It is customary to draw a distinction in the history of science between a broadly 'Galilean' and a broadly 'Aristotelian' approach to methodology (see, for example, Lewin, 1930/31). The proponent of the former sees science as a matter of the formulation and testing of hypotheses of a quantitative sort. Such hypotheses, conjoined with the results of observations of present events, allow the theorist to predict specific future events in specific ways, and can thereby be seen as amounting to an explanation of the phenomena in question. The proponent of the latter, Aristotelian methodology, in contrast, sees science not in terms of prediction and explanation but rather as a descriptive enterprise, a matter of qualitative laws governing the connections between certain essences or categories. Such laws may in addition be seen as having the peculiar property that they can be known a priori, which is to say, without the application of special methods of experiment and induction.

The Aristotelian methodology was for a long time regarded as having been entirely superseded, so that all modern scientific disciplines came to be seen as tending inevitably towards the status of the exact physical sciences. More recently, however, it has been recognized that there are a number of scientific domains, especially in the sphere of the human sciences, where the Aristotelian methodology is still appropriate and indeed necessary. This is increasingly true, for example, in the spheres of linguistics and anthropology and in other cognitive sciences. For at least a hundred years, however, the standard-bearer of the Aristotelian methodology has been the school of Austrian economics, and it is the 'Aristotelianism' of the Austrians that we shall seek to set out more precisely in what follows.

The doctrine of Austrian Aristotelianism can be said to embrace the following theses:

1. The world exists, independently of our thinking and reasoning. This world embraces both material and mental aspects (and perhaps other sui generis dimensions, for example of law and culture). And while we might shape the world and contribute to it through our thoughts and actions, detached and objective theorizing about the world in all its aspects is nonetheless possible.

2. There are in the world certain simple 'essences' or 'natures' or 'elements', as well as laws, structures or connections governing these. All such laws are strictly universal, both in the sense that they do not change historically.
cally and in the sense that they are capable of being instantiated, if appropriate conditions are satisfied, at all times and in all cultures. Propositions expressing universal connections amongst essences are called by Menger 'exact laws'. Such laws may be either static or dynamic – they may concern either the coexistence or the succession of instances of the corresponding simple essences or natures. It is exact laws, as Menger sees it, which constitute a scientific theory in the strict sense. The general laws of essence of which such a theory would consist are subject to no exceptions. In this respect they are comparable, say, to the necessary laws of geometry or mechanics, and they are contrasted with the mere statements of fact and the inductive hypotheses of 'Galilean' science (see Menger, 1985, p. 59).

3. **We can know what the world is like, at least in its broad outlines, both via common sense and via scientific method.** Thus Austrian Aristotelianism embraces not only commonsense realism but also scientific realism, though Aristotle himself ran these two positions together in ways no longer possible today. The commonsense realism of Menger (as of all Austrian economists) is seen in his treatment of agents, actions, beliefs, desires and so on. In regard to these sorts of entity there is no opposition between reality as it appears to common sense and reality as revealed to scientific theory. Menger's (or the Austrian economists') scientific realism, on the other hand, is revealed in the treatment of phenomena such as spontaneous orders and 'invisible hand' processes, where common sense diverges from the structures disclosed by theory.

4. **We can know what this world is like, at least in principle, from the detached perspective of an ideal scientific observer.** Thus in the social sciences in particular there is no suggestion that only those who are part of a given culture or form of life can grasp this culture or form of life theoretically. The general structures of reality are not merely capable of being exemplified, in principle, in different times and cultures; like the basic laws of geometry or logic they also enjoy an intrinsic intelligibility which makes them capable of being grasped, again in principle and with differing degrees of difficulty, by knowing subjects of widely differing sorts and from widely differing backgrounds. Indeed, because the essences and essential structures are intelligible, the corresponding laws are capable of being grasped by the scientific theorist in principle on the basis of a single instance.

5. **The simple essences or natures pertaining to the various different segments or levels of reality constitute an alphabet of structural parts.** These can be combined in different ways, both statically and dynamically (according to coexistence and according to order of succession). Theoretical research, for Menger, 'seeks to ascertain the simplest elements of everything real, elements which must be thought of as strictly typical just because they are the simplest' (1985, p. 60). Scientific theory results, then, at least in part, when means are found for mapping or picturing the composition of such simple and prototypical constituents into larger wholes. Such composition is not simply a matter of heaping or gluing together. It is a matter of certain entities or features or properties of entities arising in reflection of the existence of special sorts of combinations of other sorts of entities. Thus for example a good exists as such only if certain quite determinate preconditions are simultaneously satisfied (see Menger, 1981, p. 52).

6. **The theory of value is to be built up exclusively on 'subjective' foundations, which is to say exclusively on the basis of the corresponding mental acts and states of human subjects.** Value for Menger – in stark contrast to, for example, Marx – is to be accounted for exclusively in terms of the satisfaction of human needs and wants. Economic value, in particular, is seen as being derivative of the valuing acts of ultimate consumers. The different representatives of the philosophical school of value theory in Austria, too (above all Franz Brentano, Alexius Meinong, Christian von Ehrenfels and Oskar Kraus) accepted different forms of subjectivism as here defined. Thus all of them shared with Menger the view that value exists only in the nexus of human valuing acts (see Smith, 1990a; Grassl and Smith, 1986).

7. **There are no 'social wholes' or 'social organisms'.** Austrian Aristotelians hereby embrace a doctrine of ontological individualism, which implies also a concomitant methodological individualism, according to which all talk of nations, classes, firms, and so on is to be treated by the social theorist as an, in principle, eliminable shorthand for talk of individuals. That it is not entirely inappropriate to conceive individualism in either sense as 'Aristotelian' is seen for example in Aristotle's own treatment of knowledge and science in terms of the mental acts, states and powers of individual human subjects.

It is thesis 3, above all, which establishes the line between the Aristotelian doctrine and that of Kant (for whom there loms behind the world we know an inaccessible world of 'things in themselves'). Theses 1 and 3 mark off Austrian Aristotelianism from all idealist doctrines of the sort which embrace the view that the world of experience or of scientific inquiry is somehow created or constituted by the individual subject or by the linguistic community or scientific theory, or what one will. Theses 2 and 4 distinguish the doctrine from all sorts of historicism, as also from hermeneutist relativism and other modern fancies. Most importantly, however, the doctrine is distinguished via thesis 3 from the Galilean (positivistic, empiricistic) methodology which rests on the assumption that the ultimate atoms of reality (1) enjoy only quantitative properties and (2) are associated together in ways which are both accidental and unintelligible. All intelligible structures and all necessities are, from this perspective, merely the spurious reflection of thought constructions introduced by man.
Austrian Aristotelianism as formulated above is in large part a doctrine of ontology: it tells us what the world is like. The question of apriorism, on the other hand, is strictly epistemological: it relates exclusively to the sort of account one gives of the conditions under which knowledge is acquired.

Defenders of apriorism share the assumption that we are capable of acquiring knowledge of a special sort, called ‘a priori knowledge’, via non-inductive means. They differ, however, in their accounts of where such knowledge comes from. Two broad families of apriorist views have to be distinguished in this regard. On the one hand are what we might call impositionist views. These hold that a priori knowledge is possible as a result of the fact that the content of such knowledge reflects merely certain forms or structures that have been imposed or inscribed upon the world by the knowing subject. Knowledge, according to such views, is never directly of reality itself; rather, it reflects the ‘logical structures of the mind’ and penetrates to reality only as formed, shaped or modelled by a mind or theory.

On the other hand are reflectionist views, which hold that we can have a priori knowledge of what exists, independently of all impositions or inscriptions of the mind, as a result of the fact that certain structures in the world enjoy some degree of intelligibility in their own right. The knowing subject and the objects of knowledge are for the reflectionist to some degree pre-tuned to each other. Direct a priori knowledge of reality itself is therefore possible – knowledge of the sort that is involved, for example, when we recognize the validity of a proof in logic or geometry (where it is difficult to defend the view that the character of validity would be somehow imposed upon the objects in question by the epistemic subject).

The impositionist view finds its classical expression in the work of Hume (in his treatment of causality), in Kant and in the logical positivists. The reflectionist view, on the other hand, finds its classical expression in Aristotle; it was developed further by successive waves of scholastics extending far into the modern era and brought to perfection by Brentano and his successors, above all by Adolf Reinach and other realist phenomenologists in the early years of this century (see Mulligan, 1987).

For the Austrian economists, some at least of the propositions of economics are a priori in the sense that the corresponding structures enjoy an intrinsic simplicity and intelligibility which makes them capable of being grasped by the economic theorist – in principle – in a single instance (see Menger, 1985, p. 60 on the ‘rule of cognition for the investigation of theoretical truth’). Note, however, that the fact that such structures are intelligible need not by any means imply that our knowledge of them is in any sense infallible or incorrigible, nor that it need in every case be easy to obtain or to order into the form of a rigorous theory. Indeed, much confusion in the literature on Austrian methodology has arisen because the alien moment of incorrigibility, together with connotations of special mental processes of ‘insight’ or ‘intuition’, have come to be attached to the aprioristic thesis in a way which has made the latter seem eccentric and unscientific.

Still greater confusion has arisen, however, as a result of the no less pervasive assumption that all talk of the a priori must of necessity imply an impositionist or Kantian framework. (This confusion was embraced, inter alia, by Mises: see Smith, 1990b.) The apriorism lying in the background of Menger’s thinking, however, is quite clearly reflectionist. Menger believes that there are a priori categories (‘essences’ or ‘natures’) in reality and that a priori propositions reflect structures or connections among such essences which exist autonomously in the sense that they are not the result of any shaping or forming of reality on the part of the experiencing subject. The impositionist apriorist, in contrast, insists that a priori categories must be creatures of the mind. He, therefore, may hold that the issue as to which sorts of economic structures exist is a matter for more or less arbitrary legislation by the economic theorist, or a matter of the ‘conceptual spectacles’ of the economic agent. No grain of such ideas is to be found in Menger, who is quite clearly working against the background of an assumption to the effect that the universals of economic reality are not created or imposed in any sense, but are discovered through our theoretical efforts.

See also:
Chapter 3: Subjectivism; Chapter 9: Causation and genetic causation in economic theory; Chapter 6: Phenomenology and economics; Chapter 10: Ideal type methodology in economics

Bibliography