

László Csontos

MAX WEBER ON THE METHODOLOGICAL FOUNDATIONS OF ECONOMIC THEORY¹

In the present essay I want to provide an explication or rational reconstruction of Max Weber's early views on the methodological foundations of economic theory. As a by-product of the analysis, I hope to be able to show that there is a continuity between Weber's not yet fully formed ideas about the scope and method of economics and his more mature methodological position. My aim is almost purely analytical: I am not going to discuss in detail the historical and intellectual context in which Weber first formulated his methodological creed, and I do not intend to reconstruct or deconstruct the common themes underlying the era's methodological debates (including the different stages of the famous Methodenstreit).

By presenting a rational reconstruction of Weber's ideas, I want to demonstrate that a better understanding of his methodological groundwork of the social sciences. Although the technique of rational reconstruction cannot (and does not) offer a unique and preclusive interpretation of the ideas to be explicated, it may contribute to creating the conditions for a rational discussion of alternative point of views.

As a starting point for the rational reconstruction to be offered here, I have chosen a relatively early writing of Weber which was first published under the title 'Die Grenznutzenlehre und das psychophysische Grundgesetz' in 1908, in the famous *Archiv für Sozialwissenschaft und Sozialpolitik*.² The article was a review essay of Lujo Brentano's *Die Entwicklung der Wertlehre*³, which in turn, was a relatively brief and compact overview of the history of value theory on the one hand, and an exposition of Brentano's own methodological position, on the other. Although this is not the place to go into details, I want to mention that Brentano belonged to a methodological school (the so-called "historische Schule der Nationalökonomie") the proponents of which argued - as historicists and methodological monists always did - for the basic unity of the social and natural sciences. As a result, they also believed that the main cognitive function of the social sciences was to discover universal laws on the basis of empirical studies of society, the economy, and history.⁴

Psychological reductionism

Weber's essay can roughly be divided into two parts. The first part is a devastating criticism of the research program which later came to be known as 'psychologism' or 'psychological reductionism'.⁵ According to the basic tenet of this program, empirical regularities and explanatory principles in the social sciences, including economics, are ultimately based on and must always be reduced to laws of psychology. In what follows, I am going to summarize only briefly what Weber had to say on this methodological curiosity of his and our time. The second part consists of a very concise statement, written in his usual, to say the least, highly involuted style, of Weber's own views on the methodological foundation of 'pure' economic theory in general, and of marginal utility theory in particular.

Formulating his objections against psychologism, advocated by, inter alia, Lujo Brentano and his followers in contemporary Germany, Weber makes the following strictures:

(i) The context of the discovery of a scientific theory or of an empirical regularity must not be confused with the context of its justification or application. The common roots of two theories in the history of ideas are not sufficient to establish a logical connection between them. In his own words:

[T]he question of how far particular, related concepts have enriched two generally different sciences in the course of their formative development is a purely textual and historical one. ... Thus, Darwin was influenced by Malthus, but the Malthusian theory is not the same as Darwin's, nor is either theory a special case of the other, nor are both theories special cases of a yet more general law. The situation is similar in what confronts us now.⁶

(ii) The economic interpretation of the so-called Weber-Fechner law is far-fetched, and rests on accidental, arbitrary and extremely vague analogies. Or, as Weber put it in the following characteristic stricture

... once we reflect about the progression of 'satisfaction' of which Tiffany vases, toilet paper, sausage, editions of classical writers or the services of prostitutes, doctors or priests, then the logarithmic curve of the 'fundamental law of psychophysics', as an analogy, appears to be exceedingly problematic. And if someone shows his 'need' - even, for instance, at the cost of sacrificing food - to satisfy his 'psychic requirements' for buying books and expending money for education while his hunger remains unappeased, this does not in any case become more 'understandable' than it would otherwise be by a psychological 'analogy'.⁷

Considering the nature of the subject matter (the 'raw material') of psychological and economic analysis on the one hand, and the nature of the cognitive goals pursued by psychologists and economists on the other, we find, argues Weber, an unbridgeable methodological gap between the psychological and economic approaches to human behavior.

It is not only that ... the most general hypotheses and assumptions of the 'natural sciences' are the most irrelevant ones for our discipline. But further, and above all, precisely as regards the point which is decisive for the peculiar quality of the questions proper to our discipline: In economic theory ('value theory') we stand entirely on our own feet. The 'everyday experience' from which our theory takes its departure... is of course the common point of departure of all particular empirical disciplines. Each of them aspires beyond everyday experience and must so aspire, for thereon rests its right to existence as a 'science'. But each of them in its aspiration 'goes beyond' or 'sublimates' everyday experience in a different way and different direction. Marginal utility theory and economic 'theory' generally do this not, say, in the manner and with the orientation of psychology but rather pretty much in opposite ways.⁸

Because the last point is intimately related to Weber's views on the epistemological and methodological underpinnings of economic theory, I want to pause here and make some comments.⁹

Methodological monism vs methodological dualism

When attacking the psychologism of his time, Weber actually was fighting a battle on two fronts. Although the primary target of his criticism was psychological reductionism - that is, the idea that the explanatory principles of economic theory can somehow be deduced from psychology - he simultaneously kept under fire another basic assumption underlying the reductionist program, namely the idea of methodological monism.

The ultimate aspiration of methodological monists (of 'ancients' and 'moderns' alike has always been to define 'proper' standards of inquiry for the social sciences. The basic tenets of methodological monism are the following:(1) On an ontological level, methodological monists emphasize the essential similarity of the subject matter for the social and natural sciences.

(2) They firmly believe, moreover, that the final goal of all forms of scientific inquiry should be a deductive-nomological explanation of events and/or empirical regularities. In deductive-nomological explanations we derive the statements describing the event or regularity to be explained from universal laws or law-like statements, plus singular propositions capturing initial conditions.(3) They also hold the view, finally, that there is a fundamental unity of method underlying every kind of scientific analysis. More specifically, they believe that in order for them to be 'really ' scientific, the social sciences should become methodological clones or look-alikes of the natural sciences. It goes almost without saying that Weber rejected the extreme claims of methodological monism. In this sense, but only, in this limited sense, he may be regarded as a methodological dualist. Methodological dualists tend to argue for the methodological autonomy of the social sciences and advocate explanatory arguments different from the deductive-nomological paradigm. Because Weber's views on the methodological foundations of economic theory are intimately related to his dualist stance, I want to examine very carefully his arguments against basic tenets of methodological monism.¹⁰

Understanding human action

Whereas the natural sciences, a behavioristically conceived psychology included, deal with brute facts, the subject matter of the social sciences proper, argues Weber, is human action. Human action, however, whether individual or collective, cannot be taken as a *factum brutum*, because it is not something given to us *ex ante*. That is, it is not something given before or without analysis. On the contrary: human action is something that must be interpreted or properly understood before we go about explaining it.

Let me illustrate the scope and import of this distinction with a hypothetical example. Suppose we observe the conduct of a certain person for a couple of days. Suppose further that the observed person 'does' - seemingly - absolutely nothing, or at least nothing 'interesting', except for the 'fact' that he/she takes no nourishment at all. Suppose also, just for the sake of argument, that we record what we see with a camcorder. Assume now that for some obscure reason we want to know: 'What was going on here, under our very eyes, during these days?'

Assuming that we still care, the whole issue of understanding human action boils down to finding out how we can get a satisfactory answer to this unpretentious question. Of course, we can play our video tapes over and over again, but what we are going to see will be only a

sequence of bodily movements and/or a succession of changes in bodily states. Thus, by watching our tapes, we can get at most a severe case of eye strain, and not a satisfactory answer to our original question.

To put it differently: if we want to describe what we saw in purely physical terms, that is, as a progression of movements and bodily states, what eludes our description is precisely the interpretation - one is tempted to say: the understanding - of the motivational background of what was going on under our staring and bulging eyes. So we have to face the puzzling question: how can we interpret what we saw.

When trying to find a solution to this problem, we can take, in principle, one of the following two routes. First, we could say that what was going on could be completely and adequately described as a particular sequence of responses to a particular sequence of stimuli. That is, we could say that what we saw would completely and perfectly fit into the familiar pattern of a stimulus-response explanation. But a methodological caveat is in order here. If we choose this interpretation, we are assuming - and sometimes we may have every right to do so - that in the situation under discussion we were dealing with human behavior, and not with human action. Returning to our poor starving man/woman, the answer to the 'What was going on?' question might run something like this: Because the observed person had been exposed to certain stimuli (traumatic experiences in early childhood, frustrations in his social, professional or sexual life, etc.), he/she reacted by developing what psychologists could call an especially severe form of 'nutritive negativism'.

Second, we might regard the observed person as a human agent, capable of intentional action, and say that he/she was acting purposefully or intentionally. Suppose that we have good reasons to make this assumption.

Now the initial 'What was going on there?' question, because we know, by assumption, that what we saw was action and not simply behavior, must be replaced, as a first attempt at a deeper understanding, by a 'What did he/she do?' type of question.

Notice, however, that in the great majority of cases we cannot give a straightforward and quick answer even to a simple action-question like this one. The reason is that to answer a 'What did he/she do?' type of question is equivalent to identifying or specifying a certain kind of human conduct as a particular type of action; in other words, it is equivalent to subsuming it under a particular intentionalistic description. In principle, however, and also quite often in practice, we are likely to find an embarrassing richness of possibilities here. It may turn out, for example, that the same - that is, in terms of its physical or bodily manifestations the same - human conduct can be identified as representing different types of action, depending on what kind of intentions (do) we (have the right to) ascribe to the agent(s) in question.

Let's visit our poor starving man/woman again, and let's take a closer look at the 'What could he/she have done?' - question. We have to consider several distinct alternatives.

(1) He/she could have been an obstinate weight-watcher, who chose the most radical diet possible, i.e., he/she decided not to eat at all for a couple of days.

(2) He/she could have been a deeply religious person, who, observing a rite of his/her religion, decided to fast.

(3) There is also the possibility, that he/she was engaged in a hunger-strike.¹¹

The upshot of this argument is this. The 'facts' of the social sciences are not brute facts but rather 'artifacts', in the sense that in the process of a pre-explanatory interpretation we make them. We have to make hard choices, however, when we embark upon constructing the raw material for our explanations.

First, on the basis of the available evidence, we have to decide: do the observations and data we have fit into the stimulus-response, pattern, or do they need an intentionalistic interpretation? Second, if the answer to the latter question is affirmative, we have to cope with the further problem of choosing, on the basis of further evidence and rational arguments, the empirically adequate intentionalistic description from among the possible alternative descriptions that may seem equally compatible with the original data and observations.

Now, after this 'hermeneutic' excursion¹² it is high time to return to Weber's views on the methodological foundations of economic theory.

Economists, argues Weber, differ from the adherents of methodological monism and psychological reductionism in several respects. First, they take it for granted that people, in general, act purposefully or intentionally. In his view,

In the economic theory of marginal utility and in every 'subjective' value theory ... there is, to begin with, not an external 'stimulus' but a 'need'. This is of course the reverse of the situation we have in the case of the fundamental law of psychophysics. Accordingly, if we wish to express ourselves in 'psychological' terms, we deal with a complex of 'sensations', 'feeling-states', states of 'tension', 'discomfort', 'expectation', and the like, which may at any time be of the most various kinds. Also, while the fundamental law of psychophysics instructs us about how an external stimulus evokes psychic conditions ..., economics, rather, is concerned with the fact that in virtue of such 'psychic' conditions a specifically oriented external behavior (action) is evoked.¹³

The assumption of intentionality, Weber could have said, is a theoretically more fruitful hypothesis than - aping the natural sciences - to conceive of human actors as puppets on the strings of obscure psychological stimuli or of mysterious 'social forces'. It also has something to do with the methodological autonomy of the social sciences in general, and of economics, in particular.

It is not only that, at least by and large, the most general hypotheses and assumptions of the 'natural sciences' (in the usual sense of this term) are the most irrelevant ones for our discipline. But further, and above all, precisely as regards the point which is decisive for the peculiar quality of the questions proper to our discipline: In economic theory ('value theory') we stand entirely on our own feet.¹⁴

Secondly, economists not only assume that people in general are capable of intentional action, but they add to this the further assumption that people - at least in economic matters or, more generally, in matters relating to their own interests - do act calculatively, that is in this sense rationally. In Weber's words:

Marginal utility theory, in order to attain specific objects of knowledge, treats human action as if it ran its course from beginning to end under the control of commercial calculation - a

calculation set up on the basis of all conditions that need to be considered. It treats individual 'needs' and the goods available (or to be produced or to be exchanged) for their satisfaction as mathematically calculable 'sums' and 'amounts' in a continuous process of bookkeeping. It treats man as an agent who constantly carries on 'economic enterprise', and it treats his life as the object of his 'enterprise' controlled according to calculation. The outlook involved in commercial bookkeeping is, if anything, the starting point of the constructions of marginal utility theory.¹⁵

In the next section I will examine some of the far-reaching methodological and theoretical consequences of these assumptions.

Ideal types and intentional explanation

If individual people, in the light of everyday experience, really do act intentionally and calculatively, then in the great majority of economically relevant cases, we can regard their actions as means to achieve a desired goal or end.

Marginal utility theory and, more broadly, any subjective theory of value are not psychologically, but - if a methodological term is desired - 'pragmatically' founded, that is, on the use of the categories 'ends' and 'means'.¹⁶

This is equivalent to saying that we can frequently explain individual actions and collective outcomes by referring to the particular goals or ends people are seeking to achieve. We can call explanations couched in terms of means and goals intentional explanations of individual actions and teleological-functional explanations of collective outcomes.

In Weber's view, however, there is a methodological gap between these two explanatory patterns. In this and the following sections, I will clarify the nature of this gap by offering a rational reconstruction of the explanatory arguments in question.

I attempt to elucidate the logical structure of teleological explanations of individual human action with the help of a simple example.¹⁷ Suppose we observed the conduct of a certain individual, B, and we found, after intentionalistically interpreting his/her action, that he/she did x, where x denotes a particular action-type or action. In other words, we suppose that we have succeeded in giving an empirically sound answer to a 'What did B do?' type of question, and the answer, astonishingly enough, turned out to be: 'did x'.

Now suppose that, as good and curious scholars, we do not stop here, but go a step further, and decide to find out: 'Why did B do x?'. How can we answer, or, for that matter, how do economists answer this variety of 'Why?'-questions? Of course, by constructing ideal types of human action, Weber would reply.

[T]he tenets which constitute specifically economic theory do not represent... "the whole" of our science. These tenets afford but a single means (often, to be sure, an underestimated means) for the analysis of the casual connections of empirical reality. As soon as we take hold of this reality itself, in its culturally significant components, and seek to explain it casually, economic history is immediately revealed as a sum of "ideal-typical" concepts. This means

that its theorems represent a series of conceptually constructed events which, in 'ideal purity', are seldom, or even not at all, to be found in the historical reality of any particular time.¹⁸

But what does the term 'ideal type' mean in this context? Suppose we know right from the outset that B has wanted and managed to achieve or realize y, where y stands for some desired end. For simplicity's sake, let's make the further assumption that the only means to be taken into account - if a means is to be taken into account at all - or the only means B had considered - if he/she had considered any means at all - was nothing else but the action x.

Could we then put forward the following argument?

(1) B wanted to achieve y.

(2) The only means to achieve y was action x.

Therefore

(3) B did x.

Clearly, we cannot always explain B's action this way. First, B may not have known that x was a means to achieve y, in which case he/she did x perhaps for some other reason, and obtained y only as a fluke. Second, B may have acted on a wrong reason, that is, he/she may have believed, mistakenly, that x was the only means to achieve y, whereas in fact x was not an effective means to this end at all.

We can take care of these possibilities, Weber came to argue later, in either of the following two ways. The first option is to show - by factoring in the agent's epistemic situation - that B, given his/her beliefs about the relevant means-ends relationships, acted in a subjectively rational way. The second route is to examine what B should or could have done, had he/she acted in accordance with the objective logic of the situation, that is in an objectively rational fashion.¹⁹

It is easy to see that construction of what Weber calls subjectively rational ideal types produces straightforward intentional or teleological explanations of individual action. Objectively rational ideal types, however, as explanatory frameworks have only, as Weber points out, instrumental and heuristic value.

[T]hese theorems - since in fact their elements are derived from experience and intensified to the point of pure rationality only in a process of thought - are useful both as heuristic instrumentalities of analysis and as constructive means for the representation of the empirical manifold.²⁰

Thus the logical structure of a subjectively rational ideal type is the same as that of an intentional explanation. In the simplest possible case the explanatory argument runs as follows.

(1) B wanted to achieve y.

(2) B thought (believed) that he/she can achieve y best by doing x.

Therefore

(3) B did x.

When we construe empirically adequate ideal types of this kind, then, according to Weber, we arrive at a motivational, as distinct from actual, understanding of human action. 'Actual' understanding is equivalent to selecting the 'right', i.e., empirically adequate, intentionalistic description.²¹ Motivational understanding, argues Weber, rests on our nomological knowledge. Nomological knowledge is information about rules defining actions and action-types and governing means-ends relationships in a given culture or society. To have the required type and amount of nomological knowledge at our disposal is the same as to know - either by acquaintance or by description - the rules of experience that in the eyes of people living in a particular society or culture assign given means to given ends.

In the case of objectively rational ideal types the reasoning is hypothetical, and, in the instrumental or technical sense of the word, normative. Taking as our paradigm the simplest possible situation, again, we have the following 'constrained maximization' type argument.

(1) Suppose B wanted to achieve y.

(2) In the light of the available evidence, and under the existing constraints, B could have achieved y, only if he/she had done x.

Therefore

(3) B should have done x.

It requires only a modicum of methodological imagination to recognize in the foregoing primitive models the germ or analytical core of marginal utility or, for that matter, modern microeconomic theory. In fact, argued Weber²², economic analysis is founded not on some allegedly fundamental psychological laws, but on the use of the categories 'ends' and 'means', that is, as I have shown, on the use of more or less sophisticated 'praxeological' ideal types.

Ideal types and functional explanation

Weber, of course, was fully aware of the fact that the entanglement of individual intentions and the interdependence of individual decisions and actions often produce unintended and unexpected collective outcomes.

The theoretical 'values' with which marginal utility theory works should in principle make understandable to us the circumstances of economic life, in a manner like that in which commercial book values render information to the businessman about the state of his enterprise and the conditions for its continued profitability. And the general theorems which economic theory sets up are simply constructions that state what consequences the action of the individual man in its intertwining with the action of all others would have to produce, on the assumption that everyone were to shape his conduct toward his environment exclusively according to the principles of commercial bookkeeping - and, in this sense, 'rationally'. As we all know, the assumption does not hold - and the empirical course of those proceedings for the

understanding which the theory was formulated accordingly shows only an 'approximation' ... to the theoretically constructed course of strictly rational collective action.²³

Although the economic explanation of these outcomes is often teleological in nature, the logical structure of such explanations, argued Weber, is fundamentally different from the logical structure of intentional explanations of individual action.

In the case of social collectivities ... we are in a position to go beyond merely demonstrating functional relationships and uniformities. We can accomplish something which is never attainable in the natural sciences, namely the subjective understanding of the action of component individuals... This additional achievement of explanation by interpretive understanding, as distinguished from external observation, is of course attained only at a price - the more hypothetical and fragmentary character of its results.²⁴

Although both intentional explanations of individual actions and teleological explanations of collective outcomes may involve the idea of an 'optimum', the methodological and logical status of the concept of an optimum, Weber would have argued, is not the same in the two cases.

An 'individual' optimum, as the prior analysis of the 'constrained optimization'-like explanatory argument suggests, is nothing but the best action chosen, given the preferences and the goals of the actor, and given the external constraints. When it comes to the explanation of collective outcomes, however, 'there is involved in the concept of the optimum', argues Weber, 'teleological "function value." Optimum', one says - optimum for what?²⁵

Weber then adds the following, rather cryptic, comments:

It is easy to see that this comes up especially where we operate explicitly or by implication with the category of 'purpose' ... This occurs as we conceive a given manifold as a unity, relate this unity to a determinate outcome, and then evaluate the unity with respect to this concrete outcome as 'means' for the attainment of the outcome. We herewith consider the outcome in terms of whether it is attained, not attained, incompletely attained, and attained through the use of few or many means.²⁶

I will illustrate what I think to be the general thrust of this argument with an example from Weber's later work. This example may also serve to showcase a methodologically legitimate and theoretically productive use of the notions of 'system' and 'equilibrium' in institutional analysis.

It is a very well known fact that Weber was tremendously impressed by the efficiency, technological superiority, and 'optimal functioning' of the large administrative and business organizations prevalent in modern industrial societies. (For later use, let me denote by S this type of organizational systems.) He also noticed that the organizational proficiency under discussion was intimately related to the fact that predictable rules had replaced the personal caprice of decision makers, professional standards of performance had superseded ascriptive and personalistic evaluation of achievement, and rational criteria of selection, tenure and promotion had supplanted recruitment based on kinship ties or patron-client obligations. I will denote this set of preconditions by R.

Weber's crucial insight, however, was to relate the development of the organizational attributes in question to an ongoing process of bureaucratization. Bureaucratization, in its ideal-typical form, included, *inter alia* the assignment of fixed and rule-governed jurisdictional areas within the organization; the creation of an office hierarchy and of levels of graded authority; the ensuing development of an ordered system of super- and subordination; the use of written documents; office management based on expert training and relying on a more or less stable and more or less exhaustive system of rules.²⁷ Let's denote the bundle of characteristics epitomizing an ideal-typical bureaucracy by Q.

The abstract argument underlying Weber's theory of bureaucracy is couched in terms of functions, 'purposes' and preconditions, and its formal structure seems to be this.²⁸

Suppose we want to know 'How did S (large, modern business and administrative organizations) come to have Q (i.e., a bureaucratic structure)?' In other words, what is the function of the bureaucratic pattern of organization in administrative departments and business corporations? Depending on the nature of the original query, we can put forward a factual or a hypothetical argument to answer these questions.

(1) We assume (or we may have found) that S (the organizational system under discussion) functions properly, efficiently or 'optimally' in a particular 'environmental' setting.

(2) Suppose we have good theoretical reasons to assume (or we know on the basis of empirical evidence) that in the given environmental framework S works efficiently or optimally only if a certain set of preconditions, R, is present.

(3) Suppose further that we can assume (or we have sufficient evidence to believe) that R will be present if and only if S - over and above its defining characteristics - has a bundle of features Q, and the elements of Q, separately and collectively, are compatible with R.

(4) Consequently, if (1)-(3) are true factually or we can make a case for accepting them hypothetically, then we can conclude that S must necessarily be characterized by the bundle of features, Q.

To flesh out this abstract argument, we need only to identify the key variables in Weber's theory of bureaucracy. The puzzling question: 'How did S come to have Q?' (How did large, modern government agencies and business corporations come to be characterized by a bureaucratic pattern of organization?) is answered in this theoretical framework by referring to the function (beneficial effect) of Q, that is bureaucratization.

More specifically, Q (bureaucratization) is set into a broader context, and it turns out that it serves the following function: by being a necessary and sufficient condition for R (that is providing for the emergence of predictable rules, of professional standards of evaluating performance, and of rational criteria of selection, tenure and promotion within large organizations), which, in turn, is a necessary condition for an efficient functioning of S, Q - indirectly - proves to be indispensable for the 'optimal' functioning of S. Interestingly enough, it follows from this argument that from the perspective of technical-administrative efficiency - at least in Weber's view - there are no functional alternatives to the bureaucratization of large organizations.

I would suggest that this line of reasoning, even in its present crude form, is a fair representation of one of the two most widely used explanatory arguments in 'institutional' economics.²⁹ The emergence and evolution of particular economic institutions and of new collective behavioral patterns are often explained - from the German historical school of economics to neo-institutionalism and to transaction cost economics - in terms of the functions served by those institutions and behavioral regularities, while the functions themselves are evaluated in the light of their contribution to the optimal working of a broader economic, organizational or political system.

Conclusion

As I mentioned before, just as there are different readings of the same text, there can be different rational reconstructions of the same methodological doctrine. Although the technique of rational reconstructions does not guarantee that we hit upon the best or the most fruitful interpretation, a serious attempt at explicating a methodological or theoretical position can be regarded as successful, if it helps to remove the conceptual underbrush forestalling rational discussion. In conclusion, I just want to summarize and pin down what I believe to be the defining attributes of Weber's methodological stance, as they emerged from the above attempt to explicate his early views on the methodological foundations of economic analysis.

Economic analysis, in Weber's view, is founded on our capability to understand individual human conduct. By imputing intentions to persons, we interpret individual behavior as deliberate, subsume it under some specific action-type (utility maximization, cost minimization, etc.), and clear the ground for an intentional explanation of a particular instance of the action-type in question.

Intentional explanations of individual actions in economic theory, argues Weber, are grounded on ideal types. Ideal types, in turn, are theoretical constructs, fulfilling classificatory, heuristic, and explanatory functions.³⁰ The constrained maximization models of standard microeconomic theory, for instance, help us pigeonhole economic behavior into the categories of expected utility maximization, profit maximization, price discrimination, etc. Furthermore, if we want to explain a particular instance of any of these categories (the actions taken by the managers of a specific firm, for example), and it turns out that these actions deviated from the course of action 'prescribed' or predicted by our pet model, we are still going to have to use our ideal type as a benchmark, because without having that heuristic device at our disposal we will not be able to arrive at meaningful hypotheses about the possible causes of this clash between theory and reality.

The explanation of collective outcomes, holds Weber, also involves the use of theoretical constructs. If we are able to show that a given economic, organizational or political system functions optimally only if certain preconditions are met, and if we are able to demonstrate that the preconditions in question will be met if and only if a particular institution, set of rules or form of collective behavior is present, then - assuming that the system does work optimally - we can explain the presence or emergence of the institution, set of rules or behavioral pattern in terms of their beneficial functions.

The methodological feasibility of such functional explanations, however, maintains Weber, hinges on our ability to demonstrate that the institutions, rules or behavioral patterns to be

explained are the results or manifestations of the interplay of understandable individual human actions.³¹ Weber firmly believed that the methodological autonomy of the social sciences in general and that of economics in particular is rooted in the epistemic potential inherent in interpretation and understanding. Without our unique capacity to attribute meaning and intention, and without bringing individual men (and, of course, women) back into our analysis, we would never be able to make sense of the "sound and fury" of ordinary social and economic life.

Notes

1. I am thankful to two anonymous referees for their valuable comments and suggestions.
2. Weber's paper was republished later in the first and subsequent editions of his *Gesammelte Aufsätze zur Wissenschaftslehre*; see, for example, the 4th edition, Tübingen, 1973, 384-399. The first English translation of the essay appeared, under the title 'Marginal Utility Theory and "the Fundamental Law of Psychophysics"', in the *Social Science Quarterly*, 1975, 21-36, and was done by Louis Schneider. All the quotations are from, and all the page numbers refer to this translation.
3. See Brentano (1908).
4. It was an anonymous referee who drew my attention to this point.
5. There are many different kinds of reductionism. On the closely related ideas of 'Austrian' reductionism, as opposed to psychological reductionism, see Nozick 1977: 353-61.
6. Weber 1975: 25.
7. Weber 1975: 29. Emphasis in the original. See also 27-28, *passim*.
8. Weber 1975: 31. Emphasis in the original.
9. In what follows I rely heavily on Anscombe 1957; von Wright 1971; Davidson 1980; and von Wright 1983: 1-67.
10. On Weber's arguments against methodological monism and for an 'interpretive' social science, see Weber 1978: 1-32.
11. The ethical and political significance of the distinction I have tried to draw between a behavioristic and an intentionalistic interpretation of the same human conduct, can be best illustrated by the widespread practice, followed by imaginative Soviet and East European psychiatrists even in the early 80s, of diagnosing attempts at hunger-striking by dissidents as cases of acute 'nutritive negativism', and sending the 'patients' into mental institutions.
12. I hope it is not difficult to recognize that the above arguments in favor of intentionalistic understanding capture the rational core, if there is any, of the numbo jumbo that has gone by the fancy name 'hermeneutics' in the last three decades mainly in Germany. Hans Albert (1985), offers a devastating criticism of this hermeneutic tradition.

13. Weber 1975: 27-28. Emphasis in the original.
14. Weber 1975: 31. Emphasis added. By 'value theory' Weber meant what we call 'price theory' nowadays.
15. Weber 1975: 32. Emphasis in the original.
16. Weber 1975: 33. Emphasis added.
17. On what follows see also Langlois and Csontos 1993.
18. Weber 1975: 33-34. On the structure and functions of ideal types cf. further Weber 1978: 6, 9, 20; furthermore Weber 1949: 50-113; and see, in addition, also note 20 below.
19. Weber makes the distinction between subjectively rational and objectively rational ideal types (the latter he calls Richtigkeits-Typen) in 'Über einige Kategorien der verstehenden Soziologie' (1973: 433). This essay first appeared in 1913, in Logos, and represents Weber's first attempt at a positive and systematic exposition of his methodological views.
20. Weber 1975: 34.
21. On the distinction between actual and motivational understanding see Weber 1978: 8-13. 'Actual' understanding (aktuelles Verstehen) is rendered in the English translation, somewhat misleadingly, as 'direct observational' understanding.
22. Cf. Weber 1975: 33.
23. Weber 1975: 32-33. Emphasis in the original.
24. Weber 1978: 15.
25. Weber 1975: 35. The last sentence is in parentheses in the original.
26. Weber 1975: 35. Emphasis in the original. The last sentence is in parentheses in the original.
27. On Weber's theory of bureaucracy see 1978, vol. 1: 223-226.
28. What follows is a modified version of the standard account of holistic-functional explanations in the philosophy of science. On the standard account see Hempel 1970: 297-331; Stegmüller vol. 1: 555-585.
29. The other category includes, I would argue, different varieties of "invisible hand" explanations.
30. Cf. 'The more sharply and precisely the ideal type has been constructed, thus the more abstract and unrealistic in this sense it is, the better it is able to perform its functions in formulating terminology, classifications, and hypotheses.' Weber 1978, vol. 1: 21.

31. Cf. "Even a socialist economy would have to be understood sociologically in exactly the same kind of 'individualistic' terms; that is in terms of the action of individuals, the types of officials found in it, as it would be the case with a system of free exchange analysed in terms of the theory of marginal utility or a 'better', but in this respect similar theory. The real empirical sociological investigation begins with the question: What motives determine and lead individual members and participants in this socialistic community to behave in such a way that the community came into being in the first place and that it continues to exist? Any form of functional analysis which proceeds from the whole to the parts can accomplish only a preliminary preparation for this investigation - a preparation, the utility and indispensability of which, if properly carried out, is naturally beyond question." Emphasis added. Weber 1978: vol. 1: 18.

References

- Alber, Hans (1985), *Treatise on Critical Reason*, Princeton: N. J.: Princeton University Press.
- Anscombe, G. E. M. (1957), *Intention*, Ithaca, N. Y.: Cornell University Press.
- Barnstone, W. ed. (1982), *Borges at Eighty*, Bloomington: Indiana University Press.
- Brentano, Lujo (1908), *Die Entwicklung der Wertlehre*, München: Verlag der Akademie (Sitzungsberichte der Kgl. Bayr. Akad. Der Wissensch. Philos.-philol. und histor. Klasse. 3. Abh., 15. 2.).
- Carnap, R. (1963), *Logical Foundations of Probability*, Chicago: University of Chicago Press.
- Davidson, D. (1980), *Essays on Actions and Events*, New York: Clarendon Press
- Hempel, Carl G. (1952), *Fundamentals of Concept Formation in Empirical Science*, Chicago: University of Chicago Press.
- Langlois, R. N. and Csontos, L. (1993), 'Optimization, Rule Following, and the Methodology of Situational Analysis', in: Bo Gustaffson, Christian Knudsen, and Uskali Mäki (eds.) *Rationality, Institutions, and Economic Methodology*, London: Routledge, 113-144.
- Nozick, R. (1977), 'On Austrian Methodology', *Synthese*, 353-361.
- Stegmüller, W. (1969), *Probleme und Resultate der Wissenschaftstheorie*, Vol. 1. München-New York: Springer Verlag.
- von Wright, G. H. (1971), *Explanation and Understanding*, Ithaca, N. Y.: Cornell University Press.
- von Wright, G. H. (1983), *Practical Reason*, Oxford: Basil Blackwell.
- Weber, Max (1978), *Economy and Society*, (ed.) G. Roth and C. Wittich, Los Angeles-London: University of California Press, Vol. 1.

Weber, Max (1975), 'Marginal Utility Theory and "the Fundamental Law of Psychophysics"
Weber, Max 1978., *Social Science Quarterly*, trans. Louis Schneider, 21-36.

Weber, Max (1949), "'Objectivity" in Social Science and Social Policy', in: Weber, Max *The Methodology of the Social Sciences*, trans. and ed. E. Shils and H. Finch, Glencoe, Ill.: The Free Press of Glencoe, 50-113.

Weber, Max (1973) [1913] 'Über einige Kategorien der verstehenden Soziologie'; *Gesammelte Aufsätze zur Wissenschaftslehre*, 4th edn., J. C. B. Mohr, Tübingen.