

## NOMINALISM, SUPERVENIENCE AND METHODOLOGICAL INDIVIDUALISM

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*Abstract:* This article analyzes the relationship between methodological individualism and nominalism in the light of the most recent debates on this topic. It is argued, contrary to Mario Bunge and Brian Epstein, that as an approach committed to a nominalist ontology, methodological individualism is compatible with a non-reductionist theory of the social world. According to this article, the incompatibility thesis stems from a confusion between ontological anti-substantialism and linguistic or semantic reductionism. Particular attention is paid to the relationship between supervenience, a nominalist theory of the social world developed and widely discussed in analytic philosophy in recent decades, and methodological individualism.

*Keywords:* methodological individualism – nominalism – supervenience – Mario Bunge – Brian Epstein.

### 1. Introduction

That methodological individualism is an outmoded and useless theory has become accepted wisdom in Anglo-American philosophy. Its major failing, the analytic philosophers charge, is that it is guilty of reductionism, and their view has come to be an influential one among economists and sociologists. By taking an atomistic approach, methodological individualism is said to attempt reducing the vocabulary of social phenomena to descriptions of individual properties<sup>1</sup>. Such a reduction is found to be unworkable because in reality social phenomena are characterized by global or systemic properties and structural constraints that cannot be accounted for using a vocabulary that refers solely to strictly individual facts<sup>2</sup>. Despite the prevalence of this attack, an interpretation of methodological individualism in reductionist terms does not seem to be supported by a

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<sup>1</sup> See H. Kincaid, 1986, 2017; see also J. Zahle and F. Collin, 2014.

<sup>2</sup> *Ibidem*

careful philological and historical analysis of the works written by its most eminent advocates, who actually rejected reductionism and developed a systemic theory of the social world<sup>3</sup>.

Analytic philosophers who have regarded methodological individualism as a useless reductionist approach (such as, for example, Kincaid, Lukes, Searle, Pettit and Sawyer) also reject holism understood as socio-cultural determinism in favor of a view that, in their opinion, is preferable to methodological individualism because it is neither holist, nor reductionist<sup>4</sup>. The vast majority of analytic philosophers are committed to a nominalist conception of the social wholes such as, for example, society, state, market, army, church and university. As a consequence, for most analytic philosophers, the criticism of methodological individualism does not involve its ontological foundation. However, there is also an anti-nominalist variant of the reductionist interpretation of this approach. In recent years, Bunge<sup>5</sup> and Epstein<sup>6</sup>, have argued that the only way to develop a consistent non-reductionist theory of social reality is to get rid of the nominalist ontology. According to them, methodological individualism is flawed precisely because it is committed to this metaphysical position.

The main purpose of this article is to clarify the relationship between methodological individualism and nominalism. Taking the most recent debates about this topic into account, it is argued that, contrary to what Bunge and Epstein have suggested, nominalist ontology is compatible with a nonreductionist and systemic theory of the social world. The intellectual origins of the anti-individualist standpoint endorsed by these two thinkers are traced back to the debates on reductionism that have taken place in recent decades. Particular attention is paid to the relationship between supervenience, which is a nominalist theory of the social world developed and widely discussed in analytic philosophy, and methodological individualism.

The article is articulated as follows. Section 2 explains the way methodological individualists traditionally conceived of nominalism, while section 3 clarifies the link between their endorsement of this ontology and their methodological approach to the study of social phenomena. Section 4 focuses on the interpretation of methodological individualism in terms of reductionism developed by analytic philosophers as well as on the reasons why this interpretation is questionable. Section 5 analyzes the anti-nominalist variant of this interpretation advanced by Bunge and Epstein. Section 6 demonstrates why this variant must be rejected, arguing that ontological individualism is compatible with the irreducibility of the social world and its systemic features to strictly individual properties or facts. It is argued that the incompatibility thesis stems from a confusion between ontological anti-substantialism and linguistic or semantic reductionism.

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<sup>3</sup> See A. Bouvier, 2020; N. Bulle, 2018; P. Demeulenaere, 2011; F. Di Iorio, 2020.

<sup>4</sup> See K. Sawyer, 2002, 2003.

<sup>5</sup> See M. Bunge, 2000.

<sup>6</sup> See B. Epstein, 2015.

## 2. The Ontology of Methodological Individualism<sup>7</sup>

Methodological individualists, or at least most of them, maintain that holism is strictly related to a «realist»<sup>8</sup> ontology of the collective nouns. According to holism, social «wholes» such as «society» or the «economy», «capitalism», or a particular «industry», «class», or «country» must be treated like *sui generis* substances that exist independently of individuals, similar to a stone or tree<sup>9</sup> According to this holistic view, these substances are supposed to be endowed with «laws» governing «their behavior as wholes» and individuals' behavior is viewed as a mere derivative of these laws<sup>10</sup>. Moreover, according to holism, social substances are the only entities that have real existence. Actors are reduced to a kind of «appearance» precisely because they are derivatives of these substances. In other words, from the standpoint of holism as understood by methodological individualists, the universal concepts used in the social sciences are, to use the terminology of medieval metaphysics, *ante rem, in re*, i.e. before things, in things. They precede, both logically and temporally, individuals, who are nothing but epiphenomena of their existence<sup>11</sup>.

Methodological individualists reject this «conceptual realism» or «misplaced concreteness» and defend a nominalist ontology<sup>12</sup>. For them, the only existing entities are concrete individuals. As argued by Mises<sup>13</sup>, collective nouns describing social phenomena do not refer to *sui generis* substances that exist independently from the individuals who compose them. Collective nouns such as «society» or «market» are convenient ways of talking. They are synthetic terms with practical usefulness referring to «*a collection of individuals, habits and ideas of individuals, actions of individuals*», *unintended consequences deriving from these actions, «and systemic properties regarding this set of individuals»*<sup>14</sup>. In addition, these collective nouns also refer to and describe a set of «relations between men and things»<sup>15</sup>. As pointed out by Hayek<sup>16</sup>, the error of holism: «is that it mistakes for facts what are no more than provisional theories, models constructed by the popular mind to explain the connection between some of the individual phenomena which we observe».

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<sup>7</sup> This section draws on the section «Two Different Ontologies» of my book «Cognitive Autonomy and Methodological Individualism», 2015, 83-85.

<sup>8</sup> See F.A. Hayek, 1948, 6; see also E. Di Nuoscio, 2018, 105 ff.; K. Popper, 1966a, 26 ff., 204 ff.; K. Pribram, 2008, 120; A. Varzi, 2010, 62 ff.

<sup>9</sup> F.A Hayek, 1952, 53.

<sup>10</sup> *Ibidem*

<sup>11</sup> See D. Antiseri and L. Pellicani, 1995, 13–18; Watkins J. W. N., 1952, 1955; A. Laurent, 1994, 33; E. Di Nuoscio, 2019, 110.

<sup>12</sup> See F. A. Hayek, 1952, 54; 1948, 6. See also K. Pribram, 2008, 121; A. Varzi, 2010, 68–77.

<sup>13</sup> L. Mises, 1998, 312.

<sup>14</sup> F. Di Iorio, 2015, 84. See also J. Petitot, 2012, 209.

<sup>15</sup> F. A. Hayek, 1952, 25.

<sup>16</sup> *Ivi*, 54.

### 3. *Ontology and Social Explanation*

According to (nominalist) methodological individualists, their ontology entails a methodological stance that can be summarized as follows: since supra-individual entities do not exist as independent substances, the causes of social phenomena must be located in individuals. This fundamental feature of their approach is often expressed by arguing that this approach is characterized by an interpretative nature: it is based on what Weber and German philosophy call *Verstehen*. Methodological individualists reject the holistic view that the causes of social phenomena must be sought in social substances that secretly control individual actions<sup>17</sup>. An example of the holistic theory of the social wholes that was challenged by methodological individualists is the capitalist system as understood by the French thinker Louis Althusser, who, following Marx, considers it to be the economic base that deterministically causes a variety of super-structural phenomena, including, among other things, law, art and politics<sup>18</sup>.

The commitment of methodological individualism to the idea that individuals are the causes of social phenomena does not mean that this approach denies the influence of socio-cultural factors on social life, but only that it does not conceive this influence in a holistic manner. While methodological individualism assumes that this influence is real, it argues that it must be analyzed without hypostatizing these factors. For example, the influence of the Indian caste system on the individual must be studied without assuming that this system is a *sui generis* substance. According to methodological individualism, social environment is the way individuals think and act in a typical manner and the emergent properties related to their interaction. It is a stable structure of interaction created by shared beliefs that are accepted by individuals and govern their relationships.

Moreover, methodological individualism argues that, even if the agent is not absolutely free from social constraints, her behavior is not mechanically produced by the socio-cultural environment. This is because the influence of this environment on the agent, which must be analyzed in nominalist terms, is related to the way this environment and its constraints are interpreted by her. As an interpretative approach, methodological individualism requires that social «constraints must be analyzed with account taken of the individual subjective standpoints»<sup>19</sup>. While holism assumes that the individual's lived experience does not matter because it is the epiphenomenon of deterministic social factors, methodological individualism argues that the individual's lived experience is absolutely crucial to explain actions and social phenomena. The problem of methodological individualism is understanding what Boudon, following Weber, calls «the good reasons»<sup>20</sup>

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<sup>17</sup> See F. Di Iorio, 2015; E. Di Nuoscio, 2018.

<sup>18</sup> See E. Di Nuoscio, 2018.

<sup>19</sup> F. Di Iorio, 2016, 353.

<sup>20</sup> R. Boudon, 2001.

of individuals at the bottom of the social system which play a crucial role in social conditioning, its presuppositions and its consequences. As a theory of interpretation, methodological individualism assumes that both collective or common beliefs that characterize a given society and shape its structure and the strictly personal motivations of the individual are produced by «good reasons». According to this approach, social conditioning – for example religious constraints on action – can be explained neither independently from the understanding of a set of shared cultural beliefs that create this objective conditioning, nor independently from the goals and motivations of the agent – such as an individual’s love for a person who she wants to marry but cannot because of religious taboos dominant in her society.

Within the frame of methodological individualism, understanding of an individual’s reasons for acting is often related to the study of the unintended mechanisms that govern the social world. This world is accounted for in terms of both understandable beliefs, and the macro level emergent properties that stem from them and retroact on the micro level. Weber’s analysis of the way capitalism evolved in Northern Europe under the influence of Protestant ethics and the way its emergence altered the living conditions of the inhabitants of this region is a well-known example of the link between methodological individualism, unintended consequences and micro-macro circular causality<sup>21</sup>.

#### ***4. The Concept of Reductionism in Analytic Philosophy of the Social Sciences***

Methodological individualists have usually argued that the social world must be explained “in terms of individuals”<sup>22</sup>. This is because they want to criticize the holistic tendency to explain actions in terms of deterministic social factors that govern social and historical dynamics. In a letter to the German economist Robert Liefmann, Max Weber expresses this idea in the following way:

If I have finally become a sociologist...it was mainly so as to bring to a definite conclusion these essays based on collective concepts whose spectre still prowls. In other words: sociology, like all the others, can only come from the actions of one, of several, or of a number of separate individuals. This is why it is bound to adopt methods which are strictly individualist<sup>23</sup>.

The assumption of methodological individualism that explanations should be in terms of individuals rather than in terms of holistic wholes and their deterministic laws of functioning has often been misunderstood, especially in the field of analytic philosophy. Focusing on the analysis of language, analytic philosophers (for example Kincaid, Lukes, Searle, Pettit and Sawyer) have interpreted this assumption as the idea that explanations

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<sup>21</sup> See M. Weber, 2005a, 181.

<sup>22</sup> L. Udehn, 2002, 489.

<sup>23</sup> M. Weber, 2005b.

in terms of methodological individualism require that the vocabulary of social properties must be replaced by that of individual properties<sup>24</sup>. On this basis they conclude that methodological individualism is an «obviously implausible»<sup>25</sup> form of semantic reductionism and must be rejected<sup>26</sup>. This is because of various technical arguments that shows the impossibility of this linguistic reductionism, such as the multiple realization problem<sup>27</sup>. Analytic philosophers also argue that the reductionism of methodological individualism is committed to a useless atomistic theory of social dynamics<sup>28</sup>. This commitment depends on the fact that, since socio-cultural constraints on action can only be described in terms of systemic or structural phenomena, they cannot be accounted for in terms of reductionism, in other words by using a vocabulary that refers only to individual properties<sup>29</sup>. Consequently, the problem with methodological individualism is that, from a linguistic standpoint, this approach cannot account for social phenomena and the structural constraints that influence agents. Linguistically, these phenomena are more than the sum of their parts and their analysis is incompatible with reductionism.

As already stated, this criticism of methodological individualism is not committed to a defense of socio-cultural determinism as understood by the traditional variants of holism. The authors mentioned above reject this determinism and defend what they consider a middle ground between holism and reductionism. In their opinion, it must be assumed that social phenomena are caused by individuals, but also that these individuals are influenced by irreducible socio-cultural factors. Sawyer calls this middle ground approach «nonreductionist individualism»<sup>30</sup>.

The interpretation of methodological individualism in terms of semantic reductionism, which nowadays is widespread in Anglo-American philosophy, misrepresents the nature of this approach. The confusion between methodological individualism and semantic reductionism stems from a misunderstanding of the individualist claim that social explanations must be «in terms of individuals»<sup>31</sup>. As already suggested, by making use of such explanations the intention of methodological individualists has not been to effect a semantic reduction of social properties to individual ones, but rather to make anti-holistic explanations that are not based on socio-cultural determinism. This misunderstanding derives from analytical philosophers' focus on the very philosophically abstract Watkins-Mandelbaum debate that took place in the 1950s, rather than from a careful examination of the key works by social scientists who sought to use methodological individualism to solve concrete scientific problems. Watkins' defense of methodological individualism was

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<sup>24</sup> See F. Di Iorio and S-H Chen, 2019. See also H. Kincaid, 1986; 2017; S. Lukes, 1968; 1973. P. Pettit, 1996; K. Sawyer, 2002; 2003; J. Searle, 1995.

<sup>25</sup> H. Kincaid, 1986, 504.

<sup>26</sup> *Ibidem*. See also F. Di Iorio, 2015, 105ff; 2020; F. Di Iorio and S-H Chen, 2019; A. Rainone, 1990.

<sup>27</sup> *Ibidem*

<sup>28</sup> *Ibidem*

<sup>29</sup> *Ibidem*

<sup>30</sup> K. Sawyer, 2002; 2003.

<sup>31</sup> H. Kincaid, 2017, 87.

ineffective because he failed to understand the nature of the criticisms made by Mandelbaum, the originator of the interpretation of methodological individualism in terms of reductionism<sup>32</sup>. Since Watkins did not engage with the problem of reductionism and «provide valid arguments against Mandelbaum's line of reasoning, subsequent debates on methodological individualism in analytic philosophy took for granted that Mandelbaum was right about the reductionist nature of methodological individualism»<sup>33</sup>. This has led to a widespread misunderstanding of methodological individualism that continues to affect current debates on it in Anglo-American philosophy and methodology of the social sciences.

Analytic philosophers' writings on the topic suffer from an excess of abstraction because they lack a careful historical analysis of the theoretical and empirical contributions provided by the advocates of this approach<sup>34</sup>. The systemic or structural nature of explanations in terms of methodological individualism, including the influence of the macro level on the micro level and the way this influence produces social conditioning, is already clearly illustrated in the works of the originators of this approach. For example, Menger and Simmel wrote illuminatingly on the systemic nature of social research<sup>35</sup>. Moreover, during the second half of the twentieth century, various methodological individualists such as Popper, Hayek, Coleman and Boudon openly rejected the idea that their approach was committed to semantic reductionism<sup>36</sup>. Curiously, their straightforward statements against reductionism are never mentioned and discussed in the analytical philosophy literature on methodological individualism. Moreover, the commitment of methodological individualism to the theory of the unintended consequences of human action, which refers to unwanted systemic effects, clearly shows that, according to the individualist paradigm, the vocabulary of social properties is not semantically reducible to the vocabulary of mental and behavioral properties that are attributable to the individuals<sup>37</sup>.

### ***5. The Interpretation of Nominalism in Terms of Reductionism***

Most analytic philosophers who mistakenly interpreted methodological individualism in terms of semantic reductionism and criticized it because of the impossibility of this reductionism (including Kincaid, Lukes, Searle, Pettit and Sawyer) regard ontological

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<sup>32</sup> See A. Rainone, 1990.

<sup>33</sup> F. Di Iorio and S-H. Chen, 2019, 360.

<sup>34</sup> For more details on this point see N. Bulle, 2018; A. Bouvier, 2020; F. Di Iorio, 2015, 75-120; 2020; E. Di Nuoscio, 2018; A. Rainone, 1990; J. Petitot, 2016.

<sup>35</sup> For more details on this point, see C. Menger, 1985; G. Simmel, 1977; see also N. Bulle, 2018; P. Demeulenaere, 2011; F. Di Iorio, 2020.

<sup>36</sup> See F. Di Iorio, 2016.

<sup>37</sup> See F. Di Iorio and F. Leon-Medina, 2021; F. Di Iorio and S-H Chen, 2019, 361; see also A. Bouvier, 2011; N. Bulle, 2018; F. Linares, 2018; A. Rainone, 1990.

nominalism as a valid metaphysical assumption for the social sciences<sup>38</sup>. Like methodological individualists, they defended this ontological stance, but suggest combining it with a systemic and anti-reductionist theory of the social world. As already pointed out, in their view, a systemic and anti-reductionist approach is by definition non-individualistic.

Other critics of methodological individualism influenced by the debates on this approach that took place in analytic philosophy, namely Bunge<sup>39</sup> and Epstein<sup>40</sup> developed an anti-nominalist variant of the reductionist interpretation of methodological individualism<sup>41</sup>. They distance themselves from the dominant view in analytic philosophy of the correctness of nominalism and maintain that this ontological position is inevitably committed to reductionism and cannot support methodologically valid explanations of the social world.

According to Bunge, methodological individualism is mistaken because «social systems such as families, tribes, villages, business firms, armies, schools, religious congregations, informal networks, or political parties...are just as real and concrete as their individual constituents»<sup>42</sup>. Since «individualists insist that all these are just collections of individuals», «they underrate or even overlook structure»<sup>43</sup>. In other words, «individualists resist the systemic approach. They insist on studying only the components of social systems, that is, individuals, while overlooking their structure or set of connections»<sup>44</sup>. In Bunge's opinion, methodological individualism is thus mistaken because its nominalist ontology does not allow for a systemic or structural analysis of the social world.

More recently, Brian Epstein developed a criticism of methodological individualism that resembles Bunge's, but is more detailed<sup>45</sup>. The book on the ontology of the social sciences in which he advances this criticism, *The Ant Trap: Rebuilding the Foundations of the Social Sciences*, has had a strong impact on the most recent debates on methodological individualism, as reflected by its receipt of accolades such as the 2016 Lakatos award and the 2016 American Philosophical Association Joseph B. Gittler Award. Like Bunge, Epstein argues that, because of its ontological assumptions, methodological individualism cannot account for the irreducibility of social phenomena to individual phenomena. However, unlike Bunge, Epstein criticizes the individualist approach on the grounds that it is committed to the concept of «supervenience»<sup>46</sup>. This concept, which refers to a particular interpretation of ontological nominalism, developed within analytical philosophy during recent decades, can be defined as follows:

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<sup>38</sup> See B. Epstein, 2015, 23.

<sup>39</sup> See M. Bunge, 2000.

<sup>40</sup> See B. Epstein, 2015.

<sup>41</sup> See F. Di Iorio, 2020.

<sup>42</sup> M. Bunge, 2000, 148.

<sup>43</sup> *Ibidem*

<sup>44</sup> *Ibidem*

<sup>45</sup> See B. Epstein, 2015, 36ff.

<sup>46</sup> *Ivi*, 33.

Supervenience is a relation between two sets of properties. Take property A to be all the social properties and property B to be all the individualistic properties. To say A supervenes on B, then, is to say an object cannot change its A-properties without there being some accompanying change in its B-properties. Or to put it more intuitively, *the B-properties fix the A-properties*. Once all the individualistic properties are in place, that fixes the social properties<sup>47</sup>.

In other words, supervenience means that «social properties globally supervene on the properties of individual people» in the sense that the «individualistic properties exhaustively determine the social properties»<sup>48</sup>. On this reading, society «is entirely composed and determined by individual properties»<sup>49</sup>. According to Epstein<sup>50</sup>, the failures of this ontological reductionism are «intuitively» clear. Society is not composed and determined only by individuals in the same way organisms are not composed and determined only by cells. Organisms like humans include «a lot of extracellular material»<sup>51</sup> such as blood plasma, ocular transparent gel, bone matrix, teeth, gastrointestinal fluid, and so on. Because of this, the human body cannot be described as an entity that supervenes on the cellular level: «the cellular facts are too limited to exhaustively determine the anatomical facts»<sup>52</sup>. In the same way, the «social facts do not supervene on the individualistic ones»<sup>53</sup>. The facts about individuals «do not exhaustively determine the facts at the higher level»<sup>54</sup>. To understand this point, consider, for example, Starbucks: «To be sure, the employees are critical to the operation of Starbucks. But facts about Starbucks seem also to depend on facts about the coffee, the espresso machine, the business license, and the accounting ledgers»<sup>55</sup>. The changing properties of Starbucks are not exhaustively determined by facts about individuals.

Suppose, for instance, there is a freak, late night power spike at a number of Starbucks outlets, causing the blenders and refrigerators to break, the ice to melt, and the milk to spoil. Suppose that event is the last straw for a financially struggling Starbucks, underinsured as it is. So, when the power spikes and its key assets melt down, its assets no longer exceed liabilities. Overnight, as the owners, employees, and accountants are asleep in their beds, Starbucks goes from being financially solvent to insolvent<sup>56</sup>.

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<sup>47</sup> *Ibidem*

<sup>48</sup> *Ivi*, 24.

<sup>49</sup> F. Di Iorio and C. Herfeld, 2017, 18.

<sup>50</sup> B. Epstein, 2015, 37.

<sup>51</sup> *Ivi*, 38.

<sup>52</sup> *Ibidem*

<sup>53</sup> *Ivi*, 36.

<sup>54</sup> F. Di Iorio and C. Herfeld, 2017, 5.

<sup>55</sup> B. Epstein, 46.

<sup>56</sup> *Ibidem*.

This transition to insolvency «involves property and equipment, not individuals»<sup>57</sup>. As a consequence, it cannot be explained in terms of supervenience on the lower, «individualistic level»<sup>58</sup>. It must be regarded as a «social-level transition»<sup>59</sup>, where social-level means a level that cannot be exhaustively accounted for in terms of individuals. In other words, according to Epstein, the problem with ontological nominalism is that, as a theory of supervenience of the social level on the individualistic level, it fails to understand that the social world is not only influenced and shaped by the individual level, but also by non-individual factors, namely physical phenomena. In his opinion, while nominalist sociologists and economists partly recognize the relevance of nonindividual factors in the social world, they have not recognized that the relevance of those factors is incompatible with their nominalist ontology.

### **6. In Defense of Nominalism**

The validity of the criticism of methodological individualism developed by Bunge and Epstein on the basis that the nominalist ontology of this approach is committed to reductionism is open to question. First and foremost, it must be noted that the equivalence between methodological individualism and nominalism is rejected by some advocates of the former, namely Boudon and his disciples. Boudon interpreted nominalism in a way that is very similar to Bunge, that is as form of reductionism that cannot account for the systemic nature of the social world and the constraints this world imposes on agents<sup>60</sup>. According to Boudon, to explain the social world we need to assume that both structural factors and individuals do exist and play a crucial role in the development of historical and social dynamics<sup>61</sup>.

From the standpoint of the history of methodological individualism, the position defended by Boudon and his disciples is though a minority one. Most methodological individualists (for example Menger, Simmel, Weber, Popper, Mises and Hayek) are more or less directly committed to nominalism. Still, the main problem with the criticism of this ontology developed by Bunge and Epstein is that they attack a caricature of it rather than something these authors would agree with.

Bunge's idea that, because of their commitment to nominalism, methodological individualists simply deny the existence and influence of social institutions and their systemic features seems clearly incorrect. As already noted, nominalist methodological individualists do not deny the existence and relevance of social systems, but argue that these systems must not be regarded as substances that «exist independently of the

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<sup>57</sup> *Ibidem*

<sup>58</sup> *Ibidem*

<sup>59</sup> *Ibidem*

<sup>60</sup> R. Boudon, 1996.

<sup>61</sup> See F. Di Iorio, 2020; see also P. Demelenauere, 2020.

individuals which compose them»<sup>62</sup>. In their view, institutions and social systems do exist and play a crucial role in social life and social conditioning, but they do not exist as *sui generis* entities. They only exist as derivative of the existence of the individuals and their interactions<sup>63</sup>. Even if, like any other system, they are semantically irreducible to the sum of their parts, they are not independent substances because if the individuals disappear, they disappear too<sup>64</sup>.

While Bunge interpreted nominalism as necessarily incompatible with a systemic analysis of the social world, the individualist scholars who endorsed this ontological position considered nominalism and systemic theory to be intimately connected. According to these scholars, the former is a way to interpret the latter, namely an anti-substantialist way to interpret this theory. The idea that the social sciences must be based on a systemic approach is a truism for nominalist methodological individualists. In these scholars' opinion, any collection of individuals, like any collection of things, is necessarily characterized by emergent properties that are semantically irreducible in the sense explained above. This is shown, for example, in the following statement made by Popper:

the triviality as well as the vagueness of the statement that the whole is more than the sum of its parts seems to be seldom realized. Even three apples on a plate are more than «a mere sum», in so far as there must be certain relations between them (the biggest may or may not lie between the others, etc.): relations which do not follow from the fact that there are three apples, and which can be studied scientifically<sup>65</sup>.

Another committed adherent of nominalism, Ludwig von Mises, points out that methodological individualism does not deny the existence of social factors and their influence as sources of social conditioning:

It is uncontested that in the sphere of human action social entities have real existence. Nobody ventures to deny that nations, states, municipalities, parties, religious communities, are real factors determining the course of human events. Methodological individualism, far from contesting the significance of such collective wholes, considers it as one of its main tasks to describe and to analyze their becoming and their disappearing, their changing structures, and their operation. And it chooses the only method fitted to solve this problem satisfactorily<sup>66</sup>.

Epstein's interpretation of methodological individualism in terms of supervenience is no less problematic than Bunge's criticism of nominalist ontology. As already explained above,

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<sup>62</sup> F. A. Hayek, 1948, 6.

<sup>63</sup> See D. Antiseri, 2007; E. Di Nuoscio, 2018.

<sup>64</sup> See F. Di Iorio, 2020.

<sup>65</sup> K.R. Popper, 1957, 82.

<sup>66</sup> L. von Mises, [1949] 1998, 42.

Epstein's attempts to propose a new nonanthropocentric metaphysics for the social sciences is based on the assumption that ontological individualism, understood as the thesis that society is entirely composed and determined by individual properties, is false because of the ontological and explicative relevance of nonhuman and nonindividual factors in the social sciences<sup>67</sup>.

Like Bunge, Epstein caricatures nominalism as understood by methodological individualists because methodological individualists do not conceive this ontological position in terms of supervenience. They do not support the clearly mistaken idea that the «social world is exhaustively determined by individual properties»<sup>68</sup>. Epstein confuses the individualist view that social wholes are not substances in the sense that they do not exist as *sui generis* entities independently of the individuals who compose them with the completely different view that social phenomena are solely composed and determined by human factors<sup>69</sup>. In other words, he confuses the individualist stance that only individuals exist, not substances, with the claim that social phenomena must be reduced to individual properties. Nominalist methodological individualism is not committed to this reductionist theory, but only to a criticism of substantialism. It argues that social explanations, including those about «the relations between men and things»<sup>70</sup>, must avoid the hypostatization of social wholes.

Epstein's interpretation of nominalism in terms of a mistaken reductionist theory is falsified not only by the account of nominalism provided by the methodological individualists who endorsed this metaphysical theory, but also by their countless empirical studies showing the existence of non-human factors that causally influence social phenomena. Think, for instance, of the Austrian school's marginalist theory of value, according to which the scarcity of a metal affects its price and, as a consequence, resource allocation and the entire structure of production<sup>71</sup>. According to nominalist methodological individualism, social phenomena supervene on both human and non-human factors<sup>72</sup>.

As argued by Weber, while the individualist approach cannot disregard the meaning that individuals attach to their actions, it also assumes that social phenomena can be produced by causes that are external to the human mind. This approach «does not confine itself to the internal aspect», that is, to mental phenomena, «but conceives the whole historical constellation of the external world» as potentially causally relevant<sup>73</sup>. For example, Weber contends, the «empirically founded conclusions of psychopathology and the laws of psychophysics are only relevant for history in exactly the same sense as

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<sup>67</sup> F. Di Iorio and C. Herfeld, 2017, 18.

<sup>68</sup> Ivi, 19.

<sup>69</sup> *Ibidem*

<sup>70</sup> F. A. Hayek, 1952, 25.

<sup>71</sup> F. Di Iorio, 2020, 36. See also A. Bouvier, 2015, 574; F. A. Hayek, 1948, 77-91.

<sup>72</sup> Ivi, 37.

<sup>73</sup> M. Weber, 2012, 50.

physical, meteorological and biological knowledge»<sup>74</sup>. In other words, the individualist approach, «does not deal with the internal processes . . . of human beings for their own sake; instead, it is concerned with the “external” conditions and effects of the way in which human beings relate to the “world”»<sup>75</sup>. This is shown, for example, by «the significance of the Black Death . . . for social history, or the significance that the invading waters of the Dollart . . . had for the history of the colonization movement»<sup>76</sup>. In Weber’s opinion, «both events are in absolutely no respect different from the invasion of Germany by Gustavus Adolphus . . . or the invasion of Europe by Genghis Khan»<sup>77</sup>. This is because «all those events» have had «historically significant» effects on social life<sup>78</sup>.

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<sup>74</sup> Ivi, 53.

<sup>75</sup> *Ibidem*

<sup>76</sup> Ivi, 35.

<sup>77</sup> Ivi, 36.

<sup>78</sup> *Ibidem*

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