# Methodological Individualism and Subjectivism in the Writings of Ludwig M. Lachmann:

#### A Realist Clarification

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#### Abstract

This paper considers ontological and epistemological aspects in the writings of Lachmann. I describe not only Lachmann's distinct radical subjectivist position within the Austrian camp, but also show the thread that runs from Menger via Mises and Hayek through to Lachmann. This can be achieved by focusing on the criticisms raised by Menger, Mises, Hayek and especially Lachmann against the Walrasian general equilibrium approach. It turns out, that the criticism is to a large extent ontological in its nature. Despite Lachmann's ontological criticism, I argue that his social ontology suffers from tensions itself that have an impact on and indeed weaken his methodological subjectivist position. I highlight three flaws in Lachmann's methodological subjectivist position. First, Lachmann is not as careful as he might be in keeping separate the distinct realms of epistemology and ontology, which has the effect that Lachmann uses the term subjectivism sometimes in an ontological and sometimes in an epistemological sense. Second, Lachmann glosses the difference between methodological individualism (MI) and MS, by fusing MI with MS and hermeneutics. Finally, Lachmann connects methodological subjectivism (MS) with the method of reduction. In this essay, I offer possible solutions to the identified problems and at the same time propose a sustainable version of MS.

#### 1. Introduction

This essay focuses on Ludwig M. Lachmann, a prominent representative of the Austrian school of economics, with the aim of clarifying his conception of the relationship between human agency and social structure. Lachmann represents an interesting case for several reasons. First, he belongs to the radical subjectivist wing of the (neo) Austrian school, according to which the future is unknown, the social world is in permanent flux, actors labour under uncertainties of various kinds, and crucially, plans and expectations of individual actors not only often diverge but also change through time. Second, Lachmann does not see his commitment to subjectivism as being in conflict with the ideas of market coordination or spontaneous order. His subjectivism does not lead to nihilism (Koppl 2002, 9) as has sometimes been claimed (Coddington 1983). Indeed, Lachmann seeks to explain the existence of socio-economic order from his (radical) subjectivist perspective, which is a difficult task because this requires explaining how a coordination of individual plans (and thus socioeconomic order in general) can emerge. The third reason why Lachmann represents an interesting case is that his writings are influenced by authors who are widely regarded as standing in opposition to the Austrian approach. On the one hand, he draws on the writings of Max Weber (see Lachmann 1970) and Werner Sombart, both of whom are associated with the German Historical School. On the other, he uses Keynesian insights, such as the works of John M. Keynes himself, and George L.S. Shackle. Finally, Lachmann's writings are a good example of how methodological individualism and subjectivism can contribute to the social sciences in general, perhaps in supplementing other analytical approaches such as institutionalism, for example. Amongst other things, my essay will demonstrate that institutions do have a prominent place within Lachmann's approach, as methodological individualism and subjectivism are concerned with the relationship between human agency and social structure, including institutions. In general, Lachmann and most Austrian economists argue for methodological pluralism<sup>3</sup> within the social sciences.

<sup>&</sup>lt;sup>1</sup> Roger Koppl points to the same difficulty when he states that '[e]xpectations are to be neither data nor variables. They are to be endogenous, but not functionally related to observable facts. Rather than functional relations, we [economists] are to see in expectations subjective interpretations of facts whose meaning for future actions is always more or less obscure' (Koppl 2002, 10).

<sup>&</sup>lt;sup>2</sup> See Lachmann [1982a] 1994; [1990] 1994; [1991] 1994, 286.

<sup>&</sup>lt;sup>3</sup> Methodological pluralism may be captured as the idea that while there is only one reality, different perspectives provide only partial access to it. Hence a methodological pluralist supports the use of a mixture of different methods (rather than one) in order to reach the fullest possible understanding of reality.

The structure of the paper is as follows. In section 2, I highlight the criticisms made by Austrian economists and by Lachmann in particular, of economists' use of methods borrowed from the natural sciences and Walras's general equilibrium approach. It turns out that the Lachmann's critique (and the Austrian more generally) is an ontological one. Moreover, based on this criticism, it is possible to show Lachmann's distinctive position within the Austrian camp. Section 3 describes aspects of Lachmann's social ontology. In particular, I focus on his conception of human action and social order, both of which provide the ontological basis for his methodological subjectivism. In section 4, I highlight crucial aspects of Lachmann's methodological subjectivism, clarify some confusion and provide a sustainable version of methodological subjectivism. Section 5 concludes the paper.

# 2. From Menger to Lachmann on Method: Positioning Lachmann

Lachmann regards his work as in the tradition of the Austrian school of economics, in particular in the tradition of its main representatives Carl Menger,<sup>4</sup> Ludwig v. Mises,<sup>5</sup> and Friedrich A. v. Hayek, under whom Lachmann studied at the London School of Economics. As Koppl and Gary Mongiovi argue even 'Sombart's influence [as his dissertation advisor] was not sufficient to keep Lachmann from identifying with the Austrian tradition of Menger, Mises, and Hayek' (Koppl and Mongiovi 1998, 3). While it is possible to find many commonalities between Menger, Mises, Hayek and Lachmann, the commonality that I shall focus on here is their respective attempts to establish a methodology (i.e. methodological individualism and subjectivism)<sup>6</sup> for the social sciences that (supposedly) takes the peculiar features of the social world into consideration. In order to promote their preferred method for economic and social research, Menger, Mises, Hayek and Lachmann all follow the same strategy, namely to criticise the use of methods borrowed from the natural sciences for the analysis of socio-economic problems.<sup>7</sup> Moreover, and this is linked to the latter strategy, they

<sup>&</sup>lt;sup>4</sup> See Grinder (1977, 14) and Lachmann ([1990] 1994, 245-46).

<sup>&</sup>lt;sup>5</sup> See Grinder (1977, 16) and Lachmann ([1967b] 1977, 336; 1976b).

<sup>&</sup>lt;sup>6</sup> For example, Richard Ebeling argues that it is methodological subjectivism which connects Lachmann with Hayek and Mises: 'For Mises and other Austrians such as Hayek and Lachmann, the cardinal rule for serious work in the social sciences in general and economics in particular has been adherence to a methodological subjectivism, i.e., that human actions in the social world are outgrowths not merely of the subjectivism of tastes and preferences but of a subjectivism of perspective, perception, and purpose that serve as the steering rods and meanings for the actions undertaken' (Ebeling 1986, 49). Mark Addleson (1986) makes a similar argument, while others, such as Carlo Zappia (1986) and Steven Horwitz (1986), identify the main link between Menger, Hayek and Lachmann as residing in their theory of institutions.

<sup>&</sup>lt;sup>7</sup> See Mises ([1949] 1966, 18, 23-24, 26; [1957] 1958, 3, 234); Hayek ([1942-44] 1955); Menger captured in Lachmann ([1966a] 1977, 48-49; [1967b] 1977, 336; 1970, 2, 36).

all use the currently still dominant version of subjectivism that derives from Léon Walras as a benchmark to distinguish their own brand of subjectivism. It is important to note this fact, as Menger is usually identified with William S. Jevons and Walras as one of the originators of the subjectivist revolution in economics. In highlighting Menger, Mises, Hayek and Lachmann's criticisms of Walrasian general equilibrium analysis, I attempt to illustrate, first, the difference between Austrian and Walras's subjectivism, second, the thread that runs from Menger to Lachmann, and finally, the distinct position of Lachmann within the Austrian camp. It will become apparent that each of the authors criticise different aspects of the Walrasian model and at the same time further develop their predecessor's position.

Let me start with Menger, whose aim is to understand, explain and eventually 'control' economic processes (see Menger [1883] 1969, 5, 18, 28, 34, 44). Menger is interested, not in the preconditions for a (static) general equilibrium in the economy, but rather in how a tendency to an equilibrium can exist in a dynamic world in which agents are not completely informed, make errors, and so forth. His aim is to gain knowledge about the nature and essence of social phenomena (see Menger [1883] 1969, X, 14). Accordingly, in a letter to Walras, he raises the question of how an economist can attain knowledge of the 'nature of value, rent, profit' etc. by the mathematical method? (see Jaffe 1965). Lachmann summarises Menger's criticism of the use of mathematics in economics as follows:

even Menger saw himself compelled to oppose the methods of the natural sciences in economics. In two letters to Walras, of June 1883 and February 1884, he insisted that we are dealing not only with quantitative relationships but also with the 'essence' of economic phenomena. He also asked how with the aid of mathematics one could ascertain the essence, for example, of value, rent, or the entrepreneur's profit. However, since mathematics is essential to the modern natural sciences, Menger's attack was directed just as much against the latter as against the former (Lachmann [1966a] 1977, 48-49).

<sup>&</sup>lt;sup>8</sup> All three authors independently (between 1870 and 1880) suggested a new (subjective) way of analysing economic problems.

<sup>&</sup>lt;sup>9</sup> Walras attempts to show the conditions under which a general equilibrium for the whole economy may occur. He uses the idea of marginal utility in order to derive demand and supply curves and then to determine equilibrium prices. Walras regards mathematics as a useful tool in order to demonstrate a general equilibrium state and his analysis is consequently rather static (see Jaffe 1976; Leube 2002).

As the use of mathematics by Walrasian general equilibrium analysis represents a subset of the more general methods of the natural sciences, Lachmann sees Menger's critique as being directed against both.

Mises similarly distinguishes between (methods of) natural and social sciences: he argues for methodological dualism (see Mises [1957] 1958). Mises criticises not only what he calls behaviourism and positivism for using methods of the natural sciences, but also mathematical economists. In his view the latter group put far too much emphasis on static equilibrium models. For Mises, Walrasian general equilibrium analysis is of little use because it is both static and descriptively unrealistic. Most importantly, however, it cannot deal with real human action and choice. According to Mises, a static equilibrium concept transforms human action to simple reaction (see Mises [1957] 1958, 246). Elsewhere, he argues:

But the chief objection which must be raised to the mathematical treatment of economic problems comes from another ground: it really does not deal with the actual operations of human actions but with a fictitious concept that the economist builds up for instrumental purposes. This is the concept of static equilibrium. [...] Occupation with static equilibrium is a misguided evasion of the study of the main economic problems (Mises [1942] 1990, 7).

#### Or in Human Action Mises states:

Now, the mathematical economist does not contribute anything to the elucidation of the market process. He merely describes an auxiliary makeshift employed by the logical economists as a limiting notion, the definition of a state of affairs in which there is no longer any action and the market process has come to a standstill. [...] A superficial analogy is spun out too long, that is all (Mises [1949] 1966, 355).

Hayek's criticism focuses on knowledge problems, which he believes are not properly addressed in general equilibrium analysis. He argues that 'formal equilibrium analysis in economics' does not inform us 'about causation in the real world' as long as it does not deal with the problem of 'how knowledge is acquired and communicated' (Hayek [1937] 1949, 33). And two pages further on, he argues 'that the tautological proposition of pure equilibrium analysis as such are not directly applicable to the explanation of social relations' (Hayek [1937] 1949, 35). Moreover, he holds that in our analysis (by using a general equilibrium approach)

instead of showing what bits of information the different persons must possess in order to bring about that result [an equilibrium state in which prices correspond to costs], we fall in effect back on the assumption that everybody knows everything and so evade any real solution of the problem (Hayek [1937] 1949, 51).

In a different essay Hayek highlights the importance of change in the social realm and 'real' time (similarly to Mises, see [1949] 1966, 99-104), both of which he regards as incompatible with equilibrium analysis (see Hayek [1945] 1949, 82) and the methods borrowed from the natural sciences for social analysis more generally.

Lachmann regards knowledge issues as a prerequisite of what he highlights as important aspects which are not properly addressed specifically in general equilibrium analysis, namely the subjectivity of expectations and plans of individuals. Lachmann ([1976a] 1977, 37) regards the notion of equilibrium at the level of the individual (including a household or firm) as a useful tool of analysis, as long as it is an expression of consistent action. However, '[e]quilibrium involving action *planned by different minds*' Lachmann sates ([1976a] 1977, 37, italics added) 'involves altogether new problems'. He continues that

Equilibrium on a simple market, such as a Marshallian corn market, still has its uses. 'Equilibrium of the industry' is already harder to handle. When we speak of 'general equilibrium', we are simply hypothesizing that among the forces of interaction between markets the equilibrating forces are of overwhelming power and will prevail over all obstacles. Also, they must be able to do their work quickly, before any changes in data can take place. General equilibrium is thus possible in a stationary world (Lachmann [1976a] 1977, 37-38).

However, the social world is not stationary: 'The image of economic action that emerges from our [Austrian] reflections' according to Lachmann ([1976a] 1977, 39, italics in original) 'is thus that of the *market as a continuous process without beginning or end*'. Hence he concludes that 'Marshallian markets for individual goods may, for a time, find their respective equilibria. *The economic system never does* (Lachmann [1976a] 1977, 39-40, italics in original). Elsewhere Lachmann maintains that the Austrian 'research programme of

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<sup>&</sup>lt;sup>10</sup> Roger Garrison maintains that for Lachmann 'equilibrium never' exists, while Mises and Hayek have faith in a tendency towards a general equilibrium position (see Garrison 1986, 90). Thus, according to Garrison, Lachmann's position on the forces that lead to a general equilibrium differ from those emphasized by Mises and Hayek. In contrast to Garrison, Steve Fleetwood argues that Hayek's position changed during his life and that Hayek in most of his writings rejects the concept of general equilibrium by replacing it with the concept of

subjectivism is [...] incompatible with determinism in all its forms, in particular that of the General Equilibrium model' (Lachmann [1990] 1994, 243). Hence, and in contrast to general equilibrium theory,

Austrian economics takes no form of knowledge for granted. The market appears to it as a continuous process, in the course of which the knowledge possessed by some participants becomes diffused to many, while new knowledge is acquired by some, and some earlier knowledge becomes obsolete (Lachmann [1976a] 1977, 35).

Indeed, Lachmann ([1976a] 1977, 39) argues that 'new ignorance emerges simultaneously with the new knowledge gained by some'. Knowledge and information represent a reservoir on which individual agents draw when they form not only their expectations of the future but also their plans. Consequently, Lachmann highlights the significant role of individuals' changing expectations and plans in a changing world:

What appeared to them [Austrian economists] much more urgent was to take into account the continual need, in a constantly changing world, to adapt economic plans to these changes. For in such a world a general condition of equilibrium cannot be achieved. We thus see why economic plans occupy a central place in Austrian theory, while the general nexus of market phenomena is neglected. One takes one's orientation from reality (Lachmann [1966a] 1977, 55, italics added).

From this statement emerges, at the same time, that Lachmann's critique of general equilibrium analysis and the issues that he regards as most important (e.g. changing plans in a changing world) stem from ontological reasoning, e.g. that the dynamic nature of the social world renders static general equilibrium analysis quite useless.<sup>11</sup> For Lachmann, the '[m]ethods borrowed from the natural sciences are applied without testing their applicability to the *object* of the social sciences' (Lachmann [1966b] 1977, 117, italics added). A useful theory must provide insights into and be applicable to a world as it is, according to Lachmann and Austrian economists in general. In other words, Austrian economists are primarily

socio-economic order (see Fleetwood 1995, 65). That is to say the position of Hayek and Lachmann is indeed very similar if not even the same, according to Fleetwood. As regards Hayek's position, he states: 'Acquisition of new relevant knowledge gradually changes subjectively held knowledge, bringing agents' expectations more and more into line, and thereby bringing about a tendency towards equilibrium - even though this end state may never be reached' (Fleetwood 1995, 68, italics added).

<sup>&</sup>lt;sup>11</sup> And the same applies to Menger, Mises, and Hayek.

interested in 'realistic' explanations of socio-economic problems. <sup>12</sup> As the philosopher Uskali Mäki puts it, for Austrian economists a theory refers 'to entities that exist' and is 'a systematic representation of the features of those entities, such that the theory has a chance of being either true, close to the truth, or carrying the promise of getting us closer to the truth of what it represents' (Mäki 1992b, 38). Elsewhere Mäki argues that 'most Austrian economists have thought that the economy exists, that economic theories about it are true or false, and that true theories are to be preferred to false ones' (Mäki 1990, 292-293). This is apparently one aspect that Lachmann tries to emphasize when he argues that Austrian economists take their 'orientation from reality'. The second aspect (and related to the former) is the belief of Lachmann (and Austrian economists more generally) that a 'realistic' explanation of economic phenomena has to take 'real' influences into consideration, that is, that 'economic phenomena should be explained by giving information about the causal mechanisms that give rise to them' (Runde 1998, 152). Thus, Lachmann attributes some of the deficiencies of general equilibrium analysis to its ignoring of some essential (e.g. causal) influences (e.g. the subjectivity of expectations and plans) that generate economic phenomena. 13 He argues, for example, that in 'the general equilibrium system of Walras and Pareto [...] all action is determined by present prices, while in the *real world* entrepreneurs will have to let themselves also be guided by expectations of future prices and sales' (Lachmann [1967a] 1977, 302, italics added).<sup>14</sup>

In short, Lachmann joins the chorus of Menger's, Mises's, and Hayek's ontological criticism, addressing his critique specifically at the general equilibrium system of Walras and Vilfredo Pareto<sup>15</sup> on five grounds:<sup>16</sup>

i) like Menger, Mises and Hayek, he sees a very limited use for mathematical models in social sciences;<sup>17</sup>

<sup>&</sup>lt;sup>12</sup> See Menger ([1871] 2004, 46-47; [1883] 1933, 33; [1889] 1994, 12); Mises (1962, 41, 62; [1949] 1966, 6, 64-65); Hayek ([1945] 1949, 91); Lachmann ([1971] 1977, 185-86; [1976a] 1977, 36-37; 1986, 34-35; [1991] 1994, 277); Birner (1990); Ebeling (1986, 52); Hülsmann (1999, 18).

Mises, for example, highlights that an important aspect of socio-economic analysis is to use an adequate conception of the individual actor: 'Economics does not deal with an imaginary *homo oeconomicus* as ineradicable fables reproach it with doing, but with *homo agens* as he really is, often weak, stupid, inconsiderate, and badly instructed' (Mises [1944] 1994, 120, italics in the original). Like Mises also Hayek argues that in his approach he treats 'men in all their given variety and complexity, sometimes good and sometimes bad, sometimes intelligent and more often stupid' (Hayek [1946] 1949, 12). As regards the conception of the individual actor, Lachmann is in agreement with both Mises and Hayek.

<sup>&</sup>lt;sup>14</sup> For a more elaborated version of the same point see Jack High (1986, 119)

<sup>&</sup>lt;sup>15</sup> See Lachmann [1967a] 1977, 302; [1967b] 1977, 328-329; and 1976b, 55.

<sup>&</sup>lt;sup>16</sup> Koppl and Mongiovi identify three main elements in Lachmann's writings. They argue that: 'Lachmann's subjectivism embraced three interrelated themes that run through his work: the explanatory primacy of subjective evaluations; the importance of expectations; and the inadequacy of equilibrium models of the market' (Koppl and Mongiovi 1998, 4).

- ii) like Mises and Hayek, Lachmann argues that economic actors have the capacity for action rather than being restricted to simply (passively) reacting to changes in their environment;<sup>18</sup>
- iii) like Menger, Mises and Hayek, he believes that the change and the dimension of time are both essential aspects of the social world that are not taken into account by equilibrium analysis;<sup>19</sup>
- iv) like Mises and Hayek, he is aware of the problematic assumptions of Walras's subjectivism in regard to human agents knowledge and foresight;<sup>20</sup> and finally,
- v) following Shackle,<sup>21</sup> Lachmann stresses the importance of the subjectivity of expectations and plans of individuals in an radically uncertain world (Lachmann [1969] 1977, 152): the future is unknowable but not unimaginable.

Indeed, Lachmann regards his emphasis on the subjectivity of interpretations, expectations, plans, and radical uncertainty as a move to the third stage of Austrian subjectivism (see section 4):<sup>22</sup> the culmination of an 'evolution' of subjectivism<sup>23</sup> from Menger's 'subjectivism of wants', to Mises's subjectivism 'of means and ends' as well as Hayek's subjectivism of knowledge,<sup>24</sup> through to Shackle's (and respectively Lachmann's version of) subjectivism of expectations.<sup>25</sup> Notice that Lachmann is not only widely regarded as, but is also a self-

<sup>&</sup>lt;sup>17</sup> See Lachmann [1966b] 1977, 114; [1976a] 1977, 37; 1986, 19. Indeed, Lachmann's skepticism about the use of mathematics in the social sciences follows from or is very much based on the criticism that I mention from point two to five.

<sup>18</sup> See Grinder 1977, 16; Lachmann [1950] 1977, 167; [1969] 1977, 160. For Mises, Hayek and Lachmann,

See Grinder 1977, 16; Lachmann [1950] 1977, 167; [1969] 1977, 160. For Mises, Hayek and Lachmann, action is related to an 'active mind', which includes actively forming ends, allocating means to ends, as well as making and revising plans (see, Lachmann 1982b, 37; Prychitko 1995, 93). Moreover, Mises, Hayek and Lachmann all believe in the existence of genuine choice, that is, that individuals could have acted differently than they actually did (see section 3).

<sup>&</sup>lt;sup>19</sup> See Lachmann [1966a] 1977, 54; [1969] 1977, 151; [1971] 1977, 187; 1976b.

<sup>&</sup>lt;sup>20</sup> See Lachmann [1943] 1977, 71; [1967b] 1977, 328-29; [1971] 1977, 185-86; 1976b.

<sup>&</sup>lt;sup>21</sup> Shackle was a student of Hayek at the London School of Economics at the same time as Lachmann and was a significant influence on Lachmann's work (see Koppl and Mongiovi 1998, 1-2).

<sup>&</sup>lt;sup>22</sup> Hutchison makes a similar point: 'In the last decade or so, however, dominated by disequilibrium and crises, a libertarian school of economic thought has emerged to prominence which not only rejects comprehensively the assumption of omniscience, or full knowledge, but which has swung over towards an extreme opposite assumption of thoroughgoing uncertainty and unpredictability. This is the Neo-Austrian school, which, inspired by the ideas of Professor George Shackle, insists that fundamental uncertainty and ignorance, together with erroneous or inadequate expectations, or anticipations, dominate economic decisions and the human condition. In the real world of uncertainty and ignorance, decisions, it would seem, have to depend on, or emerge from, a combination, largely of instinct, hunch, inspiration, clairvoyance, or what Keynes called "animal spirit". In such a world, the case for economic freedom and competition has to be based on the desirability of creating and maintaining the widest opportunities for as many as possible to try their luck' (Hutchison 1986, 129).

<sup>&</sup>lt;sup>23</sup> Sometimes Lachmann (1976b; [1990] 1994) speaks about an extension or 'inner metamorphosis' of subjectivism.

<sup>&</sup>lt;sup>24</sup> See Horwitz 1994, 20.

<sup>&</sup>lt;sup>25</sup> See Lachmann 1976b, 58. Elsewhere Lachmann argues: 'Subjectivism of the first stage, in the 1870s, was subjectivism of wants. Different men had different wants and thus were inclined to attribute different values to the same object. [...] In Mises's work we reach the second stage. Subjectivism is now a matter of means and ends. [...] In a world of change the mind of the actor must continuously ponder the adequacy of the means at his

proclaimed, 'radical subjectivist'. <sup>26</sup> In strongly emphasising the subjectivity of agents' interpretations, expectations, and plans, Lachmann's subjectivism is rather extreme and distinct by comparison to his eminent predecessors Menger, Mises and Hayek. <sup>27</sup>

Lachmann's radical conception of the subjectivity of expectations and plans as well as his emphasis on radical uncertainty may be regarded as being heavily influenced by Keynes and Shackle (see Koppl 2002, 3). David Prychitko also discerns traces of Keynes and Shackle in Lachmann's writings, and observes that the Austrian community was indeed puzzled when Lachmann started emphasising their ideas in mid 1970s:

What could Keynes [...] or Shackle [...] who spent the rest of his career expounding a theory of expectations and radical uncertainty first discussed in chapter 12 of Keynes's General Theory – what could either of them add to Austrian economics? (Prychitko 1995, 94).

The uniqueness of Lachmann's position within the Austrian camp lies precisely in that it fuses his Austrian predecessor's insights with a more radical (i.e. Shacklean) perspective on the subjectivity of expectations, plans, and uncertainty (e.g. radical subjectivism).

Yet, there is another reason why Lachmann's position is distinct from the positions of Menger, Mises, and Hayek. In contrast to his Austrian predecessors, Lachmann neither believes that there is a strict dividing line between methods of history and economic theory, nor does he deny the usefulness of historical methods for theoretical economic analysis. That is to say, Lachmann has a different perspective as regards the nature and role of methods of history for economic analysis: a perspective that comes close to the one articulated by proponents of the German Historical School. Let me elaborate on that.

For example, Menger and Mises criticised proponents of the (older and younger) German Historical School<sup>28</sup> for an over-reliance on the methods of history for theoretical

disposal, but not the ends themselves which are "given" to it. [...] We have now reached the third [...] stage. The subjectivism of the active mind, and George Shackle, the master subjectivist, has been our mentor (Lachmann [1990] 1994, 245-46).

<sup>&</sup>lt;sup>26</sup> To be fair, there are also authors who do not regard Lachmann as a radical subjectivist because, as John O'Neill has recently argued, radical subjectivism is neither radical nor subjectivist (see O'Neill 2000). However, I think that O'Neill belongs to a minority.

Note that Lachmann criticised Mises's system for leaving no room for a theory of expectations (see Koppl 2002, 38) or 'uncertainty, expectations, [and] plans' (Prychitko 1995, 94).

<sup>&</sup>lt;sup>28</sup> The German Historical School is divided into the older and the younger Historical School. The main representatives of the former are Wilhelm Roscher (1817 – 1894), Bruno Hildebrand (1812 – 1878) and Karl Knies (1821 – 1898). Gustav Schmoller (1838 – 1917) is generally taken as the founder of the younger German Historical School, which also included Lachmann's supervisor Werner Sombart (1863-1941).

analysis.<sup>29</sup> For Menger, history represents a separate strand of social research next to the theoretical and practical one. As history is exclusively concerned with the description and explanation of particular or individual (in contrast to general) economic phenomena (see Menger [1883] 1969; [1889] 1994) at a particular point in time, history generates historical but not theoretical results. Mises, in turn, regards history as no more than an ancillary science to and strictly separated from the general (theoretical) science of human action (see Mises [1949] 1966). Unlike Menger and Mises, Lachmann maintains that it is difficult to sustain a sharp distinction between the methods of history and economics.<sup>30</sup> Furthermore, Lachmann argues that Austrian economists attempt to understand the meaning of an action from the perspective of the actor and he concludes that 'this is what all historians, whether philosophically minded or not, have always done. It is this "positive" method of the German Historical School that Weber took over and adapted to his purpose' (Lachmann 1970, 10). He goes on:

Once we have realized that the historical method is really nothing more or less than the classical method of interpretation applied to overt action instead of to texts, a method aiming at identifying a human design, a 'meaning' behind observable events, we shall have no difficulty in accepting that it can be just as well applied to human interaction as to individual actors. From this point of view all history is interaction, which has to be interpreted in terms of the rival plans of various actors. All historiography has in fact proceeded in this manner (Lachmann 1970, 20).

As we shall see in section 4 below, an important element of Lachmann's third stage of Austrian subjectivism consists in an interpretive turn. As Prychitko (1995, 95) argues, Lachmann applies Weber's concept of ideal types reformulated into plans as an interpretive device for economic analysis. Although '[i]t is quite true that in some important respects he [Weber] remained very much the heir of the German Historical School all his life' (Lachmann

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<sup>&</sup>lt;sup>29</sup> Notice that originally Menger saw his writings as a contribution to (rather than a substitute for) the 1900s century mainstream approach in the economic discipline of the German Historical School. It is therefore not surprising that Menger dedicated his *Principles* to Whilhem Roscher. To quote Menger (1871): 'Dem Königlich Sächsischen Hofrathe Dr. Wilhelm Roscher Professor der Staats- und Cameralwissenschaften an der Universität in Leipzig etc. in Achtungsvoller Verehrung zugeeignet'. Also Israel Kirzner states: 'Clearly Menger hoped that his theoretical innovations might be seen as reinforcing the conclusions derived from historical studies of the German scholars, contributing to a new economics to replace a discredited British classical orthodoxy' (Kirzner 1991, 146). Nonetheless, Menger's work cumulated in the well-known dispute over the methods (*Methodenstreit*), in particular with Gustav Schmoller.

<sup>&</sup>lt;sup>30</sup> See Lachmann [1969] 1977, 154; 1970, 22; 1986, 33.

1970, 17), Lachmann maintains the usefulness of history and the method of interpretation (hermeneutics) for theoretical economic research.<sup>31</sup>

In summary, while it is possible to identify a clear subjectivist thread that runs from Menger via Mises and Hayek through to Lachmann, we also find traces of, on the one hand, Keynes and Shackle, and on the other, the German Historical School in Lachmann's thought. This makes Lachmann's position distinct from his Austrian antecedents. Finally, I have demonstrated that both Lachmann's criticism of Walrasian general equilibrium analysis and the use of methods borrowed from the natural sciences more generally, stem from ontological considerations.<sup>32</sup> On the one hand, it is Lachmann's conception of the social world (the object of social analysis) to which a general equilibrium analysis does not fit: equilibrium analysis does not take essential causal features of the social world into consideration. On the other hand, Lachmann (and by the same stroke, Menger, Mises and Hayek) describe essential features of the social world with which social science research methods have to be compatible. As I have already mentioned before, the essential characteristics of the social world highlighted by Lachmann include change, uncertainty, openness, diversity in what agents know, ignorance about the future, divergent expectations and plans, and that agents act rather than simply react in real time. These are the basic elements of Lachmann's subjectivism. It is now time to turn to the positive contribution in his writings in more detail, which consists largely in the development of a rich social ontology.

# 3. Lachmann's Subjectivism: Ontological Considerations

# 3.1. Human Agency and Action

All social phenomena come into existence through and are manifestations of human doings. According to Lachmann, 'subjectivism [...] sees in spontaneous human action the mainspring of economic events' (Lachmann 1986, 19), and '[w]e might say that economic phenomena are the outward manifestations of action guided by plans' (Lachmann [1991] 1994, 278). For

<sup>&</sup>lt;sup>31</sup> Notice that for Prychitko Austrian economists, including Boettke, Ebeling, Horwitz, Lavoie, Rector and Prychitko himself, support the use of hermeneutics in economics. However, he also argues that the contributions of these authors owe more to Gadamer and Ricoeur than they do to Lachmann's writings (see Prychitko 1995, 94, 94 n. 5). At the same time, some Austrian economists, such as Garrison and Kirzner, are suspicious of Lachmann's (or any) hermeneutical approach to economic problems (see Prychitko 1995, 94-95). See also Bruce Caldwell (1994, 310-11) for an explanation of why Hayek avoids hermeneutics in economics.

<sup>&</sup>lt;sup>32</sup> Also Lachmann's positive contributions are largely based on his ontological considerations (see Lachmann [1966a] 1977, 59; [1967a] 1977, 302; [1967b] 1977, 328; [1971] 1977, 185-86; [1976a] 1977, 35; 1976b). And the same applies to his Austrian predecessors.

Lachmann, the dynamic 'real world' is shaped by human acts (see Lachmann [1966a] 1977, 56), which require the existence of human beings. However, Lachmann not only asserts the existence of human beings but also includes statements about their constitution: about human wants, their knowledge (and ignorance), expectations, plans, attitudes, beliefs, how they acquire knowledge, etc. All of these factors are real, according to Lachmann, as they influence human action and thus have an impact on particular outcomes or economic events. What follows in this and section 2.1 is an account of Lachmann's ontological position, which starts with an attempt to answer the question: what is Lachmann's conception of human action?

First, human action is purposeful behaviour and thus requires a plan (see Lachmann [1943] 1977, 75). For Lachmann, an important aspect of planning is 'tying means to ends' (Lachmann 1970, 38). The purpose of a plan is to guide human action: 'It is within the framework of the plan that means and ends take firm shape. We may therefore say that the plan, as its mental scheme, "guides" the course of action' (Lachmann [1978] 1994, 220).

A second crucial element of Lachmann's conception of human action is that the actor does not act and plan in isolation. Lachmann argues that '[p]lans are not made in *vacuo*, and the planner has therefore to draw a mental picture of the situation in which he will have to act [...]' (Lachmann [1943] 1977, 75, italics in original). Further, the situation in which the planner has to act will include the actions of other actors:

For our actor they [actions of other actors] are simply points of orientation in no way different from other circumstances of action. The other actors, be they allies or rivals, widen or restrict our own freedom of action. In the former case their co-operation provides us with means; in the latter case their rivalry offers an obstacle (Lachmann 1970, 44-45).

Third, action is directed to the (immediate or remote) future: 'action is of course concerned with the future, the more or less distant future. But the future is to all of us unknowable, though not unimaginable' (Lachmann 1976b, 55).

The actor's imagination (and expectations) of the future represents the fourth element of Lachmann's conception of human action. An actor forms expectations of the future based on his/her information, or rather interpretation of his/her information, regarding past and current events. A crucial aspect for Lachmann is that each actor forms his/her own specific interpretation of the past as well as specific expectations of the future, hence the subjectivity

of interpretations and expectations (see Lachmann [1966b] 1977, 123; 1970, 38).<sup>33</sup> Of course, an actor's expectations of the future as well as his/her choice of means for particular ends is also closely connected to the actor's state of knowledge. Lachmann argues: 'Evidently the knowledge of the actor is an important element of his action' (Lachmann 1970, 36). Two pages further on he continues:

Evidently only part of a man's total knowledge will be relevant to a given plan. Which part? This will depend on his subjective interpretation of the past and his equally subjective expectation of the future. In other words, each plan contains subjective elements of more than one kind (Lachmann 1970, 38).

Notably, for Lachmann there is 'no such thing as a common state of knowledge shared by all which we could regard as a datum' (Lachmann 1967, 328-329).<sup>34</sup>

From this fourth element of Lachmann's conception of human action follows the fifth, that is, that individual actors may respond in different ways to the same stimuli. Thus Lachmann shares Mises's view that typically in the social world '[m]en react to the same stimuli in different ways, and the same man at different instants of time may react in ways different from his previous or later conduct' (Mises [1957] 1958, 5). In other words, Lachmann's fifth element of his social ontology consists in distinguishing between an actual realm (events and state of affairs) and an empirical realm (the actor's interpretation and experience of the actual realm).

That the same person may act differently in similar situations at different points in time and the fact that different individuals act differently in the same situation is also and mainly due to the sixth element of Lachmann's conception of human action: individuals have choice, if only limited choice (see Lachmann [1950] 1977, 167). Lachmann namely embeds human action in a system that may be captured as a midway between determinism and voluntarism. Lachmann states:

<sup>34</sup> As Lachmann regards economic change as linked to the change of knowledge, he argues that prediction is impossible: 'The impossibility of prediction in economics follows from the fact that economic change is linked to change in knowledge, and future knowledge cannot be gained before its time. Knowledge is generated by spontaneous acts of the mind' (Lachmann [1953] 1977, 90). However, Lachmann believes that an economist is able to make the social world intelligible by reference to plan-guided action (see Lachmann [1971] 1977, 17; Prychitko 1995, 95).

<sup>&</sup>lt;sup>33</sup> Even in cases in which different individual actors have the same wants, pursue the same goals and have access to the same information, their actions (e.g. the choice of means) may differ due to differences in their particular subjective interpretations, and expectations. Lachmann states, for example: 'The same information will be interpreted differently by an optimist and a pessimist. The same objective possibility will be used differently by an aggressive and by a restrained actor' (Lachmann [1966b] 1977, 123).

Human action is not determinate, but neither is it arbitrary. It is bounded, firstly, by the scarcity of means at the disposal of actors. This circumstance imposes a constraint on the freedom of action. It is bounded, secondly, by the circumstance that, while men are free to choose ends to pursue, once they have made their choice they must adhere to it if consistent action with a chance of success is to be possible at all. In other words, human action is free within an area bounded by constraints. Obstacles of various kinds further limit the area of freedom (Lachmann 1970, 37).

Although there are various boundaries to the actor's choice (including institutions, see section 3.2), Lachmann believes in the 'reality of genuine choice' (see Lachmann [1950] 1977, 167). That is to say, actors could have chosen to act differently than they actually did.

As economic events and state of affairs are generated by human doings based on genuine choice, they could also typically have been different from what they were. This is the seventh aspect of Lachmann's social ontology, and the reason why he describes the social world as an (ever changing)<sup>35</sup> 'open system', <sup>36</sup> by which he means that the social world is characterised by an absence of strict or deterministic (in accordance with a probabilistic law) sequences of events or closed systems. Lachmann holds:

Functionalism in neoclassical formalism requires a closed system of variables, in which the magnitudes of a number of dependent variables are determined by functional relationships. It is easy to see why such a mode of thought cannot do justice to the market economy, which *by its nature is an 'open system'* (Lachmann [1966b] 1977, 122, italics added).

Elsewhere Lachmann states: 'The Market Economy is an open system. We cannot say what concrete action an entrepreneur confronted with a given situation will actually take. It depends on his interpretation of it' (Lachmann [1967b] 1977, 329). In short, the existence of genuine choice leads Lachmann to conclude that the social world must be captured as an open system.

Finally, from the above described subjectivity of knowledge, interpretations, expectations, plans, and actions, Lachmann infers that the expectations and plans of individual actors should often diverge. As actors do not know the future, they have to imagine a future

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<sup>&</sup>lt;sup>35</sup> Lachmann argues that '[t]he market is a process of continuous change, not a state of rest. It is also clear that what keeps this process in continuous motion is the occurrence of unexpected change as well as the inconsistency of human plans' (Lachmann [1969] 1977, 151).

<sup>&</sup>lt;sup>36</sup> See Lachmann ([1966b] 1977, 122; [1967b] 1977, 328; [1969] 1977, 151).

state, but each imagination ought to be different due to different states of knowledge and different interpretations. He argues that '[f]uture knowledge cannot be had now, but it can cast its shadow ahead. In each mind, however, the shadow assumes a different shape, hence the divergence of expectations' (Lachmann 1976b, 59).<sup>37</sup> Furthermore, Lachmann argues that in the dynamic and uncertain social world, typically the forces for divergence ought to be 'stronger than those for their convergence' (Grinder 1977, 19).<sup>38</sup> This aspect of Lachmann's social ontology emerges in the following passage:

It is impossible to show that, as a result of repeated failures and revisions, the various divergent plans will tend to grow closer together and in the end converge. This would be so only in a stationary world in which it might be legitimate to expect that actors, like man shooting at a fixed target, will as a result of a process of trial and error gradually come to learn more and more about the circumstances in which they have to act and thus be able progressively to correct their mistakes. But the real world is a world of continuous unexpected change in which targets are moving rather than fixed. This means that even while men are gaining additional knowledge by learning from earlier mistakes, at the very same time some of their existing knowledge is continuously becoming obsolete. A situation is even possible, which we might call 'the tragedy of the premature pioneer', in which an actor's sole mistake consists in anticipating a future event at too early a date, so that, were he here to 'learn' from his mistakes, he would actually mollify valid knowledge, which, if retained to a later date, would probably prove to be useful (Lachmann 1970, 46-47).

According to Lachmann, then, the actions of individuals should often turn out to be incompatible and hence, no socio-economic order should evolve. This is due to, on the one hand, Lachmann's conception of the subjectivity of expectations and plans of individual actors, and, on the other, to his opinion that the forces for divergence are stronger than those for convergence. However, Lachmann still observes quite remarkable levels of coordination in socio-economic life. That is to say, despite Lachmann's conception of the social world as

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<sup>&</sup>lt;sup>37</sup> In his essay 'Ludwig von Mises and the Market Process' Lachmann holds, for example, that in an uncertain world: 'Experience shows that different people will entertain widely divergent expectations. This will be so not merely because some men are, by temperament, optimists and others pessimists. Differences in knowledge are here often of fundamental importance. The diffusion of new knowledge is not a uniform and not often a continuous process. Some sources of knowledge are only available to some, but not to others, while the ability to make use of new knowledge is most unequally distributed among men' (Lachmann [1971] 1977, 187).

<sup>&</sup>lt;sup>38</sup> Lachmann repeatedly argues: 'In reality expectations almost always diverge between agents, and the same agent's expectations will vary over time under the influence of the daily stream of news' (Lachmann 1986, 140). Elsewhere he states: 'In an uncertain world, in which economic agents are dependent on their expectations, a general coherence of plans is almost impossible' (Lachmann [1966b] 1977, 123).

an open system and his rejection of the existence of a general equilibrium state, he does not deny the possibility of social order. Consequently I am wondering how a compatibility of individuals' expectations, plans and actions (see Lachmann 1976b, 57) can occur in the Lachmannian world of divergent expectations, uncertainty, absent knowledge, etc.? To put it differently, if the plans of actors are to be formed on basis of fallible expectations about the behaviour of other actors, how could consistency between the expectations and plans of different actor ever be achieved?

#### 3.2. Social Order

The latter issue emerges in questions posed by Lachmann himself: 'In a complex society such as our own, in which the success of our plans indirectly depends on the actions of millions of other people, how can our orientation scheme provide us with firm guidance?' (Lachmann 1970, 49).

The answer to this question, according to Lachmann, 'has to be sought in the existence, nature, and function of institutions' (Lachmann 1970, 49, italics in original): an element of Lachmann's social ontology that I have not discussed yet. It is an institutional environment that shapes the expectations and plans of individuals, according to Lachmann ([1943] 1977, 75; [1991] 1994, 281, 282). Social institutions provide shared sets of rules and conventions that instruct individual actors how they should interpret and respond to circumstances in which they find themselves. Hence, institutions have a guiding function,<sup>39</sup> according to Lachmann, almost like signposts (Lachmann 1970, 49-50) towards which numerous individuals orient their plans and actions. These signposts allow actors to predict the actions of others to some degree, and in this way facilitate more or less accurate expectations of the future. Consequently the plans and actions of different individuals have a chance of becoming coordinated and succeeding. Institutions 'reduce uncertainty by circumscribing the range of action of different groups of actors, buyers and sellers, creditors and debtors, employers and employees' (Lachmann [1991] 1994, 285). Although institutions change over time, 'some faster than others' (Lachmann 1970, 13), Lachmann holds that a general institutional order exists. The latter consists of external institutions, such as the legal system, that constitute the outer framework of society, and internal institutions, which evolve

<sup>&</sup>lt;sup>39</sup> Lachmann also argues that institutions serve as 'orientation maps' (Lachmann 1970, 13) or 'interpersonal orientations tables' (Lachmann [1966a] 1977, 62).

gradually and spontaneously from individual action (Lachmann 1970, 81).<sup>40</sup> As Paul Lewis and Jochen Runde (forthcoming, 14) nicely summarise, 'Lachmann (1970, 141) sees social institutions as "vehicles of human action" that at once serve as "instruments of, and constraints upon, human action" in situations of uncertainty'.

Now how does Lachmann define an institution? Lachmann argues 'that each institution denotes a recurrent pattern of conduct' (Lachmann 1970, 75). Here, we are faced with a contradiction in Lachmann's social ontology. As we have seen in section 3.1, Lachmann describes the social world as an open system (i.e. in terms of the absence of event regularities). However, his definition of an institution, as pattern of behaviour, is indeed nothing more than an event regularity or closed system. This tension has also been identified by Lewis and Runde. They (forthcoming, 17) argue that this tension is generated by Lachmann's oversimplified binary categories of open and closed systems. That is to say, Lachmann divides the world into domains where event regularities are absent (open systems) and where they occur (closed systems). Lewis and Runde (forthcoming, 17-18) state:

The fact that this metaphysics furnishes Lachmann with just one abstract form in terms of which the significant, enduring features of the socio-economic world can be conceptualised, namely event regularities, implies that it provides no basis for distinguishing between the various possible objects of knowledge in the socio-economic world in order to show that, even where objects of knowledge of one sort (event regularities, say) are absent, there remain other objects of knowledge (namely, social institutions and rules) that can guide and inform people's actions and thereby facilitate an orderly outcome.

Thus, 'a more sophisticated metaphysics' is required, according to Lewis and Runde (forthcoming, 18), 'that allows social institutions to be conceptualised, not only in terms of empirically observable regular conjunctions of events, but also as non-empirical in nature'.<sup>42</sup>

<sup>&</sup>lt;sup>40</sup> Notice that Hayek ([1973] 1993) and Lachmann have a very similar conception of the social order (see Fehl 1986). Furthermore, Ulrich Fehl also argues that radical subjectivism does not necessarily deny the possibility of socio-economic order. He states: 'Lachmann's as well as Shackle's radical subjectivism are not in conflict with the concept of economic and social order. It can be shown, on the contrary, that it is just the very diversity of individual imaginations which – together with general rules in the Hayekian sense and other institutional arrangements – constitutes economic order' (Fehl 1986, 83).

<sup>&</sup>lt;sup>41</sup> Lewis and Runde (forthcoming 15, n. 14) point out that while it is clear that Lachmann defines internal institutions as recurrent patterns of conduct, 'it is not clear whether he believes the same to be true of external institutions'.

<sup>&</sup>lt;sup>42</sup> Lewis and Runde (forthcoming, 16 n. 15) provide the following example: '[T]here seems to be no empirically observable counterpart to many kinds of social rules that most of us live by most of the time, such as the rule 'thou should not kill'. The fact that most of us do not kill most of the time is surely not an empirical

Hence, the social world would then consist not only of an actual (events) and empirical (experience and interpretations of events) realm, but also of irreducible institutions, which may be part of a 'non-empirical' or 'coordinating' realm. Furthermore, Lachmann's unsophisticated conception of an institution as pattern of events represents, on the one hand, an inconsistency, and on the other, leaves him 'unable to explain how socio-economic order is possible under conditions of uncertainty', according to Lewis and Runde (forthcoming, 16). They conclude that Lachmann's ontological tensions can be resolved by resorting to the recent literature of realist social theories, such as the writings of Archer (1995) and Lawson (1997, 2003). However, here I want to stress that Lachmann's ontological inconsistency has a negative effect on his methodological subjectivist position. Especially, it leads Lachmann to connect methodological subjectivism with the method of reduction, as I shall demonstrate in the following section.

# 4. Lachmann's Methodological Subjectivism, a Critique and Possible Solution

In this section I will highlight what Lachmann regards as the third stage of the Austrian methodology, namely methodological subjectivism (henceforth MS). There are three essential aspects in Lachmann's position on MS that attract attention:

- i) Lachmann uses the term subjectivism sometimes in an ontological and sometimes in an epistemological sense,
- ii) Lachmann fuses methodological individualism (henceforth MI) with MS, and regards MS as strongly linked to hermeneutics, and
- iii) Lachmann connects MS with the method of reduction.

In the following subsections, I will describe each element of Lachman's MS (epistemology) in more detail, clarify some tensions and hence offer a sustainable version of MS.

manifestation of this rule, since there are always an infinite number of things we are not doing at any one moment in time, and we would hardly consider our not doing most of those things an expression of any social rule. Further, there are cases in which what we observe is the opposite of people conforming to the rule in question (in wars, car accidents, voluntary euthanasia, suicide, etc.), none of which undermine the general rule. Indeed, cases of this kind are usually explicated as quite intelligible (and empirical) exceptions to what is a pre-existing and often non-empirical social rule'.

<sup>&</sup>lt;sup>43</sup> They argue: 'If people have no grounds for believing that a particular set of social institutions will endure at least some time into the future, then they will have no reason to orient their plans towards those institutions; and if people do not orient their plans towards common social institutions, then it is well nigh impossible to see how they will be able to form plans with the inter-compatibility required for a reasonable orderly allocation of resources' (Lewis and Runde forthcoming, 16).

#### 4.1. Keeping Distinct the Ontological and Epistemological Meaning of Subjectivism

Lachmann is not always consistent in separating the ontological and epistemological (e.g. methodological) meaning of terms. This is particularly the case with regard to his use of the word 'subjectivism', which he uses to describe both aspects of human agency (in an ontological sense) and a methodological approach. He applies 'subjectivism' in an ontological sense, for example, when he talks about the existence of the subjectivity of individual wants, ends and means, knowledge, interpretations, expectations etc., as objective propositions of the world. At the same time, subjectivism has an epistemological connotation for Lachmann, when he describes subjectivism as a *method* of social analysis (see Lachmann 1986, 3-4, 19; [1990] 1994, 234). Unfortunately there are other economists too, such as Hayek, who use the term subjectivism without indicating whether it refers to its ontological or epistemological meaning (see Hayek [1942-44] 1955, 38). Fortunately, some Austrian economists, such as Karl Mittermaier and Richard Ebeling, are not only alert of the distinct realms of ontology and epistemology, but also use clear-cut terms respectively:

Ontological subjectivism is the commitment to a subjectivist *Weltanschauung* or a subjectivist ontology, i.e., a set of beliefs or tenets. [...] Different people may of course be committed to different subjectivist ontologies. They may also be committed to mechanistic or physicalist ontologies. Ontological subjectivism is reflected in the unself-conscious natural attitude to life. We know that there are people out there, that they make decisions, make plans, act purposefully and so on. Ontological commitment is necessary in any field of study but does not in itself provide a method of analyzing what one is committed to (Mittermaier 1986, 243, italics in original).

Also Ebeling is careful to insert the word 'methodological' before 'subjectivism' when he writes: 'For Mises and other Austrians such as Hayek and Lachmann, the cardinal rule for serious work in the social sciences in general and economics in particular has been adherence to a *methodological* subjectivism' (Ebeling 1986, 49, italics added).

Why is it necessary to mention that Lachmann does not but should use clear-cut terms to capture either the ontological or epistemological meaning of subjectivism? Keeping separate the distinct realms of ontology and epistemology, as Ebeling and Mittermaier do, is important in order to avoid what Tony Lawson calls 'the epistemic fallacy'. The epistemic fallacy leads to the belief that a method can be 'successfully applied irrespective of the nature

of the object of study' (Lawson 2003, 111).<sup>44</sup> Certainly, for Lachmann MS is a successful approach precisely because it takes into account the specific nature of the object of study. Consequently Lachmann wants to avoid and indeed points to the mistake of what Lawson calls 'epistemic fallacy' in much of his criticism on the use of methods borrowed from the natural sciences for social analysis: such methods do not accurately consider essential ontological features of the social world (see section 2). To avoid confusing the two, I propose and henceforth use the term subjectivism (or ontological subjectivism) in its ontological sense and MS in its epistemological (methodological) one. This, I believe, represents an important clarification.

#### 4.2. Methodological Individualism, Methodological Subjectivism, and Hermeneutics

For Lachmann, MI or MS represents 'the method which seeks to explain human action in terms of plans conceived before action is actually taken [...] viz. to make events intelligible by explaining them in terms of the plans which guide action' (Lachmann [1969] 1977, 152). As methodological individualists have no option other than to interpret the plans of individuals in the first place (see Lachmann 1970, 6-7; [1978] 1994, 200), for Lachmann, MI and MS are synonyms. Hence Lachmann states: 'In this book we shall view the ongoing market process, the elements composing it, and its manifold variants from the perspective of subjectivism, or what Popper has called methodological individualism' (Lachmann 1986, 3, italics in original). Further on in the same essay he argues that for MS the problem of how plans are made is of crucial significance (see Lachmann [1969] 1977, 157). Accordingly, Lachmann confines himself 'to the significance of hermeneutics in economics' (Lachmann [1991] 1994, 277), by which he means that a methodological subjectivist explains social phenomena by trying to identify the meaning that underlies action. Lachmann argues: 'Subjectivism is a research programme of the social sciences which aims at elucidating social phenomena in terms of their *inherent meaning*, i.e. in terms of their meaning to actors' (Lachmann [1990] 1994, 243, italics in original). Elsewhere he states:

<sup>&</sup>lt;sup>44</sup> In more detail, the epistemic fallacy 'consists in the view that questions about being can always be reduced to questions about our knowledge (of being), that matters of ontology can always be translated into epistemological terms. This fallacy assumes the form of an expectation that methods can be adopted from any sphere, and/or be of any kind – mathematical, evolutionary or whatever – and successfully applied irrespective of the nature of the

object of study' (Lawson 2003, 111).

In other words, interpretation is a method of comparative study by means of which we are attempting to establish a relation between an observable event (a readable text) and an idea which existed in a human mind prior to the writing of the text, and to which the latter is designed to lend expression. The object of our study is therefore to establish a degree of correspondence between a phenomenon and an idea (Lachmann 1970, 18).

Of course, for Lachmann the method of interpretation can be used not only for making a text intelligible, but also for understanding the actions of economic actors. As Prychitko (1995, 96) puts it, '[m]anaging a firm, buying at the stock exchange, lending credit can only be understood, like a classic text, when the activity is interpreted by reference to individual' plans'. To repeat, according to Lachmann, this (his) third stage of Austrian methodology consists essentially in an interpretive or hermeneutical turn (see Lachmann, [1991] 1994, 278-79), which, as we have seen from section 2 above, is strongly influenced by Weber. However, it is equally possible to regard Lachmann's 'third' stage of Austrian methodology as a transformation of MI into MS: Lachmann regards MI as synonymous with MS.

Contrary to Lachmann, I believe that MI and MS are different things and should be kept apart. Following Hayek, MI refers to a methodological approach used to aid attempts to understand and explain particular social phenomena that uses individuals (and their properties) implicated in those phenomena as a point of entry into the analysis (see Hayek [1942-44] 1955). That is to say, Hayek regards MI as an approach to the investigation of social phenomena that begins with the individual actor: his/her actions. <sup>45</sup> Of course, MI presupposes that actors have knowledge, expectations, plans, attitudes, beliefs, etc. that lie behind their actions and hence affect actual events. That is to say, the ontological presuppositions of Hayek's MI are very similar or even identical to Lachmann's MS. Therefore Hayek argues that MI is closely connected to subjectivism (see Hayek [1942-44] 1955, 38). Furthermore, the entry point for both MI and MS are individuals and their actions. However, despite these ontological and epistemological similarities, MI and MS are different because they seek to explain economic phenomena from slightly different angles. A methodological individualist is someone who attempts to explain social phenomena as

<sup>45</sup> It is important to bear in mind that that the dominant contemporary interpretation of MI adopted by philosophers, mainstream and non-mainstream economists alike (see Kincaid 1986, 1990, 1998; Watkins 1953a;

Arrow 1994; Hahn 1984; Hahn and Hollis 1979; Hodgson 1988; Lawson 1997), differs from the one of Hayek. Contrary to Hayek's social ontology, the dominant interpretation of MI presupposes an atomistic social ontology and hence, it is indeed preferable to call the latter interpretation of MI methodological atomism (MA) in order to avoid confusion (see Zwirn forthcoming).

consequences of actions and interactions of individual actors. A methodological subjectivist is someone who attempts to explain social phenomena by interpreting the action of an individual involved in the particular phenomenon by referring to his/her plans: of major interest to a methodological subjectivist is how plans are formed (see Lachmann [1969] 1977, 157). Hence, MS shows stronger links to hermeneutics than MI and at the same time, MI and MS are not synonyms.

Although both approaches contribute to a fuller understanding of economic phenomena, MI and MS will not explain all social phenomena in their entirety. As Hayek puts it with respect to MI:

we can always examine a part of the whole only in terms of that whole which we cannot entirely reconstruct and the greater part of which we must accept unexamined. As it might also be expressed: we can always only tinker with parts of a given whole but never entirely redesign it (Hayek [1976] 1993, 25).

This statement from Hayek indicates also that he strongly rejects the idea that MI entails the method of reduction (see Hayek, [1942-44] 1955). For Hayek, reductionism is related to isolationism, whereas both concepts belong to the natural sciences (see Hayek, [1942-44] 1955). Moreover, Hayek argues that social wholes such 'as "society" or the "economic system," [...] will exist irrespectively of the concepts which the people have formed about these wholes' (Hayek [1942-44] 1955, 37). Attempts to arrive of a complete reduction of social phenomena to individuals and their concepts are therefore likely to fail. I shall argue in section 4.3 that, contrary to Lachmann, the method of reduction is not necessarily linked to MS as well.

#### 4.3. Methodological Subjectivism and the Method of Reduction

MS involves reductionism, according to Lachmann: 'The theory we are attempting to establish aims at the *reduction* of certain social phenomena to human mental acts as manifested in plans' (Lachmann 1970, 74, italics added). Earlier on in the same book he states: 'In social theory our main task is to explain observable social phenomena by *reducing* them to the individual plans (their elements, their shape and design) that typically give rise to them' (Lachmann 1970, 31, italics added). Again and again, similar statements appear in

Lachmann's writings (see Lachmann [1943] 1977, 69; [1950] 1977, 170-171), which indicate that for him the method of reduction is indeed an important element of MS.

In general terms, the method of reduction refers to the analysis of a phenomenon at one level, in terms of another, more fundamental level of description (see Boehm 2002). Reductionism is hence often connected to the claim that phenomena or objects of one type are constituted by or are nothing but objects of other types (see Searle 1992). Furthermore, the common interpretation of the method of reduction refers to the position that a social phenomenon, including institutions, can be reduced to and explained by solely one unit of analysis (see Hodgson 1998, 156; Lawson 2003, 56-57). Typically, the method of reduction ignores the relationship between different units (e.g. plans of individuals, institutions, evolutionary processes, etc.) and thus shows strong links to the method of isolation by which social phenomena are explained by invoking the operation of causes that are taken to be separable in their effects. In our case, rules and institutions, such as money, are to be reduced to and explained solely by plans of individuals, according to Lachmann.

There seem to be two possible reasons why Lachmman is so keen on connecting MS with reductionism. First, his limited (and incoherent, see section 3.2) conception of social rules and institutions (solely as pattern of behaviour) allows him to conclude that they can eventually be reduced to the plans of individuals entirely. Second, as the existence of social rules and institutions depends on actions and plans of individuals, it seems that they also need to be reduced and explained by the latter. More generally, Searle describes this (false) dilemma as follows: 'It has seemed [...] that we have to choose between reductionism, on the one hand, or a super mind floating over individual minds, on the other' (Searle 1995, 25). Following Searle, I will show that this is not the case and that the method of reductions is neither a necessary nor even an appropriate requirement for MS.

In the first place, if social structures, including social rules and institutions, both come with emergent properties<sup>47</sup> and exist not only in form of event regularities but also as part of an non-empirical or coordinating realm, and if social structure and human agency is recursively organised, such that 'each is both a condition for, and a consequence of, the other'

<sup>&</sup>lt;sup>46</sup> This claim refers to ontological reduction, according to the philosopher John Searle. He differentiates ontological reduction from other types of reductionism, such as property-ontological, theoretical, definitional, and causal reduction (see Searle 1992).

<sup>&</sup>lt;sup>47</sup> Following Lawson (1997, 63) '[e]mergence may be defined as a relationship between two features or aspects such that one arises out of the other and yet, while perhaps being capable of reacting back on it, remains causally and taxonomically irreducible to it'.

(Runde 2001, 5),<sup>48</sup> it follows that they cannot be reduced completely to plans and actions of individuals. It would be indeed difficult to explain the observation that practices governed by social rules are often not in conformity with those rules. Following Lawson (2003, 36-38), Lewis and Runde (forthcoming 17 n.16) state: 'For instance, the possibility of workers threatening to "work-to-rule" presupposes both the existence of workplace rules and also that the workers usually do *not* conform to the strict letter of the rules in their everyday activities'.<sup>49</sup>

Furthermore, institutions, such as money, depend on i) the assignment of functions, ii), collective intentionality, iii) constitutive rules, such as 'X counts as Y in context C', and iv) the Background, which include human capacities to cope with their environment, according to Searle (see 1995, 13). Here, I am not intending to give chapter and verse on Searle's conception of institutions or institutional fact. I will focus solely on aspects related to reductionism. For instance, a commodity functions as money (medium of exchange, store of value, etc.) because this function has been assigned and accepted (whether intentional or not) by numerous individual actors. Now, is money a result of collective or individual intentionality? Or can collective intentionality be reduced to individual intentionality plus mutual beliefs? That is to say, can money be reduced to my (individual) plan to use a particular medium for exchange and my belief that you also plan to use the same medium for exchange and vice versa? Following Searle (1997, 427), '[c]ollective intentionality is a primitive notion in the sense that it does not reduce to individual intentionality'. The crucial element in collective intentionality is a sense of planning (doing, wanting, believing, etc.) something together, according to Searle (1995, 25), 'and the individual intentionality that each person has is derived from the collective intentionality that they share'. By which Searle means that I am planning or doing something only as part of our planning or doing something. Searle (1995, 23) provides the following examples: 'So if I am an offensive lineman playing in a football game, I might be blocking the defensive end, but I am blocking only as part of our executing a pass play. If I am a violinist in an orchestra I play my part in our performance of the symphony'. In short, Lachmann's conception of an institution lacks the notion of irreducible collective intentionality. The latter is, however, consistent with MS and MI,

<sup>&</sup>lt;sup>48</sup> As mentioned in section 3.2 and discussed in detail by Lewis and Runde (forthcoming), occasionally Lachmann presents social structures with emergent properties and the relationship between social structure and human agency as recursively organised.

<sup>&</sup>lt;sup>49</sup> Furthermore, Lewis and Runde (forthcoming 17 n.16) hold that 'the claim that institutions consist of nothing more than patterns in people's practices makes it difficult to explain how changes in institutions shape people's practices, that is, it makes it difficult to explain how people's actions change save through external shocks'.

because 'collective intentionality exists entirely in the heads of individual agents' (Searle 1997, 427).

#### 5. Conclusion

I have illustrated Lachmann's distinctive methodological position within the Austrian camp by showing, not only the thread that runs from Menger via Mises and Hayek to Lachmann, but also by pointing to the influences of Keynes and Shackle on the one hand, and the German Historical School (e.g. Weber) on the other. Lachmann criticised the use of methods borrowed from the natural sciences (e.g. general equilibrium analysis) in order to promote his methodological alternative (MS). I have argued that Lachmann's critique (and the Austrian more generally) is essentially an ontological one: Walras's general equilibrium approach is not compatible with Lachmann's conception of social reality. Furthermore, I described essential elements of Lachmann's ontological subjectivism and highlighted that in particular his conception of institutions as event regularities generate not only an inconsistency within his social ontology but also affects Lachmann's MS, e.g. he connects MS with the method of reduction. I have shown that this is a weakness in Lachmann's methodological subjectivist position and that MS does not require reductionism. Moreover, I have demonstrated that Lachmann glosses the difference between MI and MS by fusing MI with MS. While MI and MS are closely related to each other, following Hayek, the link to hermeneutics is far weaker in the case with MI than it is with MS. I have defended a version of MS that can stand alongside alternative approaches to the analysis of economic problems, such as MI and institutional approaches. And crucially, my proposed version of MS is consistent with most elements of Lachmann's social ontology and the social ontology offered by his eminent predecessors Menger, Mises, and Hayek.

#### References

- Addleson, Mark. 1986. "Radical Subjectivism" and the Language of Austrian Economics. In Subjectivism, Intelligibility and Economic Understanding: Essays in Honor of Ludwig M. Lachmann on his Eightieth Birthday, edited by Kirzner I. M., 1-15. New York: New York University Press.
- Archer, Margaret S. 1995. *Realist Social Theory: The Morphogenetic Approach*. Cambridge: Cambridge University Press.
- Arrow, Kenneth J. 1994. Methodological Individualism and Social Knowledge. *American Economic Review* 84.2: 1-9.
- Birner, Jack. 1990. A Roundabout Solution to a Fundamental Problem in Menger's Methodology and Beyond. In *Carl Menger and His Legacy in Economics, Annual Supplement to Volume 22 History of Political Economy*, edited by Bruce Caldwell, 241-61.
- Boehm, Stephan. 2002. The Ramifications of John Searle's Social Philosophy in Economics. *Journal of Economic Methodology* 9.1: 1-10.
- Boettke, Peter J. 1994. *The Elgar Companion to Austrian Economics*. Aldershot: Edward Elgar.
- Caldwell, Bruce. 1994. Hayek's Scientific Subjectivism. *Economics and Philosophy* 10: 305-313.
- Coddington, Alan. 1983. Keynesian Economics: The Search for First Principles. London: Allen & Unwin.
- Ebeling Richard M. 1986. Toward a Hermeneutical Economics: Expectations, Prices, and the Role of Interpretation in a Theory of the Market Process. In *Subjectivism, Intelligibility and Economic Understanding: Essays in Honor of Ludwig M. Lachmann on his Eightieth Birthday* edited by Kirzner I. M., 39-55. New York: New York University Press.
- Fehl, Ulrich. 1986. Spontaneous Order and the Subjectivity of Expectations: A Contribution to the Lachmann O'Driscoll Problem. In *Subjectivism, Intelligibility and Economic Understanding: Essays in Honor of Ludwig M. Lachmann on his Eightieth Birthday* edited by Kirzner I. M., 72-86. New York: New York University Press.
- Fleetwood, Steve. 1995. *Hayek's Political Economy: The Socio-Economics of Order*. London: Routledge.

- Garrison, Roger W. 1986. From Lachmann to Lucas: on Institutions, Expectations, and Equilibrating Tendencies. In *Subjectivism, Intelligibility and Economic Understanding: Essays in Honor of Ludwig M. Lachmann on his Eightieth Birthday* edited by Kirzner I. M., 87-101. New York: New York University Press.
- Gloria-Palermo, Sandye. 1999. An Austrian Dilemma: Necessity and Impossibility of a Theory of Institutions. *Review of Austrian Economics* 11: 31-45.
- Grinder, Walter E. 1977. In Pursuit of the Subjective Paradigm. Introduction to *Capital, Expectations, and the Market Process: Essays on the Theory of the Market Economy,* 3-24. California: Institute of Human Studies INC..
- Hahn, Frank, and Martin Hollis. 1979. *Philosophy and Economic Theory*. Oxford: University Press.
- Hahn, Frank. 1984. Equilibrium and Macroeconomics Oxford: Basil Blackwell.
- Hayek, Friedrich A. v. [1937] 1949. Economics and Knowledge. In *Individualism and Economic Order*. London: Routledge.
- Hayek, Friedrich A. v. [1942-44] 1955. Scientism and the Study of Society. In *The Counter-Revolution of Science: Studies on the Abuse of Reason*. London: The Free Press of Glencoe Collier-Macmillan Limited.
- Hayek, Friedrich A. v. [1945] 1949. The Use of Knowledge in Society. In *Individualism and Economic Order*. London: Routledge.
- Hayek, Friedrich A. v. [1946] 1949. Individualism: True and False. In *Individualism and Economic Order*. London: Routledge.
- Hayek, Friedrich A. v. [1973] 1993. Law, Legislation and Liberty: A New Statement of the Liberal Principles of Justice and Political Economy vol. I: Rules and Order. In Law, Legislation and Liberty in one volume. London: Routledge.
- Hayek, Friedrich A. v. [1976] 1993. Law, Legislation and Liberty: A New Statement of the Liberal Principles of Justice and Political Economy vol. II: The Mirage of Social Justice. In Law, Legislation and Liberty in one volume. London: Routledge.
- High, Jack. 1986. Equilibrium and Disequilibrium in the Market Process. In *Subjectivism*, *Intelligibility and Economic Understanding: Essays in Honor of Ludwig M. Lachmann on his Eightieth Birthday* edited by Kirzner I. M., 111-121. New York: New York University Press.
- Hodgson, Geoffrey M. 1988. Economics and Institutions: A Manifesto for a Modern Institutional Economics. Cambridge: Polity Press.

- Hodgson, Geoffrey M. 1998. Emergence. In *The Handbook of Economic Methodology*, edited by Davis, John. B. et al., 156-60. UK: Edward Elgar Publishing Limited.
- Horwitz, Steven. 1994. Subjectivism. In *The Elgar Companion to Austrian Economics*, edited by Boettke, Peter J., 17-22. Aldershot: Edward Elgar, Aldershot.
- Horwitz, Steven. 1998. Hierarchical Metaphors in Austrian Institutionalism: a Friendly Subjectivist Caveat. In *Subjectivism and Economic Analysis: Essays in memory of Ludwig M. Lachmann*, edited by Koppl, Roger and Gary Mongiovi, 143-162. London and New York: Routledge.
- Hutchison, Terence W. 1986. Philosophical Issues that Divide Liberals: Omniscience or Omni-nescience about the Future? In *Subjectivism, Intelligibility and Economic Understanding: Essays in Honor of Ludwig M. Lachmann on his Eightieth Birthday* edited by Kirzner I. M., 122-139. New York: New York University Press.
- Hülsmann, Jörg, G. 1999. Economic Science and Neoclassicism. In *The Quarterly Journal of Austrian Economics*, 2.4: 3-20.
- Jaffe, William. 1965. Leon Walras, Correspondence of Leon Walras and Related Papers 2 vols. Amsterdam: North Holland Publishing Co.
- Jaffe, William. 1976. Menger, Jevons and Walras De-Homogenized. *Economic Inquiry* XIV: 511-24.
- Kincaid, Harold. 1986. Reduction, Explanation, and Individualism. *Philosophy of Science* 53.4: 492-513.
- Kincaid, Harold. 1990. Eliminativism and Methodological Individualism. *Philosophy of Science* 57.1: 141-148.
- Kincaid, Harold. 1998. Methodological Individualism/Atomism. In *The Handbook of Economic Methodology*, edited by Davis, John. B. et al., 294-300. UK: Edward Elgar Publishing Limited.
- Kirzner, Israel M. 1991. Austrian School of Economics. In *The New Palgrave: A Dictionary of Economics*, edited by Eatwell J., M. Murray, and P. Newman. London: The Macmillan Press Limited.
- Kirzner, Israel M. 1994. *Classics in Austrian Economics: A Sampling in the History of a Tradition: The Founding Era*, vol.1, edited by Kirzner I., London: William Pickering.
- Koppl, Roger and Gary Mongiovi. 1998. Subjectivism and Economic Analysis: Essays in memory of Ludwig M. Lachmann. London and New York: Routledge.

- Lachmann, Ludwig M. [1943] 1977. The Role of Expectations in Economics as a Social Science. In *Capital, Expectations, and the Market Process: Essays on the Theory of the Market Economy*, 65-80. California: Institute of Human Studies INC..
- Lachmann, Ludwig M. [1950] 1977. Economics As a Social Science. In *Capital, Expectations, and the Market Process: Essays on the Theory of the Market Economy,* 166-180. California: Institute of Human Studies INC..
- Lachmann, Ludwig M. [1953]. 1977. Professor Shackle on the Economic Significance of Time. In *Capital, Expectations, and the Market Process: Essays on the Theory of the Market Economy*, 81-93. California: Institute of Human Studies INC..
- Lachmann, Ludwig M. [1966a] 1977. The Significance of the Austrian School of Economics in the History of Ideas. In *Capital, Expectations, and the Market Process: Essays on the Theory of the Market Economy*, 45-64. California: Institute of Human Studies INC..
- Lachmann, Ludwig M. [1966b] 1977. Model Constructions and the Market Economy. In Capital, Expectations, and the Market Process: Essays on the Theory of the Market Economy, 112-129. California: Institute of Human Studies INC..
- Lachmann, Ludwig M. [1967a] 1977. Causes and Consequences of the Inflation of Our Time. In *Capital, Expectations, and the Market Process: Essays on the Theory of the Market Economy*, 289-307. California: Institute of Human Studies INC..
- Lachmann, Ludwig M. [1967b] 1977. Cultivated Growth and the Market Economy. In Capital, Expectations, and the Market Process: Essays on the Theory of the Market Economy, 323-337. California: Institute of Human Studies INC..
- Lachmann, Ludwig M. [1969] 1977. Methodological Individualism and the Market Economy. In *Capital, Expectations, and the Market Process: Essays on the Theory of the Market Economy*, 149-165. California: Institute of Human Studies INC..
- Lachmann, Ludwig M. 1970. The Legacy of Max Weber. London: Heinemann.
- Lachmann, Ludwig M. [1971] 1977. Ludwig von Mises and the Market Process. In *Capital, Expectations, and the Market Process: Essays on the Theory of the Market Economy,* 181-193. California: Institute of Human Studies INC..
- Lachmann, Ludwig M. [1976a] 1977. Austrian Economic in the Present Crisis of Economic Thought. In *Capital, Expectations, and the Market Process: Essays on the Theory of the Market Economy*, 25-41. California: Institute of Human Studies INC..
- Lachmann, Ludwig M. 1976b. From Mises to Shackle: An Essay on Austrian Economics and the Kaleidic Society. *Journal of Economic Literature* 14. 1: 54-62.

- Lachmann, Ludwig M. 1977. Capital, Expectations, and the Market Process: Essays on the Theory of the Market Economy. California: Institute of Human Studies INC..
- Lachmann, Ludwig M. [1978] 1994. Vicissitudes of Subjectivism and the Dilemma of the Theory of Choice. In *Expectations and the Meaning of Institutions: Essays in Economics by Ludwig Lachmann*, edited by Lavoie. London and New York: Routledge.
- Lachmann, Ludwig M. [1979] 1994. The Flow of Legislation and the Permanence of the Legal Order. In *Expectations and the Meaning of Institutions: Essays in Economics by Ludwig Lachmann*, edited by Lavoie. London and New York: Routledge.
- Lachmann, Ludwig M. [1982a] 1994. The Salvage of Ideas: Problems of the Revival of Austrian Economic Thought. In *Expectations and the Meaning of Institutions: Essays in Economics by Ludwig Lachmann*, edited by Lavoie. London and New York: Routledge.
- Lachmann, Ludwig M. 1982b. Ludwig von Mises and the Extension of Subjectivism. In *Method, Process, and Austrian Economics: Essays in Honor of Ludwig von Mises*, Iedited by Kirzner Israel, 31-40. New York: Gower Publishing Co. LTD.
- Lachmann, Ludwig M. 1986. *The Market as an Economic Process*. Oxford and New York: Basil Blackwell.
- Lachmann, Ludwig M. [1990] 1994. G. L. S. Shackle's Place in the History of Subjectivist Thought. In *Expectations and the Meaning of Institutions: Essays in Economics by Ludwig Lachmann*, edited by Lavoie. London and New York: Routledge, 241-48.
- Lachmann, Ludwig M. [1991] 1994. Austrian Economics: A Hermeneutic Approach. In *Expectations and the Meaning of Institutions: Essays in Economics by Ludwig Lachmann*, edited by Lavoie. London and New York: Routledge.
- Lawson, Tony. 1997. *Economics and Reality*. London: Routledge.
- Lawson, Tony. 2003. Reorienting Economics. London: Routledge.
- Leube, Kurt R. 2002. On Menger, Austrian Economics, and the Use of General Equilibrium. ICER working paper No. 35/2002.
- Lewis, Paul and Jochen, Runde. Forthcoming. Subjectivism, Institutions and the Possibility of Socio-Economic Order: The Case of Ludwig Lachmann. *Journal of Economic Behavior and Organisation*.
- Mäki, Uskali. 1990. Mengerian Economics in Realist Perspective. In *Carl Menger and his Legacy in Economics*, edited by Caldwell, Bruce. Annual supplement to volume 22, History of Political Economy. London: Duke University Press.

- Mäki, Uskali. 1992. The Market as an Isolated Causal Process: A Metaphysical Ground for Realism. In *Austrian Economics: Tensions and New Directions*, edited by Caldwell Bruce and Stephan Böhm. London: Kluwer Academic Publishers.
- Menger, Carl. [1871] 2004. Principles of Economics tramslated by James Dingwall and Bert, F. Hoselitz, with an Introduction by F.A. Hayek, Ludwig von Mises Institute: electronic online edition.
- Menger, Carl. [1883] 1969 Carl Menger Gesammelte Werke Bd.II: Untersuchungen über die Methode der Socialwissenschaften und der Politischen Oekonomie insbesondere. Tübingen: J. C. B. Mohr.
- Menger, Carl. [1883] 1933. The Collected Works of Carl Menger Volume II: Untersuchungen über die Methode der Socialwissenschaften, und der Politischen Oekonomie insbesondere. London: The London School of Economics and Political Sciences.
- Menger, Carl. [1889] 1994. Towards a Systematic Classification of the Economic Sciences. In *Classics in Austrian Economics: A Sampling in the History of a Tradition: The Founding Era*, vol.1, edited by Kirzner I., London: William Pickering, 3-34.
- Mises, Ludwig, v. [1942] 1990. Social Science and Natural Science. In *Money, Method, and* the *Market Process: Essays by Ludwig von Mises*, edited by Ebeling, Richard. Auburn: Kluwer Academic Publishers.
- Mises, Ludwig, v. [1944] 1994. The Treatment of "Irrationality" in the Social Sciences. Classics in Austrian Economics: A Sampling in the History of a Tradition, vol. 3/ The Age of Mises and Hayek, edited by Kirzner, Israel M. London: William Pickering.
- Mises, Ludwig, v. [1949] 1966. *Human Action: A Treatise on Economics*, 3rd edition. Chicago: Contemporary Books Inc.
- Mises, Ludwig, v. [1957] 1958. Theory and History, 2nd edition. London: J. Cape.
- Mises, Ludwig, v. 1962. *The Ultimate Foundation of Economic Science*. Princeton and New York: Van Nostrand.
- Mittermaier, Karl. 1986. Mechanomorphism. In Subjectivism, Intelligibility and Economic Understanding: Essays in Honor of Ludwig M. Lachmann on his Eightieth Birthday, edited by Kirzner I. M. New York: New York University Press.
- O'Neill, John. 2000. "Radical Subjectivism": Not Radical, Not Subjectivist. *Quarterly Journal of Austrian Economics* 3.2: 21-30.
- Prychitko, David L. 1995. Ludwig Lachmann and the Interpretive Turn in Economics: A Critical Inquiry into the Hermeneutics of the Plan. In *Individuals, Institutions*,

- *Interpretations: Hermeneutics Applied to Economics*, edited by Prychitko David, 93-112. Avebury, Aldershot: Ashgate Publishing Ltd.
- Runde, Jochen. 1998. Assessing Causal Economic Explanations. *Oxford Economic Papers* 50.2: 151-172.
- Runde, Jochen. 2001. Bringing Social Structure Back into Economics: On Critical Realism and Hayek's *Scientism* Essay. *Review of Austrian Economics* 14: 5-24.
- Searle, John R. 1992. The Rediscovery of the Mind. Cambridge, MA: MIT Press.
- Searle, John R. 1995. *The Construction of Social Reality*. Middlesex: Allen Lane, the Pinguin Press.
- Searle, John R. 1997. Précis of The Construction of Social Reality. *Philosophy and Phenomenological Research* LVII.2: 427-28.
- Watkins, John. W. N. 1953. The Principle of Methodological Individualism. *The British Journal for the Philosophy of Science* III: 186-89.
- Zappia, Carlo. 1998. Radical Subjectivism and Austrian Economics. In *Subjectivism and Economic Analysis: Essays in memory of Ludwig M. Lachmann*, edited by Koppl, Roger and Gary Mongiovi, 125-142. London and New York, Routledge.
- Zwirn, Gregor. Forthcoming. Methodological Individualism and Methodological Atomism: The Case of Friedrich Hayek. *History of Political Economy*.