

workmen. Nothing else could have given him the strength to overcome the innumerable obstacles, above all the infinitely more intensive work which is demanded of the modern entrepreneur. But these are ethical qualities of quite a different sort from those adapted to the traditionalism of the past.

(Ibid., 31)

This also had an impact on technological innovation. Even though modern science was not born with the Reformation, the fact that it put science at the service of technology and the economy is a specific development of Protestantism (Weber 1958, Eng. trans. 1987). These, then, are the ascetic-religious foundations of the innovative dynamism that from its origins distinguished the entrepreneurial bourgeoisie. However, the progress of rationalisation, with the growing secularisation of economic behaviour, altered the picture. For Weber, the desiccation of the 'religious roots' of modern economic man tended to create problems for capitalism. First, because it freed the conflict of the underprivileged classes, their protest no longer curbed by the expectation of other-worldly rewards. Second, because it dried up the ethical and motivational well-springs of bourgeois entrepreneurship (Weber 1922a, Eng. trans. 2005, 119). Weber feared that secularised and radicalised Western rationalisation would mean the prevalence – both in the economic and political sphere – of a bureaucratic mentality averse to risk and innovation, reducing the space for individual action and personal charisma (Cavalli 1981a; 1981b, 165). In the 'political writings' of his later years, in fact, he voiced serious concerns regarding the spread of a spirit of discipline that weakened the personal responsibility and leadership skills that private entrepreneurs and 'political leaders' brought to the table (Weber 2008). These were concerns that, as we shall see in the next section, also found an echo in Schumpeter's work. To conclude and summarise, then, Weber offers us two readings related to the formation of capitalist entrepreneurship oriented towards innovation. The first, 'macro' in nature, stresses the importance of a set of institutional, social and cultural factors that created a professional-rational ethos which spurred on innovative behaviour and broke with economic traditionalism. The second, at a 'micro' level, focuses on a *charismatic mechanism of innovation*: that is, the ethico-personal qualities of Puritan entrepreneurs who, to escape the influence of tradition and overcome resistance to innovation, had to deploy charismatic traits in order to exert their leadership.

## 1.5 Schumpeter and the economy of innovation

Joseph Schumpeter is a special economist. Although he evolved as a thinker as part of the 'Austrian School' of economics and shared many of the assumptions of neoclassical analysis, he was also influenced by the ideas of the 'historical school' of economics – quite widespread in Germany at the time – as well as by the Marxist and sociological approaches.<sup>14</sup> This multiplicity of influences made him very attentive to the study of development's 'non-economic' factors. The importance of these socio-institutional elements is already to be found in *The*

*Theory of Economic Development* (1912), the most famous work of his early years. It is a book that addresses the issue of development by placing the entrepreneurial role at the centre of the explanation and sees Schumpeter clearly distancing himself from traditional (neoclassical) economic analysis. This he shows to be substantially static and incapable of explaining the central element of capitalist development: innovation.

The essay opens with a description of the ‘circular flow of economic life’, a situation characterised by a market equilibrium that determines the quantity and price of the goods produced, based on established routines and customs. The phenomena of *growth* experienced in this context are continuous, marginal and incremental in nature, and occur without substantially altering the framework of given conditions. This static theory is, however, unable to encompass the phenomena of *development*:

is not only unable to predict the consequences of discontinuous changes in the traditional way of making things; it can neither explain the occurrence of such productive revolutions nor the phenomena which accompany them.... Development in our sense is a distinct phenomenon, entirely foreign to what may be observed in the circular flow or in the tendency towards equilibrium. It is spontaneous and discontinuous change in the channels of the flow, disturbance of equilibrium, which forever alters and displaces the equilibrium state previously existing.

(Schumpeter 1912, Eng. trans. 2012, 62–4)<sup>15</sup>

Traditional economic analysis, then, fails to account for the radical changes that are at the basis of the development processes and cyclical evolutions of the capitalist economy. In order for these phenomena to come into being, *innovation* is required in the ways of combining ‘materials and forces’ of production – that is, ‘new combinations of productive means have to be introduced’ (*ibid.*, 66). These innovations may involve: (1) the production of new goods, not familiar to consumers; (2) a new method of production or marketing; (3) the opening of new markets; (4) the acquisition of new sources of supply of raw materials and semi-finished products; and (5) the reorganisation of an industry, such as the creation or destruction of a monopoly (*ibid.*). It is the entrepreneurs who come up with these innovations, providing a ‘creative response’ for the situations that they are facing (Schumpeter 1947, 150).

Schumpeter reads innovation as a social phenomenon that shapes economic development (Fagerberg 2003, 135). Unlike the (so-called neoclassical) economists of his time, he does not consider change in the states of equilibrium as due to factors external to the economy. Capitalism, in fact, has an essentially dynamic character that should be explained – as Marx had done – with endogenous factors: the new economic elements that are introduced by ‘new men’ through ‘new firms’ (Schumpeter 1939, 92–4). This dynamism, moreover, is not based on price competition between companies, but on technological and organisational competition: on ‘doing things differently’, in other words, in the realm

of economic life (ibid., 80). Development takes place through industrial change that *incessantly* revolutionises the economic structure from within, *incessantly* destroying the old one and *incessantly* creating a new one. It is this process of 'creative destruction' that characterises capitalism in such a specific way (Schumpeter 1942, Chapter VII).

Successful innovation ensures economic profit for the entrepreneurs, but this is transient in nature since the new element will soon be imitated by competitors. Other aspects of innovation which Schumpeter draws attention to are the following: (1) it is not present everywhere in the economy, but is concentrated in particular areas; (2) it tends to appear in clusters, nourishing other innovation in connection with it (Schumpeter 1939, 98); (3) it is cyclical in nature; (4) it is mostly related to the creation of new businesses, or to the advent of new men at the helm of old businesses, since the latter generally demonstrate 'symptoms of what is euphemistically called conservatism' (ibid., 94).

Schumpeter makes a clear distinction between *innovator-entrepreneurs* and those who, in the running of enterprises, engage solely in administrative tasks and management, exploiting already-acquired knowledge and established routines. Entrepreneurs are not even the owners of the means of production or financial capital. To ensure that they are provided with the necessary resources, the action of the financial credit system is crucial so that – through the use of deposits – additional purchasing power is created in order to finance innovation. Entrepreneurs are also different from inventors, since their role is not so much to discover new things, but to introduce innovation into the economic sphere, thwarting the social and psychological resistance that it can arouse.<sup>16</sup> To overcome this type of opposition a particular kind of personality is required – one endowed with energy, determination and intuition. The ability to lead others is another important trait, creating consensus around a project, the results of which may be shrouded in a great deal of uncertainty.

The logic of entrepreneurial action is very different from the utilitarian and maximising logic employed by conventional theory to describe 'economic man'. Entrepreneurs, in fact, lack the information required to apply a rational assessment of the costs and benefits of their behaviour, since the latter is unconstrained by established routine. The motivation that urges him to act, moreover, is neither rational nor hedonistic in nature:

First of all, there is the dream and the will to found a private kingdom, usually, though not necessarily, also a dynasty.... Then there is the will to conquer: the impulse to fight.... Finally there is the joy of creating, of getting things done, or simply of exercising one's energy and ingenuity.

(Schumpeter 1912, Eng. trans. 2012, 93)

If in delineating the profile of the entrepreneur Schumpeter places strong emphasis on the individual and psychological characteristics that are typical of such a figure, he also gives equal importance to the historical context within which the entrepreneur comes to the fore. The socio-institutional context and the actors are

set in a relationship of mutual interdependence. Schumpeter is also aware that development will alter the institutional framework upon which capitalism is based, modifying the very logic of competition and innovation. He distinguishes, in fact, *competitive capitalism* from *trustified capitalism* (Schumpeter 1939, 93). In the first model, innovation is introduced by individual entrepreneurs – new men who place themselves at the head of new business. The typical industrial entrepreneur of the nineteenth century was a man who innovated by placing himself at the head of an enterprise that he led personally and of which he was the owner. In the second model, on the other hand, innovation is produced by the R&D labs of large oligopolistic companies that, especially in the United States, dominated capitalism from the beginning of the twentieth century.<sup>17</sup> In this second scenario, competition becomes more restricted: it takes place between a few giant firms, where ownership is separated from management (given over to managers) and the entrepreneurial role loses those personal traits that characterised the previous phase (Fagerberg 2003, 133).

That said, what is the relationship that links the bourgeoisie and capitalism to the entrepreneurial role? Entrepreneurs do not constitute a specific social class and should not therefore be confused with the bourgeoisie, a class from which they do not necessarily hail. Because being an entrepreneur is not a profession and not, as a rule, a lasting condition ‘entrepreneurs do not form a social class in the technical sense, as, for example, landowners or capitalists or workmen do’ (Schumpeter 1912, Eng. trans. 2012, 78). However, a close relationship does exist between the bourgeoisie and the entrepreneurial role, since the former tends to absorb the entrepreneurs and their families into their own ranks, drawing new strength from them. The innovative role and economic dynamism ensured by the entrepreneur confer upon the bourgeoisie the prestige and social legitimacy that is at the foundation of their class position: ‘Economically and sociologically, directly and indirectly, the bourgeoisie therefore depends on the entrepreneur and, as a class, lives and will die with him’ (Schumpeter 1942, 134). This quote also helps us to clarify the causes which, according to Schumpeter, lead to the crisis of capitalism and its ruling class – an issue at the heart of his most famous book, *Capitalism, Socialism and Democracy*. The originality of Schumpeter, which sets him apart from Marx, is to identify some of the ‘socio-cultural contradictions’ that can lead to the crisis of capitalism, since its own success (development) ‘undermines the social institutions which protect it’ (*ibid.*, 61). From a strictly economic point of view, capitalism is still capable of providing an increase in well-being. The large oligopolistic companies possess organisational structures capable of promoting – on an extensive and ongoing scale – the introduction of new combinations of productive factors.

Innovation, indeed, is to some extent routinised, ensured by a team of specialists working as employees. Economic progress tends therefore to become depersonalised and automated (*ibid.*, 134). This bureaucratisation of innovation, however, takes away space from the entrepreneur, reducing the scope for leadership based on individual strength of will, intuition and personal responsibility (*ibid.*; Schumpeter 1947, 157–8). As this occurs, the ruling class loses much of its social legitimacy, which was linked to the exercise of this social function.

If capitalist evolution – ‘progress’ – either ceases or becomes completely automatic, the economic basis of the industrial bourgeoisie will be reduced eventually to wages such as are paid for current administrative work.... The perfectly bureaucratised giant industrialised unit not only ousts the small or medium-sized firm and ‘expropriates’ its owners, but in the end it also ousts the entrepreneur and expropriates the bourgeoisie as a class which in the process stands to lose not only its income but also, what is infinitely more important, its function.

(Schumpeter 1942, 130)

Schumpeter’s reflections on innovation are of great interest. In the first place, because they show an interdisciplinary approach to study, one in which the institutional-historical analysis of capitalist development is combined with a microfoundation based on the innovative behaviour of entrepreneurs. Second, because his works have had a profound impact on the contemporary economics of innovation. Schumpeter’s contribution was long-ignored by the dominant economic theories, which tended to consider technological progress as an exogenous factor in relation to the economy (Freeman 1994, 732; Helpman 2004). In recent decades, however, there has been a strong revival of attention given to innovation, which has gradually been ‘endogenised’ within the new theories of economic growth (Helpman 2004, Chapter IV). A rediscovery of Schumpeter’s ideas has thus taken place, especially due to so-called ‘evolutionary economics’, which sees innovation and technological competition between companies as the driving force of capitalist development.<sup>18</sup>

## 1.6 Models of capitalism

This brings us to contemporary economic sociology. In this context, we will deal exclusively with two analytical approaches: that of *comparative political economy* and that of *new economic sociology*, but, as already seen in the preceding pages, only with reference to the subject of innovation. The first approach, prevalently macro in nature, is to be covered in this section, while the second approach, to be discussed in the next section, is characterised by a micro perspective. Political economy represents a line of study that analyses the relationships of reciprocal influence between economic, social and political phenomena and their modes of regulation in different institutional contexts.<sup>19</sup> In relation to this line, we are interested in a specific topic that, starting from the end of the eighties, has mainly attracted the attention of sociologists and political scientists: the study of the various institutional forms of advanced economies – that is, the debate on *varieties of capitalism*.

Comparative analysis highlights the existence of different models of capitalism which differ from each other in the way they regulate a wide range of economically important activities: for example, the financing and management of firms, relationships with suppliers and customers, the training of human capital, and systems of industrial relations and social protection. These differences