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► **To cite this version:**

Francisco J. Bellido. The Interdisciplinary Research Programme of Methodological Individualism: Back to Its Foundations. 2024. hal-04446410v2

**HAL Id: hal-04446410**

**<https://hal.science/hal-04446410v2>**

Preprint submitted on 16 Oct 2024 (v2), last revised 12 Nov 2024 (v3)

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# **The Research Programme of Methodological Individualism: Back to Its Foundations**

## **Abstract**

According to methodological individualism any scientific explanation in the social sciences should have recourse to individual beliefs, wishes, intentions and actions. This article sets forth two practical reasons to endorse a clear-cut, classical version of methodological individualism as a research programme in the social sciences. The first one is that methodological individualism should lead to fundamental heuristic hypotheses. The second reason is that methodological individualism has the epistemological strength of producing statements open to logical refutation.

The present article questions highly sophisticated accounts of methodological individualism. It suggests instead four tenets to be a valid research programme in the social sciences underscoring an intuitive language to analyze social phenomena. By doing so, it reviews some distinctive features of methodological individualism: Max Weber's ideal types, Joseph Schumpeter's notion of given behaviour, Friedrich Hayek's concept of individual action and Jon Elster's account of explanatory mechanisms.

**Keywords:** Methodological individualism, research programme, social sciences, social phenomena, explanatory mechanisms.

## **Introduction**

In the second volume of the *Encyclopedia of Political Theory* methodological individualism is defined as the perspective according to which “social structures and entities are nothing but ensembles of individuals and their behaviors” (Little 2010, p. 880). That characterization is both an ontological definition and a methodological thesis. Other characterizations of methodological individualism also emphasize ontological propositions that are not informative about its methodological strengths (Cfr. MacDonald 1985, p. 199). But what is methodological individualism about? Do we mean a methodology to raise meaningful scientific explanations, an eclectic heuristic tool to find certain laws in social sciences or a broad research programme encompassing several epistemological assumptions? (Udehn 2002, p. 480).

To answer those previous questions, this paper is organized around eight sections. The first one presents the basic principles of the classical version of methodological individualism. The second one focuses on Weberian ideal types and the potential of his conceptual apparatus to underscore methodological individualism. The third one addresses Joseph Schumpeter's notion of given behaviour together with his particular version of methodological individualism. The fourth section pays attention to the meaning of Friedrich Hayek's individual rational action. The fifth section elaborates Jon Elster's contribution to methodological individualism by means of a sophisticated version of explanatory mechanisms in the social sciences. The sixth section seeks to characterize a clear-cut version of methodological individualism that section seven translates into a research programme. The eighth and last section puts forwards the scientific relevance of the arguments presented through the paper. It accounts for a strengthened version of methodological individualism in the social sciences that relies

on those four contributions: its originality lies in their mutual codependence to form a coherent research programme.

To begin with the classical version of methodological individualism suggested here, it would be desirable to clarify this preliminary question: What does a research programme mean? According to Imre Lakatos' celebrated account of that expression, any research programme consist of a set of fundamental "hard core" hypotheses with an axiomatic-like heuristic character strengthened by a "protective belt" of hypotheses that can be empirically refuted. The former will remain valid even when the latter are discarded (Lakatos 1978, p. 4). That "protective belt" consist of auxiliary replaceable hypotheses that change in order to fight against criticisms (Lakatos 1978, p. 48). As long as the "hard core" hypotheses are not seriously affected, that research programme will remain valid to the scientific community.

Following Lakatos' contribution, as a research programme in the social sciences, methodological individualism can bring about models and explanations of regularities, correlations and causality in social sciences. Methodological individualism is aimed at preventing unscientific theses (Katzner 1999, p. 8). Further, those models and explanations can be successfully implemented in social sciences to illustrate and to answer practical problems avoiding speculative research. From that perspective, interconnections of individual beliefs, wishes, intentions and actions illuminate both correlations and causal chains between social phenomena, which can be explained as the result of individual interactions.

The version outlined in this paper is open to counter-arguments that in case of being true would delegitimize it. Four central theses indebted to Weber, Schumpeter, Hayek and Elster respectively are assumed: (1) rational action in the social sciences entails that the meanings given to their actions by individuals are central to explain social phenomena (Weber 1949, p. 34); (2) very often social phenomena are better grasped and delimited from the starting point of given behaviour without studying in more detail the factors that formed it, being this essential to methodological individualism (Schumpeter 1954, p. 855); (3) individual actions are the source of social phenomena: collective concepts and entities are abstractions, but not existing facts (Hayek 1942, p. 286; [1973] 1993, pp. 159–61); (4) explanatory mechanisms are "frequently occurring and easily recognizable causal pattern(s)", irreplaceable in social sciences (Elster 2015, p. 27). In that regard, concepts such as 'ideal type', 'given behaviour', 'individual action' and 'explanatory mechanisms' are the backbone of methodological individualism as a distinct research programme.

### **Methodological Individualism's Tenets**

There is a rationale behind the abovementioned selection of contributions. Max Weber delimited the features of any individualistic approach in the social sciences through the idea of the meanings given by individuals to their actions, a major methodological contribution to social sciences that he explored when discussing the very ideas of 'interpretation', 'understanding' and 'objectivity'. A path followed by Hayek, who in line with Ludwig von Mises, thoroughly developed the idea that individual action is the unit of analysis for social scientists to an extent never achieved before (Hayek 1942, p. 270). Only by focusing on them hypotheses and theories within the social sciences are intelligible for individuals and subject to logical refutation.

According to methodological individualism in a Weberian sense, in order to choose collective concepts as units of analysis it is indispensable to grasp the specific orientations of individual behaviour in terms of chance. To select several factors accounting for a set of individual interactions dismissing others would lead not to one-sided perspectives, as it would be desirable, but to wrong interpretative frameworks (Weber 2012, p. 111).

Only by illuminating the plurality of motivations driving individual behaviour, as much as its effects, it is possible to give an account of scientific explanations in the social sciences. Indeed, any explanation of a given social phenomenon M in line with methodological individualism should be interpreted as a function of a set of individual actions (mi): M(mi) (Boudon 2023: p. 205).

The use of collective concepts implies to rule out the multiple motivations of individually oriented behaviour. The fact that collective concepts and their corresponding theses are difficult to refute from a logical point of view should lead us to think that explanations of that sort are very often hardly meaningful from the standpoint of scientific validity in the social sciences. Methodological individualism does imply a distinctive use of agency that is to a great extent either elicited or completely absent in alternative research programmes.

The empirical orientation assumed by Weber and Hayek was discussed by Schumpeter when alluding to the notion of ‘given behaviour’. The preliminary task of social scientists would be to select a part of the social reality and to distinguish it from others. That task would be unattainable unless we intuitively select from the very beginning of our research what should count as given behaviour and as a given social phenomenon.

A more recent contribution is indebted to Jon Elster’s clarification of what is ambiguously known as explanatory mechanisms. His efforts were addressed to clarify this idea and to highlight its relevance within the social sciences. Beyond the reasons why that metaphor was translated from the physical sciences into the vocabulary of the social sciences, Elster realized that what it is usually labelled as explanatory mechanisms can be explicitly stated through hypotheses and explanations with distinctive meanings that do not correspond with general laws (Elster 2015, p. 23).

These contributions do not exclude others within methodological individualism. The argument of this paper as regards to the previous selection aims to make sense of four basic contributions methodological individualism, indispensable to build “hard-core” theses that account for a classical version of methodological individualism. They are not intended to exhaust the plurality of methodological individualism as a research programme. Each one of these contributions points at a different aspect of methodological individualism’s specificity as a research programme in the social sciences.

### **Max Weber: Methodological Individualism and Ideal Types**

Regarding social sciences, Max Weber acknowledged that sociological analyses could lead to understand collective entities as existing entities only if the starting point of methodological research were individuals acting together (Jensen 2012, p. 51). His

account of methodological individualism did not dismiss the heuristic utility of collective ideas. Nonetheless, he brought up the necessity of individual actions and intentions to provide scientifically meaningful explanations in social sciences (Jensen 2012, p. 52). Individual actions are the unit of analysis because they clarify the complexity of empirical reality:

[I]ndividual action may actually in terms of its subjective meaning be oriented towards several [instituted] orders that, according to conventional ways of thinking in that particular context, “contradict” each other in terms of their meaning, but are nevertheless empirically “valid” alongside each other (Weber 2012, p. 284).

Weber interpreted scientific explanations in the social sciences as the result of rational reconstruction and selectivity, always incomplete and open to further improvements. Ontological presuppositions are of scarce value because in the social sciences the questions that researchers pose are crucial to make scientific answers meaningful. There is no genuine knowledge in the social sciences without research questions determining a certain perspective about a delimited social phenomenon or a set of social phenomena (Feuerhahn 2023, p. 43). This fact is omnipresent in scientific research in the social sciences and is less prevalent, though not completely absent, in the natural sciences.

Weber’s methodological account of rational individual action in social sciences remains substantially valid. Interpretative models akin to Weberian ideal types should rationally reconstruct the portions of the social reality that social scientists delimit (Rosenberg 2016, p. 7). To use ideal types means to highlight the “empirical consequences” of fragments of individual actions and meanings subsumed under unitary “unreal” categories. These categories do not correspond to any of those individual meanings and actions, but they allow to draw a comprehensive picture of them (Schwinn 2023, p. 328). In that sense, in a letter that Max Weber addressed to Robert Liefmann on 9 March 1920, he endorsed individuals and their actions as the methodological constituent material of social phenomena against the use of collective concepts:

[I] wish to note that if I have now become a sociologist (according to my official title!), then to a great extent in order to finish off the last resilient remnants of an enterprise working in terms of collective concepts. In other words: sociology too can only be based on the action of one, several, or many individuals; it can only be pursued with a strictly “individualistic” method... In sociological terms, the state is no more than the chance that particular kinds of specific action occur. And that is all. I have taught and written about this for years. What is “subjective” about this is that such action is oriented to particular ideas. And what is “objective”: that we, the observers, conclude that there is a chance that action oriented to these ideas will follow (Weber [1921] 2019, p. 57).

Any concept used by social scientists should clarify one or several aspects of social phenomena from the point of view of acting individuals. No concept in the social sciences is of scientific interest unless it is connected to individual concrete actions and/or perspectives. Without that goal in mind, concepts in the social sciences would be ineffective tools that only apparently explain aspects of social reality in a scientific sense:

The relationship between concept and historical research is reversed for those who appreciate this, the goal of the Historical School then appears as logically impossible, the concepts are not ends but are means to the end of understanding phenomena which are significant from concrete individual viewpoints (Weber 1949, p. 106).

To say that agents of group A refused to do X because they tended to think it unfair to her fellows under circumstances C1, C2 and C3 is to provide a meaningful explanation from the standpoint of methodological individualism. Even if that explanation does not amount to a general model, an individual disposition is taken as the explanatory key to make sense of agents' actions within a group. To anyone who assumes the utility of this explanatory framework at a basic level, this statement should be necessarily open to logical refutation. Historical events cannot be explained without statements establishing connections between events, facts and intentions.

The advantage of explaining that the end Y is the effect of agents of group A, or of agents of multiple groups with features F1, F2 and F3, doing X is typically a rational explanation in Weberian terms. Fundamental heuristic hypotheses and ideal types grounded in methodological individualism fit this apparently simple scheme (Udehn 2001, p. 96). To look into causal chains implies to use conceptual devices to stress certain features of any given social phenomenon to the detriment of others. That is precisely the one-sided perspective of causal explanation suggested by Max Weber that ideal types supply with.<sup>1</sup> Without recourse to abstract types of individual action, social sciences would lack mechanisms of causal explanation about the intentionality of single individuals acting.

Additionally, Weber realized that his individualism presupposes an ontological commitment with pervasive methodological implications. He does not preclude that any phenomenon is bound to a never-ending chain of causal factors. But Weber identified the task of the social scientist, that is to say, to single out the factors, be they political, economic, psychological or of another sort, that are causally relevant from a certain research perspective to the occurrence of a given social phenomenon:

We ask first [...] how in general is the attribution of a concrete effect to an individual "cause" possible and realizable in principle in the view of the fact that in truth an *infinity* of causal factors were indispensable for the occurrence of the effect in its concrete form (Weber 1949, p. 169).

Indeed, causal factors are intelligible through individual actions because of their interconnections insofar as they give rise to a certain social phenomenon or effect on social reality. A causal explanation in the social sciences can be valid if explicit research aims have been previously organized with logical coherence. In that regard, ideal types are research instruments to translate that logical coherence into a conceptual

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<sup>1</sup> Friedel Weinert has concisely presented the main methodological strength of ideal types as envisaged by Max Weber: "hypothetical *as-if* models" which account for scientifically relevant connections and relations between selected social phenomena empirically grounded (Weinert 2014, p. 11). Yet more interestingly, Weinert makes it patent that Weber did not distinguish between initial conditions leading to social mechanisms and social mechanisms themselves (Weinert 2014, p. 19). To say it with other words, social phenomena are characterized by a number of observable conditions that make them to be such phenomena. But those features are distinct from explanatory mechanisms, as for instance, a regularity regarding social behaviour or a tendency leading to certain changes within the social phenomenon analyzed.

apparatus. Individual concrete actions are subsumed under abstract classifications, namely, ideal types. Each ideal type allows to establish differences and causal connections between individual actions.

### **Joseph Schumpeter: Individualism and Given Behaviour**

Despite the prominence of Weber's contributions to understand the baseline of methodological individualism, it was Joseph Schumpeter who circulated the term 'methodological individualism' in 1908.<sup>2</sup> The Austrian thinker combined the study of political, social and economic institutions in his famous *History of Economic Analysis* with the endorsement of methodological individualism (Bögenhold 2018, p. 254). Accordingly, methodological individualism would lead to relevant and expedient results that other approaches cannot supply (Schumpeter [1908] 1980, p. 6).

Some authors have affirmed that Schumpeter assumed the perspective of an institutional individualist (Papageorgiou and Michaelides 2016, p. 14). Others, that he presented a *sui generis* middle ground between methodological individualism and social holism, namely, sociological individualism (Hodgson 2007, p. 213). Indeed, Schumpeter's analysis in *Capitalism, Socialism and Democracy* seems to befit sociological individualism. Institutions and groups matter when explaining individual actions as much as individual explanations contribute to understand institutional dynamics and collective decision-making. Whatever the case is, Schumpeter's individualism is not an all-encompassing research programme excluding others. It is rather an intricate one to produce specific research results having the entrepreneur as its main character (Papageorgiou and Michaelides 2016, p. 15).

Perhaps the best answer is that – as Schumpeter himself acknowledged – his approach to methodological individualism in economics during his youth was a methodological choice to understand economic phenomena with new overtones (Schumpeter [1908] 1980, p. 6–7). In any case, his appraisal of methodological individualism is more schematic than detailed, and not free of contradictions. He was in favour of heuristic explanatory devices that individual rational action makes possible. Pure economic theory was to him inadequate to analyze the complexity of individual interactions since it heavily relied on abstract theoretical frameworks.

The structure of both *Capitalism, Socialism and Democracy* and *History of Economic Analysis* points at a very personal insight, almost unique, of addressing research questions from the rhetorical perspective of constantly defending counterintuitive viewpoints. In doing so he mixed up methodological strategies diverging from his earlier account of methodological individualism towards more eclectic methodological strategies. Type concepts such as 'bourgeois', 'pre-capitalism', 'capitalism' or 'socialism' were used to make sense of the complexity of individual social action without hypostatizing them.

As a mature social scientist, his methodological approach to social reality ranged from individual psychologism to economic sociology, combining them in original manners to raise ambitious scientific results (Bögenhold 2018, p. 261). It was precisely his methodological, historical and philosophical erudition what gifted him with a far-

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<sup>2</sup> Nevertheless, it was used for the first time four years before, in 1904, by the French intellectual Élie Halévy (See Bulle and Di Iorio 2023, p. VIII).

sighted approach on almost any topic addressed. He never renounced explicitly to methodological individualism. Immediately after outlining the weaknesses of sociological individualism in *History of Economic Analysis*, namely, its incapacity to account for a theory of social processes, he stated:

From this, however, it does not follow that, for the special purposes of a particular set of investigations, it is never admissible to start from the given behavior of individuals without going into the factors that formed this behavior. A housewife's behavior on the market may be analyzed without going into the factors that formed it. An attempt to do so may be suggested by considerations of division of labor between different social disciplines and need not imply any theory about the theme of Society and Individual. In this case we speak of Methodological Individualism (Schumpeter 1954, p. 855).

Schumpeter's pragmatism is interesting for, at least, two reasons. The first one is that his scientific positivism was connected to methodological efficiency and not to settle once and for all what kind of methodology would be the most suitable in the social sciences. Debates as such seemed to him pointless (Shionoya 1990, p. 187). He deemed methodology a substantial issue which admitted dissimilar answers. The second one is that his notion of given behaviour implies that social phenomena can often be simply explained without resorting to their causal factors. This is relevant inasmuch as it means that when we investigate social reality a crucial thing is to distinguish something specific on it as behaviour. As trivial as this may seem, it has methodological implications. To delimit portions of social reality being the result of individual behaviour is not the same than to consider it the result of intentional actions.

### **Friedrich Hayek's Appraisal of Individual Action**

Prominently, Friedrich Hayek pointed out that the scientific interest of social sciences would be unattainable if individual actions were reduced to psychologism. He accepted society as a system of 'emerging properties' derived from individual interactions compatible with methodological individualism (Di Iorio 2015, p. 71). Whether Hayek's methodological individualism is or not atomist remains as an open question (Borella 2017, p. 4). In any case, his version of that research programme exhibits a scientific potential compatible with the language of institutions to describe social phenomena. The label of hermeneutical individualism can be applied to his methodology (De Iorio 2015, p. 76).

In fact, Hayek voiced his methodological affinities with Schumpeter's account of methodological individualism: "I must confess that I still sympathize more with the views of the young Schumpeter than with those of the elder, the latter being responsible to so great an extent for the rise of macrotheory" (Hayek 2002, pp. 12–13). Hayek rejected the ontology of collective concepts, as Weber did:

It is the ideas which the popular mind has formed about such collectives as 'society' or the 'economic system', 'capitalism' or 'imperialism', and other such collective entities, which the social scientist must regard as no more than provisional theories, popular abstractions, and which he must not mistake for facts. That he consistently refrains from treating these pseudo-entities as 'facts', and that he systematically starts from the concepts which guide individuals in their actions and not from the



results of their theorising about their actions, is the characteristic feature of that methodological individualism which is closely connected with the subjectivism of the social sciences (Hayek 1942, p. 286).

Individual rational action is of interest to the social scientist and cannot be replaced (Boettke and Coyne 2005, p. 150). Institutions are better explained as providing social rules for individual agents (Boettke and Coyne 2005, p. 153). This would be possibly the most concise answer that a methodological individualist can give about the role of institutions in social sciences. In that regard, Hayek's perspective was not reductionist, but compatibilist regarding the language of institutions (Zwirn 2007, p. 59).

In Hayek's view, individuals give subjective meaning to their action. The social sciences "build pattern of relationships between many men" and "classify types of individual behavior which we can understand" (Hayek 1943, pp. 2 and 8). Without scientific explanations distinguishing types of individual action there would be an informative vacuum. Accordingly, any theoretical framework adopted should underpin arguments and explanations that refer to multiple kinds of individual interactions. The different 'guises' of methodological individualism should not overshadow its scientific potential (Zwirn 2007, p. 76). The more we look for valuable explanations in the social sciences the more we need complementary perspectives to abstract types of individual behaviour.

Individual actions are the unit of scientific analysis in the social sciences. Beyond individual actions there is no meaningful explanation. To distinguish different levels of explanation in the social sciences excluding individual beliefs, wishes, intentions and actions necessarily results in flawed explanations that do not draw on any tangible practical framework. A numberless myriad of actions "seeks ends distinct from the social patterns that emerge" (Hayek [1960] 2001, p. 16). To sum it up, Hayek's version of methodological individualism entails a particular view of individual actions as irreducible units of analysis in the social sciences. Together with the miscellaneous Schumpeterian notion of given behaviour and Max Weber's defence of one-sided intentionally oriented perspectives organized around ideal types, ontological and epistemological strengths of methodological individualism are visible.

### **Elster's Contemporary Version of Explanatory Mechanisms**

The previous characterization of methodological individualism does not imply to exclude the language of institutions when explaining social phenomena. To reject the validity of scientific statements which refer to existing institutions and groups is simply misleading. The language of social institutions and mechanisms is connected to individual actions by means of abstract concepts that translate into intelligible statements a portion of the countless concrete individual actions that shape social reality. To say it with Jon Elster's words:

Institutions exist as networks of mutual expectations among officials and between officials and clients. To individuals subject to their decisions, they can appear as supra-individual, monolithic entities, but to those who operate them, they appear as what they are (Elster 2023, p. 127).

Aiming to settle explanatory mechanisms Elster affirmed that “understanding the details of the causal story [in social sciences] reduces the risk of spurious explanations, that is, of mistaking correlation for causation” (Elster 1999, p. 6). Causality implies that certain factors and means necessarily have certain consequences. These consequences could occur or not otherwise, but they are indeed the result of factors operating on individual beliefs, wishes, intentions and actions.

With other words, social scientists should be very careful when describing connections between social phenomena. For these connections are infinite, it is indispensable to differentiate spurious from relevant causal inferences. Even when establishing correlations can be a first step in social analysis, to find causal explanations is much more difficult. The former requires observation, whereas the latter also demands clever insight and capacity to discern necessary factors beyond appearances. In social sciences arguments open to refutation should be raised to endorse causal connections.

As pointed out by Elster, methodological individualism does not conflict with the fact that individuals have expectations about supra-individual entities that cannot be reduced to individualistic explanations (Elster 1982, p. 453). Indeed, the sort of explanations that the social scientist should yield does not correspond with general laws. As outlined by Elster, “even if we can establish a general law from which we can deduce the explanandum [...] this does not always amount to an explanation [in the social sciences]” (Elster 2015, p. 32).

There are causal, intentional and functional explanations, though in a wide sense intentional and functional explanations can be regarded as concrete type of causes or ‘causal chains’ in social sciences (Elster 2015, p. 14). The methodological individualist should take heed when selecting explanations of social phenomena. The main scientific concern in the social sciences is to bring out informative statements about one or several actions and events. These actions and events are connected through causal chains identifiable as explanatory mechanisms, some of which the researcher should identify to answer a certain research question.

To interpret individual motivations does not mean to disregard the causal connections between facts and events that the social scientist looks for. These causal connections can amount to psychological explanations, but they are not themselves psychological ones. They are rather intentional explanations, typically facts in Elster’s terminology. By contrast, public acts and declarations should count as events.

To endorse methodological individualism implies that individual interactions are the most relevant unit of analysis regarding social phenomena. This is also the case when explaining the very existence of institutions and their changes. The four theses about methodological individualism mentioned in the introduction entail that meaningful explanations in social sciences require, at least, one description or explanatory statement that can be logically refuted. Together with it, that descriptive statement should state explicitly individual beliefs, wishes, intentions or actions. Institutions are not exceptional in this sense. To find one or several explanatory mechanisms unleashing a certain social phenomenon means to ‘dig into’ their causal chains. Institutions can be understood in rough terms as patterned individual interactions (See Hodgson 2006, pp. 7-12). In that sense, they have the potential to reveal explanatory mechanisms.

A relevant question is to know to what extent methodological individualism succeeds in shedding light on the interconnections between social phenomena and explanatory mechanisms by using collective entities as *post res* heuristic fictions. With other words, methodological individualists should identify effective intentional drifts and regularities among types of social phenomena, namely, explanatory mechanisms. Only they explain connections between actions and events through scientific statements. Abstract concepts have an exclusive conceptual function that should not be confused with their actual existence.

To give a satisfactory account of those explanatory mechanisms that explain social phenomena is the crucial aspect of explanations in the social sciences. To say that one or several mechanisms of rational – or irrational – social action have been *discovered* means to identify those mechanisms or causal chains (Udehn 2001, p. 310). Additionally, it means to indicate that they are relevant to understand intentionality and their consequences from a certain point of view. Methodological individualism does not exhaust all relevant explanations about social phenomena. As a research programme, it leaves open complementary accounts of rational social action. It admits that any social phenomenon can be understood from differing perspectives, each one of them explaining a portion of relevant information about a given social phenomenon.

### **The Basis of Methodological Individualism**

Methodological individualism provides “fundamental heuristic hypotheses distinct from independently testable and specific factual assumptions” (Machlup 1955, p. 9). Besides, methodological individualism asserts the importance of clarifying individual actions and their meanings in order to explain a certain social phenomenon. This idea radically diverges from the interpretation of methodological individualism by analytic philosophers. They rather perceive methodological individualism as a form of linguistic reductionism that forbids the use of societal terms and predicates (Cfr. Rainone 2023, p. 616).

The sort of explanations found in Marxism, psychoanalysis, economic neo-institutionalism or radical feminism, among other research fields. Methodological individualists reject that collective concepts provide specific information about causal chains between social phenomena that individual interactions classified into groups would not. A concomitant question arises, if individuals are the primary unit of analysis, what is the role of institutions, historical dynamics and ideologies that, for instance, Marxists vindicate? (Heijdra, Lowenberg and Mallick 1988, p. 296).

Abstract collective concepts with vague outlines, such as ‘economic superstructure’, in the Marxist jargon, or the ‘heteropatriarchy’, in the language of radical feminism, do rely on, at least, one assumption: the behaviour of multiple individuals exclusively aligns with economic motivations to act and with male dominance restricting women’s freedom respectively. But these abstractions are not subject to empirical fallibility. When using collective concepts with vague and/or ambiguous features they can generate its own corresponding explanations of social phenomena irrespective of empirical reality. To think that individual agency can be subsumed under comprehensive collective concepts bringing together even oppositely oriented behaviour is completely misleading. How it is possible to claim the scientific validity of certain collective concepts instead of others?

Without the necessity of coordination between individuals, institutions would not make sense. They are better understood as instances of individual coordination than as supra-individual entities. With Kirdina's words, "metaphorically, institutions in society can be presented as the 'power lines' of an electro-magnetic field" (Kirdina 2015, p. 62). Institutions seem to operate on their own logic and rationale, but they are exclusively the aggregate result of individual members acting. Collective agency is a heuristic ellipsis resulting from summing individual interactions.

Methodological individualism implies to regard social phenomena as the result of individuals acting with a certain amount information and wishes upon a given fact (Goldstein 1958, p. 2). Any version of methodological individualism draws attention to individual behaviour as being rational with respect to certain beliefs and wishes, even if those connections are always rationally imperfect from the perspective of rational-oriented conduct (Sproule-Jones 1984, p. 169). Both the existence and the lack of intentionality in human actions can be explained in terms of absent beliefs and wishes.

In that same regard, one of the theses about methodological individualism suggested by Nathalie Bulle and Denis Phan, with extensive scientific implications, is the following: "[...] social/relational structures have an explanatory or causal role in the representation of generative mechanisms only insofar as they affect the subjective meaning of the reasons for individual actions by the contextual properties they define" (Bulle and Phan 2017, p. 404).

With a clearer language, individual interactions and relations have a causal role to explain mechanisms and regularities. This is so because the meanings that individuals give to their own actions significantly vary. Social scientists should resort to how individuals interpret and explain relations between social phenomena. How individuals represent themselves and their reasons to act in certain ways have a causal role in contextualizing and explaining social actions.

Bulle presents two theses to characterize methodological individualism: (1) the meanings that each individual gives to its actions have methodological pre-eminence over explanations based on 'social forces' and (2) social institutions and groups have an explanatory potential when they are influential in the meaning that individuals give to their own reasons to act and actions (Bulle 2017, p. 2).

Further, methodological individualism is compatible with references to 'primary' existing social groups (Heijdra, Lowenberg and Mallick 1988, p. 303). To be scientifically useful, methodological individualism should not dismiss the explanatory use of collective enterprises or concepts about such entities. Methodological individualism suggests that to explain social phenomena and to produce scientific statements we should elaborate general models, research hypotheses and/or empirical claims that account for individual interactions at a certain level. If the vocabulary of supra-individual entities is admitted, then researchers should not forget that those entities are general abstractions made of individuals acting within them.

To the methodological individualist there is no valid statement about social phenomena when selecting a single explanation in social sciences as scientifically valid (Steel 2006, p. 441). To say that most agents of group A will behave in the way X when

circumstances C1 and C2 take place because reasons R1 and R2 motivate that conduct resorts to the level of individual rational explanation, subject to be either logically or empirically refuted. That statement advances how individuals of a group will act if a series of circumstances do meet. If the expected behaviour X for that group does not take place, the previous statement would therefore be false.

In Ernest Nagel's terms, any explanation within methodological individualism implies that it is possible to describe social regularities for social phenomena. Additionally, he assumes that those descriptions can be translated into propositions or principles which refer to individuals through so-called 'bridge laws' (Duijf, Tamminga and Van de Putte 2021, p. 4166). As for the concept of emergence, 'bridge laws' is a rather elusive expression that can make sense in natural sciences: they admit different explanatory levels and connections between them. To assume that parallelism in social sciences calls for a thorough justification.

Nagelian individualism would allow to mathematicise some propositions or principles to obtain meaningful statements open to refutation (Duijf, Tamminga and Van de Putte 2021, p. 4168; Zahle and Collin 2014, p. 8). But against Nagel's view, to establish social laws is far from the aim of methodological individualism. To find the sort of explanations about social phenomena that account for certain types of causal chains should be the main task of the methodological individualist. If those laws – or to say it better, regularities – exist and can be determined that is a very positive result. However, in no case this would mean to exhaust the meddling of interconnections between actions and events that can be successfully explained.

To say that gravity law explains why agent A fell from his house's roof does not provide any meaningful explanation of either *how* it happened that agent A went up to his house's roof or *how* it occurred that he fell from it. To provide a psychological explanation of *how* that happened, we must resort to agent A's beliefs, wishes, intentions and actions. Instead, to ask *why* agent A fell from his house's roof is a more ambiguous question: it would admit different explanations depending on the physical or psychological explanation that we choose to privilege. The methodological individualist chooses an explanation depending on the portion of social reality and the research question drawn up. Logical coherence and selectivity are prerequisites for valid scientific explanations.

Methodological individualism's approaches provide research explanations that would be otherwise impossible. Explanations of that kind can be fairly interpreted in terms of broad individual actions and preferences (Udehn 2001, p. 4). Human interactions result in multiple interconnected individual beliefs, wishes, intentions and actions. In any case, individual behaviour can be translated into the language and reasoning framework of social sciences.

In some cases, methodological holists raise the accusation of psychologism against this sort of social explanation. Despite the relevance of this criticism, methodological individualism is not equivalent to psychologism. Individuals are multi-layered units which coexist with other equally acting individuals whose interactions amount to something else than psychological ones. Individual interactions can be explained from a purely psychological perspective or not. These interactions can result in regularities that do not exclusively respond to psychological factors. The use of ideal types as

abstractions about individual entities to explain certain social phenomena is not just a choice for the researcher, but a necessity to prevent exclusively psychological explanations.

A concomitant issue should be clarified. Psychological explanations are compatible with historical approaches in the social sciences. Events-to-events explanations in which event A is explained as the consequence of event B does not disqualify the relevance of individual decisions and misbehaviour leading to event B. A same event admits different types of causal connections that highlight one or several aspects instead of others. The more connections are satisfactorily explained, the better quality in social sciences usually is.

Psychological explanations of individual behaviour usually are of great relevance to methodological individualists, but the concepts that social scientists elaborate, such as 'supply', 'demand' or 'competition', start from interpreting aggregate individual decisions and relationships between agents based on their behaviour and results. Without resorting to the explanatory level of individual intentionality, actions cannot be connected to events and facts (Hodgson 2007, p. 5). More importantly, methodological individualists use concepts that categorize individual behaviour to distinguish its different orientation and results. Methodological individualism cannot be reduced to psychologism.

For instance, if we say that a bank went to bankrupt since masses of people were afraid of losing their deposits, we provide a meaningful but also a partial explanation of an event (that a bank went to bankrupt) and two facts (that its users were afraid of losing their deposits and moved their money back from their bank). The methodological individualist use concepts such 'deposit' and 'withdrawal of funds' to make sense of a set of phenomena that fit a certain category: bankruptcy. The way in which individual beliefs leads to a type behaviour as to make this phenomenon possible requires a corresponding vocabulary that correctly describes what is characteristic of that process.

Other possible perspectives and theses can add more relevant information. For example, it could be the case that there was a lack of ability on the part of the bank firm to ensure its financial capacity. Not doing so could unleash uncertainty among users of the bank. The fact that those doubts were publicly raised in social media could result in massive deposit withdraws. These causal chains throw light on how it was possible that these masses panicked, in which sense social trust affect banks' solvency and how the information or misinformation about the bank's funding capacity circulated among users. The more relevant information the researcher explains, the more complete our picture of the social phenomenon – or the set of social phenomena – that we label as 'bankruptcy' is.

### **Methodological Individualism as a Research Programme**

Any methodology or research programme faces its own problems. Methodological individualism is not an exception. It is plainly valid from a methodological point of view to say that intentionality is not a property of supra-individual entities (Hodgson 1986, p. 215). Methodological individualism's strength hinges on its potential to interconnect individual motivation, individual action, meanings given to actions and strategic behaviour. Methodological individualism is comparatively more helpful than

other research programmes to raise explanations about how individuals receive new information and act in the light of it. That is so even when social institutions provide that information (Arrow 1994, p. 8). Collective entities are abstractions used in everyday language, but cannot be split from individual actors' agency (Mises 1998, p. 42). The former is an aggregate result of the latter.

Methodological individualism resorts to a specific kind of social explanation. It requires the language of social entities, but its validity rests upon the meanings that social actors give to their actions. A methodological individualist assumes that social entities sometimes seem to operate beyond individuals' purposive action (Mitrović 2017, p. 34). However, when understanding social actions and social phenomena the methodological individualist explores what are the means and ends of those individuals and entities. Methodological individualism seeks to explain the causal connections or chains corresponding to the social meanings given to certain ends or results.

Fruitful examples of scientific models in the social sciences are Weberian ideal types. Successful methodological contributions are public choice, game theory, markets' asymmetric information and behavioral finance. It is not by chance that economics places a privileged field in which the research programme of methodological individualism has obtained prominent results.

Indeed, the theoretical frameworks and findings in economics have a high degree of applicability outside that field. For instance, game theory and public choice are irreplaceable to understand how human organizations operate in the context of growing political, economic and sociological complexity. In the case of game theory, interactions among individuals and groups are analyzed according to individual actors' strategies, be they isolated or acting within groups. Without those perspectives, we would be obliged to use less sophisticated interpretative frameworks and explanations about individual interactions in the social sciences.

In the case of public choice theory, its basic theoretical framework has been essential to understand collective action in government through the lens of individual beliefs, wishes, intentions and actions (Neck 2022, p. 357). Transfers between disciplines are possible insofar as models for understanding individual actions, beliefs and intentions are needed in all social sciences. Despite attempts to clarify the meanings of scientific explanations and mechanisms in the social sciences, we can affirm that there is no definite answer. To put into practice the research programme of methodological individualism in the social sciences is a matter of defending a number of coherent research premises and feasible research questions responding to them.

A theory or a set of theories of what a scientific explanation in the social sciences is can be dispensed with. From a methodological point of view, it matters to use specific explanatory frameworks that have been fruitful in other social sciences. Methodological individualism should not produce new theories, but to identify and to distinguish, as much as possible, correlations, regularities and interconnections between social phenomena, intentionality and actions. The methodological individualist should test the rational strength of her statements as regards to what we know about existing social phenomena. Additionally, methodological individualism should lead to improve our understanding of a very plural and never exhausted social reality. Research aims matter when delimit a certain aspect of social reality.

Some of the general questions to be answered by the methodological individualist are the following: (1) How agents play strategically according to others' expectations as to give rise to new social phenomena?<sup>3</sup> (2) How blurred is the distinction between political, economic, historical, legal, psychological and sociological phenomena when analyzing the complexity of social reality? (3) How advances in social sciences are related to hypothesized intuitions, cumulative knowledge and logical reasoning? If strategic behaviour in markets, parliaments, electoral campaigns or courts of justice is analyzed from the perspective of methodological individualism, then regularities about changing wishes, beliefs, intentions and actions responding to strategic aims must be identified. Additionally, it would be relevant to contrast how different social disciplines can contribute to understand a same social phenomenon over a certain time span. If the rational coherence of explanations is pondered, their correspondence with rational preferences, biases and noise of individuals acting in the context of growing institutional complexity should be tested.

Social sciences' explanatory models, if focused on individuals, can bring argumentative and strategic frameworks into light. They suggest a path to check how institutions and social groups work at the level of individual interactions among and within conflicting groups. Social sciences can gradually refine models of social explanation when applied to differing disciplines and sub-disciplines in social sciences. The degree of compliance of current social research under the premises of methodological individualism varies significantly. Economic and psychological results can be improved by means of conceptual clarification. The consistent use of concepts should produce both fundamental heuristic hypotheses and independently testable assumptions. That is a remarkable strength of methodological individualism lacking in alternative research programmes.

## **Conclusions**

Section one has characterized the selected tenets of methodological individualism held by Weber, Hayek, Schumpeter and Elster. These authors start from common grounds: to form categories allow to classify types of individual action oriented through particular meanings given by actors (Weber); individuals and their actions are the basic unit of analysis to the methodological individualist: for there is no collective action beyond abstract types of concrete individual actions (Hayek); in order to analyze social phenomena we delimit events and facts to distinguish given behaviour as relevant from a certain research perspective without extensively reflecting on that choice (Schumpeter); one of the main tasks of methodological individualists is to find explanatory mechanisms that throw light on relevant events and facts within the infinite causal chains that surround any social phenomena (Elster). Together, these four contributions establish coherent methodological guidelines within methodological individualism.

The second section has explored the necessity of postulating Weberian ideal types as categories to order and classify abstract types of individual behaviour. Far from being a secondary contribution to methodological individualism, ideal types are basic tools to translate individual specificity and the subjective meaning that agents give to their

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<sup>3</sup> The potential of game theory should be especially fertile in this regard.



actions. Without them the social scientist would be deprived of a scientific apparatus to clarify the existing relationships between individual actions, orientations, meanings and effects on social reality.

Section three enquires into Schumpeter's notion of given behaviour as the starting point of research in the social sciences. His version of methodological individualism can be labelled as sociological individualism. He assumed that facts in the social sciences are selected with certain research aims to which both individual interactions and social preconditions matter. For instance, psychologism and sociology cannot be separated from each other when analyzing economic matters. For the social scientist must restrict herself to explore certain relationships between facts previously delimited, her contribution to science is better when more orientations and relationships between them can be successfully explained under analytic categories.

The fourth section endorses Hayek's both ontological and epistemological decision of choosing individual action as the basic unit of analysis in the social sciences. In an ontological sense, to postulate individual action as the guideline for the social scientist allows to look into its causes and effects on social reality. In an epistemological sense, to analyze a certain social phenomenon requires to differentiate the meanings that individual ascribe to their actions. Even when social behaviour is highly dependent of irrational motives, these ones are held by individuals, each one of them with her own intentionality. Without taking into account the plurality of individual actions the social scientist jeopardize the status of his hypotheses and explanations about the social reality.

Section five underpins Elster's concept of explanatory mechanism as central to methodological individualism as a research programme. To explain a social phenomenon means to use categories that subsume a number of individual orientations that would be otherwise unintelligible. Regularities, psychological drifts and effects in social reality can count as explanatory mechanisms. By identifying them the social scientist finds out a key that is present in multiple individual actions and behaviour. The task of social sciences is to reveal, as much as possible, what are the mechanisms unleashing a certain social phenomenon by means of a research question that delimits it.

The sixth section has outlined the accommodation of methodological individualism in social sciences. As a token of them, it has been argued that prevailing research questions in these disciplines should be oriented towards empirical relevance and open to criticisms by opponents. When applied to social sciences methodological individualism prompts a practical-oriented empirical turn in the social sciences. This means to boost the search for reasons, explanations and causal relationships between events, facts and social phenomena. Conceptual clarity leads to raise new models and to identify explanatory mechanisms in order to understand social phenomena.

Section seven, the last one, has been included to argue in favor of methodological individualism as a research programme that seeks the validity of explanations about social phenomena over hypostatized attempts of theoretical foundation. Speculative research should be straightforwardly discarded. Research results under the premises of methodological individualism should benefit from conceptual clarity and fair delimitation of social phenomena. By doing so causal connections between concepts, intentionality, actions and effects on social reality can be gradually grasped.

The arguments presented in this paper have outlined a classical version of methodological individualism indebted to four contributions: Weberian ideal types, Schumpeter's notion of given behaviour, Hayek's appraisal of individual action and Elster's account of explanatory mechanisms. Together, they delimit the methodological features of methodological individualism. It does so by selecting four features explicitly explained by these authors that other methodological individualists have either developed or taken for granted.

If understood as a research programme in Lakatos' terms, methodological individualism fundamental heuristic hypotheses are meaningful insofar as: (1) individuals attribute certain meanings to their actions that can be classified into ideal types, (2) observable behaviour is used to delimit a given social phenomenon or a set of social phenomena; (3) individual action is the source and unit of analysis through which to interpret those phenomena; and (4) explanatory mechanisms unleashing a certain social phenomenon are analyzed and distinguished as causal factors.

This paper asserts that those four contributions are essential to build consistent hard-core theses for methodological individualism. Taken together they achieve a higher degree of logical coherence and clarity lacking in more sophisticated methodological approaches. By means of clear reasoned theses both the complexity and internal contradictions of methodological debates among analytic philosophers are lessened. Their originality lies in the capacity to successfully provide intuitive outspoken theses and derived research hypotheses open to logical refutation.

## **Bibliography**

Arrow, Kenneth J. (1994), 'Methodological Individualism and Social Knowledge', *The American Economic Review*, 84 (2), 1–9.

Boettke, Peter J. and Christopher J. Coyne (2005), 'Methodological Individualism, Spontaneous Order and the Research Programme of the Workshop in Political Theory and Policy Analysis', *Journal of Economic Behavior & Organization*, 57, 145–58.

Bögenhold, Didier (2018), 'Schumpeter's Split Between "Pure" Economics and Institutional Economics: Why Methodological Individualism Was Not Fully Considered?', *International Advances in Economic Research*, 24, 253–64.

Borella, Agustina (2017), 'Hayek in Lawson's View: Positivism, Hermeneutics and Ontological Individualism', *Revista de instituciones, ideas y mercado*, 66, 1–29.

Boudon, Raymond (2023), 'Examples of Sociological Explanation in Terms of Methodological Individualism', in Nathalie Bulle and Francisco Di Iorio (eds), *The Palgrave Handbook of Methodological Individualism*, vol. II. Cham: Palgrave Macmillan.

Bulle, Nathalie and Denis Phan (2017), 'Can Analytical Sociology Do Without Methodological Individualism', *Philosophy of the Social Sciences*, 47 (6), 379–409.

Bulle, Nathalie (2019), 'Methodological Individualism as Anti-Reductionism', *Journal of Classical Sociology*, 19 (2), 161–84.

Bulle, Nathalie and Francisco Di Iorio (eds) (2023), *The Palgrave Handbook of Methodological Individualism*, vol. II. Cham: Palgrave Macmillan.

Di Iorio, Francesco (2015), *Cognitive Autonomy and Methodological Individualism: The Interpretative Foundations of Social Life*. Cham: Springer.

Duijf, Hein, Allard Tamminga and Frederik Van de Putte (2021), 'An Impossibility Result on Methodological Individualism', *Philosophical Studies*, 178, 4165–85.

Elster, Jon (1982), 'The Case for Methodological Individualism', *Theory and Society*, 11 (4), 453–82.

Elster, Jon (1999), 'Explaining by Mechanisms', in *Alchemies of the Mind: Rationality and the Emotions*. Cambridge: Cambridge University Press.

Elster, Jon (2015), *Explaining Social Behavior: More Nuts and Bolts for the Social Sciences* (Revised edition). Cambridge: Cambridge University Press.

Elster, Jon (2023), 'What's the Alternative?', in Nathalie Bulle and Francisco Di Iorio (eds), *The Palgrave Handbook of Methodological Individualism*, vol. I. Cham: Palgrave Macmillan.

Feuerhahn, Wolf (2023), 'Max Weber and Understanding Explanation', in Nathalie Bulle and Francisco Di Iorio (eds), *The Palgrave Handbook of Methodological Individualism*, vol. I. Cham: Palgrave Macmillan.

Goldstein, Leon J. (1958), 'The Two Theses of Methodological Individualism', *The British Journal for the Philosophy of Science*, 9 (33), 1–11.

Hayek, Friedrich A. (1942), 'Scientism and the Study of Society. Part I', *Economics*, 9 (35), 267–91.

Hayek, Friedrich A. (1943), 'The Facts of the Social Sciences', *The University of Chicago Press*, 54 (1), 1–13.

Hayek, Friedrich A. (2002), 'Competition as a Discovery Procedure', *The Quarterly Journal of Austrian Economics*, 5 (3), 9–23.

Hayek, Friedrich A. ([1960] 2011), *The Constitution of Liberty*. Chicago: The University of Chicago Press.

Hayek, Friedrich A. ([1973] 1993), *Law, Legislation and Liberty*, vol. III. *The Political Order of a Free People*. Chicago: The University of Chicago Press.

Hodgson, Geoffrey M. (1986), 'Behind Methodological Individualism', *Cambridge Journal of Economics*, 10, 211–24.

- Hodgson, Geoffrey M. (2006), 'What Are Institutions?', *Journal of Economic Issues*, 40 (1), 1–25.
- Hodgson, Geoffrey M. (2007), 'Meanings of Methodological Individualism', *Journal of Economic Methodology*, 14 (2), 211–26.
- Heijdra, Ben J., Anton D. Lowenberg and Robert J. Mallick (1988), 'Marxism, Methodological Individualism and the New Institutional Economics', *Journal of Institutional and Theoretical Economics*, 144 (2), 296–317.
- Jensen, Henrik (2012), 'Methodological Individualism', in *Weber and Durkheim: A Methodological Comparison*. New York: Routledge.
- Katzner, Donald W. (1999), 'Methodological Individualism and the Walrasian Tâtonnement', *Journal of Economic and Social Research*, 1 (1), 5–33.
- Kirdina, Svetlana (2015), 'Methodological Individualism and Methodological Institutionalism for Interdisciplinary Research', *Montenegrin Journal of Economics*, 11 (1), 53–67.
- Lakatos, Imre (1978), *The Methodology of Scientific Research Programmes*, John Worrall and Gregory Currie (eds), vol. I. Cambridge: Cambridge University Press.
- Little, Daniel (2010), 'Methodological Individualism', in Mark Bevir (ed.), *Encyclopedia of Political Theory*, vol. II. Thousand Oaks: SAGE.
- MacDonald, Graham (1985), 'Modified Methodological Individualism', *Proceedings of the Aristotelian Society*, 86, 199–211.
- Machlup, Fritz (1955), 'The Problem of Verification in Economics', *Southern Economic Journal*, 22 (1), 1–21.
- Martin, Peter J. and Alex Dennis (eds) (2010), *Human Agents and Social Structures*. Manchester: Manchester University Press.
- Mitrović, Branko (2017), 'Is Multiple Realizability a Valid Argument against Methodological Individualism?', *Philosophy of the Social Sciences*, 47 (1), 28–43.
- Mises, Ludwig von (1998), 'The Epistemological Problems of the Sciences of Human Action', in *Human Action: A Treatise on Economics*. Auburn: The Ludwig von Mises Institute.
- Neck, Reinhard (2022), 'Methodological Individualism: Still a Useful Methodology for the Social Sciences', *Atlantic Economic Journal*, 49 (4), 349–61.
- Rainone, Antonio (2023), 'Methodological Individualism and Analytic Philosophy of Action', in Nathalie Bulle and Francisco Di Iorio (eds), *The Palgrave Handbook of Methodological Individualism*, vol. I. Cham: Palgrave Macmillan.

- Rosenberg, Michael M. (2016), 'The Conceptual Articulation of the Reality of Life. Max Weber's Theoretical Constitution of Sociological Ideal Types', *Journal of Classical Sociology*, 16 (1), 1–18.
- Schumpeter, Joseph A. ([1908] 1980), *Methodological Individualism*, Friedrich A. Hayek (trans). Brussels: European Institute.
- Schumpeter, Joseph A. ([1954] 1986), *History of Economic Analysis*. London: Routledge.
- Schwinn, Thomas (2023), 'Max Weber's Methodological Individualism', in Nathalie Bulle and Francisco Di Iorio (eds), *The Palgrave Handbook of Methodological Individualism*, vol. I. Cham: Palgrave Macmillan.
- Shionoya, Yuichi (1990), 'Instrumentalism in Schumpeter's Economic Methodology', *History of Political Economy*, 22 (2), 187–222.
- Sproule-Jones, Mark (1984), 'Methodological Individualism: Challenge and Response', *American Behavior System*, 28 (2), 167–83.
- Steel, Daniel (2006), 'Methodological Individualism, Explanation, and Invariance', *Philosophy of the Social Sciences*, 36 (4), 440–63.
- Udehn, Lars (2001), *Methodological Individualism: Background, History and Meaning*. London: Routledge.
- Udehn, Lars (2002), 'The Changing Face of Methodological Individualism', *Annual Review of Sociology*, 28, 479–507.
- Weber, Max (1949), *The Methodology of Social Sciences*, Edward A. Shils and Henry A. Finch (ed) and (trans). Glencoe: The Free Press.
- Weber, Max (2012), *Max Weber: Collected Methodological Writings*, Hans Henrik Bruun (ed). London & New York: Routledge.
- Weber, Max ([1921] 2019). *Economy and Society*, Keith Tribe (ed) and (trans). Cambridge (Mass.): Harvard University Press.
- Weinert, Friedel (2014), 'Social Mechanisms and Social Causation', *The Journal of Philosophical Economics: Reflections on Economic and Social Issues*, 8 (1), 1–24.
- Zahle, Julie and Finn Collin (eds) (2014), *Rethinking the Individualism-Holism Debate: Essays in the Philosophy of Social Sciences*. Cham: Springer.
- Zwirn, Gregor (2007), 'Methodological Individualism or Methodological Atomism: The Case of Friedrich Hayek', *History of Political Economy*, 39 (1), 47–80.