

NOMINALISM AND SYSTEMISM: ON THE NON-REDUCTIONIST
NATURE OF METHODOLOGICAL INDIVIDUALISM

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Abstract

This paper investigates the systemic nature of methodological individualism. According to widespread belief, the notion of autonomy of the actor that is defended by methodological individualism is mistaken because it is incompatible with the study of society in terms of its organized structure. We argue that this viewpoint must be rejected. In our opinion, it stems from confusion between ontological nominalism – the idea that superhuman collective entities do not exist – and reductionism. In contrast, we would argue that methodological individualism is a form of nominalist structuralism. Following Hayek, Popper and Boudon, we will maintain that methodological individualism is not incompatible with the reference to systemic and irreducible properties. As these authors stressed, the history of methodological individualism is full of examples of non-reductionist explanations that undermine the widespread theory of the equivalence between methodological individualism and reductionism. We will state, therefore, that the current debate about methodological individualism is often based on a caricature of the concept of methodological individualism that does not match its correct meaning. In addition, we will provide a criticism of the notion of “structural individualism” that is becoming increasingly popular among social scientists.

Keywords: Methodological Individualism, Nominalism, Structural Individualism, Hayek, Boudon.

1. Introduction

Methodological individualism (MI) is the theory in which the exclusive motor of history and social dynamics are the individuals, whose actions produce intentional and unintentional effects (see Boudon 1991). Due to this fact, MI challenges the socio-cultural determinism that is defended by methodological holism (MH). According to the latter approach, the causes of social processes must be sought outside the individual. They must be lodged in super-individual factors. MH assumes that at least a part of

actors' consciousness – the part that incorporates the collective beliefs that are largely shared within a certain social group (for instance, the shared ethical judgments within a specific culture) – is nothing but the emanation of macro-laws that govern the social system as a whole, where social system means something that exists “out there” as a given reality, independently of the individuals.

This paper attempts to eliminate a common misunderstanding about MI. According to a widespread interpretation, since MI affirms that the individuals are the only motor of history, it is a form of reductionism that tends to describe social phenomena solely in terms of psychological or individual properties. MI is viewed to be incompatible both in reference to societal concepts and to the systemic analysis of social world. Moreover, it is accused of denying the relevance of social conditioning. We will contend that the reductionist interpretation of MI is misguided. As will be clarified, this interpretation stems from confusion between ontological nominalism – the idea that only individuals exist, while collective entities do not exist as independent substances and cannot be considered as objects of study – and reductionism.

We will argue that the true point of contrast between MI and MH is not related at all to the issue of reductionism. Unlike what is often stated, both are systemic approaches. Their difference rather depends on the fact that, while MI links the concepts of system, emergent properties, and social conditioning to those of interpretative approach, nominalism, and unintended consequences of the subjective intentionality, holistic systemism does not. The latter assumes that social structures are given realities, which can be described as independent substances, and considers action and social order as epiphenomena of these superhuman entities.

One of the main aims of this paper is to criticize the concept of “structural individualism,” which is becoming largely popular within social sciences and which is the more recent version of the reductionist interpretation of MI. Structural individualism, which is defended among

others by Bunge (1996), Bearman, Hedström (Hedström and Bearman 2009), Pettit (1993), and Udhen (2001), is assumed to be a middle ground between holism and individualism – a “synthesis” of these two approaches. Structural individualism agrees with the individualist idea that the actors’ views and intentions matter and cannot be erased from the analysis as unimportant – an idea that is not shared by holist sociology. However, according to structural individualism, MI is partly wrong because it denies the systemic nature of society and the fact that the social system implies constraints for the actors. From the standpoint of structural individualism, authors such as Menger and Weber must be considered to be reductionists. Structural individualists attempt to improve what they consider the traditional and reductionist individualism by merging it with a systemic theory of society. They assume the systemic approach to social phenomena to be a specific and peculiar feature of the holist tradition.

We will contend that structural individualism is based on presuppositions that are both logically and historically incorrect. Although it is true that some methodological individualists defended the idea that MI is a reductionist approach, the majority of the main theorists of MI explicitly endorsed a systemic view. Moreover, even those individualists like John Stuart Mill, who argued the necessity of a psychological reductionism, did not really follow a reductionist approach in practice. Mills’ analysis of phenomena like puritanism, market, and bureaucracy are implicitly based on systemic and irreducible concepts. The real differences between Mills and Comte, who Mills criticized for his sociological holism, are related to divergences concerning the epistemology of action and the ontology of collective nouns, rather than to the issue of reductionism (see Di Nuoscio 2006).

Strictly speaking, there are no examples of reductionist explanations of historical phenomena (See Boudon 1971). As we will try to make clear, the reductionist definition of MI cannot describe the nature of the empirical analyses that are provided by individualist authors.

Already in 1883, Menger, pointed out that MI is not a form of reductionism. According to MI, he argues, the individual's intentions and actions must be considered as parts of a structure. For Menger (1985, p. 142), "social structures...in respect to their parts are higher units". Moreover, they are endowed with "functions" which "are vital expressions of these structures in their totality" (p. 139). Society is a system because each part of it – each individual or each social subsystem (like a family or a firm) –

serves the normal function of the whole, conditions and influences it, and in turn is conditioned and influenced by it in its normal nature and its normal function. (p. 147)

The paper is structured as follows. Section 2 sketches the ontological differences between holism and MI. Section 3 shows one of the two reasons why, unlike what is assumed by structural individualists, the holist ontology is not really systemic (the second reason is analyzed in section 7). Section 4 focuses on the fact that the use of the concept of system by the holist tradition is inextricably linked to the assumption that the individual is a remote-controlled being rather than a free being. Section 5 briefly recalls the differences between the anti-rationalist individualism and the atomist and contractualist interpretations of society. Section 6 clarifies that the defense of the ontological nominalism is consistent with the use of a systemic approach. Section 7 investigates the way the individualist systemism is linked to a theory of intersubjectivity. Section 8 explains the concept of social conditioning from the standpoint of MI. Section 9 shows why the empirical explanations of social phenomena provided by MI cannot be described in terms of psychological reductionism. Section 10 explains that the notion of group-selection is consistent with methodological individualism. Section 11 draws the conclusions from the arguments provided in the previous sections and criticizes the concept of structural individualism.

2. Two Different Ontologies

From the standpoint of MH, social 'wholes', like 'society' or the 'economy' or 'class', are *sui generis* substances which exist 'out there' independently of individuals, similar, for instance, to a stone or tree. These entities are considered to be endowed with "laws" governing "their behavior as wholes" and the individuals' ideas and actions are viewed as mere manifestations of these laws (Hayek 1952a, p. 53). These collective entities are supposed to be the only entities that have real existence in the sense that actors are reduced to simple 'appearances', i.e. to the reflex or emanation of these essences or forms in the Platonic sense. According to MH, the universal concepts that are used in the social sciences are thus, 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 precisely nothing but manifestations of their existence (see Antiseri and Pellicani, p. 13-18; Di Nuoscio 2006, p. 110; Laurent 1994, p. 33; Watkins, 1952b, 1955).

Methodological individualists reject this "conceptual realism" or "misplaced concreteness" and endorse a view that ontology calls "nominalism" (Hayek 1955, p. 54; 1948, p. 6; see also Pribram 2008, p. 121; Varzi 2010, pp. 68-77). According to them, the only existing entities are concrete individuals. As Mises (1998, p. 312) writes, society is not a *sui generis* entity; "there is I and you and Bill and Joe and all the rest." From MI's viewpoint, collective nouns describing social phenomena do not refer to independent substances. They are nothing but convenient ways of talking – synthetic expressions having practical usefulness and referring to a collection of individuals, habits and ideas of individuals, actions of individuals, unintended effects deriving from their actions, *and systemic properties regarding this set of individuals* (see Hayek 1955, p. 54; Petitot 2012, p. 209).

3. "Wholes" and the Selective Nature of Knowledge

Holism is usually assumed to be a systemic tradition. As we already pointed out, structural individualists, who interpret MI in reductionist terms, want to improve MI by merging it with holist systemism. However, as Popper stresses, in spite of the fact that the fathers of MH, namely Comte, Hegel, and Marx, criticized the psychological reductionism, their approach is, in a sense, pseudo-systemic. For Popper, the holist ontology lacks one of the fundamental aspects of any true systemic approach, i.e. its theoretical and selective presuppositions. The holist ontology is strictly linked to a theory of cognition that denies the a priori nature of knowledge. Since MH considers social wholes as given realities, it assumes that these "wholes" can be "intuitively comprehended" or recognized (Hayek 1955, p. 73). MH is based on a theory called intuitionism. According to this theory, "we possess a faculty, intellectual intuition, by which we can visualize essences" in an immediate and obvious way (Popper 1966b p. 218).

As Popper (1957, p. 76) upholds, the essentialist intuitionism endorsed by the fathers of MH contributed to the creation of a fundamental "ambiguity" in the use of the word 'whole' in the social sciences. This word

is used to denote (a) the totality of all the properties or aspects of a thing, and especially of all the relations holding between its constituent parts, and (b) certain special properties or aspects of the thing in question, namely those which make it appear an organized structure rather than a 'mere heap'. (*Ibid.*)

From the standpoint of MH, social wholes are wholes in sense (a). In other words, according to MH, the true "significance" of an action is "determined by the whole" (Popper 1957, p. 22), understood as "the

structure of all social and historical events of an epoch'" (Popper 1957 p. 78).

However, wholes thus understood cannot be object of a scientific analysis:

If we wish to study a thing, we are bound to select certain aspects of it. It is not possible for us to observe or to describe a whole piece of the world, or a whole piece of nature; in fact, not even the smallest whole piece may be so described, since all description is necessarily selective. (Popper 1957, p. 77)

This being so, only "wholes" in sense (b) can be considered by science. Examples of wholes in sense (b) might be taken from studies of the 'Gestalt' school of psychology. Of things that possess such structures as wholes in sense (b), "it may be said, as Gestalt theory puts it, that they are more than aggregates--'more than the mere sum of their parts'" (Popper 1957, p. 76).

If, with the Gestalt theorists, we consider that a melody is more than a mere collection or sequence of single musical sounds, then it is one of the aspects of this sequence of sounds which we select for consideration. It is an aspect which may be clearly distinguished from other aspects, such as the absolute pitch of the first of these sounds, or their average absolute strength...By thus being selective, the study of a Gestalt, and with it, of any whole in sense (b), is sharply distinguished from the study of a totality, i.e. of a whole in sense (a). (p. 77)

4. The Holistic Account of Social Order

In spite of many philosophical differences, Hegel and Comte, the two fathers of MH, shared a kind of

Hobbesian view of human nature. It is central to this view that, in the absence of external constraint, the pursuit of private interests and desires leads inevitably to both social and individual disintegration. (Dawe 1970, p. 207)

Without social constraint, they argue that “the only possibility is the war of all against all” (p. 208). Both Comte and Hegel share the idea that the society is an organized and harmonic structure (or system) due to the fact that individuals are remote-controlled, rather than self-determined, beings. In other words, these two authors employ the concept of system to describe the way in which society, understood as an independent substance or *sui generis* entity, creates collective harmony by defining “the social meanings, relationships and actions of” its members (Dawe 1970, p. 208). According to Hegel and Comte, ‘society’ and ‘system’ are two synonyms referring to the same external essence working as a kind of mold organizing the way in which its human byproducts behave. This mold, they argue, is settled “over” the individuals “in such a way as to impose a common meaning and, therefore, order upon them” (p. 208; see also Boudon 1971, pp. 32-33; Di Nuoscio 1996, p. 307; Laurent 1994 pp. 18-19).

This particular conception of social system, which denies the intentionality of the individual, influenced many scholars, starting with Durkheim and structural functionalists such as Malinowski, Radcliffe-Brown, and Parsons. As is well known, the tendency to explain social phenomena by merging systemic approach, substantialism and heteronomy developed not only within conservative and functionalist sociology. It is also shared by many left-wing social scientists who, in Marx’s footsteps, often link this tendency to the theory that an occult oppression exists – an oppression that the social scientist is supposed to reveal (see Di Nuoscio 2006, pp. 113-114). The works of members of French structuralism such as Althusser, Balibar, Bourdieu, Foucault, and

Lacan are instructive in this regard (see Boudon and Bourricaud 1986, pp. 387-393).

5. MI and the Atomist Interpretations of Society

The theory of social order that is defended by MH is partly linked to an old religious superstition. Popper (1966a, p. 17) calls this superstition, which influenced Comte, Hegel, Marx, and their followers, the “theistic interpretation” of history. The theistic interpretation of history belittles the importance of individuals as historical actors because it assumes that there are “powers behind the scenes” (ibid.). According to this archaic belief, history and social order are not accidental outcomes but the products of a hidden superhuman will. A divine plan is supposed to be at work. MH is a secularized version of this view. The theistic interpretation of history and MH share the idea that there are “hidden...determinants” of action (p. 410).

During the Age of Enlightenment, a systematic attempt to get rid of the religious interpretation of social order and institutions began. However, the anxiety to get rid of this old belief and to affirm the principle of man being the only cause of social phenomena was sometimes accompanied by the tendency to overestimate the powers of human reason (see Dawe 1970, p. 212; Laurent 1994, p. 25-28; Petitot 2009, pp. 153 ff. ; 2012, p. 210).

Hayek (1978, p. 3) calls this phenomenon “constructivism” (see also Caldwell, 2007; pp. 358-359; Nemo 1988, pp. 23 ff.). The mechanist and atomist theories of social contract that developed at that time, mainly in Continental Europe, represent an expression of this presumptuous mentality (see Agassi 1960, pp. 252-253; Hayek 1948, p. 6; Laurent 1994, p. 14-16). According to these theories, individuals, meant as perfectly rational beings, must be viewed to be logically and historically prior to social institutions, the latter resulting from their mutual agreement expressed in social contract terms. Such atomism is

undoubtedly a weak theory. Its fallacy is clear for two reasons. The first is that it views human beings as being intelligent and cooperative since the beginning in spite of the fact that originally they shared neither socio-cultural linkages nor common institutions. The second is that, following the mechanist doctrine, it assumes that society is nothing but the sum of its parts, its parts being individual atoms and their doings. Such a view is not a correct description of the nature of social phenomena because the existence of global irreducible properties can hardly be denied.

As is well known, a criticism of social atomism was already being formulated during the Enlightenment (see Hayek 1978 p. 80 ff.). At that time, the idea that social institutions must be explained by assuming that the individuals are not heteronomous, but self-determined beings, was also defended by scholars recognizing the limitations of human reason as well as the existence of unintended consequences of action – unintended effects that rule out the possibility of explaining history as the expected outcome of deliberate projects as contractualist do. This anti-constructivist school specifically (though not exclusively) brought together British thinkers, namely Locke, Burke, and the members of the Scottish Enlightenment (de Mandeville, Ferguson, Hume, Smith, and Tucker). As Hayek (1948, p. 6) points out, this orientation did not at all assume “the existence of isolated or self-contained individuals.” It “starts from men whose whole nature and character is determined by their existence in society” (p. 6; see also Cubeddu 1996, pp. 27-33; Infantino 1998, pp. 73-80; Schatz 1907, p. 558). Although exceptions do exist, this anti-atomist standpoint is explicitly defended by most champions of MI in the 18th, 19th, and 20th centuries. Authors such as Menger, Mises, Hayek, Spencer, Tocqueville, Weber, Simmel, Schütz, Merton, Popper, Watkins, Coleman, Elster, Boudon, and Crozier can be more or less directly linked to the tradition of British and Scottish Enlightenment.

6. The Systemic Approach and Nominalism

According to Hayek (1948, p. 6), the tendency to confuse MI with atomism is “the silliest of the common misunderstandings” (see also Watkins 1957, p. 112). As Popper (1966b, p. 421) states, because this tendency is wrong, “there is some similarity” between the individualist and holist paradigms. “But,” he points out, “there are very considerable differences also.” The most basic of them is ontological. Methodological holists

argue that, since we owe our reason to ‘society’...‘society’ is everything and the individual nothing; or that whatever value the individual possesses is derived from the collective, the real carrier of all values. (*Ibid.*)

As opposed to this, the position of MI, which endorses nominalism,

does not assume the existence of collectives; if I say, for example, that we owe our reason to ‘society’, then I always mean that we owe it to certain concrete individuals — though perhaps to a considerable number of anonymous individuals — and to our intellectual intercourse with them.” (*Ibid.*)

Therefore, in speaking of a ‘social’ theory of reason, Popper (*Ibid.*) adds,

I mean more precisely that the theory is an inter-personal one, and never that it is a collectivist theory. Certainly we owe a great deal to tradition, and tradition is very important, but the term ‘tradition’ also has to be analysed into concrete personal relations.

According to MI, not only must the origin of social institutions be studied from a nominalist standpoint, but also the fact that these institutions imply stable systems of interaction. The argument that is endorsed by methodological individualists is that, as collective nouns, social systems do not exist “independently from the individuals” (Hayek 1948, p. 6; see also Di Nuoscio 1996, p. 302-303). As we have already pointed out, nominalism does not mean reductionism. Both MH and MI are anti-reductionist. However, there is an important difference between them. While the second approach postulates that there are systemic irreducible properties, which concern a set of individuals, the first approach assumes that since only supra-individual entities truly exist, systemic properties are the manifestation of these supra-individual entities. According to MH, individuals are epiphenomena of social structures that exist ‘out there’ as independent substances and impose, as such, regularities on the individual’s behavior. According to MI, the opposite is true: only individuals exist and what matters is the “continuous process of interaction” between them – a process that implies emergent properties (Dawe 1970, p. 213; see also Elster 1989, p. 158; Petitot 2012, pp. 209 ff.). Due to the fact that human “beings are supposed to be the only moving agents in history” and that there are not “superhuman agents” (Watkins 1957 p. 106), action is not viewed “as the derivative of the system” but the “system as the derivative of action” (Dawe 1970, p. 214).

Due to the fact that methodological holists tend to confound nominalism with reductionism, they tend to consider themselves to be the only defenders of the theory stating that ‘the whole is more than the sum of its parts.’ Moreover, they also tend to exaggerate the importance of this theory. This is probably owed to the fact that they view it as the proof that heteronomous powers act in history and create social order. As Popper (1957, p. 82) points out,

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.

It must be noted that sets of things that are not characterized by global properties do not exist in nature.

However, a distinction must be made between different kinds of systems. Consider the social sciences – there are systems of interaction within which, for instance, the reciprocal influence of the parts is not based on a set of rigid and well-defined social roles. On the contrary, there are other systems of interaction within which the opposite is true. A group of pedestrians walking down a street is an example of the first case, while a bureaucratic organization, in which binding social roles exist, is an example of the second. Boudon and Bourricaud (1990 p. 401) call the systems based on role relations "role systems" or "interaction systems" while they call the other systems simply "relation systems" (see also Nemo 1988, p. 394). In any case, it is wrong to think, as many Gestalt theorists used to think, that there are

'heaps', in which we cannot discern any order, and 'wholes', in which an order or symmetry or a regularity or a system or a structural plan may be found. ... [A] so-called 'heap', as a rule, has a Gestalt aspect too... (consider the regular manner in which pressure increases within a heap of stones). Thus the distinction between 'heaps' and 'wholes' is not only trivial, but exceedingly vague; and is not applicable to different kinds of things, but merely to different aspects of the same things. (Popper 1957, p. 83)

From the above follows that the tendency to treat social wholes as more than the sum of their parts must be considered a “physiological” and trivial characteristic of the social sciences rather than a specific pillar of MH (Di Nuoscio 1996, p. 303; see also Boudon 1971, pp. 1-4; Boudon & Bourricaud 1982, pp. 387-388). But there is more. As Hayek (1952, p. 85) states, “it is only by the individualist...method that we can give a definite meaning to this ‘much abused’ statement.” This lies in the fact that the explanation of global properties presupposes the existence of the parts that imply these properties. If one endorses holist ontology and considers elusive superhuman entities as the only real substances – as do, for instance, Comte or Foucault – one falls into the paradox of being obliged to see global properties as implied by a single macro-entity. This clearly makes no sense: “there is no system without components” (Bunge 1996, p. 261). MI is not vitiated by this contradiction. It argues that human systems are systems of interaction between individuals that are characterized by emergent properties. Endorsing nominalist ontology, it considers these proprieties to be attributes that are irreducible to the sum of the attributes of the parts. This is trivially true with respect to any set of things.

8. An Intersubjectivist Theory of the Socio-Cultural World

According to MI, society must not be considered a substance existing ‘out there’ independently from us because it is nothing but a process of interaction between individuals – individuals who share a common set of interpretative schemas, meanings, and expectations that make this interaction non-chaotic, i.e. rule-governed. Thanks to this shared horizon, which is mainly cultural, social interaction is organized “in a particular manner” (Hayek 1967, p. 70; see also Heritier 1997, pp. 54 ff.; Nemo 1988, pp. 39-58). Hayek (1952, p. 54; 57) stresses that the tendency to hypostatize the social system and believe that the horizon that we share with our fellows is a byproduct of a “given” reality that is external to us is

an archaic “anthropomorphic” tendency. It is implicit in our common sense, which naturally leads us to endorse both “naïve realism” and ontological collectivism (p. 54). Indeed, denying that society exists ‘out there’ as substance and that due to this fact, it purposefully ensures, as a sort of “superperson” or “super-mind,” the order that characterizes human actions and interactions is counterintuitive (p. 57). Phenomenological sociology contributed a clarification of the flaws of the holistic and objectivist views.

Society as such is a concept, an abstraction – *What exists in reality are individuals in whose mind society exists as a factor determining certain types of behavior.* If the mental attitude no longer exists, society does no longer exist either. If people were not aware of each other’s existence, society would not exist, even if all the same people were still in existence...Thus society is an attitude in the mind of the individual which is subject to X changes each second. It is unstable and undermined, although it may appear constant and concrete on the surface during long periods, or made to appear this way by the social theorists. (Landheer 1955, p. 22)

As Schütz (1967, p. 218), the father of phenomenological sociology, remarks, from a nominalist and anti-objectivist standpoint, the social world only exists as an “intersubjective” construction (see also Husserl 1970). It is “common to us all” – interacting beings – because it is based on collective and typical ways of interpretation (*Ibid.*). Due to the fact that we share certain cognitive schemas with our fellows, we also “share a common environment with them” (Schütz 1967, p. 171). This common environment depends on what exists in our minds as meaning rather than on what is outside of us. The individual’s “feelings” and “doings” (which are related to these feelings) are crucial because they “lie at the bottom of the whole system,” which is called society (1976, p. 49).

Consider, for instance, collective interpretative categories such as “friend,” “family dinner,” or “postal service.” Specific “expectations” are linked to them (Schütz 1967, p. 189). Collective schemas of this type are the basis of social interaction and constantly help us to attach a meaning to different situations as well as to organize our behavior. Following Weber, Schütz (p. 189) calls these shared schemas “ideal types.” Because of their existence, the other is more or less “anonymized” (p. 184) within the social world. This fact also makes interaction and reciprocal understanding possible between strangers. The action of the anonymous other is linked to specific “meaning-contexts” (*Ibid.*) and, sometimes, to “a certain function” (p. 180), referring to a typical structure of interaction (for instance, ‘a bank cashier’). The fact that the members of the same society share a horizon of common meanings largely depends on the fact that they have a cultural tradition in common – a tradition they have interiorized by learning a set of interpretative schemas that their predecessors created. The social world is thus connected to the “world of predecessors,” which is “what existed before I was born” (p. 208).

9. Order and Social Conditioning: The Individualistic Viewpoint

Considering the social world in nominalist and intersubjectivist terms does not imply the denial of social conditioning (Hayek 1948, p. 3). On the contrary, it is necessary in order to conceive of social conditioning in correct terms by purifying it from a set of substantialist and deterministic prejudices. Social conditioning is trivially evident.

If the elementary actions of individuals are alone capable of accounting for macrosociological phenomena, this does not mean that they are the product...of an individual liberty which is conceived as absolute. Individual action always occurs within the framework of a system of constraints which are more or less clearly

defined, more or less transparent to the subject, and more or less rigorous. (Boudon and Bourricaud 1990, p. 13)

Although MI accepts the existence of these constraints, it denies that they are the effect of a superhuman entity that mechanically controls a part of the individuals' views and actions (see Crozier and Friedberg 1980, pp. 17 ff.). Within the individualistic framework, social conditioning is precisely linked to a nominalist standpoint. Moreover, it is also connected to the idea that the way the environment influences us is mediated by the way in which we interpret it. As we have already pointed out, MH denies the relevance of the individual standpoints for the social analysis because it considers them to be mere epiphenomena of social factors (see Boettke 1990, p. 36). Rejecting this view, MI argues that social conditioning cannot be defined independently of human views and projects. It endorses a broadly Kantian viewpoint: things cannot influence us as pre-given data or essences, only as meaning. According to MI, the study of social conditioning, rather than being based on the assumption that action is extra-determined, should incorporate the idea that conditioned action is ultimately caused by the way the individual interprets his/her constraints in the light of his/her goals (see Di Iorio 2013).

Let us consider some examples. We already mentioned the structural-functionalist theory of the 'social role'. This theory assumes in a sense that a 'social role' is something that exists 'out there' independently of the individuals and their way of seeing things – something that controls their actions from outside themselves. As we have already pointed out, MI conceives of a 'social role' in quite a different manner. It views a 'social role' as an intersubjective meaning construction which implies specific regularities of action and particular expectations. In other words, it considers a social role to be a shared idea about what a social role is – an idea which guides the behavior of both the one who is supposed to act in conformity with this role – let us say a waiter – and of those who interact with him – his customers (see Weber 1978, pp. 3 ff.). This shared idea

has concrete effects, including social conditioning. The waiter “cannot move among his customers giving out blessings” (Boudon and Bourricaud 1990, p. 190). However, this conditioning cannot be studied by assuming that his lived experience is causally irrelevant, as MH requires. It is not implied by alleged pre-given constraints that exist independently of the waiter’s meaning-constructions, but by the way in which he interprets the situation and his needs. For instance, in order to explain the way he is conditioned, the fact that he does not have any interest in looking mad or in losing his job matters (see also Bronner 2007, pp. 166-167).

According to MI, the very socialization process must be studied from an interpretative and nominalist angle. Indeed, following his birth, the child does not encounter what Durkheim means by ‘culture’, i.e. an objective reality that exists independently of individuals and that programs their behavior. Rather, he or she meets other concrete individuals who share specific skills of perception and action. By interacting with these individuals, the child learns their skills through imitation (see Antiseri and Pellicani 1992, pp. 73 ff.). Moreover, during the socialization process, a young person is not led to internalize instructions “that will make up a kind of syllabus designed to be achieved later on, more or less mechanically” (Boudon and Bourricaud 1990, p. 357). The socialization-programming analogy must be rejected due to many reasons.

First of all, this analogy would only be correct if one supposes that during their lives, actors “are confronted by a limited number of repetitive situations” (p. 356). On the contrary, they prove to be capable of coping with unexpected events (see Gadamer 2006). In addition, the acquired memory that structures the way in which individuals interpret the world and behave is, at least partially, ever changing (see Hayek 1952b). In other words, new experiences lead them “to enrich” their “cognitive resources or to modify” their “normative attitudes” (Boudon and Bourricaud 1990, p. 357). Although certain effects of socialization are difficult to erase (a French person who speaks English usually has an

accent, and the same is true for a Brit who speaks French), what is learned is not absolutely unchangeable.

Moreover, the socialization-programming analogy also must be rejected due to another reason. While “some values or norms can be interpreted unequivocally, others are...very versatile” (Boudon and Bourricaud 1990, p. 359). This means that following a rule usually requires a creative effort. “Some norms are precise and in no way ambiguous (‘thou shalt not kill’); others might be interpreted in a variety of contradictory ways” (*Ibid.*). The principle “help your neighbor” – a principle that finds its origins in Christianity – has been interpreted in very different manners by political theorists, as is shown by the contrast between theorists of socialism and those of a market society (see Nemo 2004; 2006a).

Following Weber, Boudon and Bourricaud (1990, p. 13) also highlight another reason why data on socialization are extremely useful yet “insufficient in themselves to understand the reasons for the action,” due to the fact that the effects of socialization on different individuals are not identical (see also Di Nuoscio 2006, p. 121). The way in which actors react to the socialization process is not rigidly standardized. For instance, some people are very traditionalist and conformist, while others are not. The personality of an individual and the way in which he or she interprets things, including his or her cultural tradition, is variable (see Gadamer 2006; Hayek 1952b).

Due to all this, MI argues that the holistic account of social order must be rejected. It approaches the issue of order from a different viewpoint. If individuals tend to follow a typical set of rules, this does not depend on the fact that they are “extradetermined” (Boudon and Bourricaud 1990, p. 358). They can transgress a rule if their interpretative horizon changes the way in which they attach a meaning to things. If they respect certain rules, this depends on the fact that they do not see viable alternatives to them and have no reasons to violate them. Consider, for instance, the rules of pronunciation that created the different

regional accents in the United States. It is possible that a young person – let us say an undergraduate – who has a rural accent and moves to New York City to complete his studies might start feeling a bit uncomfortable with his accent. It is thus possible that as a consequence, he gradually changes to adopt the New York City accent through practice. If the shame a person feels can affect his accent, this means that the way in which one speaks cannot be dissociated from his intentionality and lived experience as holist and culturalist paradigms assume. It follows that shared local accents cannot be explained in terms of objectivistic and heteronomous determination. If inhabitants of a specific region share a particular accent, this is not the mechanical consequence of the fact that they learned the same phonetic tradition. The fact that they feel no need to change their way of speaking is equally important.

This kind of anti-objectivist approach can be applied *a fortiori* to explain the respect of shared moral norms. If individuals follow these norms, this depends on them not being motivated to do otherwise. There can be different reasons for their attitude. They might believe in their intrinsic value on the basis of what Boudon (2001) calls “cognitive rationality.” Or they might consider the consequences of their violation as undesirable (they might tend to avoid, for instance, certain social sanctions or the sense of loss or confusion related to the abandonment of familiar reference points). Further, they might combine these two perspectives. In any case, individuals follow certain ethical rules because it makes sense to them, and it is their intentional attitude, which presupposes a tacit or implicit interpretative evaluation, that implies, mainly unintentionally, the “overall order” (Hayek 1967, p. 68).

10. Methodological Individualism and Reductionism

The debate on the nature of methodological individualism has been influenced, beginning in the fifties, by linguistic analysis and, in particular, the neo-positivist concept of the reduction of theories (Petroni 1991, p.

16). This concept was considered by its fathers as a theoretical tool that could be used to clarify the nature of scientific knowledge by establishing whether one theory or phenomenon is reducible to another theory or phenomenon. It is related to the neo-positivist concern for a unified epistemology. Far from clarifying matters, the use of the concept of reduction of theories in the social sciences has led to a misleading debate. This is because the application of such a concept was based on the assumption that the equivalence between methodological individualism and atomism was correct – an equivalence which, as earlier mentioned, was already defended, among others, by Hegel and Comte. According to the atomist theory of society, which is related to philosophical mechanism, the social whole is not more than a mere sum of atomic parties in the sense that there are no global and systemic social properties. This precisely means that society can be described in reductionist terms. However, methodological individualism is not atomism and does not deny the existence of irreducible social properties. Assuming that methodological individualism is atomism, linguistic analysis confused individualism with reductionism. Within this incorrect interpretative frame, the problem of the epistemological validity of methodological individualism became the problem to understand if its alleged reductionist program was to really be achievable. In other words, reflections on the nature of methodological individualism became focused on the issue of the reducibility of social phenomena.

Imagine that you are watching a basketball game. You have two teams, so 10 people in total. A reductionist description of this set of individuals (where reductionism means what the critics of MI usually mean by this term) states that the properties of this whole are nothing but the sum of the properties of each player. So, you add up the properties of player X (he is 7 feet tall, he is from North Carolina, he is black, he likes sport cars and so on), the properties of player Y (he is 6 feet, and 5 inches, he is from Texas, he is white, he likes motorbikes, and so on) and the properties of all other players and you have all the properties of the

whole. In fact, this reductionist description of the properties of a set of individuals is deeply flawed. This is because there are properties of the whole which cannot be reduced to the properties of the individuals. For instance, if you say that one of the players is taller than the others, you are not really talking about a property of an individual: you are referring to a property which, by its nature, is linked to the whole and cannot be understood simply as an individual property. One can be taller than other people only in comparison to other people. The fact that he is taller is a property which presupposes a whole.

If methodological individualism was a reductionist program, it would be extremely easy to criticize this approach. The systemic and irreducible nature of social phenomena is trivially evident and hardly contestable. Convinced by the linguistic analysis that the distinguished feature of methodological individualism was to achieve a reductionist program in social sciences, many authors rejected this approach (see Di Nuoscio 2006, pp. 118-120). Those who applied the concept of the reduction of theories to the analysis of the achievability of the alleged reductionist program of the individualist paradigm quickly concluded that this was indeed impossible (see, for instance, Bunge 1996, p. 246; Kincaid 1990, p. 141; Lukes 1973; Mandelbaum 1955, p. 307 ff.). They stressed not only the obvious irreducibility of the global or emergent properties to individual or psychological properties. They also criticized this approach by bringing attention to the equally obvious irreducibility of the "societal" predicates. The latter might be explained, for instance, by the following sentence: 'the nation X is richer than the nation Y'. As it is easy to understand, here the predicate cannot be semantically reduced to a set of predicates concerning qualities of individuals because it does not say that any member of the nation X is richer than any member of the nation Y. In other words, it does not truthfully reflect a set of individual qualities (see Di Nuoscio 2006, p. 119).

Due to its apparent capacity to clarify the holism/individualism debate as well as to the relevant influence of linguistic analysis in recent

philosophy, the reductionist interpretation of methodological individualism has been highly successful. Today the most current definition of methodological individualism is, by far, the one that describes this orientation in terms of psychological reductionism. The idea that methodological individualists are reductionists has been largely accepted because their ontological nominalism has been considered to be a proof of their reductionism. Their nominalism has been misunderstood. The reductionist interpretation of methodological individualism regards the ontological stance "only individuals exist", which is endorsed by the individualists, as meaning "there are only individuals, so there are not global properties." This is mistaken because the ontological nominalism of the individualists is not a theory in support of the semantic reduction (i.e. a theory stating that the properties of a social system can be semantically reduced to individual properties). Instead, it is a criticism of a Platonic theory of the social wholes – a criticism of a theory that assumes that social sciences must study superhuman substances, which exist independently of individuals and control them. The nominalism of the individualists means "history is made by individuals rather than by superhuman entities." As authors like Hayek and Popper have stressed, being a nominalist does not mean being a semantic reductionist in the sense of the analytical interpretation of methodological individualism. It only means that you do not assume that the global properties (like, "Jon is taller than his friends") concern macro-entities, which exist independently of individuals, as the holists believe. For methodological individualist like Hayek and Popper, the irreducible properties must be regarded as properties of a set of individuals. The nominalist ontology is incompatible with the holist ontology because the holist ontology does not make any distinction between the concept of emergence of global properties and the concept of superhuman entity. On the contrary, according to the ontology of methodological individualism, only individuals exist, and the global properties must be considered a "trivial" implication of the existence of individuals.

The success of the reductionist interpretation of methodological individualism implied the spread of the belief that this approach completely neglects the crucial importance of social factors. From the standpoint of those who consider methodological individualism to be a reductionist method, this orientation rules out the possibility to analyze society and social conditioning in structural terms. We have already stated that nominalism and systemism are not incompatible. Given that the true point of contrast between holists and individualists is not the issue of reducibility, it must be sought in a disagreement about the ontology of the social wholes and the epistemology of action. While individualists defend the autonomy of the actor and nominalist ontology, holists refuse them. Holists argue not only that global properties are properties of a macro-entity, but also that these properties influence individuals as substances or objective realities, i.e. independently from the way in which individuals interpret them. On the contrary, for individualists, global properties do not influence the individuals mechanically, but on the basis of the way in which they are interpreted. As we have shown before, this hermeneutical systemism is linked to a theory of intersubjectivity and to the idea of unintended consequences. The nominalism underpinning this approach is perfectly compatible with both the theory of emergent properties and that of societal predicates. In fact, it allows us to understand irreducible social phenomena in a better way.

The definition of methodological individualism as reductionism, which is based on a misinterpretation of the nominalist ontology, fails to reflect the nature of the explanations that are provided by methodological individualists. It is not complicated to find many examples of individualist explanations that cannot be described in reductionist terms.

Let us consider, for instance, Mises' most famous theory, i.e. his criticism of the planned economy. As is well-known, Mises argues that without private property, economic calculation is impossible since market prices are absent. Now, it's impossible to describe Mises' analysis of the calculation problem in terms of reductionism. Mises' analysis is implicitly

based on the reference to global and systemic properties. First of all, Mises does not consider the interactions among individuals in the market to be random. He conceives of the market as a system. He assumes that there are specific rules protecting private property and regulating contracts and that these rules create a specific structure of interaction. Moreover, he also assumes that these rules imply structural constraints. Mises does not argue that people are completely free. For instance, his concept of market society presupposes that in such a kind of society, if you steal, you risk going to jail. In addition, Mises stresses that it is precisely the existence of the constraints that are implied by private property that allow us to solve the calculation problem. This is because private property implies market prices (which cannot exist in a communist system). Even the market prices cannot be described in reductionist terms. Prices are not a mental property. They do not depend only on the will of a particular individual. Prices are an aggregate effect. They are an unintentional consequence that depends on the combination of many intentional choices. Prices are emergent properties. Moreover, Mises explains that even prices imply structural constraints because they influence choice, and by doing so, they allow us to solve the coordination problem. Obviously one cannot buy something which is too expensive given his/her monthly income¹.

Mises is often regarded as a reductionist, but it is impossible to describe his criticism of the planned economy by using the concept of reductionism as intended by the dominant definition of methodological individualism. It is not complicated to find other examples. Consider, for

¹ The reductionist interpretation of methodological individualism has been particularly successful in economics where the reductionist nature of methodological individualism is taken for granted. The current debate about methodological individualism in the economics field is a debate on the reducibility of social properties rather than a debate about methodological individualism properly understood. Many economists seem to have forgotten that the essence of methodological individualism is a criticism of the theory that individuals are unconsciously controlled by superhuman entities. As far as one does not endorse the holist theory of the heteronomy one cannot be considered to be an anti-individualist. The macroeconomists and the neo-institutionalists who criticize the alleged reductionist nature of methodological individualism and take their distances from methodological individualism do not deny that the ultimate causes of economic phenomena are individuals. Consequently, they are not really anti-individualists. Their criticism of reductionism is compatible with methodological individualism. All the different contemporary orientations in economics are actually individualist although some of them criticize methodological individualism.

instance, Adam Smith's theory of the 'invisible hand'. Smith argues that the wealth of a nation is not a property of the selfish behavior of the individuals, but a global emergent property. Consequently, the theory of the 'invisible hand' is not reductionist. Similarly, when Tocqueville explains how the centralized character of the French administration made the French social and political 'system' very different from the English system, he refers to structural properties that influence the choices of the actors and social dynamics. Tocqueville provides an explanation that cannot be described in reductionist terms. So does Weber when he analyzes the caste system in India and the way this system imposes highly constrictive professional, religious and social obligations to the individuals.

As Boudon (1971) stressed, the use of a structural approach and irreducible concepts is a physiologic characteristic of social research. He maintained that systemism is an integral part of the individualistic model of explanation. Even those individualists like John Stuart Mill, who argued the necessity of psychologist explanations of social phenomena, did not really follow a reductionist approach in practice. The way they empirically describe the social world cannot be defined as reductionist. Mill's analysis of phenomena like puritanism, markets, and bureaucracy is implicitly based on systemic and irreducible concepts. A bureaucracy is obviously a system within which actors have specific constraints because they have to respect specific rules of interaction. Moreover, although Mill does not explicitly develop a theory of the unintended consequences of human action, it is possible to find many examples of unintended consequences in Mill's work. For instance, Mill argues that too much bureaucracy is a danger to human freedom. He understood that the good intentions of those who want to solve social problems by implementing statism might have side effects. By definition unintended consequences are not mental properties and cannot be described in reductionist terms. The real differences between Mill and Comte, whom Mill criticized for his sociological holism, are related to divergences concerning the

epistemology of action and the ontology of collective nouns, rather than to the issue of reductionism (see Di Nuscio 2006).

It seems problematic to apply the concept of reductionism even to describe the atomist theories of the social world which deal with fictional situations rather than with empirical and historical phenomena (and which are therefore very different from methodological individualism as intended by authors such as Hayek and Boudon). Even the unrealistic atomist models of social interaction usually implicitly assume the existence of some global properties and structural constraints. So, although they describe the behavior of a hypothetical man who is free from many constraints that affect the real man, they do not seem to consider this hypothetical man to be free, so to speak, one hundred percent. Take the contractualist tradition. The members of this tradition denied many social constraints and described in purely fictional terms social interaction. However, they have been obliged to implicitly assume the existence of some irreducible global and systemic properties which limit the individual freedom. This can be understood if one considers that no social contract is possible without an agreement and that the possibility of an agreement presupposes a shared language. A language is a system that cannot be described in reductionist terms and that implies structural constraints and limitations which affect the individual behavior. Speaking a language requires, for instance, the respect for phonological, semantic, and syntactic rules.

Probably it would be better to describe the atomist tradition as hyper-rationalistic rather than as reductionist although some of its members explicitly defended a mechanist philosophy and a reductionist interpretation of the social world.

11. Group-Selection

The criticisms which have been formulated against methodological individualism on the basis of the concept of the reduction of theories can

be described as 'tilting at windmills'. One of the clearest examples of the confusion created by the use of this concept in social sciences and of how misunderstood methodological individualism is today is the idea that this paradigm is incompatible with Hayek's theory of cultural evolution – a theory according to which cultural evolution "operates...through group selection" (Hayek 1988, p. 25). This incompatibility is argued by many authors, including Boehm (1989), Gray (1986), Hodgson (1993), Steele (1987), Udehn (2001), Vanberg (1994), and Witt (1994). These scholars' viewpoint is also partly shared by Caldwell (2009), Heritier (1997) and Laurent (1994). The core of the theory of incompatibility is that an explanation of cultural evolution in terms of group-selection is inconsistent with methodological individualism because it is based on the reference to societal concepts of the "group" and "group advantage" rather than on the reference to the concepts of the "individual" and "individual benefits" (Vanberg 1994, p. 84). In other words, the incompatibility is assumed to depend on the fact that the theory of group-selection implies the reference to concepts which are irreducible to individual or mental properties. Due to the fact that Hayek conceives cultural evolution in these anti-reductionist terms, he is accused as being incoherent in his explicit defense of methodological individualism. He is accused of endorsing a kind of "collectivist functionalism" (Vanberg 1994 p. 84).

This criticism of Hayek is based on a misunderstanding. Within the framework of methodological individualism, the reference to societal and systemic concepts of group and group-advantage is perfectly legitimate. It does not presuppose the hypostatization of groups nor the denial of the individual's autonomy because the nominalist and intersubjectivist systemism of the individualist paradigm has nothing to do with holist sociology. Max Weber used the concept of 'caste' and Mises that of 'price' which are both irreducible concepts. However, this does not mean that Weber and Mises developed holist explanations. From the standpoint of methodological individualism, group-selection does not concern *sui generis* entities. It is rather a selection of shared rules which are

intentionally followed by individuals on the basis of a “situated rationality” and which create a specific system of interaction (see Di Nuoscio 2000, p. 178; Nadeau 2003, p. 18; Petitot, 216-217).

Group-selection is dependent on unintentional and unpredictable aggregate effects which are implied by the generalized respect of collective rules – aggregate effects which give an evolutionary advantage to certain structures of interaction as compared to others. This view is not only incompatible with structural-functionalism, it is also only explainable individualistically, i.e. by combining the idea of individual autonomy with that of unpredictable aggregate effects. The individualistic nature of Hayek’s standpoint is confirmed by the fact that, in analyzing the logic of group-selection, he does not conceive cultural innovation in historicist terms. Indeed, Hayek (1988, p. 16) remarks that the mechanism of group-selection interacts with another crucial mechanism, i.e. that of the “variations of habitual modes of conduct”. He stresses that the latter mechanism, precisely presupposes the autonomy of actors, i.e. the possibility to violate a rule. In addition, it must also be noted that Hayek was not the first methodological individualist to have used the concept of group-selection. As Di Nuoscio (2000, p. 174 ff.) remarks, this concept has been used before and in a very similar way by Spencer, another author who has been, unsurprisingly and unfairly accused of being a crypto-holist (see also Boudon and Bourricaud 1989, pp. 367 ff.).

12. The Middle Ground Paradigm: a Criticism

Over the last few years, the reductionist interpretation of methodological individualism has become the presupposition of a new kind of criticism of this approach. This criticism does not argue that the individualist paradigm is completely wrong like the traditional holist criticism maintains. It is less radical. It admits that there is a part of truth within methodological individualism. This criticism has been developed by the

theorists of what Udehn (2001, p. 318), following Wippler, calls “structural individualism”. Structural individualism accepts the individualist idea that the actors’ views and intentions matter and cannot be erased from the analysis as valid – an idea that is not shared by holist sociology. However, according to theorists of this new paradigm, methodological individualism is partly wrong in that it is a form of reductionism which denies the importance of “the social structure” as well as of the “positions” and “roles” related to this structure (Udhen 2001, pp. 319; 347). To explain social action, they maintain, the intentionality of the actor is not the only factor that matters. Structural individualists are engaged in defending what they consider a middle ground between holism and individualism – a “synthesis” of these two approaches providing a systemic analysis of social phenomena. They understand systemic analysis to be a specific and peculiar feature of the holist tradition which can be used to improve traditional and reductionist individualism (Udhen 2001, p. 318). Besides Udhen, supportive of this approach are, among others, Bunge (1996), Bearman, Hedström (Hedström and Bearman 2009), and Pettit (1993). Some of them prefer to use terms other than “structural individualism” to refer to the middle ground paradigm they defend, but this does not really matter here. There is a substantial identity of their viewpoints.

Like other reductionist interpretations of methodological individualism, structural individualism makes the mistake of confusing methodological individualism and its ontology with a defense of reductionism. Due to the reasons that we have exposed before, this standpoint cannot be accepted. The theorists of structural individualism do not completely agree with the thesis of methodological individualists according to which the causes of action must be lodged within individuals. They interpret this thesis as proof that methodological individualism denies social conditioning and is “psychologist” (see Udhen 2001, pp. 331-336). According to structural individualists, the cause of action must be sought both in the individuals and in the structural factors that limit the individual possibility of choice. They argue that methodological

individualism denies the existence of these factors and assumes, consequentially, that the actor is absolutely free. For them, it is necessary to acknowledge, in Durkheim's footsteps, that there are external social constraints which are linked to the characteristic of the social system within which the action takes place and which cannot be described in terms of mental reductionism.

However, methodological individualists' theory of autonomy neither argues for actors' absolute freedom nor the lack of external conditioning. We have already provided examples of the fact that the individualistic explanations of social phenomena do not neglect structural constraints and consider social rules, social sanctions, social positions and the effects of cultural tradition to be important. According to methodological individualism, individuals are autonomous beings not because they do not have any boundaries, but because they are not passively subjected to external influences and because their boundaries cannot be understood without considering their intentionality. In other words, the assumption of the individualist approach is that influences coming from the social environment, understood in terms of nominalist structuralism, do not affect actors in a mechanical and direct way, but always through interpretative processes. The theory of autonomy, as intended by methodological individualism, does not challenge Durkheim's conception of social constraints because this conception assumes that there are irreducible social structures which influence us. It challenges it because it is an objectivist view which considers action to be an epiphenomenon of external data that exist independently of the individuals. The reasons why methodological individualists criticize Durkheim is because he is not a nominalist and also because he neglects the hermeneutical presuppositions of action.

As Demeulenaere (2011, p. 11) remarks, "methodological individualists have always defended the idea that individuals are, let us say, "embedded" in social situations that can be called "social structures," and are in no respect isolated atoms moving in a social vacuum". The

notion of “structural individualism...is... inherent to sociological methodological individualism from the very beginning, as opposed to some versions of economic atomism” (Ibid). Institutions and rules clearly have “effects upon individual action” (Ibid). However, they “have no direct ‘energy’ of their own” (Ibid; see also Demeulenaere 2012, pp. 25-26).

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