this point under the label 'Popper's rational principle of institutional reform': "However bad the existing institutional coordinations are a prospective reformer will try his best to make use of them in his attempt to reform them or abolish them."13 Choice of action, deciding what to do, to the extent that we act in a social world, is only possible if we choose or decide in light of existing institutional arrangements.

But what sort of existence does situational analysis or methodological individualism grant to institutional wholes? This is an important question in light of Popper's wish to distinguish his position from that of holism. Popper proposes that "only a minority of social institutions are consciously designed while the vast majority have just 'grown' as the undesigned results of human actions."14 Jarvie makes this point clearer. "Human action has consequences, especially unintended consequences, including patterned structures of relationships which we call institutions, and, while these are the results of human action, they are not the result of human design."15 We can see the middle course (an idea emphasized by Agassi) that Popper's position runs in avoiding the extremes

12 "Logic of the Social Sciences", p. 103.
14 Poverty of Historicism, p. 65, originally italicized.
15 Concepts and Society, p. 3.
of both holism and radically reductionistic individualism. As patterns of unintended consequences, institutional wholes are treated in the action deliberations of agents like physical obstacles, i.e. as given, as independent of themselves, as factors to which they must adapt. But seen as patterns of unintended consequences, institutional wholes lose their seeming independence; they are seen as dependent on, not as existing behind or over-and-above, the actions of individuals. Social wholes are neither completely reducible nor completely irreducible. They are, in Prof. Wisdom's words, distributively but not collectively reducible: any one whole can be reduced to a series of the unintended consequences of many individuals' actions, but all wholes could not be collectively so reduced. We can understand this suggestion of Wisdom's in the following manner, as he himself seems to in part. Collective reduction is impossible because the reduction of any one whole will necessarily make reference to other wholes. For the elements to which the reduction is effected are consequences of actions, and actions, on a situational analysis, themselves make reference to social wholes in the beliefs and theories in light of which the agent chooses. (A similar point, so it seems to me, is made by Agassi.)

Besides being subject to distributive reduction, there is another, related respect in which the social wholes Popper allows differ from those championed by holists. In his explanation of Popper's position, Agassi emphasizes that the following proposition must be rejected: "If 'wholes' exist then they have distinct aims and interests of their own." Social wholes exist but they can neither act nor have the qualities possessed by individuals in virtue of which individuals do act. "The theory . . . ascribes the power to act to all and only to those who have the power to decide, and . . . ascribes this power to all and only to individuals; not to collectives, and not to computers, etc." This is so, I believe, because to attribute aims and actions to social wholes (i.e. to patterns of unintended consequences) would destroy the distinction of


type between the qualities ascribed to an agent in virtue of which he has effects in the world (e.g. aims), and the qualities possessed by those effects, even in aggregation. In light of Popper's opposition to the holistic doctrine of a 'group mind', I believe the position may be generalized in the following manner. Social wholes exist but can possess no (Strawsonian type) P-predicates.

All these points we have been considering are, I believe, implicit in the choice of an individualism based on a situational rather than a psychologistic analysis. The manner in which these points are interdependent demonstrates the appealing coherence of the doctrine. Situational analysis requires the existence of institutional wholes because these wholes are taken into account in the choice of action. But the model of action as chosen allows a distinction between intended and unintended consequences; and the latter in aggregation constitute a kind of social whole which is distributively reducible to individual chosen actions. Thus the position itself gives a non-holistic account of that apparently holistic element of which it requires the introduction.

Let us turn our attention now to the second aspect of methodological individualism broached in The Poverty of Historicism. How does the notion of rationality fit into the model as it has been developed so far? "In most social situations, if not in all, there is an element of rationality. Admittedly, human beings hardly ever act quite rationally (i.e. as they would if they could make the optimal use of all available information for the attainment of whatever ends they may have), but they act, none the less, more or less rationally; and this makes it possible to construct comparatively simple models of their actions and inter-actions, and to use these models as approximations."21 In what way is this sort of rationality part of the situational model of action? Popper later asserts: "The explanations of situational logic . . . are rational, theoretical reconstructions."22 Apparently, just to give a situational analysis of an action is to show it as being (more or less) rational; i.e. rationality is implicit in the situational model, it is not superadded to it. In addition, to construct an explanation of an action by a situational analysis, all one need assume is that "the various persons or agents involved act adequately, or appropriately; that is to say, in accordance with their situation." Thus having constructed our

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20 e.g. Open Society, II, p. 91.
21 Poverty of Historicism, pp. 140-41.
22 "Logic of the Social Sciences", p. 103.
model, our situation, we assume no more than that the actors act within the terms of the model, or that they 'work out' what was implicit in the situation."23 This assumption, that an agent will act in accord with the situation, is itself the rationality principle. Consequently, to formulate a situational model is ipso facto to give a rational reconstruction. In an important respect then, the rationality principle adds nothing to the situational model; it simply makes clearer what the model already contains.

But if the application of the situational model is made co-extensive with the ascription of rationality, does not this amount to the claim that all human action is rational? There are at least two lines of response that could be taken in regard to this question. The first would be to postulate the principle in such a weak form that no one would deny that all action is rational in that sense. The second is to argue that commitment to the situational model should only require that the claim that all action is rational, even in the weak sense, be regarded as at best a close approximation to the truth. Popper apparently adopts the second approach, for, while being committed to the situational analysis, he claims that it is false to assert that the rationality principle always applies.24 The weakness of the principle for Popper is indicated by his calling it a "zero-principle" and by his asserting that it is almost empty of empirical content. But despite this degree of weakness, he finds an indication that the principle is only an approximation to the truth in the existence of personal differences "in assessing or understanding a situation", which "means that some people will act appropriately and others not."

But any force the citing of such differences has in showing the principle as only approximating truth is, it seems to me, taken away when it is later claimed that the rationality principle can be used in explaining the acts of a madman. With the acts of a madman, Popper suggests, one applies the rationality principle by taking account of the agent's radically false perception of the situation.25 Popper could respond that even if an agent's beliefs are radically false, his act can be regarded as rational if his assessment of the situation as


24 "Rationality", pp. 4-6.

he falsely perceives it is rational. But it seems to me rather
difficult to draw a sharp distinction between beliefs about
and the assessment of a situation, such that the rationality
of the action could be judged solely on the basis of the latter.
If the acts of a madman can be regarded as rational on the
basis of misperception, then so it seems, must all acts
which appear prima facie to be irrational.

But there is I think an important truth in Popper's
position that may tend to be obscured by the debate over
whether or not all actions are rational. The difficulty with
the notion of rationality is that it is tied, as Popper indi-
cates, 26 to the idea of the agent making optimal use of avail-
able information to achieve his goals. Optimality is a prob-
lematic notion: does an agent acting adequately to his situ-
uation always have to make optimal use of his information? Much
more important to emphasize is the goal-directed nature of
human action; this is I think the important truth in Popper's
position. In the same passage where Popper links rationality
to optimality, he suggests that although agents hardly ever
act completely rationally, they do act "more or less rationally". Using this expression, I would like to suggest the following
identification: to say that an agent chooses to act is to
say that he acts more or less rationally, and this means that
his actions are intended to achieve his goals in (not necessar-
ily optimal) light of the situation as he perceives it. Of course,
an agent only takes action in light of his beliefs concerning
his situation; we could neither perform, explain, nor under-
stand an intentional action which took no account of its situ-
ution. But the account taken of the situation need not be
optimal for the action to be intentional. This is why I think
the debate about rationality is to some extent obscurantist
in this context. To avoid problems raised by the notion of
optimal use of knowledge, I suggest the expression 'more or
less rational' rather than 'rational' be used for the property
which characterizes all human action: all intentional action
is the former, but not necessarily the latter. The claim that
agents act more or less rationally should be regarded as satis-
factory, unless one wished to give the principle an ultra-weak
reading such that action is rational merely in virtue of being
goal directed. We will find later some confirmation of this
interpretation of what is most important in Popper's individ-
ualism, when we see how he counsels that the situational model
of action not be abandoned even in those cases where there
is reason to believe that rationality principle does not apply.

It is an important insight on Popper's part that human
activity can only be intentional, chosen, and (potentially, at
least) rational under a doctrine which rejects the extremes

26 Poverty of Historicism, p. 140.
of both holism and psychologistic reduction, at least, in some of the forms that these doctrines frequently take. Psychologism can be incompatible with action as intentional, chosen, and rational, because it dissolves the institutional wholes only in light of which it is possible to intend and choose; it contravenes 'the rational principle of institutional reform'. Holism can destroy the possibility of individual intentional action because it denies the agent the autonomy of his aims: his aims become merely the expression of the aims of the social whole. Even an optimistic holism which sees reason at work in the progress of history "denies to human reason the power of bringing about a more reasonable world." This fundamental insight of Popper's could be expressed by reconstructing his position in the form of a transcendental argument: given that human action is chosen, intentional, and sometimes rational, it must be the case that only a situational analysis is appropriate to explain it; the latter is a necessary condition for the former.

The reflections of this last paragraph allow me to indicate more clearly what I take to be the central point of Popper's doctrine. Methodological individualism is basically the assertion that all social science theorizing should be consistent with the claim that human beings are autonomous agents; in other words, it is the assertion that all social phenomena should be understood as the manifestation of the (more or less) rational actions of a number of individuals, each pursuing his own aims, acting to further his own interests, in light of his own particular situation. An agent is autonomous when his actions are chosen; when he chooses to realize certain intentions or aims, these intentions or aims become his. In choosing to act as he does, an agent at the same time chooses an aim to pursue, for the action is a chosen action in virtue of being a manifestation of a chosen end. The situation does in some sense determine an agent's aims, but only in the same way it determines his actions, i.e. through his choosing his aims and actions in light of the situation. That aims are chosen in the same way as actions is indicated by the following passage. "Our aims can change and . . . the choice of an aim may become a problem; different aims may compete, and new aims may be invented and controlled by the method of trial and error-elimination." Popper makes the related point, when arguing in opposition to holism, that the only way a social whole can be said to have an aim is when an agent chooses to act in accord with what he believes to be its aim or interest.

Poverty of Historicism, p. 50, originally italicized.

Henceforth, I shall frequently refer to Popper's methodological individualism as the autonomy position. Methodological individualism, as we have seen, is the doctrine that situational analysis is applicable to human action. Human action, as a result, is seen as chosen, intentional, and (more or less) rational: in a word, autonomous. Though I am importing the term 'autonomy' into Popper's argument to characterize and label what I regard as most important in his position, this use of the term does receive support from him: he indicates that the Kantian notion of autonomy captures his idea that we cannot escape the responsibility for having ourselves chosen our proposals or standards; there is no absolute authority to which to appeal to relieve the burden of choice. It is of course important to point out that Popper puts forth his individualism as a methodological position, so the autonomy position is by itself only a claim about the way persons should be treated in our social-science theorizing, it does not necessarily imply an ontological individualism of any sort. Because of the common-sense appeal of the autonomy position, it may appear I am trivializing Popper's doctrine. But the autonomy position will be seen to be far from trivial when we compare it below with alternative positions presupposed by certain kinds of social-science hypothesis. But for the moment, noticing that it is put forth as a methodological position, we must ask whether or not Popper succeeds in giving it a methodological justification.

II. The Weak Case

What arguments can be found in Popper to give a methodological justification of his individualism? In this section I will examine The Poverty of Historicism with this question in mind. This work contains surprisingly little in the way of explicit argument of the kind for which we are looking. Since Popper advocates a unity of method among the natural and social sciences, the ideal argument would show methodological individualism to be implicit in the application of natural science method to the subject matter of the social sciences. Due to the fact that falsifiability is the criterion of demarcation between science and non-science, that the principle of falsifiability apply is the minimum condition that should be placed on the claim of unity of method. So the argument should show, in particular, how the falsifiability of social science theories is only possible on individualist assumptions. There are, I believe, two lines of argument that can be reconstructed from The Poverty of Historicism which appear to take this form. They depend upon the claim that the doctrines of historicism and methodological essentialism contravene the

principle of falsifiability, a claim that I believe Popper can successfully establish.

As one line of argument, Popper would appear to claim, contrary to my general line of criticism, that individualism is not only consistent with a methodological anti-essentialism, but in fact is a direct consequence of such a position. The second line of argument is the following. Popper's advocacy of methodological individualism emerges in the context of his argument against historicism. He contrasts individualism with two other methodological approaches—holism and psychologism—suggesting that these latter involve the acceptance of an historicist position. This would appear to be a form of argument from elimination to justify individualism as a methodological principle. I shall consider the former line of argument first, beginning with an explication of Popper's view of essentialism.

What is methodological essentialism, and why is Popper opposed to it? It is the view that science should be concerned to discover the essences or ultimate natures involved in its subject matter. The metaphysical issue of the existence of such essences is not at stake. Whether essences exist or not, Popper argues, science ought not to be conducted as if they did. This is because science is a falsificationist rather than a verificationist enterprise: a theory can never be established beyond doubt, it can only either sustain or succumb to attempts to falsify it. The search for essences is the search for ultimate natures or ultimate explanations, and these cannot be had since no theory concerning them could be verified. Better put—even if we had a theory which gave an ultimate explanation, we could never know this to be the case.

So the methodological essentialist, believing science should arrive at ultimate explanations, must be, broadly speaking, a verificationist, and such a position can only lead to obscurity and stultify scientific progress. This can be seen in the attitude the essentialist takes towards the definition of terms. Since essences are formulated in definitions, the essentialist will see the end of science as uncovering these definitions, and subsequently needing to progress no further. Rather, Popper argues, we should adopt an anti-essentialist or nominalist attitude toward definition. Words are mere instruments to be used in the advancement and testing of theories, and no definition should be regarded as more than provisional since no theory containing it can be verified. The scientific questions are not definitional questions, 'what is x?', but instead questions of the sort, 'how does x work?'.

For these reasons, methodological essentialism is ruled out by the condition of falsifiability or testability. Consequently, anti-essentialism is a valid methodological principle; and if individualism is implicit in anti-essentialism, this would be an indication that it is a valid methodological principle as well. Popper comes closest to asserting this kind of connection between individualism and anti-essentialism in the following passage.
And in the social sciences it is even more obvious than in the natural sciences that we cannot see and observe our objects before we have thought about them. For most of the objects of social science, if not all of them, are abstract objects, they are theoretical constructions. Very often we are unaware of the fact that we are operating with hypotheses or theories, and we therefore mistake our theoretical models for concrete things. The fact that models are often used in this way explains—and by doing so destroys—the doctrines of methodological essentialism. It destroys them because the task of social theory is to construct and to analyze our sociological models carefully in descriptive or nominalist terms, that is to say, in terms of individuals, of their attitudes, expectations, etc.—a postulate which may be called 'methodological individualism'.

Recalling Popper's objections to essentialism, what is being claimed in the first part of this quotation is clear. The objects of a science are postulates of its theories, and we cannot take these objects as concrete, i.e. as entities with an essential nature, because the theories through which such natures would be postulated cannot be verified. This does not mean we cannot talk about these objects, or theorize in terms of them, but in our talk our terms for these objects must be treated nominalistically rather than essentialistically, i.e. their definitions must be taken in this way. One may ask, 'how does a state work?', but one should not attach much importance to the definitional question 'what is a state?'

Popper's argument appears to be this. Because social scientists should be methodologically anti-essentialist, they should not treat such things as 'the state', 'the middle class', 'the proletariat', as concrete objects, and the way to avoid treating them as such is to analyze them in terms of individuals. Consequently, anti-essentialism implies individualism. But this is an illegitimate move.

Anti-essentialism or nominalism is, as we have seen, a doctrine relating to the way in which terms are handled in theorizing. 'For methodological nominalists hold that the task of science is only to describe how things behave, and suggest that this is to be done by freely introducing new terms wherever necessary, or by re-defining old terms wherever convenient while cheerfully neglecting their original meaning. For they regard words merely as useful instruments of description'. Anti-essentialism requires openness to change in the use of terms. So it certainly cannot be taken to mean, as a methodological principle, that one specified term or set of terms should have precedence over others.

30 Poverty of Historicism, pp. 135-36.

31 Poverty of Historicism, p. 29.
Presumably that is an issue determined by the theories we hold. Is a theory which analyzes states in terms of individuals better corroborated than one that does the opposite? This is not an issue to be decided a priori, i.e. as a methodological principle. Thus, contrary to Popper's claim, anti-essentialism should be seen to proscribe individualism.

But let us look more carefully at Popper's argument in the extended quotation above. Methodological nominalism is, more specifically, a doctrine on how definitions should be understood, and this is how it is sometimes developed by Popper. He claims that an essentialist understands a definition as reading from left to right, meaning that the concept or term defined is the more important part of the definition—given the term, the task is to find the defining phrase. The nominalist, on the other hand, reads the definition from right to left, the defining phrase is more important and the task is to find a term to use as a shorthand label for it. Definitions are not then very important, because "shorthand symbols can always, of course, be replaced by the longer expressions, the defining formula, for which they stand". This suggests the following possible interpretation of the quotation. Because we observe individuals but do not observe states, 'state' in its various contexts should be seen definitionally as shorthand for a much longer expression referring to the activity of individuals. This is what is meant when it is said that our sociological models should be constructed and analyzed in terms of individuals, that what Popper calls a 'bare' or 'nominalist' description of these social wholes would be given in terms of the behaviour of individuals.

But if this is the correct interpretation of the passage, it in no way implies individualism understood as the autonomy position. For a bare or nominalist description would make no commitment as to the sort of behaviour in terms of which it is couched, i.e. whether the behaviour is chosen or non-chosen, intentional or non-intentional, rational or non-rational. This sort of definitional reduction in accord with nominalism would give only the utterly trivial truth that if there were no persons there would be no social wholes.

Let us turn to the second line of argument I am by reconstruction imputing to Popper. It is the claim that the methodological rejection of historicism entails the rejection of psychologism and holism as well, leaving by elimination individualism with a methodological justification. I believe this argument fails to get off the ground, for it depends on these three being the only alternatives, which they are not; e.g. Agassi points out that cybernetics is an additional alternative. But the argument is worth examining anyway. I will argue that while Popper makes a successful methodological case against historicism, and rightly concludes that

psychologism entails historicism, it is not the case that holism need involve historicist method. Popper is concerned to keep sociology autonomous from both psychology and history: he is correct in seeing that he must reject psychologism to do the former, but he must only reject historicism, not necessarily holism, to do the latter.

What is Popper's argument against historicism? Let me give a brief sketch. Its central point is this: historicism is a faulty doctrine because it simply misunderstands the methods of natural science which it is attempting to emulate. In particular, it sees the purpose of social science as propounding unconditional predictions or prophecies, when in fact scientific prediction is necessarily conditional, i.e. dependent on the specification of initial conditions. Some scientific predictions which seem to be unconditional, e.g. astronomical ones, only appear so because, in light of the constancy of conditions due to a repetitive system subject to minimal outside influences, reference to the initial conditions in the prediction need be only implicit. Historicist prophecy, because it is unconditional and so on a grand scale, will be historical in character; social science laws will be laws of historical development; and social science will become theoretical history. Historicism is led to these extravagances by failing to understand the methods of natural science it believes itself to be following. Historicism is to be rejected as a methodology because it violates the condition of falsifiability or testability: successful testing depends on a hypothetical-deductive structure of explanation with the specification of initial conditions, and explanation by unconditional prediction does not satisfy this form.

Popper presents a strong case that the advocate of psychologism is necessarily led to adopt an historicist approach. Psychologism, in one version at least, is the view that all social phenomena are to be explained by the psychological properties of the individual participants (perhaps in interaction with their natural environment). The problem is that the institutional factor which looms large in the account given of any social phenomena can only be explained on this model ultimately by considering a time before there were institutions, when their founding would depend only on the psychological properties of the founders. But this move to consider beginnings must involve psychologism in seeking laws of historical development, and so engaging in historical prophecy.

But the corresponding argument which attempts to link holism with historicism is much weaker. To begin with, it is not too clear what Popper understands by holism. He suggests it is the view that "the objects of sociology, social groups, must never be regarded as mere aggregates of persons". But he himself admits as a triviality that "the whole is more than the sum of its parts". We may turn to Agassi's clear exposition

Poverty of Historicism, pp. 17, 82.
of the position.\textsuperscript{35} Agassi, as we have seen, shows methodological individualism to be the position that social wholes exist but are not such as to have aims or take action; or more generally, social wholes can have no \(P\)-predicates. Although we get no argument for this very crucial point, the claim apparently is that for the ascription of any predicates other than a \(P\)-predicate to a social whole (distributive), reduction can be effected from the social phenomenon indicated to the intentional actions of individuals (and their unintended consequences). Conversely, such reduction is impossible if the social phenomenon is indicated by the ascription of a \(P\)-predicate to a social whole. One particular reason why an argument from Popper is urgently needed here results from his admission that situational logic is adapted from a principle of economic analysis.\textsuperscript{36} (Most of the examples of social science hypothesis he offers are economic in character.) While it may be fairly unproblematic to claim that the reduction to individual activity can be effected in the context of economic predicates ascribed to social wholes, what about contexts in which what is ascribed to a social whole is a non-\(P\)-predicate which is at the same time a non-economic predicate? Popper's position requires reduction here, but we need an argument that it is possible. At any rate, we may take it that Popper understands holism as the doctrine that social wholes both exist and are such as to take \(P\)-predicates, e.g. that social wholes can be intelligibly spoken of as having interests or aims of their own.

(Agassi does have an argument, which he attributes to Popper, that does offer a methodological justification for rejecting a holistic doctrine of this sort, apart from the claim that holism is necessarily connected with historicism.\textsuperscript{37} Roughly, it is the following. Since the interests of a social whole postulated by a holist hypothesis would have to stand in relation to the interests of the individuals making up the group, such an hypothesis would have no explanatory power above that of an hypothesis accounting for the situation simply in terms of the individuals' interests. As will be clear in the following sections, I believe this argument to be contrary to a falsificationist methodology in that it assumes as a priori what could only be established as part of our theories, i.e. that there is such a thing as an individual's interest apart from the group's interest.)

My argument against the linking of historicism with holism is this. The conception of holism held by Popper allows for the possibility of a modest holistic theory which would not entail an historicist approach. Holism entails historicism only when it is immodest, i.e. when the social wholes in question are on such a large scale that social laws become historical laws and conditional prediction becomes historical prophecy. A modest

\textsuperscript{35} "Methodological Individualism", pp. 186-88.

\textsuperscript{36} e.g. "Logic of the Social Sciences", p. 102.

\textsuperscript{37} "Methodological Individualism", pp. 190-94.
holistic hypothesis would, while ascribing P-predicates to social wholes, consider wholes that are on a scale small enough to permit conditional prediction and testing, thus avoiding the historicist trap. An example of a modest holist hypothesis would be the one offered by Professor Wisdom, that "Great Britain is a group suffering from sub-acute depression." Consequently, rejection of historicism does not entail rejection of holism, and there can be no argument to justify individualism as a methodological principle based on the claim that it is the only approach consistent with an anti-historicist position.

III. A Different Understanding of Popper's Argument

The purpose of the weak case has been to show that Popper has failed to demonstrate the connection between his doctrine of individualism and the principle of falsifiability or testability. Since this principle is at the heart of the method which Popper argues is shared by the natural and social sciences, my conclusion was that he has failed to justify individualism as a methodological principle. But perhaps my rendering of the basic tack of his argument is based partly on a misunderstanding. Maybe there are other reasons he offers, less formal or rigorous than the implicative relation with the principle of falsifiability, for the adoption of individualism as a methodology in the social sciences. This is the possibility I would now like to explore.

Popper reports toward the beginning of *The Poverty of Historicism*, "I am convinced that ... historicist doctrines of method are at bottom responsible for the unsatisfactory state of the theoretical social sciences (other than economic theory)." Clearly Popper saw the social sciences as being in general relatively stagnant and blamed this on their adoption of an historicist methodology. Jarvie suggests the strategy adopted by Popper at this point. "A poor methodology is one which does not help one to advance the study of problems", so "it is sometimes helpful to be articulate about method when one is blocked on a problem". Under this interpretation *The Poverty of Historicism* is an attempt to present and argue for a method alternative to that offered by the historicist, in order to remove the block so that the social sciences may advance in the study of their problems. This is where the particular social science of economics comes into the picture.


39 *Poverty of Historicism*, p. 3.

40 *Concepts and Society*, p. 10.
In the quotation above, Popper exempts economics from the class of those social sciences in unsatisfactory condition. Popper is clearly impressed with the success of economics. "The success of mathematical economics shows that one social science at least has gone through its Newtonian revolution".  

In an article written a number of years after his early critique of historicism, Popper sees an alternative form of scientism infecting social science method, viz. naturalism, the view that theories are based on inductive generalization; but here as well he singles out economics as standing apart from the infection. What is the methodological approach of economics, different from historicism and naturalism, which is responsible for its success? "The logical investigation of economics culminates in a result which can be applied to all social sciences. This result shows that there exists a purely objective method in the social sciences which may well be called...situational logic." Methodological individualism or situational analysis is simply the successful method of economics prescribed for all the social sciences.

There is another reason for Popper's adoption of methodological individualism that can be distinguished. It is a consequence of what Jarvie calls Popper's problem-oriented approach in his social science writings. This is why, Jarvie suggests, we should not expect to find in Popper a systematic exposition of doctrines. But the important point here is that the problems with which social science begins are for Popper frequently practical problems, for "problems of poverty, of illiteracy, of political suppression or of uncertainty concerning legal rights were important starting points for research in the social sciences". Reflection on practical problems often leads to the posing of theoretical problems, Popper suggests. Further, the concern with practical problems is for Popper directly relevant to methodological debates. "The more fruitful debates on method are always inspired by certain practical problems which face the research worker." The point is that practical social problems, especially of the kind with which Popper is concerned, to the extent that they are influential on the methodological debate, would clearly favour an individualist as opposed to a holist methodology. Popper's practical problem of reducing avoidable misery would lead toward individualism; the practical problems of a fascist, e.g. how to glorify the nation, would lead toward holism. This is the point where Popper's political liberalism and his ethical concerns and theories enter the picture. Popper's ethical theory that values and norms are chosen rather than discovered in the world, e.g., clearly requires his individualism; for as I have argued, only on a situational analysis is choice possible.

41 Poverty of Historicism, p. 60n.


43 "Logic of the Social Sciences", p. 102.

44 Concepts and Society, p.xii.

45 "Logic of the Social Sciences", p. 89.

46 Poverty of Historicism, p. 57.
The fact that the practical problems which give rise to social science theorizing directly concern human welfare, may be sufficient justification for its methodology differing from that of natural science. Koertge, in her discussion of the differences between Popper's natural and social science methodologies, suggests: "The reasonableness of any methodology can only be assessed in terms of the aim towards which it is directed". The aim of Popper's social science methodology, she asserts, is "to facilitate the improvement of the human condition and not just to promote the rapid expansion of knowledge for its own sake".

Two fundamental reasons have been suggested for Popper's prescription of methodological individualism. 1) The problem-oriented approach in his writings on social science which, because of his moral and political concern with the alleviating of human suffering, leads him to pose as the starting point for theorizing the sorts of practical problems which demand individualist answers. 2) His belief that the adoption of a holist approach has proved a dead end for the social sciences and that they should embrace the relatively successful individualistic method of economics. If these two reasons give roughly the correct interpretation of the basic direction of Popper's argument in The Poverty of Historicism, then my presentation of the weak case misconstrued his effort. Popper is not trying to show that a thorough-going adoption of the methodological principle of falsifiability makes individualism mandatory, only that there are at any rate some good reasons for embracing an individualist approach. These reasons should fill the lacuna alleged by my weak case to exist in Popper's argument.

Individualism would then be an adjunct, in the case of social science, to the main methodological principle shared by both natural and social science, i.e., falsifiability. The position thus afforded to individualism in social science method could perhaps be compared to the position Popper argues that metaphysical realism holds in relation to scientific method in general. "The task of science, which, I have suggested, is to find satisfactory explanations, can hardly be understood if we are not realists...And yet it seems to me that within methodology we do not have to presuppose metaphysical realism; nor can we, I think, derive much help from it, except of an intuitive kind". The finding of satisfactory explanations, which is intimately connected with applying the principle of falsifiability or testability, does not by itself require the doctrine of realism. But on certain occasions in the history of science, e.g., when subjective idealism or methodological conventionalism has acquired wide popularity, it might well be appropriate in light of the problem-situation thus presented, to explicitly prescribe realism as a methodological principle.

47 "Popper's Philosophy of Social Science", p. 205.
48 *Objective Knowledge*, p. 203.
I am suggesting that Popper treats individualism in an analogous manner. In the case of social science method, individualism is not strictly required or implied by the principle of falsifiability; the weak case has shown there is no argument for this. But in light of the problem-situation, in particular the widespread popularity of holist methods (but including as well the humanitarian concern to ameliorate individual suffering), it is salutary to include individualism within methodology.

But of course this interpretation requires that individualism be at least consistent with falsifiability. It seems clear that two methodological principles cannot at the same time be inconsistent and yet both valid. The central argument of this paper is that there is in fact an inconsistency here, and thus a confusion in Popper's thought. Can a minimum condition for consistency between these two principles be set forth? That the following is such a minimum condition is I think fairly obvious, although an argument for its being such will not be given until the next section. For the two principles to be consistent, individualism must at least be metaphysical, i.e., empirically irre-futable. This is just as it is in the parallel case I drew: realism and falsifiability are consistent because the former is a metaphysical doctrine, i.e., no empirical observation could refute it. Individualism, what I have called the autonomy position, must be a metaphysical view and not an empirical theory, if it is to be consistent with the principle of falsifiability. Before turning to the strong case, wherein I argue that on Popperian criteria individualism cannot be metaphysical, let us see if Popper himself regards it as metaphysical.

First it should be mentioned, to say individualism or any other doctrine is metaphysical is not to say it is uncriticizable. Empirical refutation is only one form that criticism may take. Any theory, metaphysical, logical, or empirical, can be criticized by considering it in terms of the problem-situation out of which it arose: does it offer, considering all relevant factors, the best available solution to this problem or set of problems? So positing individualism as metaphysical and methodological would only make it a priori relatively to empirical evidence, it would not become an absolute presupposition.

It must be admitted there are opposing tendencies in Popper on the question of whether individualism is a metaphysical as well as a methodological doctrine. First, let us examine evidence indicating that he would regard it as metaphysical. That individualism is metaphysical appears to be implied by the form of Popper's argument for the autonomy of sociology from psychology. "The method of applying a situational logic to the social sciences is not based on any psychological assumption concerning the

49 Logic of Scientific Discovery, pp. 91-92.
50 Conjectures and Refutations, pp. 195-200.
rationality (or otherwise) of 'human nature'. On the contrary: when we speak of 'rational behaviour' or of 'irrational behaviour' then we mean behaviour which is, or which is not, in accordance with the logic of the situation". 51 Here is another statement of this point: "The 'zero method' of constructing rational models is not a psychological but rather a logical method". 52 A related point is made by Popper in a discussion of Darwinism. He asserts, "a considerable part of Darwinism is not of the nature of an empirical theory, but is a logical truism". This is because "the method of trial and of the elimination of errors... can be said not to be an empirical method but to belong to the logic of the situation. This. I think, explains...the logical or a priori components in Darwinism". 53 All these remarks indicate that situational analysis is, or employs, a logical, as opposed to a psychological or empirical, method or theory. Their force is, I think, that individualism is to be understood as metaphysical, as not subject to empirical refutation.

The doubts about whether individualism is for Popper metaphysical come primarily from his fascinating article Rationality and the Status of the Rationality Principle. There Popper repeats the point that the rationality principle is not an empirical or psychological assertion, and states explicitly: "It does not play the role of an empirical explanatory theory, of a testable hypothesis"; and "it is not treated in the social sciences as subject to any kind of test". 54 But this point does not in Popper's view entail the conclusion I drew from it in the last paragraph. "In this way it may appear that...we treat the rationality principle as if it were a logical or metaphysical principle exempt from refutation: as unfalsifiable, or as a priori valid. But this appearance is misleading". 55 The reason Popper gives for the rationality principle lacking metaphysical status is, surprisingly, that it is false, i.e., it is not universally true, consequently it is not empirically irrefutable. Apparently individualism, in so far as its fate is bound up with that of the rationality principle, is not in fact untestable, but it is treated as if it were untestable. How can it be treated in this way, and what is the justification for doing so?

It is possible to treat the rationality principle as untestable because it is always a constituent part of the theory that is being tested, which is always a particular situational model. One could simply decide when a particular theory has been falsified to blame the other constituents of the theory, i.e., the hypothesized beliefs and aims. One is entitled to make such a decision, according to Professor Watkins, because "a policy of clinging to the rationality principle in the face of falsified predictions

51 Open Society, II, p. 97.
52 Poverty of Historicism, p. 158.
53 Objective Knowledge, pp. 69-70.
54 "Rationality", p. 5.
55 "Rationality", p. 8.
can be justified even from a falsificationist point of view". Without the rationality principle, he argues, the falsifiability of theories would be seriously undercut, so it "is treated as unfalsifiable in the interest of the falsifiability of the whole system." Popper offers a similar reason when he suggests the rationality principle be treated as unfalsifiable because rejecting it would "lead to complete arbitrariness in our model-building". He offers a second reason which is, I believe, more basic in that it encompasses the first. In the case of a falsification, we learn more if we blame the situational model rather than blaming the rationality principle. The reason we learn more in blaming the model is because, though the rationality principle may be false, it is at least a "good approximation to truth". So even if it is false it will contribute little to the usually quite drastic breakdown or falsification of the model or theory.

The reason why the rationality principle is not unfalsifiable, hence metaphysical, is that it is false; the reason why it can be treated as if it were unfalsifiable is because it closely approximates the truth. With a clearer understanding of what it means for the rationality principle to closely approximate the truth, I think we may see that individualism itself is not falsified even in those situations in which the rationality principle strictly speaking is falsified. When Popper claims the rationality principle closely approximates the truth, he seems to mean that in the majority of situations persons act rationally, i.e., adequate to the situation, but occasionally they do not. The one example he cites where the principle fails to apply is consistent with this interpretation. It is a case of minor desperation, a frustrated driver trying to park his car when there are no spaces available. As a rule a person acts rationally, but when in the grip of emotions such as desperation, fear, anger, or passion, he is liable not to act in this manner, i.e., he is liable not to make optimal use of the information contained in his beliefs about the situation. But note this obvious point: even these acts of emotion are acts, i.e., they are goal-directed and performed on the basis of at least some of the situation-relevant information the agent has available to him. The result would be the same if we took Popper's claim that the rationality principle approximates the truth to mean, not that only the majority of actions are rational, but that all actions are close to being rational, for this is simply the interpretation developed in the first section: all an action needs to be goal-directed is to be more or less rational.

When Popper advises that we always reject the conjectured model rather than the rationality principle when our social science theories are falsified, he clearly means that that particular model is to be discarded, not the type of model involved, viz. a situational analysis. The new theory replacing the old will be a situational model as well. This may appear surprising. Since the rationality or adequacy principle "animates" all situational analyses, why stick with this type of model in the particular

57 Popper, "Rationality", p. 8.
58 "Rationality", p. 6.
cases when the principle is false? In the case, e.g., where we have
under consideration a single action of a particular historical
figure which was performed in the grip of intense anger or despera­
tion, the rationality principle would be a false constituent in any
situational analysis posed in explanation of that action. I believe
the solution to this puzzle is as follows. When Popper advises hanging on
to the rationality principle even when it is known to be false, he is
really counselling fidelity to a type of theoretical model, viz. the
situational analysis. This means of course that he believes the situ­
tional model can apply even when its animating principle is strictly
speaking false. This tends to confirm my analysis in the first section
of what is important in Popper's position. At the core of Popper's
individualism is the claim that when considering human activity one
must always apply a situational analysis, that one must always regard
actions as goal-directed and performed on the basis of at least some of
the information available to the agent. This is what I labelled the
'autonomy position'. The notion of optimal use of the available
information, such as would indicate the agent to be acting completely
adequately or rationally, is a standard which is only more or less well­
achieved in particular actions. So Popper's call to treat the rationality
principle as if it were unfalsifiable, is an indirect claim that the
situational model (as a type of model) is applicable to all actions, hence
is in fact unfalsifiable. In this way I would argue that Popper in fact
treats individualism as a metaphysical position.

To further support the claim that individualism is for Popper
metaphysical, I would like to present two arguments which are speculative
extrapolations on my part from Popper's writings. Both arguments begin
from the fact that human beings have the capacity to engage in argumenta­
tion, the ability to subject theories of their own and others to criticism
and possible refutation.

The first argument is based on an examination of the article
"Language and the Body-Mind Problem". Popper there argues that there are
four primary, hierarchical functions of language: the expressive, the
stimulative, the descriptive, and the argumentative. Whether one of the
higher functions as well as one of the lower functions is being utilized
in any particular speech episode depends solely on the intention of the
speaker. "The linguistic behaviour of two persons...may be indistinguishable;
yet the one may, in fact, describe or argue, while the other may only express
(or stimulate)". Any machine, Popper argues, no matter how complex its

59 Conjectures and Refutations, pp. 293-98.
60 Conjectures and Refutations, p. 295.
feedback mechanisms, can at most be said to express or stimulate, but never to describe or argue, precisely because its activity is not intentional. Even if the machine activity is indistinguishable from that of a person, we could not, without being mistaken, attribute to it the ability to describe and argue, i.e., we could not attribute to it intentionality. Popper's purpose in making these points is to present an argument for mind-body interactionism, in particular to show there could be no "causal physicalistic theory of linguistic behaviour" of the higher functions. But in addition to making this case, these points also I believe indicate that the autonomy position, the view that humans act intentionally, must count for Popper as metaphysical. He allows no empirical evidence in terms of overt behaviour to falsify the claim that humans are, or that machines are not, intentional agents. (This claim, of course, only applies to human activity in general: it is always open to question whether any particular piece of human behaviour is intentional or more akin to an automatic reflex.) Here is another way of putting this claim of metaphysical status: it is necessary in some sense to treat persons as goal-directed agents. "In arguing with other people...we cannot but attribute to them intentions".61 In what sense is it necessary? For one thing, since science proceeds by argumentation, it is necessary to treat persons as intentional agents if science is to be regarded as possible. This leads into my second argument.

Popper sometimes charges certain theoretical approaches with displaying a special type of inconsistency. Determinism is one of the approaches thus charged. Determinism becomes absurd when the theorist himself is seen in the light of the alleged universal and complete predictability of events; for "physical determinism is a theory which, if it is true, is not arguable, since it must explain all our reactions, including what appear to us as beliefs based on arguments, as due to purely physical conditions".62 On another occasion, he gives a similar condemnation to a list of theories, all of which "try to rescue the causal completeness or self-sufficiency of the physical world". "All these are self-defeating in so far as their arguments establish—unintentionally, of course—the non-existence of arguments".63 The absurdity or inconsistency involved with this sort of theory might be expressed by saying it violates the following principle: no theory can be self-consistent which has as an implication that argumentation (not merely overt argumentative behaviour) is not possible.

61 Conjectures and Refutations, p. 297.


63 Conjectures and Refutations, p. 295
The reason is of course that there can be no such thing as a theory unless there can be argument, for a theory must be falsifiable.

What differentiates true argumentation from what is merely overt argumentative behaviour such as could be engaged in by a machine, is as we have seen that the former presupposes an agent who engages in intentional, goal-directed activity. Moreover, the intentions in question must be those chosen by the agent himself as his own; for a machine, suggests Popper, though it cannot argue, could be said to have the intentions given to it by its maker or programmer (these would presumably be 'quasi-intentions' of the same sort that institutions can be said to have). This shows again the relevance of the notion of autonomy for Popper's individualist position. So the minimum condition for the existence of science or theoretical activity is that persons be intentional agents. This is not surprising in light of Popper's claim that the scientific method of conjecture and refutation is embodied in the situational-analysis model and so is applicable to all human action, "since we can interpret an action as an attempt to solve a problem". \(^64\) That scientific activity can be captured in the same model used to explain action in general, is also indicated by a point of Jarvie's: "Rational thought can be viewed as merely a special case of rational action". \(^65\) So our principle may be generalized. No theory can be self-consistent which has as an implication that persons are not intentional agents; i.e., no theory may contravene individualism or the autonomy position. Of course, 'self-consistent' is being used here in a somewhat special sense. The series of propositions which formulate the determinist position, e.g., may be perfectly consistent among themselves, but taken together they are inconsistent with the fact that they constitute a theory.

This second argument may be clearer if it is formulated along the lines of an argument explicitly advocated by Popper. My second argument is, I believe, very analogous to Popper's argument that rationalism cannot be comprehensive, and it may in fact be a version of it. "Uncritical or comprehensive rationalism can be described as the attitude of the person who says 'I am not prepared to accept anything that cannot be defended by means of argument or experience' ". \(^66\) But there is a logical difficulty with this form of rationalism, for the adoption of the rationalist attitude must be prior to the acceptance or consideration of any argument whatsoever. Comprehensive rationalism is "inconsistent" and "logically untenable": we must accept a critical rationalism which admits that the decision to adopt rationalism is itself irrational. It might be put this way: there is a logical difficulty in rationally questioning whether or not one ought to adopt a rational attitude. I would put our argument in

\(^{64}\) Objective Knowledge, p. 179

\(^{65}\) Concepts and Society, p. 21.

\(^{66}\) Open Society, II, p. 230.
an analogous fashion: there is a logical difficulty in rationally questioning (through social science theorizing) whether or not persons are capable of rational action (and thought), and so capable of argumentation. Popper's individualism is a pre-condition for the possibility of science as an activity, so no theory can be allowed which by implication denies it. If our rationalism must be critical, our (social) science must be individualistic. Individualism cannot be empirically refuted, because refutation is a form of argument. For these reasons, individualism must be a principle both metaphysical and methodological.

IV. The Strong Case

If Popper does have such forceful arguments at his disposal to justify individualism as both a metaphysical and methodological principle, why did I take such pains in my weak case to argue that in fact he has given no such justification? The point there was to show that he has no argument for individualism based on his claim of unity of method: the claim that falsifiability or testability must be the rule in both the natural and the social sciences cannot by itself require methodological individualism. In the last section the point was to search for reasons for adopting methodological individualism that are independent of what is required by the principle of falsifiability. It was suggested these could be found in Popper's problem-oriented approach (together with his moral and political concerns) and his conviction that the reigning holist methodology had proven quite fruitless. The rather speculative arguments presented subsequently would provide a more forceful reason for adopting individualism, but they likewise I think are independent of the principle of falsifiability.

Returning in this section to the relation between the principles of individualism and falsifiability, I want to make the case that as methodological postulates they are inconsistent or mutually exclusive. An argument to this effect is needed because it is perfectly in accord with the weak case that the rule of falsifiability be neutral in regard to whether or not individualism can have methodological status. This is where consideration of the question whether individualism has metaphysical status becomes important. It is clear I think that any principle or hypothesis which is non-metaphysical and empirically refutable cannot intermingle at the methodological level with the principle of falsifiability: for the sake of consistency one or the other would have to be abandoned. This is because falsifiability applies to all empirical hypotheses, but raising a particular empirical hypothesis to methodological status is precisely the demand that it be treated as unfalsifiable; therein lies the inconsistency. Another way of making this point: any empirical hypothesis has other empirical hypotheses inconsistent with it (otherwise it would be irrefutable), so making it methodological would a priori exclude these other hypotheses.
from consideration, contrary to more general methodological demands. So the rule of falsifiability can only be neutral regarding the methodological pretensions of individualism if the latter has metaphysical status. It will now be my strategy to show that individualism, considered on Popperian grounds, is an empirical not a metaphysical hypothesis. This will make my case that there is a confusion in Popper's social science.

First, consider some suggestions which give prima facie plausibility to the claim that individualism should count as an empirical hypothesis. If we examine various ways in which the individualist hypothesis might occur to someone, I think it will be seen that they would make it likely that the hypothesis be open to empirical refutation. (I mean this examination to be a heuristic exercise; I do not mean to indicate by it that this or any hypothesis is actually arrived at inductively, nor that Popper should credit any argument concerning the way theories are arrived at or discovered.) Rhetorically then, how might a theorist come upon the individualist's position, i.e., the view that persons are autonomous, intentional agents? If he does this through reflecting on his own experience as an intending agent, such 'intuitions' as result, Popper makes clear, could only serve to form hypotheses which must then be subject to objective empirical testing. If the position arises from constant, casual observation of other agents carrying through on their intentions, Popper's claim that all observations are theory-laden would perhaps indicate that a position such as this arrived at through empirical observation should itself at least tentatively be considered an empirical hypothesis. Further, casual observation is no way to establish this or any empirical theory; theories are established not through verification but through attempted refutation. If the theorist arrives at the individualist position through a study of the language used to talk about persons, this would produce a situation as in the last example: language like observation is theory-laden, as Popper would be quick to point out to the linguistic analyst. Finally, if the position results from the theorist's faith in his background knowledge, it is empirical in virtue of Popper's view that the task of science is to critically examine what is in this way taken for granted.

In making individualism methodological, Popper is, in effect I suggest, giving 'individual' or 'person' an essentialistic definition, for this is what making an empirical hypothesis a priori occasions. Recalling his arguments for methodological nominalism, a position implicit in the falsifiability requirement, Popper should allow the term 'individual'

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67 Poverty of Historicism, p. 69.
68 Poverty of Historicism, p. 138.
69 Objective Knowledge, p. 80.
to be used freely in theorizing, without a necessary commitment to the autonomy position. To make this point clearer, consider it in relation to Popper's claim that Einstein was able to advance science greatly by finding, in considering the term 'simultaneity', "that the elimination of a theoretical assumption, unnoticed so far because of its intuitive self-evidence, was able to remove a difficulty which had arisen in science. Accordingly, he was not really concerned with a question of the meaning of a term, but rather with the truth of a theory". 70 If the definition of simultaneity rejected by Einstein had been recognized as having the status of a methodological principle of natural science, Newtonian mechanics would still have a position of preeminence. Popper's making individualism a methodological principle is, I believe, a social-science parallel of such a case: should not the autonomy position be seen as a theoretical assumption implicit in our use of the term 'individual' and liable, should a difficulty arise in social science, to be rejected on empirical grounds? The intuitive self-evidence of the view that persons are intentional agents should not, consistent with the demands of falsifiability, make it more sacrosanct than the one-time, intuitively self-evident geo-centric view of the earth. Both views should be seen as empirical hypotheses, subject to empirical criticism, and liable to fall by the wayside in the growth of our knowledge.

But to make this argument stick, it is necessary to show in a less informal way that the view of persons as intentional agents should count for Popper as an empirical hypothesis, as being open to empirical testing and possible refutation. I believe this can be done in the following manner. Popper's individualism, what I have labelled the autonomy position, can be shown to be empirically refutable or falsifiable if it can be demonstrated that there is an empirical hypothesis with which it is inconsistent. If there is such an hypothesis, there must be at least one crucial empirical test that could decide between the two. In that case the autonomy position would be potentially refutable or falsifiable, and so would be itself an empirical hypothesis. We might refer to the hypothesis being sought as a 'puppet hypothesis' to point to the contrast with the notion of autonomy, since the hypothesis would be expressly designed to be inconsistent with the autonomy position. There are, I think, two main classes of puppet hypotheses, and each of these classes has innumerable members, any one of which would be an example sufficient to show Popper's individualism to be an empirical hypothesis.

1) There are hypotheses which postulate social wholes. Consistent with the requirements sketched earlier, these social wholes must take P-predicates in order that the hypothesis be inconsistent with individualism, and they must be drawn on a small enough scale so as to avoid the falsifiability-based objections to historicism. That such hypotheses could be testable is, I believe, borne out by the prognosis given by Wisdom.
for the state of depression he ascribes to Great Britain. 71

2) There are hypotheses which reduce social phenomena below the level of the individual, so to speak, by connecting the phenomena directly with the natural world. An hypothesis could be imagined which, e.g., correlated types of social structure present in different societies with temporal variations in solar radiation due to sunspot activity, or with local variations in types of nutrients consumed. I have in mind hypotheses which would establish a direct connection between the natural and the social variables, not those which would establish the sort of indirect connection that could be easily sanctioned by Popper. Popper would admit that the natural variable would influence the social variable either by being a factor taken into account by agents in their intentional actions and deliberations, or by being a factor which played a role in determining the nature of actions' unintended consequences. But hypotheses of the sort under consideration would short-circuit the alleged need for an indirect connection by denying the possibility, central for Agassi's interpretation of Popper, of intentional or rational institutional reform: the phenomenon which is given that description would be explained in an entirely different manner. Such an hypothesis would in principle be testable given sufficient historical data. Popper could not object that such hypotheses would be illegitimate on the grounds that, in including the natural world in the way they do, they are outside the proper sphere of social science, for he does not recognize as binding conventional discipline boundaries: "We are not students of some subject matter but students of problems". 72

There is good reason then to think that at least some hypotheses in these two classes are in principle empirically testable. But would they in fact be inconsistent with the autonomy position? It is, I think, clear that they would be from the following consideration. If any of these hypotheses were to be advanced in explanation of some social phenomenon, no reference to the intentions or aims of individuals, actual or typical, need be made. This applies both at the level of the explanation of the phenomenon and at the higher level of generality at which the hypothesis in question is itself explained. In the case of hypotheses of the first class, if there is reference to aims, it is to the aims of social wholes. In examples of the second class, the universe is devoid of intentions, no reference is made to aims at all. In the picture of the world drawn by these hypotheses, persons become merely the means through which intending social wholes or intentionless natural states have their effect in social phenomena. Individualism is primarily a mode of explanation of


72 Conjectures and Refutations, p. 67, originally italicized.
social phenomena, viz. situational analysis; these hypotheses, offering as sufficient a radically alternative mode of explanation, cannot be regarded as consistent with individualism.

There is little doubt that Popper would regard these hypotheses as inconsistent with individualism. It is clear, e.g., that the second class of hypotheses betoken what he refers to as a physically complete or closed system in which mental states have no effect, in which "the whole world with everything in it is a huge automaton, and ... we are nothing but little cog-wheels, or at best sub-automata, within it". My case then is made. At least some of the hypotheses in these two classes are inconsistent with individualism and in principle empirically testable, so individualism itself is an empirical hypothesis. As a result there is a confusion or inconsistency in Popper's granting this empirical hypothesis methodological status alongside the principle of falsifiability, for the latter principle requires that no empirical hypothesis be exempt from empirical refutation.

For the sake of consistency then either individualism or falsifiability must be eschewed as a methodological principle of the social sciences. It is a hard choice. We saw at the end of the last section strong reason to maintain individualism at all costs within our methodology. This is because scientific theorizing is an activity of man; so it must be understood anthropocentrically, in the sense of it being seen as a manifestation of individuals pursuing their autonomous ends. The end pursued in natural-science activity is the acquisition of knowledge, the satisfaction of curiosity: this is why falsifiability is the primary methodological principle, for knowledge is acquired only through its application. But social science is a special case; for it is in some sense a study of man, and the danger is that it can become a study of man in an impermissible sense, e.g., in the sense indicated by Popper under the rubric 'historicism'. Popper suggests the metaphor: the historicist approach to social science "may be compared to a searchlight which we direct upon ourselves. It makes it difficult if not impossible to see anything of our surroundings, and it paralyses our actions. To translate this metaphor, the historicist does not recognize that it is we who select and order the facts of history, but he believes that 'history itself' or the 'history of mankind', determines, by its inherent laws, ourselves, our problems, our future, and even our point of view". An historicist study of man assumes that man's ends or destiny is within its purview. But such a study is logically illegitimate, for as we have seen in our consideration of the 'choice' model of action, action and aim generally arise together in a choice.

73 Objective Knowledge, pp. 218-19, 222.
74 Open Society, II, p. 269.
75 Poverty of Historicism, p. 64.
There is a necessary connection between them: an action must be intentional, and a wish only becomes an aim when it is acted on. A scientific determination of human destiny such as sought by the historicist, which would presumably comprehend a multitude of particular aims, would demonstrate the impossibility of scientific activity, or of any human activity, by denying the connection between action and aim. The only permissible determination of ends is that undertaken through a situational analysis which, in being a 'choice' model, recognizes the connections between particular actions and their aims; e.g., it is generally ex post facto and applies to single actions or a tightly circumscribed class of actions (using the device of a 'typical individual').

This is why the confusion is inherent in Popper's position. Science is thought to be characterized by the unbridled pursuit of knowledge, which is why the principle of falsifiability is imported from natural science into social science under the banner of unity of method. The prescription that knowledge be pursued relentlessly raises no difficulty in natural science, but it does raise difficulties in social science, not just of the practical kind discussed earlier, but of a theoretical kind as well. In social science a distinction is required between proper and improper objects of study. The proper object of study is human action and ends as chosen, i.e., such as to require application of situational analysis. The improper object of study is human action and ends as non-chosen, i.e., as a mere manifestation of natural forces (as in a physically closed system) or of social forces (as in a holism positing group interests and aims). The principle of falsifiability by itself is indiscriminate between these kinds of object, because both kinds are amenable to formulation in empirical hypotheses.

Individualism is central to social science method. Must the principle of falsifiability then be abandoned in order to resolve the inconsistency? It must I think, but only in an unqualified form. We should admit into social science method a principle of falsifiability, but only as qualified to allow individualism as an exception to its rule. Consequently, the claim of unity of method, being founded on the common application of the unqualified falsifiability principle, must be rejected. The necessary qualification on the principle is shown in the following formulation of individualism: although all particular situational analyses are falsifiable, situational analysis as a type of analysis is not regarded as falsifiable. On the unqualified principle the analysis type would be falsifiable, because the empirical character of the puppet hypotheses indicates the existence of possible explanations of social phenomena exhibiting alternative modes of analysis. Jarvie,76 following Popper,77 would hold that the fact that

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76 Concepts and Society, p. 5.
77 Poverty of Historicism, p. 131.
situational analyses have a hypothetical-deductive structure and so are all falsifiable demonstrates unity of method. But this fact is not sufficient to show unity of method. For a thorough-going unity of method would not allow these alternative modes of analysis, along with the empirical hypotheses which require them, to be a priori excluded from consideration. So the inconsistency in Popper's social science is resolved by retaining methodological individualism while denying unity of method. In social science method, the falsifiability principle must be applied only in a qualified form.

Another way to express the peculiarity of social science method is to say that social science necessarily has an essentialistic base. Methodological essentialism is the position that we can arrive at final explanations, but this amounts to the view that an empirical hypothesis can be treated as unfalsifiable. This is precisely the way individualism is treated when it is made a methodological principle and permitted as exceptional under a qualified falsifiability principle. The autonomy position constitutes an essentialistic definition for 'person' or 'individual', because any theory which would give these terms a different definition, such as a cybernetic theory defining a person as an automaton, is not allowed to contend. In this way, Popper can be said to have a concept of a person, when the requirement of unrestricted falsifiability would be that he have only testable theories concerning persons. Social science must have this essentialistic, conceptual foundation because science is a human activity.
Appendix: On the Relationship between the Individualism Principle and Social Science Hypotheses

Much sympathy for holism may be generated by the prima facie irrelevance of situational analysis for representative social science hypotheses. How can a model used to explain a particular action be central to a discipline where the hypotheses frequently make no reference to particular individuals, nor even to individuals at all? Even the examples of social science hypotheses mentioned by Popper make no such reference. I would like briefly to indicate the relevance individualism does have for the explanation of mass social phenomena.

It is important in considering this problem to note distinctions that hold among the various social sciences. History, e.g., clearly requires frequent use of situational analysis as a direct tool for explanation, but of course the precise frequency of such use would depend, e.g., on the extent to which the historian adopted some version of 'the great man' point of view. History of science, which would be a primary interest of Popper's, could make direct use of situational analysis even more frequently than general history would. But sociology, having as its primary concern the explanation of mass social phenomena, cannot make direct use of situational analysis: the result would be the position Popper condemns under the label 'the conspiracy theory of society'. One reason why sociology cannot make direct use of the situational model is its primary concern with unintended rather than intended consequences. But this cannot be the principal reason, for a particular unintended consequence presumably could be explained by a situational analysis of the action that caused it. The principal reason the situational model is not directly applicable is that mass social phenomena comprehend not one particular consequence but a multiple of consequences.

Popper suggests the social science hypothesis, "You cannot have full employment without inflation". This could be used to explain, e.g., the social phenomena of inflation in a situation in which the government had effected a policy of full employment. But a particular episode of inflation clearly comprehends a large number of unintended consequences; we must say the phenomenon is a generalization over these consequences. But such mass social phenomena as inflation, or such as

78 e.g., Poverty of Historicism, pp. 62-63; Conjectures and Refutations, p. 339.
79 Open Society, II, pp. 95-96.
80 Conjectures and Refutations, p. 124.
81 Poverty of Historicism, p. 62.
competition or division of labour, must according to our methodology be understood individualistically. How is this to be done, i.e., how are the many consequences involved to be explained under a model which appears to be such as to explain them only singly? Jarvie asserts that "the individual in an explanation is always anonymous and typified". This I believe gives the answer. The individualistic explanation of, say, inflation is found in constructing a situational model which typifies over individuals and their aims and beliefs perhaps in the following manner. A typical employer believing the labour supply to be short due to the government's employment policy and aiming to keep his plant fully staffed, tends to raise the price of his product in order to meet the higher wage demands of his workers who are otherwise threatening to work elsewhere, and who under the condition of a short labour supply would be difficult to replace. Inflation would be the unintended consequence of this 'typical action'. It is possible to give a typified situational analysis because this mode of analysis, being animated by the rationality principle, does not depend on individual idiosyncracies as a psychologic analysis would tend to do. Of course such typified analyses require the assumption of approximate confluence among beliefs and aims among a number of individuals. But this is not an unreasonable assumption, since important beliefs and aims are frequently shared within a culture.

These results might be expressed in the following formula: a choice model of action (a situational analysis), plus the fact of imperfect knowledge (indicating the existence of unintended consequences), plus frequent, approximate confluence of aims and beliefs among individuals, equals the basis for hypotheses regarding mass social phenomena. If situational analysis is a basis for social science hypotheses, then it explains them, i.e., it stands at a higher, more general level of explanation in relation to the phenomena than do the hypotheses themselves. This is the conclusion reached by K.J. Scott. He notices that the social science hypotheses Popper suggests do not mention individuals, and concludes that individualism plays its role in the explanation of the hypotheses. Interestingly, he believes this provides a resolution of the inconsistency I have been concerned with between the principles of testability and individualism. "The solution of the puzzle is that in a law all that matters is testability, but an explanation must comply with the principle of methodological individualism. Laws do not need to comply with this principle". But this is a suspicious distinction, for of course

82 Poverty of Historicism, p. 82n.
83 Concepts and Society, pp. xii-xiii.
laws serve an explanatory role as well. Popper claims that "the world of each of our theories may be explained, in its turn, by further worlds which are described by further theories— theories of a higher level of abstraction, of universality, and of testability". If falsifiability is not applied at all levels of explanation, the result is essentialism, the doctrine that there are ultimate explanations. Scott is right to point out that testability does not apply at the explanatory level at which individualism operates, but far from showing the compatibility of individualism and falsifiability, this demonstrates their inconsistency, if falsifiability is taken in an unqualified sense.

Thus the role played by individualism in the explanation of mass social phenomena is an indirect one. It serves to explain the lower-level hypotheses, and all such hypotheses must necessarily be explicable by it because it is a methodological principle. All lower-level hypotheses must be such that a typified situational analysis can be constructed to account for them, as the example above was designed to account for Popper's inflation hypothesis. Or, as this point was expressed in section two, all hypotheses must be such that distributive reduction can be effected to particular actions and their consequences. So individualism sets limits on the type of lower-level hypothesis which may be conjectured, and its importance for sociology and the explanation of mass social phenomena is in the extent of these limits. What is their extent. As indicated above, apparently any hypothesis is permissible which does not attribute aims and interests, or more generally P-predicates, to a social whole. But as I suggested, there is an argument badly needed at this point to show that all and only hypotheses attributing a non-P-predicate to a social whole can be accounted for by the construction of a typified situational analysis.

85 Conjectures and Refutations, p. 115.