Methodological Misconceptions in the Social Sciences. Rethinking social thought and social processes

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METHODOLOGICAL MISCONCEPTIONS IN THE SOCIAL SCIENCES
Rethinking social thought and social processes

by Angelo **Fusari**

> Men are strange beings indeed!… I would admire them, but what do I see? Sophism, a meaningless sophism that blinds them to the evidence and paralyses them in front of an open door. Perhaps the main defect of men is their mental inertness, which enables them to achieve the most admirable developments based on well established notions rather than to engage in *(methodical)* criticism and revision of the foundations
>
> Bruno De Finetti, *Un matematico e l'economia,* Franco Angeli, Milan, 1969, p.33)

Back cover

This book offers a systematic view of social analysis that will advance the communication of results between different academic disciplines. It overcomes misunderstandings that are due to the use of an unstructured variety of methodological traditions in the analysis of complex socioeconomic and political processes. The book focuses on the special features of human society: humans as subjects, non-repetitiveness and irreversibility of social actions, and the peculiar relations between necessity and possibility in human action. It defines methodological criteria, procedures and rules that enable researchers to select and classify realistic hypotheses to derive general principles and basic organizational features. It then applies these criteria in critical reviews of major theories and interpretations of society and history, offering clarifications and alternative proposals with regard to crucial aspects of anthropological, political, juridical, sociological, and religious thought.

This volume:

- Offers a thorough and detailed critique of scientific methodology in the social sciences.
- Lines out a consistent methodological approach for the social sciences.
- Extends social analysis to the field of ethical structures.

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Preface

Contemporary social teaching suffers from a grave deficiency: it is lacking rules of methodology and procedure suited to social reality that are, in particular, able to reconcile increasing creativity (implying irreversibility) with rationality, which are indispensable for the scientific judgement of theoretical ideas. Unfortunately, this lack is largely ignored, and eminent social scholars have even explicitly and emphatically theorized a rejection of method. This allows rhetorical and literary skills to prevail over the reasons of science, thereby promoting a deceptive instead of constructive pluralism, confusion in the study of contemporary societies and growing ineptitude in their government, what represents a main source of afflictions in the present world.

Our long-lasting studies on the organization and the vicissitudes of human societies made increasingly evident the poverty of the current methods of inquiry on society.This book intends to react against such poverty. It is complementary to a previous volume, *Economic theory and social change*[1], and extends the analysis to other branches of social thought and to the interpretation of history. Unlike the earlier book, however, the present work makes extremely limited use of mathematical formalization and other technical complications and obscurities; this is intended to foster easier and broader understanding of its contents and to facilitate the diffusion of studies of method outside the hermeneutics of a restricted elite. The present book has also been preceded by one substantial study of historical processes,[2] and another focused on the problem of power,[3] both published in Italian. These works confirmed our conviction that the advancement of social knowledge is severely hindered by some methodological misconceptions concerning the

[1] See H. Ekstedt and A. Fusari, Economic theory and social science. Routledge 2010, London-New York

[2] See A. Fusari (2000), Human adventure. An inquiry on the ways of people and civilizations. Edizioni SEAM, Rome. This study starts from primitive societies and embraces the great Asian and Mediterranean empires and societies, Arab civilization, European Feudal and Medieval societies and the Renaissance, through to the beginning of the eighteenth century.

[3]See A. Fusari (2008) Reason and dnomination. Ethics, politics and economics in modern global society, Marco Editore, Cosenza

characteristics of social reality and that those same misconceptions also afflict the interpretation of history. The situation seems to be worse and, in a sense, more difficult and troublesome than that afflicting the natural sciences before the methodological revolution of the seventeenth century. If this is indeed so, it is urgent to clear these misconceptions up.

Method is a two-edged sword: it offers powerful assistance in and enhances our capability of understanding and solving the problems of everyday life; but if the chosen method is inappropriate, it can seriously obstruct the advancement of knowledge. Significantly, the best contributions to social knowledge have been *ad hoc* studies that disregard method and simply apply common sense. But *ad hoc* studies suffer a lack of coordination, and the neglect of method makes it difficult to evaluate and select findings and results. As a consequence, *ad hoc* analyses have little chance of stimulating the cumulative growth of knowledge. Science needs method; in its absence, scientific thought is not possible and the growth of knowledge is difficult.

The human mind is able, in principle, to understand all that is the object of experience. In particular, humans should be particularly clever in the understanding of the social world, this being a product of human action, its creation. Seen in this light, it is surprising that the understanding and management of society on the part of its creator appears so difficult. But the dominant methods, together with their potential mistakes, always exert enormous power on the social scientists using them; and they may have the power to mislead even those who contest them. In fact, the critique deriving from the burgeoning perception of the limits and mistakes of those methods, instead of aiding clarification, has increased confusion, as is typical of times of profound crisis of current visions and methods of inquiry. The international scientific conferences on social problems, which assemble skilful scholars, are the best representation of this situation. Conferences inspired by heterodoxy and aiming to foster pluralism demonstrate a remarkable inability of participants to engage in dialogue with one another, due to the methodological cages that separate them and impede the valuation and dissemination of scholarly contributions, while those inspired by orthodoxy refuse a platform to dissenting views and persist in building on some crucial mistakes, even though these errors have been clearly identified and proved.

It seems not exaggerated to say that there is a need to go back to what may be termed the Medieval organizational view, that is, the attempt to understand the reason why societies have been organized the way that they are, and hence to learn to organize them more satisfactorily. Significantly, Bertrand Russel wrote: «it is false, from a theoretic point of view, to allow the real world inflicting us a model of good and evil»[4].

The present study is intended as a contribution that prevents method from becoming a prison for the mind as opposed to a stimulant of creativity and knowledge. In a sense, we are today living a condition opposite to that of the Enlightenment. In that era, a great intellectual revolution prognosticated reforms that sometimes proved unrealistic due to excessive abstraction but that, nevertheless, stimulated an intensive social change. Now the contrary is taking place: a deep social change is at work but is obstructed by the absence of a methodology able to promote the understanding and the profitable working of its content.

We shall try to make clear our proposal on method by setting out a multiplicity of applications in the main branches of social thought, economics excepted as it has already been treated in another book (students interested in economics can read some substantial development of the discussion in section 1.4 on positive and normative views, the final section of chapter 2 entitled 'Economic and social planning'and in the section 3.8 entitled 'Mainstream economics and its opponents'). But we have considered that those applications are not sufficient and that, to adequately clarify our methodological proposal, the reasons standing behind it, and to stimulate meditation, a number of criticisms of outstanding social theories and schools of thought were also required. We beg the pardon of readers and authors for any misunderstandings that, notwithstanding our severe attempt at accuracy, may have occurred in the handling of such extensive and difficult literature.

[4] See B. Russel (1981) Philosophy and science. Newton Compton, Rome, p. 37

Naturally, it is difficult to challenge well rooted methodological convictions. Probably, any hopes of overcoming the current difficulties of social thought must be placed on: a) that minority of heterodox scholars aware that the absence of some shared methodological rules makes impossible a serious confrontation and reciprocal interaction among the plurality of contributions and a real challenge to mainstream methodologies; b) those orthodox scholars who start to perceive the unreliability of traditional methodologies when applied to social science; c) young scholars and their tendency to distrust current thought and cultivate a critical attitude, but hopefully found their own work on the accurate analysis of facts and errors, not mere polemic; d) the good sense and mental openness of educated people, primarily those troubled by a growing dissatisfaction with the usual teachings on society; e) and, last but not least, the dimension of the present social crisis and the growing perception of the impotence of conventional thinking in understanding and facing it.

Throughout history, men's instincts and special interests have caused untold human and social misery, often justified by a utilization of reason for purposes of mystification. The discussion, development and results that follow are aimed at combating those mystifications and miseries; the results on ethics should be of interest for educational and religious institutions.

Finally it is to be emphasized that, in light of the innovative content of our proposal on method, some initial patience is required of any serious reader; after the half of chapter 2 understanding will progress quickly and, with it, enjoyment.

Acknowledgements

It is a duty to acknowledge:

My very helpful direct and indirect interaction with Boudon's extensive treatment of the method of the social sciences, which occurred primarily through my reading and criticism of various stimulating essays that he has published in Mondoperaio, together with a parallel reading of his main works. I was attracted by Boudon's attempt to provide social thought with scientific objectivity, including ethical values; but I found the basic idea of such a research unsatisfactory: the gravitation, in the very long run, of social phenomena and ethical values towards rational standards by trial and error in order that social systems may survive (diffuse rationality). Such an obliged landing of the author's objectivism as based merely on the observational method (and hence the connected idea of spontaneity) strengthened my initial conviction that *the* problem of social thought is rather to define a method able to illuminate the organization and administration of social systems so that to reduce the frequency and dimensions of the monstrosities of history implied by merely trial and error (i.e., Weberian diffuse rationality) but preserving the important role of creativity and free choice and avoiding that social interventions result in errors and abuses of a level directly proportional to their incisiveness.

Erudite and deep discussions with Hasse Ekstedt concerning central parts of this book, mainly in the light of logical-empiricism, his predilection for formal rigour in analytical procedure and his criticism of the basic postulates of mainstream economics.

Luciano Pellicani's stimulating criticisms and advice, mainly regarding my interpretation of social development and historical process. Pellicani also provided precious suggestions on valuable sociological literature. I found admirable and most instructive the orientation and impulse toward acute deepening of social, political and historical processes that he promoted as editor of the review Mondoperaio.

Guido Preparata, for profound criticisms and suggestions mainly concerning: the meaning and work of the market, in particular its reduction to a pure mechanism for imputation of costs and efficiency; the transformation of the financial market into a servant of production as opposed to a master of production; profit, the interest rate and banking system.

Angelo Reati, who read various parts of this work, providing substantial criticisms and advice on the intelligibility of crucial points in my exposition.

The intellectual openness of the review *Sociologia* and its former editor Michele Marotta, that published various articles of mine concerned, in the main, with pointing out a paradoxical vicissitude in the Medieval Christian teaching on science. The teaching underlined that the aim of scientists should be to understand the reason why the world has been made the way it is; but, the natural world being the product of an unfathomable will, a much more fecund approach has proved to be the attempt to understand its functioning through observation. My articles reproved the substantial acceptance in the end, by Christian social thought, of the hegemony of the observational view to the detriment of the Medieval teaching, notwithstanding that, being a product of humanity, it is crucial to understand the reason why the social world has been made the way it is and any implied 'errors', rather than merely observing its functioning.

General introduction and the structure of the book

1. We are living in the age of science and technology, but modern humans appear increasingly unable to understand what concerns their immediate interests, which is to say, social relations. The methodological confusion that obscures thought on social problems and binds our hands will probably seem incredible, inexplicable, to future generations and will inspire great regret for the immense damage done to humankind. An energetic response to the situation seems indispensable.
Social thought has been imprisoned in a blind alley for a good long time now. Today a profound crisis has shaken its very foundations. The doubts and conceptual revisions are often taken for signs of cultural vitality, but they actually express a great bewilderment that, sooner or later, must bring to fore the necessity for some sounder, more fruitful methodological anchorage, as is already the case with the natural and logical-formal sciences. In pursuing such an anchorage, let us provide some brief definitions of notions crucial to the analysis on method that will follow:
The word *being* is intended to express existing reality, while the word *doing* is intended to express the human activity of transformation, implementation and, in sum, the organization of existing reality. For its part, the expression *necessity-constriction* indicates unavoidable aspects of reality that are required in the organization and management of social systems for reasons of organizational efficiency; while the expression *choice-possibility-creativeness* refers to possibilities, in the organization and development of social systems, resulting from choice and creative processes. The meaning of the last two expressions will be extensively clarified in section 3 of chapter 1.

This book proposes a methodological procedure and rules that: a) weigh the role of observation with great caution, for social events are very largely non-repetitive and, in particular, flank the observational standpoint (being) to the organizational (doing); b) allow a precise distinction between necessity-constriction and choice-creativeness, extending this distinction to the field of ethics. We show that the methodological specifications under (a) and (b) are essential prerequisites to understanding the generation and organization of societies over time and to surmounting diffuse misconceptions and acute contrasts afflicting social thought, such as the apparently irreducible contrast between cultural relativism, which is dominant among students of society and sometimes goes beyond the question of values, and what may be called ethical absolutism, towards which the great religions incline. The methodological focus of the proposed theoretical perspective is on defining some criteria for the selection and classification of postulates for the derivation of general principles and basic organizational features, thereby avoiding both the theoretical fragmentation and superficiality of generic deductions and the merely inductive standpoint of dominating methodologies.

Unfortunately, the current misconceptions over method prevent correct exposition of the above two interrelated issues: *the combination of being and doing*, which is the most typical aspect of

social phenomena and should be at the heart of any study of ethical values; and the distinction in social life and organization between *necessity* and *choice-possibility-creativity*, *what must* and *what can* be done. The first term of this distinction is often wrongly identified with what is durable and the second term with what is transient, in spite of the fact that durability and transience concern merely observational standpoint; the result is the downgrading the organizational view and element. This unclear state of affairs damages the administration of social systems and often results in the prevalence, at the expense of the general interest, of the interests of the most powerful and influential social groups. If we are to ensure the prevalence of the general interest then it must be proclaimed and unanimously recognized as such; and this in turn requires that the general interest be seen to rest upon clear scientific foundations.

A number of tragedies propitiated by prestigious intellectual treatises on social problems – first and foremost in the first half of the last century – have not sufficed to direct scholars' attention to the acute need for methodological revision in social thought. Rather, they have instead produced a contrary effect: they have reinforced *strictly observation-based method, i.e. centred on being* and that privileges the spontaneity of processes against the organizational view.

Some features of our proposal on method are to be traced in current developments. But major, common misconceptions are well rooted in current thinking and strongly shielded. We apologize for the strength of some of our statement. We believe, however, that one's tone in denouncing misconceptions on some vital matters should be proportional to the deafness of the time servers and of those who, out of self-interest or cowardice, look the other way.

Of course, it is senseless to think that method, however well-founded, can immunize us against error; it only helps to recognize and reduce it. Every intellectual work suffers limitations and errors, which are directly proportional to the dimension of its scope and implications. We hope that other minds will evaluate and underline our own errors and the shortcomings of the present contribution; it is mainly aimed at opening up some useful avenues of investigation.

2. Now we summarize the structure and main contents of the book.

Chapter 1 develops some criticisms of the most frequently used methods of the social sciences and traces some first steps aimed at overcoming their basic drawbacks. Major attention is directed to the observation-verification method, where we distinguish between: a) *strong observation method* (positivism in the strict sense), which is based on the two hypotheses of 'acceptance of the observed reality' (what has happened had to happen) and its 'recurrence'; and b) *weak observation method*, which rejects the hypothesis of 'recurrence'. This second method may be usefully referred to the case of minor mutations, e.g. such as casual and slow biological mutations and those of quasi-stationary societies. But it is inappropriate when faced with the accelerating, endogenous and innovative motion of dynamic societies. A large part of social thought and the most important students of society make use of the weak observation method, which consequently has caused the most important and the most rooted misunderstanding in the social sciences. The main cause of the inappropriateness for social studies of both the strong and weak observation methods is that they are based on *being* while ignoring *doing*, while doing constitutes the larger and most typical aspect of social reality.

We then turn to the constructivist view that, by contrast, is centered on *doing* but substantially ignores *being*. Accordingly, we insist on the need, in the social sciences, of a method able to conjugate *being* and *doing* and that, on this basis, seeks to understand *becoming*.

The fact that the social sciences mainly concern the organization of social systems implies the importance of a transition, in social studies, from the *observational to the organizational standpoint.* This need may be served by a methodological reformulation based on the binary contrast of 'necessity'/'choice-possibility-creativity' as developed in chapter 2. The combination of *being* and *doing* allows us to transcend both abstract rationality, appropriate to the logical-formal sciences, and especially naturalistic rationality, in favor of an organizational rationality that rejects pure abstraction. But the organizational standpoint, while strictly combining permanence with

change, must be careful not to imply the suppression of the subjective side – that is, the suffocation of individuality (a primary source of creativeness) beneath hypothetically all-pervasive social structures and organization.

Chapter 2 focuses on identifying some procedures and rules for the formulation, in social thought, of general principles. It seeks also for the design of some notions concerning the organization and development of social systems that are robust in the face of the intensification, in modern societies, of innovation and change and that may act as guidelines for social thought and action. The failure of the observation-verification method with regard to social reality, primarily due to the growing role of innovation and hence non repetitiveness in society, implies that the method of the social sciences must be *deductive*. But the importance (as just seen) to be attributed to being indicates that deductions must be based on realistic postulates. The choice of these postulates represents, indeed, the real methodological problem (since we are obliged, by the marked non repetitiveness of social reality, to mistrust of observational verification); its solution requires the *definition and specification of rules and classification procedures to guide scholars in the research and the corroboration of initial postulates* so as to move from generic, subjective and merely hypothetical deductions to an objective and more penetrating deductive approach that can offer general formulations and explanatory principles on a continuously changing reality. So the methodology we suggest begins with the *classification and selection* of postulates and deduces their implications for the organization of social systems. This means that our method embodies a completely different notion of scientific rationality from that of the natural sciences. Both those rationalities are scientific in that they are referred to the question of method. But, unlike observational (naturalistic) rationality, which is based on the acceptance of existing conditions (with the underlying idea that the real is rational) and which is typical of positivist and evolutionary social thought, ours is a prescriptive and organizational rationality appropriate to a reality that is the work of humanity. We do not specifically expose here the rules and classificatory procedure concerning the choice of postulates but rather set out some applications.

Some fundamental deductions may be based on postulates concerning important characteristics of the *general conditions of development* of the period under study. This allows to derive organizational features that may be called *functional imperatives* (but not in Parsons' sense) in that are required by pressing reasons of functional efficiency not linked to the pursuit of specific (ideological, technological and naturalistic) objectives, conditions and choices but only to the 'general conditions of development'. These basic organizational features are enduring; that is, they change only when the general conditions of development change. Also basic technologies, i.e. technologies that are fundamental in characterizing the general conditions of development, and the organizational forms that they imply, are functional imperatives.

Some institutional and organizational features may be imposed by the conditions of nature. They are local and were decisive in characterizing the societies of the past. Their influence has been strongly reduced by technological development, mainly through the increasing speed of communications and the role of artifacts.

The implications of the conditions of nature and the functional imperatives give the field of 'necessity' in the organization and functioning of social system.

An important generalization is expressed by the notion of *ontological imperatives*. These are the result of very general and fundamental aspects of human nature, and so their operation is essential to the unfolding of human evolutionary potentialities. Ontological imperatives are, for instance, constituted by the tolerance principle and other conditions able to stimulate creativity. As such, these imperatives are universally valid, in all historical eras and mainly concern important ethical values. But unlike functional imperatives, they are *not* imposed and required (for organizational efficiency) by the general conditions of development and their motion. As a consequence, they may be repressed even for very long periods of time by the existence of a civilization that opposes them. They will certainly triumph only if, in the course of development, they also become functional

imperatives. The suffocation of ontological imperatives prevents social development, that is, the change of the general conditions of development and hence the advent of new functional imperatives. With the establishment of modern dynamic society, various ontological imperatives have become functional imperatives; that is, they must be satisfied if this kind of society is to survive; they have thus become a 'necessity'. Among the other things, the notions of functional and ontological imperatives also offer clarifications on the concept of utopia and its possible relationship with scientific procedure.

Moving from the general to the particular, i.e. to classification concerning choice and innovation, an important notion is that of *civilizations*. This is intended as an institutional set of ideological and technological choices with the consequent organizational forms, and marked by basic ideological choices (grand options) around which the society is structured and integrated. The forms of civilization, even if basically express choice, are distinguished by the pervasiveness of their effects on social systems and by their great duration. This illustrates the conceptual difference between necessity and duration: necessity is the opposite of choice, but the choices that embody grand options, at the base of civilizations, imply long duration. Next we consider the particular aspects of societies (innovations and single choices), as well as the role they should play in the building of the social science.

Social science should begin with the definition of functional and ontological imperatives and the identification of civilizations; accordingly, it should go deeply into the roles and interactions of these explanatory categories. Then the more specific aspects, i.e. specific choices and innovations, should be added, with their implications for the organization of social systems. Thus a combination of innovative flair and rational drive, innovation and structural organization, is specified, *the relationship between the two aspects being crucial to understanding social and historic processes*, as chapter 4 shows.

The method proposed here implies the scientific derivation of many important ethical values that denies the dominant idea of relativism in all values.

Chapter 3 is devoted to the criticism of the startling array of methods used by social thinkers that represent various different attempts to grasp some important, peculiar aspects of social reality: the unpredictability of events (mainly due to innovation), choice, value judgments, radical uncertainty, evolutionary creative movement, learning processes, unintentional events and constructive action. We show that the great variety of methods, far from representing fecund and creative pluralism as many scholars would have it, are for the most an expression of a widespread bewilderment that obstructs the advancement of social science.

Chapter 4 delineates, using the methodological categories set out in Chapter 2, a theoretical framework for the explanation of social and historical development that will then be compared with a multiplicity of existing theories on this subject.

The foundations for our theory of social and historical process are the interrelationships among the notions of ontological imperative, functional imperative and civilization: depending on the manner in which it embodies *ontological imperatives*, the *form of civilization* either hastens or blocks creativeness and the related variation in the *general conditions of development,* and hence the advent of *new and more advanced functional imperatives* that cause, willy-nilly, the advent of *new civilizations* consistent with them.

More particularly, the causal picture (and interpretative chain) of the social and historical processes suggested by our methodological construction and categories can be summarized as follows:

A creative drive lies at the beginning of every developmental process. The way in which the resulting civilization satisfies (or denies) ontological imperatives (and hence creativity) determines the intensity of innovation, evolutionary motion and development. The consequent possible change in the general conditions of development generates new functional imperatives demanded by the new general conditions of development for cogent reasons of organizational efficiency. If one

imperative is in contradiction with the existing form of civilization, this form will inevitably be transformed into another that is consistent with the new functional imperatives. And so forth through the subsequent surges of innovation.

It is important to note that the pace of the development process depends chiefly on a civilization's accordance with ontological imperatives. If a civilization is adverse to (and hence suffocates) important ontological imperatives, i.e. suffocates the expression of the evolutionary potential of individuals and peoples, innovation and hence evolutionary motion will be obstructed, condemning the social process to a flat or parabolic course (stagnation and decadence). Stagnation or disintegration are powerfully spurred by an 'excess' of, respectively, rational drive or creative flair, and vice versa. Otherwise, a lengthening cyclical trend is fueled by the alternation between innovation and the consequent structural reorganization; the length of the cycle depends on the degree of coordination between innovation and structural organization. Thus the degree of satisfaction of ontological imperatives and the relation between innovative drive and structural organization give rise to a sine, parabolic or flat development curve.

Our interpretation and its analytical tools allow a rigorous distinction of social process into historical ages. The notion of historical era, to be unambiguous, needs to be based on factors belonging to the realm of 'necessity' (such as functional imperatives), not the realm of 'choice' – even such crucial choices as those between civilizations. In short, historical ages are singled out by the character of the functional imperatives as demanded by the general conditions of development.
That the aspect of 'necessity' is flanked, in our theory, by that of 'choice-possibility-creativity' shows that the historical process is not deterministic. And the world appears – both from a scientific and a practical point of view – in its true characteristics: a never-ending 'correction process', resulting from the limitations of human nature and mind; a process that may ultimately bring humanity, not to the achievement of some earthly paradise (a senseless expectation indeed), but to the realization of the best of their potentialities – intellectually, ethically and operationally. Unfortunately, historical processes have not uncommonly involved devastating events and deviations from ontological and functional imperatives that have prevented the potential advance along that evolutionary path.

Chapter 5 offers, in the light of our interpretative framework, a critical review of some of the main theories of social and historical processes, ending up with Eliade's 'terror of history' and historical monstrosities. The reference to our methodological categories in the building and administration of human societies shows that it is the lack of a scientific basis of social thought that has allowed these horrors to have been perpetrated throughout history.

Part II explores some applications in various branches of the social sciences of the methodological proposal developed in Part I.

Chapter 6 concerns anthropology, which refers to the first stage of the human adventure and to very simple societies, albeit with a variety of cultures; such variety highlights the importance of civilization in investigating social processes and its crucial role in stimulating or, more frequently, obstructing further development. A number of functional imperatives typical of primitive ages are considered that allow us to bring to light and to better understand some basic common features of primitive societies, notwithstanding their extreme variety. In particular, we comment upon the nature and the meaning of the 'power of society', which, with its various and sometimes eccentric features, is probably the most important and involved characteristic of primitive civilizations. We underline the strong opposition of the power of society to evolutionary process and take note that the oppressive character of such a power is frequently misunderstood by anthropologists who eulogize a mythical freedom of primitives from domination. Finally, the chapter sketches the transition from the power of society to 'command-power' and 'state-power'.

Chapter 7 is mainly concerned with politics. Political action – the exercise of power – is particularly subject to abuse and mystification. We analyze the problem of sovereignty and its legitimization, starting with the contributions of Benjamin Constant, Jean J. Rousseau, Gaetano Mosca, Karl Schmitt, and Hans Kelsen to show that, without a strict distinction between 'necessity' and 'choice-possibility' in the organization of social systems, the theoretical legitimization of power is impossible. The remedy offered by democracy is partial, and the separation of powers may simply produce (as it has often done) a division of the power to abuse. The notions of power of domination and functional (or service) power are sketched out, and we show that a science of the organization of social systems, built mainly upon the analytical categories disclosed in Chapter 2, provides a powerful antidote to the degeneration of power by providing a scientific solution to the problem of how to control controllers.

The binary 'freedom-responsibility' and the relations between the two and with the problem of power are then investigated. We note that 'responsibility' goes beyond individual action and point out that the definition of a system of responsibilities requires the notions of functional and ontological imperatives, necessity and choice-possibility. The philosophical and theological aspects of this question and theodicy are examined.

We then emphasize that the observational method is anti-reformist, in that the acceptance of existing conditions (the real is rational, the real is necessary) is inherently conservative. We also consider the hyper-relativist prejudice that any and all ethical choices and reform proposals are acceptable in principle. It appears that the primary cause of these attitudes and prejudices is the lack of a clear distinction between 'necessity' and 'choice-possibility'. Afterwards, the problem of inequalities versus social justice and its far-reaching implications are deepened. The last section provides a wide-ranging illustration of the meaning of political action in the light of a number of major historical events and lost opportunities.

Chapter 8 begins by underlining that law is mainly concerned with doing, even if it cannot disregard being. We show that if we are to justify normative action, explain its foundations and detach the command power (as far as possible) from free will, the connection of being with doing and the organizational view, together with our methodological categories, are indispensable. Using our distinction between 'choice-possibility' and 'necessity' and the objective character of some ethical values, we set out a critique of the following: natural law doctrine, positive law, the sociology of law.

In particular, considerable space is given over to the opposition between natural and positive law, the contents and roots of such opposition and related errors concerning command-power. Then we discuss the ambiguities of the Enlightenment and contractualist view, specifically the idea of the social contract, the one-sidedness of which left an opening for the historicist reaction.
The perplexities of some contemporary authors on the foundations and the role of law in dynamic societies are considered and criticized. Finally, we set out a theory of *juridical objectivism* derived from our methodological categories, laying down some analytical foundations for the explanation and the construction of legal order.

Chapter 9 is mainly dedicated to sociological cognitive method, one of the most important methodological approaches in sociology. The individual is the backbone of cognitivism, which almost totally neglects social aspects and structures. In effect, the role of the individual is one of our ontological imperatives; but Weber and Boudon ascribe excessive importance to the individual. The assertion at the center of Boudon's theory of social evolution, namely that individualism advances incessantly across history, is questionable in the extreme, as we can see from the constant presence across history of so-called 'closed' societies alongside open ones.

Weber's meditations on method are variegated and also include an anticipation of Popper's falsification method in setting out the methodological sequence: choice of initial point of view, elimination of the explanatory factor posited, comparison of the resulting hypothetical process with

reality in order to verify the causal role of that factor. However, this is just an incidental episode in Weber's treatise on method. He does not follow up in order to develop the strong observational features that it suggests. Here we limit ourselves to noting that one of cognitivism's most ambiguous aspects lies in its notion of rationality. Weber's analyses and interpretations insist on rationality, but one crucial aspect of his sociology, i.e. ethical relativism, neglects rationality entirely and thereby arrives upon the ambiguous and misleading notion of double ethics.

Boudon, by contrast, insists on the objective character of values, deriving objectivity from the Weberian idea of 'diffuse rationality' that states that in the long run societies converge towards rational solutions and organizations by trial and error. Like dialectical idealism, this convergence, which is a pillar of Boudon's theory of social evolution, implies that the real is both rational and necessary (inevitable), even if in Boudon's exposition this spontaneist point of arrival has a liberal flavour. But the Weberian 'diffuse rationality' (a merely observational idea) operates in the very long run at best. It ignores the main problem of social thought, i.e. how to avoiding the sometimes horrifying historical disasters that have marked the spontaneous, extremely slow and laborious convergence towards the rational.

The tenth and last chapter discusses ethical values and their connections with religious thought. In particular, we underscore four principles (deriving primarily from the Christian message) that have powerfully stimulated the evolution of society. The historical events that have followed from those dynamic seeds are briefly recounted, and their successes and failures in defeating the circular motion and vision proper to stationary societies in favour of the linear-progressive vision of historical process are set out.

Next, and by way of a comparison between stationary and dynamic societies, the relativist and absolutist views are analysed and some equivocations on values, as characterizing social and religious thinking respectively, are discussed on the basis of what we have called *cultural objectivism.* The roots of civilizations (which feed opposition between peoples) are considered in historical perspective; their vitality and ability or inability to adapt to evolutionary motion weighed and the usefulness of *cultural objectivism,* (that is, the objective definition of fundamental ethical values) to this type of inquiry is emphasized.

Finally, we treat some current misunderstandings regarding the problem of a global ethics – crucial in this age of globalization – illustrating them with examples that bring out the substantial nature of *cultural objectivism*. Some aspects of Christian social thought and its mix of faith and reason are discussed, and the positions on values of some philosophers and students of society of modern and contemporary ages are criticized.

PART I (Theory)

1 Preliminary considerations on the method of social thought

Introduction

This chapter is a sort of provocative introduction to the methodological questions developed in Part I of the book.

Man is obliged, by the limits of his cognitive skills, to proceed by trial and error, especially if he operates creatively or is forced to cope with non-repetitive situations. Moreover, he is obliged to learn by mistakes; and to be able so to learn he must suffer the tribulations and adversity caused by his mistakes and so be prompted to act with mental flexibility. This structural dependency of human learning and improvement on the adversities caused by mistakes can make the world resemble a sort of enormous reformatory, whatever one's religious feeling and belief may be.

Human beings are, however, endowed with reason, the intense and appropriate use of which enables men to ease the cost of their evolutionary mission and significantly reduce the suffering inflicted by mistakes and the learning process. But in their social relations men insist on wasting or stifling their cognitive skills. This can be clearly seen if we consider one of the most striking shortcomings of civilization: the extreme modesty of ethical improvement, notwithstanding the rapid increase of technical capacities and knowledge. From the dawn of history men have listened to and approved the exhortations of important religions to strive for moral purpose, goodness and brotherhood; they have admired and exalted the sacrifices of martyrs and heroes inspired by such sentiments; but in practical life, they have largely ignored all of this. This shows that ethical exhortations as such are not persuasive, that they are obscured by personal interests. To be effective, such exhortations must be preceded by scientific teachings that reinforce them and prevent the use of reason to perpetrate and justify abuse and vice. We accordingly address our analysis to what seems to us to be more solid and engaging ground, namely the way that human knowledge is formed. We shall see that this line of inquiry leads to a scientific clarification of some important questions on ethics (*ethical objectivism*): a clarification that may improve moral behaviour and allow religions to carry out their work much more wisely and incisively than is permitted today by the common declaration by science of impotence on moral matters – a declared value neutrality that fosters nihilism.

The major impulse to human knowledge is born from the ability of human minds to co-operate, to select and hence to accumulate discoveries. Let us insist in saying that such ability requires the definition of some general methodological rules that do not imprison human creativity in rigid procedures but nevertheless make possible both dialogue and co-operation among scholars as well as the recognition of real contributions to the advancement of knowledge. Such recognition is necessary in order to allow research to benefit, in the course of time, from higher and higher starting points. The human ability to favour the cumulative growth of knowledge is the single factor that, over the millennia, has dug the abyss that separates the human condition from that of other animal species, which have consequently been crushed by the hegemony of humanity. The discovery of fire, the invention of the wheel, of writing, of various agricultural techniques and metal manufacturing, the birth of urban centres and of an intellectual class of professional thinkers, the discovery of efficient forms of government and of law, have been the great achievements of civilization over all of human pre-history and history, permitting the construction of our lengthy sequence of social orders.

The acceleration of technological and scientific discoveries, and hence of the pace of social change, by the side of which humanity has failed to achieve a parallel acceleration of social science,

has caused a "short circuit of knowledge". It is a widespread opinion today that this was inevitable, as the problems of rapidly changing societies are held to be harder to understand than the natural world. We shall see that this opinion is erroneous and that the stagnation of social knowledge is rather the effect of methodological misconceptions and misunderstandings.

This cognitive short circuit multiplies errors, misunderstandings and difficulties in the government of human societies as this is certainly affected by the state of social knowledge, and causes discredit even to the most prestigious branches of scientific knowledge by favouring senseless uses of technology. To overcome this inequality of knowledge what is required is for social thought to discover a method of inquiry that is not inferior to that of the natural and formal-logical sciences. Unfortunately, the tendency is to react to difficulties with exhortation rather than rigorous scientific research, as it is far easier to speak to the heart than to the mind; but this mode of conduct is ephemeral. It is wise to prefer to meet difficulties than to indulge in ephemeral thinking, and I hope that readers will be induced to appreciate this choice by the conclusions to which it will eventually lead.

1.1 Great 'errors' fuelled by methodological misconceptions

Both natural world and human societies gravitate, in the long run, toward functional coherence and efficiency – toward organizational rationality. This gravitation toward rationality is indispensable to their survival and evolution. A reality differently acting would tend to self-destruction and perhaps would never have emerged from the primordial chaos.

But the great difference between the evolution of human societies and the evolution of the natural world must be emphasized. Natural evolution proceeds so slowly that spontaneous evolutionary motion and selection processes can develop without substantial discontinuities. Humanity, by contrast, having lived for a long time in almost immutable primitive societies in which we little differed from other species of animals began to advance many centuries ago: at first with faltering steps, then with a slow and uncertain pace, and finally, much later, with a progressively accelerating pace that has often times been set by the temerity and success of individual pioneers.

This acceleration of the pace of evolution entails that the spontaneous gravitation toward efficient and rational organizational forms and social relations has become increasingly beset by wandering and even retrograde movements. We have seen that such difficulties are in part inevitable, arising from limitations of human knowledge that oblige even research activities endowed with very sophisticated means and procedures to learn by trial and error. It is impossible to eliminate all errors, but it is judicious to attempt to reduce their dimensions to the minimum set by the levels of human cognitive skills; not the levels of individuals, which may be very poor indeed, but rather those levels embodied in the social scientific organization of knowledge by way of the cooperation of many minds.

What is particularly impressive in the study of social processes are both the numbers and the magnitude of the "errors" that have troubled the cycles and rhythms of human societies and led them to trample underfoot ethical values and institutions that have subsequently proved to be of fundamental importance for human evolution. Many examples might be cited, but we will limit ourselves here to the discussion of one extremely instructive illustration from the recent past.

In the historical period immediately preceding our own, billions of people believed it not only possible but also imperative that a more just and efficient society be organized, one more able to develop than the capitalist systems of the West. This was a laudable intention indeed, and appears today even more urgent than it did yesterday. In the name of such a project, multitudes of dissenters and innocent persons suffered incredible repression, while countless others worked hard for its realization. The worst of it is that the promised new society inflicted pains by no means inferior than those demanded by the transition toward it. Renowned social commentators and

revolutionaries had declared that the building of the new world required the suppression of the entrepreneurial function and the market, considered the major causes of exploitation, immoralities and alienation. But their suppression propelled the birth of a bureaucratic-centralized, grey and oppressive order. In the end, these systems of "real socialism" collapsed. They represented a dead-end, an organizational form that trampled on some fundamental values, suffocated creativity, engendered a profound alienation and was unable to develop and compete with rival Western social systems. Humanity pretended to open the door to a more advanced historical phase and, according to the opinion of the most enthusiast 'believers', was actually in the very process of stepping out of this door and into a paradise on earth, simply by re-establishing bureaucratic forms and forms of social obedience reminiscent of the quasi-stationary ancient world. These organizational forms allowed for acute and wise government of the most advanced societies of ancient time, but they are unable to cope with social change. In this way a tragedy of immense proportions was prepared in the name of stepping onto the road toward a bright and glorious new dawn.

A major cause of this failure was disregard for one elementary fact: social change requires agents and institutions that, out of a sense of duty or for personal advantage, are able or inclined to stimulate change and to face the consequent uncertainty. We shall see that cumulative change needs a decentralized order and hence the market, not a bureaucratic class that requires nearly perfect knowledge and that, consequently, detests innovation and clings rather to a merely repetitive stationary motion. In brief, one crucial error was a disregard for the fact that modern dynamic societies are permeated by radical uncertainty.

A new challenge has now arisen with the rebellions against the autocrats of Arab societies. One fear is that these rebellions will facilitate a transition from autocracy to fundamentalism and theocracy (just as happened in Iran); a movement, that is, toward a regime even more oppressive and inclined to immobility than the autocratic one, which will require decades to escape and which will be even less appropriate for modern dynamic societies than was real socialism. Another fear is that the result of rebellion will be merely confusion, or perhaps a reproduction of the worst aspects of Western societies.

The experience of such great errors does not immunize modern dynamic societies from the danger of making even greater ones; at least, not unless social thought provides humanity with the requisite knowledge. If we do not specify its methodological roots, the error that has impeded our vision of the dead-end of bureaucratic real socialism is incomprehensible, thus making useless that experience. These methodological roots consist in a disregard for what we shall see to be a main point of the method of social thought: attention to the general and basic characters of the considered reality and to the current general conditions of development with their institutional requirements and imperatives.

Methodological equivocations have an extraordinary ability to suffocate the acuteness of scholars and wise men, who are accustomed to systematic reasoning. An excellent illustration, in line with our considerations above, is the important misunderstandings about the entrepreneur found in the writings of the most famous of writers on the notion of entrepreneurship, Joseph A. Schumpeter, who forecasted the collapse of capitalism as a consequence of the advancement of the process of bureaucratization. Some decades later, John K. Galbraith forecasted the convergence of capitalism and socialism by way of the bureaucratization typical of big business. Well, if these two great economists, sociologists and students of historical processes did not see the bureaucratic dead-end in the 1940s and 1960s, what chance had Lenin and the Bolsheviks to see such a dead-end at the beginning of the century? This occlusion points to something very misleading in the analyses of students of society; and this misleading factor lies in the problem of method, the strongest intellectual tool conditioning the activities and thinking of scientists.[5]

[5] Some students (in particular, von Mises and Hayek) did indeed declare the inability of real socialism to govern society and attributed that inability mainly to the elimination of prices and the entrepreneurial function; a conviction subsequently confirmed by Popper. But it was not a widely shared conviction and was often derided by social scientists. It lacked persuasiveness because not founded on a solid and shared methodological base.

A review of the vicissitudes of real socialism makes immediately evident a simple and crucial issue. Some basic organizational and ethical-ideological aspects of societies are forced, with the advancement of the general conditions (and phases) of development, not only to change, but also to assume some general features (as witnessed, for instance, by the transition from the crucial role of kinship in primitive societies to bureaucracy in ancient empires and the market in the modern age). It is important to be aware of the differing institutional, ethical-ideological and organizational pillars upon which human societies rest in the various historical ages. One main purpose of this book is to show that such knowledge is indispensable for understanding historical processes and properly governing social process. Nevertheless, these institutional requisites continue to be often disregarded. For instance, we can see that the transition process of the current period from real socialism toward the market often privileges the worst (and by no means indispensable) elements of capitalism, not to mention a number of absurdities absent in the history of Western capitalism, while it disregards or undervalues some organizational aspects that actually represent the true force of capitalism.

It is very rare, in the course of history, to see an omnipotent and strongly-armed ruling class almost submissively cede power. In its last days of despair, the bureaucracy of real socialism could easily have initiated a nuclear war and, as a result, the stagnation of the real socialist countries would have been followed by a tremendous regression on a world-wide scale. By chance and good fortune, however, the process of decay had been sufficiently prolonged that an invertebrate and confused ruling class had come into being.[6] It was the wearing down of this socialist ruling class that saved the world; after some decades of tribulations, the apple fell by itself.

The power systems of every society, even if senseless, always try to preserve themselves and hide their deficiencies; and this can lengthen significantly the time demanded for the transition to a more appropriate and rational social order. Only scientific knowledge can clearly make evident the mistakes and, in this way, accelerate the transition. Otherwise the spontaneous convergence toward a more efficient and appropriate organization may require a very long time and face serious difficulties.

It is surprising that social theory has not yet achieved a method consonant with the reality it investigates, notwithstanding the clear unsuitableness of the current methodologies. But the problem is that the dominant cultural climate strongly opposes convergence on a general method in social inquiry. This opposition is fuelled by the epistemological critique of science that dominated the scene in the second half of the last century and that even today shows great vigour. Such a critique originated 'cultural relativism', that is, the assumption of non-comparability between different explanatory models, and hence an idea of science as an almost untrammelled way of reasoning. The result is that a multitude of methodological proposals have issued forth, multiplying the confusion.

The formal-logical and natural sciences have general procedures and rules that are shared by the community of scholars; this guarantees commensurability and comparability of contributions, hence the cumulative growth of knowledge, notwithstanding the cavils of cognitive relativists and epistemology. But modern social thought is not only afflicted by the lack of codified procedures and methodological rules appropriate to social reality and shared by the academic community; it is also the victim of a paralysing doctrine of incommensurability. This has fragmented social studies into countless schools of thought, each with its own method and hence unable to interact. *This means that social scientists have essentially repudiated one of the greatest intellectual discoveries of mankind: shared methodology that allows the cumulative growth of knowledge.* This repudiation expresses a real failure of human thought. Therefore, a main problem of our time is constituted by our extensive equivocations on the method of social thought.

[6] The almost grotesquely reactionary coup d'état attempted in Russia in 1991 demonstrated the total ineptness of the old Soviet bureaucracy.

1.2 *Excursus* on the methodological peculiarity and equivocations of the social sciences

1. Many important methodological problems are very general in nature, such as the role of induction, deduction, analogy, the question of open and closed systems, the relation between the logic of discovery and the logic of explanation, the line that divides science from non-science. The scholars who treat these very general aspects insist on the uniqueness of method. But this insistence seems inappropriate, in that in addition to these very general questions there is the need for some important discussion concerning the character of the very general classes of the problems dealt with.

In this regard, a three-way partition becomes crucial as a decisive determinant of the characteristics of methodological rules and procedure for large classes of problems, to the point that failure to consider such partition turns method into a hindrance as opposed to a help to research. The three-way partition refers to some major lines of scientific endeavour: one based on abstraction and logical consistency, the other two centred on natural and on social reality respectively.

The method of the formal-logical sciences uses the criterion of 'abstract rationality'; that is, it adopts postulates that abstract from reality and then rigorously derives implications from them. The abstractions from reality allow the formulation of very general principles, embracing even situations and cases that at the moment are completely ignored. These formulations may sometimes seem nothing but pure logical jokes; but due precisely to their abstractness they may provide unexpected services to scientific investigation.[7]

But the formal-logical procedure is completely inappropriate for natural and social studies, which must pay great attention to the nature of the reality investigated; in fact, the serious mistakes discussed in Section 1 were primarily due to the absence of realism. Economic theory, with its sometimes exaggerated pretensions to mathematical rigour, is the branch of social thought that has most abused abstract rationality, an abuse that has occurred mainly in the theories of general economic equilibrium that ignore uncertainty, entrepreneurship and endogenous innovation.

Of course, every theory of society or nature needs abstraction, but from this need must not follow unrealistic basic assumptions. An inquiry on method of both natural and social sciences may conveniently start from two opposite hypotheses concerning the reality investigated:

a) Reality remains unvaried over time or is subject only to stationary-repetitive changes.

b) Reality is subject to innovations, i.e. to a substantial and persistent evolutionary dynamics.

In the first hypothesis time is reversible; it is possible to go backwards and forwards, and it is a matter of indifference which temporal direction is taken (i.e. the plus sign in front of t may be substituted by a minus sign); in a word, there is not history. In the second hypothesis, time includes singular and irrevocable events; therefore time is irreversible and there is history.

An efficacious tool for the study of reality under (a) is represented by the method that can be denominated mechanistic observationism, and which is based on statistical inference and experiments and on the formalization, through suitable differential or difference equations, of subsequently discovered uniformities. This method has yielded great achievements in astronomy and physics. But its application to reality under (b) must be considered with great circumspection and critical sense.

In order to consider this subject more deeply, we refer to a generalization of the above method that purifies it of any reference to particular techniques of theoretical formulation. It consists in the methodological procedure that can be synthesized through the following succession of three stages: Initial Observations - Formulation of Theoretical Hypotheses - New Control Observations directed to verify the specified theory. We shall indicate this procedure, with which the scientific method is often identified, with the notation O-H-O_c, i.e. Observation-Hypothesis-counter Observation. This procedure is not immune to indeterminateness and inconsistencies that concern both the terms H and O, as has been clearly established by the epistemological debate.[8]

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[7] Significant examples are Boolean algebra and non-Euclidean geometries that, long after their initial formulation, proved to be highly valuable in, respectively, information theory and the explorations of sidereal space.

[8] See M. Pera (1982). But some scholars (e.g. Popper) deny the necessity of the first term O of the procedure.

It is immediately evident that, in general, reality is not repetitive but evolutionary, i.e. it must be classified as falling under (b). This nature of reality is due to innovations and also to the influence of history on subsequent behavior (hysteresis); and this is the case even when the slow workings of evolution do not always permit the observation of mutations even in various offspring.[9] The indeterminacy of phenomena that results from such behaviours undermines the major aspiration of the O-H-O_c procedure, i.e. it undermines the attempt to discover laws of motion, which permit quantitative forecasting on every time interval, given the initial conditions and the parameters expressing such laws. This is particularly so in the presence of chaotic areas. Nevertheless, we must recognize that the O-H-O_c procedure has proved itself a powerful tool in the quest to understand the natural world. This is the result of the fact that the natural world approaches the situation described under (a). It is precisely the substantial invariableness of natural reality over long intervals of time that makes acceptable the terms O of the procedure O-H-O_c. For its part, the term H, which concerns the formulation of theoretical hypotheses, derives its operational efficiency from the fact that the principle of rationality, i.e. of coherence, on which it is based, has an absolutely general analytical fertility, as reality always inclines to organize itself on the basis of the principle of rationality and functional efficiency: as we noted at the beginning of section 1, the struggle for existence gives an impetus toward natural order; that is, *it imposes the principle of rationality and organizational efficiency, which we can always perceive in the shape of the surrounding world; in brief, it provides an impetus toward the identity real=rational*. Consequently, we are able to represent reality through the principles of logic and the criterion of organizational efficiency and coherence (as the term H implies).[10]

Let us provide a clarifying example. To prepare the ground for the development of our ideas on the method of social sciences that will follow we shall refer here to biology, which represents the natural reality in which innovation and hysteresis are most frequent. Suppose that we are interested in the explanation of the functioning of the ecological system, hence in the formalization of relations among species. It is immediately evident that such relations may assume a competitive, cooperative or predatory character. They may be represented, then, through a dynamic system of predatory, cooperative or competitive equations, well known in the mathematical applications to biology. The invariance over very long time intervals of the relationships among species allows for the estimation of such a model (as well as other formalization concerning molecular and organic biology); the model can then be utilized to find equilibrium solutions and to perform stability analysis, forecasts and simulations. Of course, the perfect stationary cycle of movement, typical of the planets, is not reflected in the biological world, where it is precluded by accidental mutations, representing the main actor in the evolution of species. But such mutations are very slow and can be taken exogenously by the model so as to analyze the way they interact with the surrounding environment and eventually are selected. So, a representation of the evolutionary movement, specifically the Darwinian mechanism of selection and differentiation of species, will be provided.

As we can see, the usefulness of the procedure O-H-O_c in the example just discussed (with H expressing competitive, cooperative or predation hypotheses), both for explanatory and forecasting purposes, is mainly due to the small number of accidental mutations and the slowness of the evolutionary process during time, which imply little violation of the postulate of the invariability of the observed reality.

2. Now let us turn to the consideration of the difficulties faced by the observational procedure and the principle of rationality, i.e. the method O-H-O_c, when applied to social reality. If one adopted the hypothesis that human activity, like that of bees and termites, is carried out in quintessentially

[9] One may conjecture that the Whole always remains identical in its immortality; but such a statement has not a scientific character, as it is unverifiable. Reality is always evolutionary.

[10] I. Lakatos emphasizes this aspect by saying: «If science aims at the truth, it must aim at coherence; if it renounces to coherence, it renounces to the truth» See I. Lakatos, '*Falsification and the method of the programs of scientific research'*, In: Criticism and growth of knowledge, edited by I. Lakatos and A. Musgrave, Feltrinelli, Milan, 1984, p. 220

repetitive forms, the effort to understand its patterns and implications certainly could (and indeed, should) be centred on the method of observation and empirical verification, just as is the case with the natural sciences. But the fact is that individual ends, value choices and judgments, and technological knowledge may continuously and unpredictably change. Man is distinguished by his adaptability and, even more, by his great capacity for innovation. There is no question of denying that the state of nature has a strong influence on human activities. Nevertheless, in the conduct of such activities innovation unquestionably plays an extremely important and, we may say, a decisive role, not only qualitatively but also in strictly quantitative terms, as everything that humankind has accomplished since its first appearance on the Earth is substantially the fruit of innovation (deliberate or unplanned) [11].

The basic characteristic of innovations is that they are the product of human creativity, and as such are by definition unpredictable and can arrive in any number of unexpected guises and forms. The succession of innovations gives rise to the phenomenon of social change. That, in a word, is the great difference between society and nature: *social change*, which assumes dimensions much larger than change generated by the mutations in the natural world.

Social reality is a slippery, mobile, undulating terrain. Strict observation of it, therefore, does not provide the kind of great illumination that sensory experience provided for Galileo, but rather a feeble, flickering flame. The unforeseeable variation of social reality over time, with respect to the reality considered by the initial control observations, makes senseless both of the extremes in the succession O-H-O_c. The application of such a methodology to social events requires (as we saw) the hypothesis that *reality means necessity (i.e., what happened had to happen*), which ignores the optional or creative aspect of social life; in fact, the simple assumption that alternative choices or events were possible makes the method based on strict observation logically indefensible. The worst of it all is that the great intensity of the evolutionary processes makes such a method absolutely misleading, with the exception of some limited and circumspect use in macro economic theory.

Put another way, *the O-H-O_c method is based on the idea of spontaneous phenomena* (and this is also true in the case in which events are reproduced through experiments) and the discovery of laws of motion through the observation of such phenomena. This hypothesis implies *the acceptance of existence* and allows for an efficient method of inquiry into the natural world, since this latter is not a product of human action; more precisely, human action may indeed interact with nature, but it does not play a constitutive role in nature. The application of the O-H-O_c method to social reality thus implies the idea of spontaneous social order, which is a misleading idea that denies the aim and the object of social life. In fact (and as we have seen)*, social order is a result of human action* (we must beg the pardon of our readers for further repetitions of this statement, but it is crucial). *Therefore, humanity is not obliged to limit itself to observation in order to understand; rather, he is allowed to investigate the reason why the social order is like it is and thereby manage to improve it*. The natural scientists and methodologists of the seventeenth century enacted a decisive advance when they objected to the Medieval dominant idea of speculating on the reason why the natural world is as it is that such a speculation was a waste of time, natural world being the work of unfathomable divine will. These methodologists recommended, rather, a commitment to the understanding of nature through its accurate observation. This recommendation became a real dogma that has also been transmitted to social thought. But while, on the one hand, every physical attribution of men, animals or, at large, nature, being the result of a long and slow evolutionary process, can be profitably studied on the basis of the observational method, on the other hand, in the study of human societies, which are the result of human work (not divine will), the inquiry on the reason way society has been organized in the way we see (as Medieval thinking suggested) is crucial; so that *an organizational view combining* (as we shall see) *being and doing, is much more appropriate*.[12]

[11] The whole route of human history is characterized by the indefatigable search for successful innovations in order to achieve power; this phenomenon is particularly evident in the modern economy, where competition is mainly based on innovations.

Let us insist on this point: the hypothesis of uniformity and repetition that underpins the O-H-O_c method, if it is to be extended to social reality, requires the collateral hypothesis of stationary motion, and hence stagnation, which is to say, a vegetative life. But as Man himself is the creator of human society, it is senseless to simply observe society, accepting it as it is, and so learn to interact with it as is typical of human relation with natural reality. It is important to learn how to build society with accuracy. Even if we are analysing a repetitive society, if we refuse to accept it and suppose the transition to a different (and, in particular, a dynamic) one, we implicitly reject the hypothesis of repetition. Therefore, social thought cannot limit itself to a merely observational kind of rationality, i.e., one based on the idea of a long-run spontaneous process of rationalisation of the kind typical of nature; it needs, so to speak, a *constructivist rationality*.[13] Unfortunately, the great prestige achieved by the merely observational method in natural sciences induces contemporary students of society to make widespread use of it and implicitly seek, as a consequence, to understand that which is a result of human activity as if it were not, and to restrict its field of inquiry to *being* and, so, to deny the scientific nature of *doing*.

To make clearer just how unsuitable the observational method is for inquiring into social reality, let us imagine we want to study a bureaucratic social system. Observation would allow us to understand its functioning. For instance, it would show that the system tends to suffocate creative processes and to promote stationary repetitive motion, this being congenial to bureaucratic decision-making. But if we want to go deeper into the path of transition from this to some other organizational form, we need an alternative methodology to positivism; specifically, we need a method consisting of: a) comparison with some different social systems (analogical procedure) aimed at discovering better organizational forms; or b) the definition of some methodological procedure and rules capable of enabling us to understand what mere observation hides, i.e. the reason for the inefficiencies of the society under examination, and indicating the way to eliminate them.

As a matter of fact, only procedure (b) is possible. Procedure (a) requires the existence of superior societies, which may not exist; moreover, it may cause serious mistakes. In fact, every social system includes both institutions that are indispensable to its functioning and other aspects that are contingent, 'optional'. This means that there is a risk of confusing what we shall call *necessity* with *choice-possibility* in the interpretation and organization of social systems; and there is a consequent risk that the imitation of the supposedly "superior" system will adopt some undesirable aspects in the belief that they are indispensable to its functioning.

To deepen and better reflect upon these questions, we turn now to discuss the meaning of the rationality principle with regard to social reality. We apologize for some repetition, which seems to be called for, however, if we really are to clarify and to overcome some widespread misunderstandings.

The notion of rationality considered here does not refer simply to the optimization of some objective function under the constraint of given means. It also refers to the rationality achieved through selection and includes forms of limited rationality imposed by the high degree of uncertainty (i.e. by the lack of knowledge) characterizing social systems and by the consequent impossibility of precisely defining means that induce people to take decisions on the basis of simpler conventional procedures. Besides, the concept of rationality concerns here the building of social structures and

[12] The omission of doing has been justified by positivist social scientists through an interpretation of the Hume's law according to which it is a logical mistake to move from being to doing or, in other words, a prescriptive statement cannot be rationally grounded. Let us insist that this is true for nature (and hence for the observational-experimental method pertaining to this), since doing does not exists in nature. But as we shall see, a method appropriate for the understanding of social reality must first of all concern itself with *combining being and doing*.

[13] Scholars often say that the objectivity of the social studies is undermined by the fact that Man is both agent and observer; but this ignores the fact that what is relevant for science is the objectivity of the scientist, not of Man as such. Moreover, hermeneutics maintains that as Man is part of society, intuition is fundamental in understanding social phenomena; but, unfortunately (or fortunately), everybody has his own intuition! We can see, therefore, that our methodological distinction between natural and social reality rests on reasons different from those emphasized by Dilthey, Rickert and – as we shall see extensively – Weber.

institutions: we do not consider these as given, i.e. as a part of the constraint system of an optimization problem, but rather as some entities that require an accurate explanation.

There can be no doubt that selection propels spontaneous social behaviour toward the surprising harmonies generated by unintentional behavior, as underlined by Hegel's cunning of universal reason that would use individuals' action to achieve his highest ends, and the Smithian invisible hand. But the evolutionary movement of society, being a much more intensive movement than that of nature, and generating as a consequence higher uncertainty and lack of knowledge, make learning by doing crucial. Together with other numerous rigidities, this fact may cause frequent nonlinearities, dependence on initial conditions (hysteresis) and even chaotic behavior. There is more. Social selection does not exhibit the inflexibility distinctive of the natural world selection, being affected by voluntary actions concerning choices of value, the building of institutions, normative interventions in sum, the enormous variety of motives and behaviours characterizing human action, the most part of which have very feeble counterparts in the life of other species. This implies the emergence, with respect to natural reality, of a much larger number of oppositions, contradictions and inefficiencies during the adjustment process toward equilibrium based on trial and error, and a persistent violation of the equilibrating tendency. More precisely, the drive toward spontaneous order and efficiency emphasized, as we shall see, by Smith, Mandeville, Hayek and the Weberian principle of 'diffuse rationality', according to which in the long run everything settles down automatically, is not warranted in a world continuously shaken by innovations. Furthermore, path dependency and 'lock in' phenomena (that is their dependence on and imprisonnement in previous paths) slow the flexibility of social systems and accentuate the rise of fractures.

The much larger errors and fluctuations of the social than the biological process are amplified further by the impulses and passions (that D. Hume's enquiry emphasizes) that characterize much of human action. Hobbes' Leviathan has lucidly underlined the destabilizing effects that the unconstrained use of human intelligence for the satisfaction of the passions of individuals may have on social life. But it is important to stress that these considerations are far from obscuring the role of the rationality principle. On the contrary, they increase the need to accurately deepen the meaning, contents and implications of such a principle. The above-mentioned big errors and inefficiencies of the trial and error process cannot be accepted as unavoidable, as simply a cruel cost imposed by the impersonal evolutionary mechanism of the struggle for existence generating the spontaneous order through selection.

Of course, unintentional phenomena and lack of knowledge are extremely important aspects of reality, as Hayek points out. Spontaneous behaviour and the freedom of individuals are crucial conditions for creativity and innovation, so that human knowledge is obliged to grow through trial and error. Besides, human beings need competition in order to improve; the repression of emulation and competition generates corruption, sclerosis and decline. But a task of human intelligence is to reduce the errors that the unfolding of the social processes generates. It is a cynical and mystifying nonsense to extend to the social system the identities that the real means the rational and that reality means necessity, which, as we saw, can be attributed to the natural world. *Social scientists deny their own true methods and facilitate criticism by empirical historians if they accept the identity between reality and rationality on which the method of natural science, based on observation, is founded. Their task is in fact to develop and improve rationality in the organization of social systems (this being the result of human action), and hence the explanation and administration of those systems so as to minimize the errors and difficulties that accompany the auto-selective gravitation toward order and efficiency.*

The content of the social sciences is both explanatory and normative. They require, therefore, a stronger notion of rationality than do the natural sciences. More precisely, *mere observational rationality based on the identity between reality and rationality (and instrumental rationality, that is, concerning the acquisition of means) is not sufficient in social science; it needs to be complemented by a constructivist notion of rationality also concerning values and ends,* imposed by the frequent violations of the above identity (between reality and rationality) that occur in social reality (where it

embodies only a mere long run tendency) and by the pursuit of programmatic objectives. This is the reason why social theory must simultaneously be a science of *being* and of *doing*.

It is well known that the comprehension of social processes through the method O-H-O_c implies much greater difficulties than when applied to the natural world. This fact can be considered a sign of the inadequacy of the above method as applied to social reality that, being generated by human beings, should be, in many of its aspects, easier to understand than natural world – as Vico pointed out many years ago.

3. To avoid confusion, it may be useful to point out that the extension of the observational-experimental method from the study of nature to social thought has taken two forms. One may be denominated the *strong observational method* or *social positivism* (including also neo-positivism and falsificationism) and consists in the full adoption within the social sphere of the two hypotheses of acceptance of existing reality and the repetitiveness of observed phenomena. The other form may be denominated the *weak observational method* or *social spontaneity*. This second form excludes the hypothesis of repetitiveness in recognition of the increasingly central role of innovation within modern dynamic societies, but retains the acceptance of existence and, therefore, a merely observational attitude. As a matter of fact, the strong observational method also embraces spontaneity, for the acceptance of existence always implies a spontaneous view. But as we have just seen, the weak observational method limits itself to the acceptance of existence and rejects the hypothesis of repetitiveness, thereby escaping the positivist standard typical of strong observationism;[14] it has, therefore, a higher spontaneity standard. What is important for our thesis is simply that both the weak and the strong observational methods erase the main significance of human action. The underlying idea is, as we have said, that *what happened had to happen*, implying the acceptance of existence. In a word, both of these methods direct effort at the understanding of spontaneous behavior. This means that both *strong and weak observational methods exclude reform action. Reform is, in principle, inconsistent with the observational method that highlights being at the expense of doing.* The consequence has been a growing inability of social thinking to illuminate reform-orientated action, as we shall see extensively later.

In the age of commercial revolution, social changes caused by the growth of capitalism were for the most part interpreted, at least by the sharpest scholars, on the basis of the weak observational method, i.e. as spontaneous but non-repetitive behavior. The attitude of economists, who analyzed the most dynamic subsystem of society, is illuminating in this regard. Political economists were attracted by the idea of a so-called 'invisible hand' that, driven by personal interest and by way of the market, seemed able to fulfill automatically the great variety of people's needs and, on the whole, warrant the coherence of many non-repetitive decisions operating separately from one another and even, at times, in reciprocal opposition. Writing at the beginning of the eighteenth century, Bernard Mandeville described in colorful terms «the vileness of the ingredients that represent on the whole the healthy mixture of a well ordered society»,[15] and described the operation of the social process as a whole in terms of the transformation of 'private vices into public benefit'.

The first industrial revolution did not much disturb the existing reality, at least with respect to more recent increasing social change. While it is true that the discontinuities caused by innovation have always caused difficulties in the understanding and management of society, nevertheless, in spite of such initial intensification of social change, the social thought of the nineteenth century was dominated by positivism. More precisely, the weak observation method, which rejects the hypothesis of the repetition of events and only postulates their spontaneity, prevailed. This method has permeated the most important lines of social thinking: free trade and social naturalism, evolutionary and historicist thought of various kinds. Its basic fault is to be centered on an exclusive regarding of being and disregarding of doing. An outstanding example is Weberian teaching that,

[14] The weak observational method is not absent in the study of natural phenomena, e.g. Darwinian teaching as centered on accidental mutations.

[15] (B Mandeville 1984), p.3

while on the one side gives a great importance to ethical values, on the other side considers value in a merely observational perspective that provides an explanation of ethical values through the idea of 'diffuse rationality', stating their supposed approach by trial and error toward right ethical values. The Marxian inspiration to Darwinian evolutionism and to Hegel's philosophical teaching (the dialectical motion toward improvement and the identification of reality with reason), strongly resembles the 'diffuse rationality'; in fact, Marx eluded the question of the organization of social system (doing), leaving the matter to the 'fancy of history'. Thanks to these various schools of thought, the spontaneous vision gained, both implicitly and explicitly, a considerable influence within social thought.

Over the course of time, some theoretical advancement has made the management of human societies an easier task. But, in the form of the weak observational method, the spontaneous view continues to dominate social thinking. This domination is strengthened by the absence of an alternative social theory that is methodologically and hence scientifically well founded. In fact, such absence frequently leads to considerable mistakes in 'constructivist' interventions intended to revise the tendency of social processes, and these mistakes can accentuate the pains associated with spontaneous tendencies, thus making it convenient, in practice, to opt for the original spontaneous tendencies.

There do exist, within social thought, some non-observational theories. For example, the doctrines of natural rights, juridical positivism and contractual thinking conjugate the observational and the organizational points of view. But they very frequently fail to take into account the importance of accurately integrating being and doing. As we shall see extensively in the second part of this book, the very expression 'natural rights' is inspired by the idea of constraint (being), from which it derives some teaching on social organization, while the theory of juridical positivism prefers freedom and the coherence of social order. For its part, contractual thinking is inclined to undervalue de facto reality and hence to develop the question of the organization of the social system according to a very abstract standard.[16] There is more. Constructivist approaches do exactly the opposite of observational method; they consider social reality in the perspective of doing, that is, disregarding being: an exaggeration no less misleading than the observational one. This is typical of the programmatic approach that we shall critically discuss at the end of chapter 2 with reference to economic and social planning.

1.3 Necessity and choice-possibility-creativeness in the organization and interpretation of social systems

1.3.1 Freedom and constraints

Human societies are the outcome of conscious and unconscious human actions, but the building process is by no means completely free; social organization and government are not unconstrained. Creativity, intuition and even the most fearless human initiatives must always encounter de facto reality and, consequently, a variety of constraints. This is fairly self-evident, and in fact the distinction between 'freedom' and 'constraint', between that which is the object of choice and that which is constrained by preexisting reality in the building of human societies, is not ignored by social thought. Nevertheless, engagement with it is afflicted by heavy ambiguities, which are difficult to defeat because they are the result of and, at the same time, a deep cause of misunderstandings on method. It may seem at first sight that the distinction between freedom and constraint is well expressed by constrained optimization models or, more precisely, the objective function and the constraints of those models. But this is not the case. The distinction is prior to such modeling; as such, it concerns both the objective function (primarily through ethical values with

[16] In particular, Rawls' principles of justice, which provide the basis of the most recent and severe forms of contractualism, do not really clarify the distinction between objective and subjective aspects, between freedom and constriction. See (H. Ekstedt & A. Fusari 2010), chapter 3, pp. 82-84.

their subjective or – as we shall see – objective character) and the constraints (primarily technology and institutions that do not simply express constraints but also imply choice and creativeness). All this, let us note, will be extensively clarified later, at the end of chapter 2.

It is neither surprising nor reprehensible that ancient students of society neglected the opposition between freedom and constraint. The substantial invariableness of the operational mechanisms of their societies favored their perfection and consolidation in the course of time, while the field of freedom did not significantly affect the generation of these societies and their quasi-naturalistic standards. The most appropriate way to understand their functioning was, therefore, the observation of phenomena in order to discover the mechanisms behind a repetitiveness that was only exceptionally interrupted by traumatic events, such as invasions, rebellions, or natural disasters. The management of stationary social processes requires a regulatory rationality, i.e. one directed to perfect the coherence of the system. The invariableness of these social systems is protected by some fairly pristine pillars, such as the legitimization of power over time as habit to subjection generates the consent of the governed. Such quasi-repetitive societies are, therefore, easy to govern, provided that they benefit from some solid institutional and administrative support in the form of experienced and faithful civil servants and a strong and enduring value system. Chinese mandarins and Confucian ethics, marked as is the latter by respect for hierarchy, a well defined distinction of functions, the suffocation of creativity, worship of tradition, and reverence for the elderly, have constituted one of the most appropriate organizational forms for the government of stationary societies that has appeared in the course of history.[17]

The advent, in some Western countries, of self-propelled development, has upset this traditional state of affairs in society and government. In such countries, the repetitiveness of social phenomena began increasingly to be contradicted by the advent of novelties, generated primarily by competition based on innovation. The distinction between freedom and constraint gained in importance, rendering social studies based on the mere observation of existing phenomena less and less reliable. Under such conditions, the investigator is obliged to disentangle the place of the two poles of freedom and constraint in the generation of human societies. Identifying the pole of constraint allows discovery of uniformities and steady (or almost steady) points that can be used as Pole stars in the attempt to navigate the laws and regularities standing behind the organization and management of modern Western dynamic social systems.

As a matter of fact, the Earth has long been home to a large variety of cultural areas and civilizations enjoying reciprocal relations. But these external relations with different 'worlds' did not define their identities and did not act as a prime stimulus of change. Until some decades ago communities separated by only a few kilometers and situated in the heart of important industrial countries preserved a strongly autochthonous physiognomy. The recent progress of telecommunications has almost annihilated large distances between geographical regions; the progress of transportation has accentuated this trend; and the processes of globalization that have followed have brought within their compass even the most isolated societies of Sub-Saharan Africa. New technologies generate new needs, new consumption and ethical values with rapidity. An abyss, or at least something near to it, now separates the ways of thinking and the sentiments of successive generations. The population of underdeveloped countries threatens to overflow into rich countries. Some consolidated forms of income distribution become untenable and enter into crisis. The struggle between old and new solutions becomes acute and the collision among cultures becomes violent.

[17] For the most part, ancient societies were careful to sanction the intangibility and consecration of inherited values, institutions and usages. On the whole, intellectual inquiries were not directed to the discussion of such contents, but rather evoked new horizons and aimed at the acquisition of immutable truths, as in the case of Plato's ideas (Plato's teacher Socrates of course proving an exception, his fate pointing to a perceived incompatibility between such exception and the stability of ancient society). There were in addition comparative analyses, such as we find in the political works of Aristotle and Polybius, but such comparisons always served to emphasize the importance of stability and repetitiveness in social processes across the cyclical vicissitudes of institutional forms.

As already noted, the observation of so much spontaneous movement and so many phenomena that overlap themselves and contradict one another, rather than illuminating the understanding, actually causes confusion. We therefore come to perceive the growing importance within social thought for the articulation and illustration of alternative ways of discovering some common necessities, attractions of the adjustment processes and long-term organizational pillars. To achieve such goals becomes an indispensable condition if humanity is to see what it has become, if people are to engage in meaningful dialogue and civilizations and cultures are to preserve their identity and hence their abilities to feed on a variety of fecund inspirations, and if those who hold power are to base their decisions upon useful knowledge.

So the most effective and natural way of obtaining knowledge about social reality is not only represented by the transition from the observational to the organizational view but needs also to be concentrated in the distinction between constraint and freedom.

1.3.2 A more expressive distinction: necessity and choice-possibility

We will now articulate the distinction between freedom and constraints by way of a terminology that seems to us more appropriate and incisive, specifically, in terms of the place of 'necessity' and 'choice-possibility-creativeness' (henceforth, simply: choice-possibility) in the organization and management of social systems. *Organizational necessities are not an observational matter; in fact, history shows that they can be ignored, largely violated in practice and even strongly opposed and denied.* It is also immediately evident that the term that refers to freedom, that is choice-possibility, has not, by its nature, an observational substance and hence cannot be studied and understood through observation. Let us examine this more closely.

The observation of a storm at sea does not allow for the discovery of the laws of the motions of the waves. But the circumstance that the observation of some strong and much perturbed behavior is unable to teach something does not imply the impossibility of understanding. Every organizational system rests on a proper logic; the problem is to understand the terms of this logic, with the aim of distinguishing the important from the ephemeral aspects, the steady points from what can fluctuate and transform almost at the drop of a hat. If we lack the skill to do this, global society will appear more and more like an unintelligible storm at sea and spontaneous adjustments will not save us from the violence of the wind or lessen the danger of being drowned.

To understand social processes we must concentrate on the field of 'necessity', primarily the organizational (but also naturalistic) necessities. The study of historical processes (for instance, the transition from the feudal period to the mercantile society of the middle ages) clearly shows the strength of 'necessity' as represented, for example, by the absolute need for proper institutions, power forms, ethical values and visions of the world in particular developmental phases, and their dispensability in others. History teaches us, moreover, that the spontaneous tendency toward existing or emergent organizational 'necessities' has always incurred the risk of immense torments; in the cases in which it has been unsuccessful, social systems have been forced to regress toward antecedent phases of development. The dimension of such torments (inflicted by spontaneous behavior) tends, let us repeat, to grow with the acceleration of development processes and social change; this gives rise to a pressing need to scientifically arrange and specify 'necessity' and 'choice-possibility'.

Before going on to unveil, in the next chapter, a methodological proposal aimed at allowing the student of society to face in a systematic way the situation just outlined, it may be useful here to sketch some examples of the distinction between 'necessity' and 'choice-possibility'. Some supplementary commentary upon Mandeville's analysis may be useful in this regard. We have previously seen how Mandeville was fascinated by the tendency of complex European economies to automatically generate consistency (at least, in the main) out of many reciprocally clashing decisions. Scottish social philosophers also subsequently paid great attention to this phenomenon. They all perceived clearly that the author of such a marvel was the market, and a number of them attributed to it the character of natural law. But the market is simply an 'organizational necessity' of

modern dynamic economies, since the limits of human knowledge and the presence of growing flows of radical uncertainty caused by innovation make futile any attempt to govern dynamic economies through centralized decision making.

The development of those organizational forms particularly suited to modern dynamic economies makes evident, not only the necessity of the market, but also that of the entrepreneur and hence of the profit rate (where this last term is not intended as a category of income distribution but simply as an accountability indicator, that is, an indispensable marker in terms of the need to define the degree of success and hence the responsibility for decision making). This triad (market, entrepreneur and profit rate) expresses the basic mechanism of dynamic competition and economic development;[18] it is not required in stationary societies as their repetitiveness can be efficiently managed by bureaucratic decision-making. In fact, the presence of the market in ancient societies represented a mere historical contingency and market agents could be persecuted, expropriated and suppressed without significant consequences to the efficiency of production.

This explanation of the market, the entrepreneur and profit is based on organizational considerations and not only differs from current economic theories but also clarifies some misunderstandings caused by them. To give but one example: the most influential economic theories consider the market concretely observed, that is, the capitalist market, which implies particular forms of income distribution. The shortcoming of these observational theories lies in the fact that they disregard the separation of 'necessity' from 'choice-possibility' and, more specifically, are disinclined to separate 'necessity' from other contents that are simply typical of capitalist civilization. The result has been a harsh and unsolvable conflict among the supporters and the opponents of the capitalist market. What is worst, the opponents of the market, disgusted by the injustice, deceits, immoralities and oppression attached to it, have hoped for the suppression of the market tout court.[19] An organizational (as opposed to observational) view and, more specifically, the distinction between 'necessity' and 'choice-possibility' in the organization of social systems, allows the avoidance of these misunderstandings by way of the clarification that the capitalist features of the economy (and of the market) belong to the realm of choice-possibility while the market by itself is an organizational necessity of dynamic economies. This allows a demonstration that Mandeville's statement of the usefulness, in complex and dynamic societies, of the vileness of human behavior, may be true from an observational view but not from an organizational one. In fact, from the observational statement (and evidence) of the conversion of private vices into public benefit it can easily be deduced that robberies are useful to society. Such a statement stimulates thefts, to the utmost joy of the lawyers in *The Fable of Bees*. But this baseness is not indispensable; it can be separated from the market intended as an organizational necessity and erased.[20]

The market competition implies some ethical values such as pluralism, decentralization, individual initiative and tolerance. These values represent organizational 'necessities' of dynamic evolutionary societies; they have, therefore, an objective substance (that relativists, starting from Weber and Myrdal's teaching, strongly oppose) that, as such, can be scientifically proved. The above values go well beyond the specific capitalist substance of the market; they are necessary to

[18] A detailed analysis of this subject may be found in (A. Fusari 2005b), and in: (H. Ekstedt & A. Fusari 2010), mainly chapters 5 and 8.

[19] The misunderstandings considered have been accompanied by others caused by senseless abstractions; for instance, those typical of neoclassical economics which model the market leaving out of consideration the entrepreneur and profit (this last being identified merely with interest on capital), and also leaving out of consideration innovation and radical uncertainty.

[20] The race toward moral perversion is greatly anterior to Mandeville's teaching and is deeply rooted in a world the operational mechanisms of which have always been largely based on cheating and intrigues; a world that has been largely inspired by the following ancient saying: "The burglar of a kingdom is praiseworthy, but he who robs too little deserves prison". Byzantine theology gave merit to him who succeeded in becoming emperor, even if he ascended to imperial power through the worst crimes. The guiding idea here was that sovereignty came from God's will, thus forgetting that frequently sovereign power has been Satan's armed hand. It is time to take to flight from these cynical stupidities.

the expression of the evolutionary potentialities of humanity or, in other words, are necessary to the operation of the large variety of individual skills that collectively constitute an enormous reservoir of skills. These subjects will be more deeply considered later on.

Another organizational necessity of modern dynamic economies is represented by the principle of 'effective demand' and is a consequence of the fact that, in the presence of radical uncertainty, a deficiency (or excess) of effective demand is likely, thus causing the exigency payoff paying attention to the equilibrium between global demand and supply in the management of the economy. Some implications that institutional scholars of different schools of thought have derived from uncertainty with reference to the theory of the firm, for instance via the notion of transaction costs, also represent organizational 'necessities' in our sense. We shall see later that 'globalization' has raised to prominence some important organizational necessities that concern the relation between production and income distribution, financial markets and political power.

Now let us consider some examples of 'choice-possibility'. A large variety of forms of income distribution can be associated with the market and the entrepreneurial system. In fact, for the variety of individual skills to operate, monetary incentives much lower than those typical of capitalism are required, everyone being largely gratified by the simple possibility of making use of his own capacities and propensities. The existence of large income inequalities, profligate utilization of wealth and a purely acquisitive conception of life, represent contingent and observational conditions, not organizational necessities. It derives from this fact that income distribution (with the exception of material incentives strictly required for performing risky and alienating activities) concerns choice-possibility.[21]

Another kind of choice-possibility is represented by the adoption of different forms of entrepreneurship and financial system. Finance should be a servant of production but, in practice, the role is reversed: production is dominated by capitalist finance in the context of globalization. Some other, clearer and more efficient financial systems are possible in principle.[22] Great importance must be attributed to aspects of choice-possibility of long duration and represented by the great ethical-ideological options that provide the identity of *civilizations*. These options take root and display a decisive influence on the functioning of human societies. They begin to waver when they become inconsistent with new organizational 'necessities'. This inconsistency marks the starting point of a difficult and delicate phase of transition, as we shall see more extensively in chapter 4.

To understand the main contents of the emerging crises, it is important to place knowledge about necessity and knowledge about choice-possibility side by side. Among other things, the absence of such a distinction (or the existence of heavy confusions in the matter) deprives social reform of a compass, or perhaps supplies it with one that indicates North in the place of South, thereby entailing that reform advances only gropingly and falls too easily into dead ends and discredit. The knowledge of what is necessary is a condition of sensitizing public opinion about such necessity. Reform also requires an ability to discern what is possible, to assign a degree of preference to the various possibilities, and a coherence that ensures an awareness of the dividing line between necessity and possibility. A lot of reforms, after a difficult introduction, have fallen into total discredit and ultimately have been cancelled, albeit only after having caused serious damage; and this is not even to speak of the tremendous dramas and failures spread by the great revolutions. Well, such failures have been caused mainly by ignorance of the distinction between necessity and choice-possibility, or a confusion of the one with the other.

The distinction between what is necessary and what can be the object of choice or is the result of creative processes can significantly contribute to the reduction of the harshness of reforms. It can also help to construct consent. In particular, the distinction helps to reduce the harshness of

[21] This aspect has been developed extensively by A. Fusari in chapter 8 of *Economic theory and social change*, Routledge, 2010.

[22] More details on the matter are to be found in A. Fusari, *Reason and domination*, as well as section 5 of chapter 4 of this book

conflicting interests by making evident the aspects of the social system that cannot be refused. Moreover, such a distinction helps to attenuate the collision among civilizations, mainly through the assessment of the objectivity of important ethical values. Finally, it facilitates the combination of old and new values, the meeting of tradition and change, as well as the clarification of what is vital and what decaying or unpropitious among the elements of existing and emerging organizations.

It is also important to place the notion of 'duration' side by side with the distinction between necessity and choice-possibility. As we shall see extensively in section 3 of chapter 2, duration is a different thing from necessity. In fact, some important phenomena that in principle are optional are deeply rooted in existing reality, for instance civilizations. If these deeply rooted aspects obstruct and oppose important and necessary changes, a strong public mobilization must occur in order to remove them, but only the notion of 'necessity' can allow such a mobilization.

1.3.3 Some outstanding equivocations on economic and social necessities

A special issue of the *Cambridge Journal of Economics* has recently celebrated the works of P. Sraffa, in part by drawing from the abundant material contained in his unpublished papers. The introductory article by S. Blankenburg, R. Arena and F. Wilkinson includes a section entitled 'The role of technical and social factors in the distinction between necessities and surplus in the Sraffian system of reproduction' that emphasizes the Sraffian notion of technical and social necessities. Social necessities are seen as a consequence of the peculiarities of different social systems, for instance, corporate (managerial) capitalism with its separation of ownership from control, or the operation of the worldwide financial hegemony of capital. But such a notion of social necessity mixes up necessity and choice-possibility, as becomes clear in light of our distinction between the two. Probably this is a consequence of the absence, in the Sraffian system of prices, of basic necessities of a dynamic economy that are independent of its characterization as a capitalist civilization: entrepreneurship, profit in its accountability role, innovation, radical uncertainty, etc. This absence undermines the Sraffian price system and prevents the founding of the discourse on surplus upon a notion of necessity amended by the reference to specific institutional and civilization choices.

The statement that, in corporate firms with separation of ownership from control, wages and the interest rate on capital represent social necessities of capitalism, and that also the heavy malfunctions deriving from the hegemonic power of international financial capital are social necessities of capitalism, is not especially illuminating as capitalism represents a particular kind of civilization. The participants in the debate neglect the necessary role of entrepreneurship and the necessary presence of radical uncertainty in an economy where competition largely acts through innovation, and hence neglect the necessary role of the profit rate intended as a mere variable of accountability required to judge the degree of success of a manager's action and decision-making, which is indispensable to control controllers. As far as I know, not one of the participants underlines that a true achievement of Sraffa's work – the demonstration of the reswitching of techniques – undermines the 'social necessity' of the interest rate. As a matter of fact, reswitching implies that the level of the interest rate cannot be explained on the basis of the demand-supply of capital but instead depends (as underlined by Keynes) on the demand-supply of money and that, as a consequence, the real interest rate can be eliminated in principle while preserving its nominal terms as a counterpart of inflation in order to defend saving. The necessity of the entrepreneurial profit rate in its accountability role prevents the wasting of capital, but such a necessity is ignored by neo-Ricardian economics.

A wider breadth and an appreciable coherence and completeness are offered by Zamagni's treatment of the question of necessity. This author's civil economy underlines the necessity of market relations, social justice and the reciprocity principle in order to allow, respectively, the efficiency, cohesion and the same survival of economic order in the age of global society with its milestone represented by the hegemony of the international financial market. We shall see that a powerful way to combine the three above necessities is the reduction of the market to a pure

mechanism for the imputation of costs and efficiency that allows the maximum separation between efficiency and income distribution and hence a coherent combination of the first with both social justice and reciprocity. But a deep revision in the method of the social sciences, a revision primarily based on the organizational view of social systems, is needed in order to avoid current confusions on the three terms of the combination, for instance the association of the elimination of profit to the principles of reciprocity and fraternity; in fact, this elimination overlooks the importance of the profit rate in its accountability role mentioned just above, the profit rate being (let us repeat) the only reliable measure of the degree of success of entrepreneurial decision making, the issue of distribution aside. This means that there is no opposition between profit, from one side, and social justice and reciprocity from the other. One of the major afflictions of social thought is represented by equivocal mixings between necessity and choice-possibility in the organization of social systems. We shall see that these mixings afflict the most important social theories.

1.4 A primary methodological misunderstanding in the social sciences: the conflict between normative and positive views

To prepare the ground for the exposition, in the next chapter, of my proposal on method, it seems opportune to consider here the opposition, in economics and social thought, between positive and normative elements. It may be useful, in this regard, to refer to a study by Valeria Mosini centered on a criticism of Friedman's ideas on method.[23] Her study goes well beyond a mere criticism of Friedman, both in what it says and what it implies.

Mosini rejects the position on method that Friedman borrows from the natural sciences, that is, the positivist idea of discovering laws of motion through observation and, subsequently, the use of the laws so discovered in order to formulate prescriptions of political economy. She underlines that such a methodology implies a total submission of normative to positive elements, and as such a substantial negation of the normative. In parallel, Mosini repeatedly condemns Friedman's disdain for the realism of assumptions and his corresponding explicit acceptance of a complete unrealism of assumptions, making evident that such a position is contradictory with respect to the above positive standard. More generally, Mosini takes pains to clarify the fact that Friedman's supposed contribution to the method of economics fails to establish a true scientific standard.

We have seen in the previous sections that observations concerning a reality affected by frequent innovations do not allow the specification and verification of laws of motion. Friedman manages to overcome such a difficulty by associating the validation of theories with their ability to generate correct predictions, irrespective of their degree of realism. But as a matter of fact the growing non-repetitiveness of social events caused by innovation also makes void the forecasting power of the supposed economic laws, particularly if these are not based on realistic assumption (in section 6 of the next chapter we show that economic and social forecasts can only operate in very narrow ambits and that, to may be effective, those forecasts require a very different method).

Without doubt, a conjunction of disdain for the realism of assumptions and a celebration of positive method is contradictory. In fact, mainstream economics uses the method of abstract rationality (that excludes the realism of assumptions) and the observational-experimental method separately, employing sometimes the first and at other times the second. In so doing it has both achieved great intellectual success and subordinated the normative to the positive. Why such a success?

Mosini discusses the relationship between positive and normative elements in the works of some important economists: J. S. Mill, H. Sidgwick, F. Y. Edgeworth, L. Robbins, A. Marshall, A. C. Pigou, L. Walras, and J. Neville Keynes. In each case, she makes evident their concern with the normative side of economic problems. But such attention to the normative has been placed in the shadow by the ever-increasing abundance within economics of the methods of the logic-formal and

[23] See V. Mosini, Reassessing the paradigm of economics, Routledge 2011

natural sciences. We must ask ourselves the reason why the normative good sense of these renowned older has so easily been defeated by the subsequent Neoclassical impact on the method of social thought. It seems evident that the success of Neoclassical economics has been made possible because the attention to the normative side by such economists as just noted collided with the well-tested methodologies of the logic-formal and natural sciences (which latter are accurately used by Neoclassical economics), while those with normative concerns failed to build an alternative method appropriate to social reality, thus leaving unstated the true implication of their criticism. Even today, this indifference to method weakens attempts to avoid the suffocation of the normative by the positive, as implied by the use of the method of the natural sciences. It seems to us that the revaluation of the normative side to the detriment of the positive that Mosini extracts from the works of those important economists mentioned above is not relevant by itself; indeed the normative is not amended by methodological misunderstandings, even if they be different from positivist-naturalist ones. Nevertheless, such a revaluation of the normative side is important since it allows for the perception that the distinction positive-normative needs to be overcome and appropriately replaced. Let us clarify this matter.

We have previously shown that the method of the social sciences must strictly combine positive and normative aspects, being and doing, within a unified method. We have also clarified that a different distinction plays an important methodological role: the distinction between 'necessity' and 'choice-possibility-creativeness'. This matter will be better explained in chapter 2, which is devoted to the presentation of our proposal on method. We must underline here, however, that the distinction between positive and normative aspects and that between 'necessity' and 'choice-possibility' do not overlap: some necessities and choices-possibilities are present both in the positive and normative sides, and vice-versa. To see this, it may be useful to recall some examples discussed in the previous section on necessity and choice-possibility.

In that section, we have seen that, for instance, fundamental ethical values pertain to the side of necessity, while some others pertain to the field of choice-possibility. But values are always referred to the normative side by the predominant cultural relativism: in Mosini's book the ethical aspects represent the main part of the normative aspect. Again, we have seen that a dynamic economy needs the entrepreneurial role, the market and profit rate (taking the last in its accountability role of indicator of the degree of success of decision making); those institutions are organizational 'necessities' the cancellation of which pushes society toward a stationary state. We have also seen that a very large part of income distribution pertains to the field of 'choice-possibility'. In sum, the market taken as a pure mechanism of imputation of costs and of efficiency, and the connected entrepreneurial function, represent some organizational necessities of dynamic economies, while the capitalist market and the capitalist entrepreneur and profit, which are strictly linked to specific kinds of income distribution, pertain to the side of choice-possibility, that is, they express organizational and value options. *Normative action should plainly operate on the side concerning choice-possibility that, however, includes aspects currently attributed to the positive side, while it cannot concern the side of 'necessity' that, however, includes aspects currently attributed to the normative side. Thus the distinction between necessity and choice-possibility makes evident that the distinction between positive and normative creates the potential for much confusion with regard to the organization and management of social systems. The absence of the distinction between necessity and choice-possibility implies confusion with regard to the distinction between endogenous and exogenous-instrumental variables.*

To perform a more profound exploration of these issues, it may be useful to refer to an important historical period that Mosini neglects. As we have seen, she points out that Neville Keynes focused on the normative side of economic questions. But she ignores the work of Neville's son, J. M. Keynes, probably because he did not explicitly consider method. As is well known, J. M. Keynes underlines the importance of the following realistic assumption: a dynamic economy, as characterized by high uncertainty and the role of expectations and hence an economy in which investment is a 'flying bird' is, by its nature, afflicted by a deficiency of demand and consequent

depression. This analysis points to the importance of the accurate management of final demand (and of deficit spending, welfare state, etc.). Clearly, such an approach amalgamates positive and normative elements, being and doing, just as our proposal on method sets out; in other words, Keynesian economics erases the distinction between economics and political economy, combining the two in a unitary explanatory and prescriptive approach. *Well, such an amalgamation of positive and normative elements needs the distinction between 'necessity' and 'choice-possibility' if it is not to be misleading.* In the absence of such a distinction, the amalgamation amounts simply to programmatic constructivism, precisely, that is, to the idea that important social and economic changes and transformations may be freely projected (as we shall see in section 7 of chapter 2). Economic and social planning, promoted in Western countries by the Keynesian teaching, was condemned to failure and ultimately condemnation by the lack of perception of the binary 'necessity' and 'choice-possibility'; a lack that has entailed the subjection of programming to a crazy constructivism. In socialist countries, the disdain for such a distinction had much worse consequences; it resulted, indeed, in a dramatic foolishness of planning.

The failure of economic and social planning in ignoring basic 'necessities' unloosed a hinge that allowed for the overturning of the situation and an increasing acceptance of Friedman's subordination of the normative to the positive. We must recognize that the misconceptions caused by the absence of the distinction between necessity and choice-possibility have been an enduring problem.

In sum, Friedman's *positivist reaction to the damaged normative side of the economic question certainly constitutes a dead end; but the concentration on the normative side by, for instance, returning to Keynes, does not offer a remedy*. The credibility of the insistence of important economists upon the normative aspect, which Mosini underlines, has been damaged by the absence of methodological revisions that it should have inspired; as a consequence, any challenge on the part of the normative has been easily defeated by the use, by mainstream economics, of both the method of the logical-formal sciences and of that of natural sciences. A different (third) method was needed, one based on the character of social reality and one which, in particular, replaced the distinction between positive and normative with one similar to that which we propose.

Criticisms of the market are grist to the neoliberal mill if the market is simply considered as capitalist market, thus transforming the necessity of the market into a purported necessity of the capitalist market. Of course, the notion of the market must be referred to a dynamic context if we intend by it to expresses a 'necessity'. The distinction, in the analysis of the working of the market, between optimizing adaptation and innovation may cause equivocations. Both optimization with given constraints and the change of constraints due to innovation are implied in the functioning of the market. Schumpeterian innovation causing transitory monopolies expresses competition (dynamic competition); this kind of market is different from and much more effective than the merely adaptive market, typical of a stationary economy where, after all, the 'necessity' of the market does not arise. This point will be brought into sharper focus when we return to Schumpeter in section 8 of chapter 3.

It seems to us that the careful clarification on method of Mosini is damaged by her problematic hope for "the re-establishment of the hegemony of normative over positive economics",[24] an aspiration which she supports by quoting Emmer's position: "Ethical premises are, in some sense, the ultimate criteria of conduct. However… they bear no logical necessity. Their force in society is measured by the ability of their advocates to impose their views on others, whether by force or by persuasion". We have clarified in the previous section that basic ethical assumptions have an objective character, are 'necessities' (that, however, may change with the general conditions of development); if so, it follows that the force of those ethical assumptions depends rather on the persuasive power of scientific reasoning in showing the 'necessity' of the implied fundamental values. Therefore, the three concluding lines of Mosini's book, assessing the importance of the

[24] See V. Mosini (2011), p. 139.

combination of will and hope in the attempt to defeat the neoliberal paradigm, do not seem to focus on the true problem: such a paradigm may much more efficaciously be defeated through a scientific demonstration of its groundlessness. As a matter of fact, the dominating confusion on method is grist to the mill of various dominant powers within society, the will and hope of people subjected to acute paradigmatic hegemonies notwithstanding. Many times humans have hoped to achieve redemption through the power of the normative; they have sometimes even believed to be building a paradise on earth, but have subsequently discovered that what they had built was rather hell on earth. The hope of earthly improvement does not depend solely on the will but requires also that will is aided by the teaching of science, primarily a social science that, unfortunately, does not yet exist. In sum, Mosini's disdain for the positive view should take care to replace the positive not simply with the normative side but something expressing aspects that cannot be the object of the normative action, that is, what we call 'necessities'. Mosini's disregard for those necessities contradicts her insistence on the realism of assumptions and this contributes to the legitimization of the positive view.

A last digression on the question of the 'realistic assumptions' may help our understanding of the vicissitudes of the Friedmanite teaching and the undue success of mainstream economics. J. M. Keynes focused upon an important realist assumption, *viz.* the factors causing the deficiency of effective demand. Unfortunately, he ignored some other important realistic assumptions. In particular, he disregarded the fact that the strategic role of effective demand requires the satisfaction of two conditions: (a) that the economy is not afflicted by important structural lacks and dualisms so that the stimulus to demand draws forth the remaining variables; (b) the impossibility of endemic pressures from income distribution (that Keynes excluded through the hypothesis that the labour market determines money wages, not real wages, which latter should be a residual determined by price movements). When conflicts for income distribution became acute and frequent, mainly propelled by the rise of the contractual force of trade unions, economists started to argue that demand was in excess (instead of being insufficient); but in fact the operation of the old, and indeed the central realistic assumption of J.M. Keynes, which legitimated demand leadership, was obstructed by the violations in *de facto* reality of those two further conditions, (a) and (b). Thus, the failure of the Keynesian paradigm has not been caused by 'exogenous shocks', but rather by its limitations. The cessation of the leading role of effective demand favored Friedman's criticism and fuelled the well known conflict between Keynesians and monetarists, a conflict that expressed a real confusion due to basic errors in the interpretation of reality. Let us see.

Monopolistic capitalism, characterized by high productivity and low wages (and hence high profits, which were not fully reinvested due to the volatility of investments caused by the volatility of expectations and radical uncertainty), implied the situation that Keynes diagnosed, that is, one inclined towards the deficiency of effective demand. But the advent of conflictual-consumeristic capitalism, fostered by wage increases that the main industrial sectors offered to stimulate mass consumption, reversed the situation, thereby implying a radical change in the role of money.

Keynes' theory of money and the interest rate was based on the notion of liquidity preference, implying that increased money supply does not cause inflation but rather stimulates production (through the reduction of the interest rate). Friedman's teaching reaffirmed the quantity theory of money, according to which the money supply determines prices while the interest rate is determined by real factors. Both Keynesians and monetarists were wrong. In conflictual-consumeristic capitalism money had lost the exogenous-instrumental character that both Friedman and Keynes attribute to it. The money supply was endogenously determined by acute conflicts for income distribution operating both in the domestic market and (through high increases in oil prices) at the international level. In conclusion, in conflictual-consumeristic capitalism inconvertible money operated like don Circostanza (in Ignazio Silone's well known 1933 book *Fontamara*), a lawyer who proposed the attribution of three-quarters of the available water of a river to each one of the two opposing parts. The discovery by trade unions of don Circostanza's trick directed their attention

toward real wages. Thereupon, the money supply ceased to stimulate production and accumulation, as it does in the presence of monetary illusion. The exigency of restrictive money policies commenced, thus giving rise to the so-called 'stop-go' phenomenon. Countries afflicted by wide sectoral and territorial disequilibria experienced an accentuation of the failure of both Keynesianism and Friedmanism. Income policy became a remedy practiced in the presence of acute crises. In order to return money to an instrumental role, a clear distinction between 'necessity' and 'choice-possibility' is needed, as well as a clear awareness of the fact that income distribution pertains to the last.

1.5 An allusion to the interpretation of social and historical processes

A brief review of the historical-social process may help us to see better some of the mystifying implications of both the strong and the weak observational views, as well as the usefulness of the organizational view and the analytical categories specified in the two previous sections. It is mistaken to think that the observation of historical events leads to well-founded interpretations of history. We know that the non-repetitiveness of those events prevents observation from discovering laws of motion and that the observational method inclines toward determinism, is afflicted by analytic rigidity and imprisoned by what actually happened in the course of time. In short, the observational method cannot provide us with clear and profound answers to those queries that are provoked by the study of history. The past of a world characterized by growing innovations is liable to deceive us if we do not approach it with an organizational view. We must ask ourselves, then, if we want to really learn from the study of history, why certain things happened in a certain way, whether it might have been (objectively) possible for them to have unfolded in a different and better (in the sense of more profitable) way, and what decisional and directional errors and interested mystifications occurred in the course of time.

We should be aware, of course, that the organizational view in historical studies raises some delicate problems and encounters some ancient prejudices. This happens because the employment of this view implies the use of the conditional 'if', which is vituperated, derided and strongly condemned by the conventional wisdom – underlined by the most important historians – that history cannot be built upon a conditional. In effect, some solid methodological formulations are required for avoiding superficial and deceitful uses of 'if'. Both the questions that the historian can and must ask of himself and the alternative hypotheses that he can and must formulate have to be based on objective foundations. But it is mistaken to presume that all that has happened was an inevitable necessity; *such presumption imprisons scholars in the facts of the past*. On the other hand, giving a free hand to fancy does not lead to scientific results but simply provides amusement in the form of easy and pleasant stories (just like a recent book on Romulus Augustulus that presents this last Roman emperor as the ancestor of the British King Arthur).

The analysis in previous sections specifies the scientific tools capable of founding historical studies on the hypothetic-organizational perspective. The distinction between necessity and choice-possibility is precious from this point of view. Let us underline that the gravitational tendency toward organizational 'necessities', which is generated by processes of trial and error, the pains that are caused by this tendency and the failures that result as well as the consequent withdrawal from current processes probably accounts for the greater part of the trials and tribulations of history. Knowledge of those 'necessities' and hence of the errors and deviations that arise with respect to them, in addition to knowledge of the causes of those deviations can be decisive for the understanding and interpretation of historical events. For its part, 'choice-possibility' legitimizes alternative hypotheses and choices about what has happened, and delineates their implications.[25]

An important analytical category concerning 'necessity' is represented by what in chapter 2 we shall denominate 'functional imperatives', i.e. the institutional and ethical-ideological forms

[25] Many examples on this matter, framed on a planetary scale, may be found in: (A Fusari 2000)

required for reasons of organizational efficiency by the level of the general conditions of development. We shall see that those imperatives allow a strict distinction between different phases or stages of historical development.

Another important analytical category is represented by what we shall denominate 'ontological imperatives'; these largely determine the evolutionary strength of human societies and mark the distinction between closed and open societies. Finally, with reference to 'choice-possibility', a great importance must be attributed to 'grand options' or choices of civilization.

It is easy to see the usefulness of the above analytical categories for the exploration of the evolutionary content, the erratic nature and other key attributes of historical-social processes. *Very difficult and troublesome historic conjunctures occur when emerging functional imperatives start to contradict well-rooted aspects of civilizations that must, therefore, be eliminated if these imperatives are to be fulfilled; and this is in spite of the fact that such elimination is opposed by customs, habits and interests strongly embodied in the existing social system.* Well, a full consciousness of the required functional imperatives can significantly mitigate labor pains. We shall see in chapters 4 and 7 that it is illuminating to ask ourselves some 'if' questions. Such questions help us learn from what happened and may allow some useful forecast of what will happen, as the grand options expressed by civilizations and functional and ontological imperatives represent long-lasting aspects of reality.

1.6 Conclusion

This chapter has sought to call the reader's attention to some basic but questionable features of the standard methods of social and historical inquiry. It has set out, as a preliminary, some peculiar contents of social reality that carry profound implications for methodology. In particular, we have emphasized the importance of properly combining being and doing in the context of an organizational view strictly rooted in reality. We have also noted the importance of distinguishing optional and creative aspects from structural necessities and arranging them appropriately. This has highlighted the limitations of both social naturalism and constructivism and traced the roots of the methodological confusion expressed chiefly in the widely held idea of the incommensurability of social knowledge. We have also sketched the way in which this confusion affects the interpretation of historical processes.

We have seen that, on the one hand observational rationality ignores the fact that verification merely based on facts is not possible with reference to social reality, given its non-repetitive nature and, more generally, humanity's ability to modify society. In this situation, the "falsification" of social theories is inevitable, which produces an impasse of observation based knowledge. Further, the observational method concerns *being* and not *doing,* and this makes it quite unsuitable for inquiry into social organization, particularly with regard to values, which represent a crucial part of social reality and organization. We have also seen that an opposite mistake afflicts constructivism, which privileges *doing* but disregards *being*. On the other hand, an anti-positivist reaction, following Weber, has confirmed that the scientific investigation of values is impossible, and has plainly accepted the doctrine of incommensurability. We have underlined the importance, for the understanding of social reality, of the distinction between 'necessity' and 'choice-possibility-creativeness', and the way misunderstandings in this regard afflict important theoretical buildings, affect the conflict between normative and positive view and the interpretation of history.

A more stringent, systematic and detailed discussion on the method of the social sciences will be provided in the pages that follow.

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2 The core of the methodological question. Procedure, rules, classifications

Introduction

This chapter points forcefully to the fundamental methodological problem facing the social sciences: drawing up analytical criteria capable of identifying general principles and sound, reliable knowledge despite the rising flood of innovation within society. As discussed in chapter 1, such a problem originates from the fact that, being social reality a product of human will and action, it cannot be investigated on the basis of the method of natural sciences, as social positivists do. The identification of general principles is obstructed to a remarkable degree by the dominant conflict between social scientists following rationalist constructivism and scholars who emphasize spontaneous behavior. The discussion of method that is developed below will show, purely on the basis of the crucial importance of spontaneous and non-intentional behaviors and also of the lack of knowledge, that these aspects are consistent with the unfolding of rational constructivism and, furthermore, that they imply and solicit it.

This chapter may also be seen as a study of the explanatory power of the rationality principle for the analysis and organization of social systems. Such a power has been largely misunderstood by scholars, who have both taken it to excess, e.g. in the Enlightenment and by the majority of positivists, and by default, by irrationalists, historicists and a large part of sociologists. In general, studies on method insist on the definition of the procedures and rules for the control and verification of theoretic formulations, while considering the achievement of the hypotheses on which those formulations hinge intractable from a methodological point of view, being the unfathomable result of some scientist's particular genius. Popper is the main defender of this position, which may tend toward doctrines of incommensurability and a refusal to embrace scientific method. We shall see that social theory must reverse such a methodology and insist on the definition of some procedures and rules useful to the specification of initial hypotheses, and on their classification, which are decisive in the deriving of general principles; at the same time, social theory must develop a distrust of the usual procedures of control and verification, whether expressed in a falsificationist or in a positivist form.

We have seen in chapter 1 the importance of the distinction between 'necessity' and 'choice-possibility'. The deepening, in this chapter, of our understanding of these two aspects will allow us to outline both a methodological arrangement of institutional analysis and, in particular, to prove that value premises are not always the object of choice and that they may sometimes admit of scientific explanation. This result opens the road to some important insights on ethical-ideological dimensions of social life. But there is much more.

Section 1 sets out the main theoretical foundations of our proposal on method, while section 2 illuminates the way to derive, from such a basis, some general principles concerning the social sciences; a derivation completely different from the attempted discovery of constants, such discovery search having no sense with regard to social reality. Section 3 moves from the general to the particular and is concerned with distinguishing particular aspects and choices having long duration, such as civilizations, from less involved choices; this section also stresses the role of innovation. From this basis, in sections 4 and 5 a synthesis of the procedure of social science as well as the role and meaning of function and conflict are traced. Section 6 then treats the puzzling question of prediction of social events, shows how it may be aided by our main analytical categories, and illuminates the relation between micro and macro theory. Finally, section 7 discusses the question of economic and social planning, a question that provides important lessons both from an empirical and methodological point of view.

2.1 An alternative view on the confrontation with social reality: the priority of rules for the formulation of hypotheses versus those concerning the control of hypotheses; the rationality principle. Towards *social objectivism*

We have seen that constructivist procedure is inappropriate to the study of social reality as it tends to ignore or undervalue reality to the advantage of *doing*. We have also seen that the inductive experimental method, expressed by the stage $H\text{-}O_c$ of the procedure currently designated as the scientific method, is not suitable to the investigation of social reality; such a reality must be investigated through deductive methodologies. In effect economics has, for the most part, a deductive content and sociologists like Weber and Parsons treated the method of social sciences from a deductive point of view. Unfortunately, the usual deductive approaches forget one or other of the following basic methodological requirement of social research:

First) Deductions directed to the explanation of the functioning and organization of social systems *cannot be based on conventional or nominalistic postulates,* such as those underlying the formal-logic sciences; rather, *they must be derived from premises concerning aspects of de facto reality*. As we shall see in the next section, such premises may be identified with much greater clarity than is the case with natural reality.

Second) In social science, *the rationality principle*, which leads to the formulation of theoretic interpretations, has a completely different content than mere observational rationality, which latter is distinctive to the natural sciences and implied by the long run Darwinian processes of selection. The rationality principle in social science *must also take a constructional view* so as to include the normative elements of the situation within the interpretative framework, as considered in section 2 of chapter 1. In short, *the rationality principle must be referred to the explicit pursuit of the rational organization of social systems*.

Third) The usual teaching on method neglects a main requirement of the method of social science: *the definition of some classificatory procedure and, for each defined class, the further definition of some rules that facilitate the specification of initial postulates and ensure the profitableness of their subsequent use for analytical purposes*.

Let us further clarify these points.

We have established that the method of social thought should be centered on the organizational view (doing). Moreover, our considerations and criticisms of the role of observation and abstraction imply that such a method can be neither strictly inductive nor ignore reality. It must be *deductive*, and it must derive its deductions from *realistic postulates*. The real and basic problem thus concerns the selection of postulates.[26] In fact, the impossibility, due to the non-repetitiveness of social reality, of verifying and corroborating, with the help of econometrics or some other verification standard, the theories deducted negates the usefulness of a hypothetical generation of theories (a generation that Popper's observational falsificationism assigns to chance). In sum, *the impossibility of verifying theories (via observation) points to a decisive role in warranting the reliability and fruitfulness of theories to two basic factors: theoretical deduction from realistic postulates; the definition of rules concerning the formulation and classification of realistic postulates in order to replace the unreliable role at present pertaining (fot instance in economic modeling) to the econometric control of hypotheses*. Those rules and procedure express the core of our proposal on method.

Some authors have envisaged the importance of selecting reliable and fecund postulates. H. Albert and J. Kapeller developments in the matter deserve attention. They refuse the apriorisms of 'model Platonism' and/or the search of expedients to escape the failures of observational-experimental standard (immunization strategies), through axiomatic variations, excessive use of *ceteris paribus*, alibi assumptions in the form of unrealistic auxiliary hypotheses. Those authors insist on the realism of postulates, their informational content, etc. and, on this basis, set out some acute criticisms to neoclassical economics[27]. It is evident from above the insufficiency of the mere realism of postulates as assessed, for instance, by critical realism.

We provide now some definitions, specification of rules and classification procedures intended to guide the research of scholars and, in particular, the corroboration of initial postulates concerning the organization and functioning of social systems. This will allow us to move from generic deductive method to a more penetrating deductive approach able to offer general formulations relating to a continuously changing reality. Some applications of the definitions, rules and classification procedures introduced below will be provided in sections 3 and 4 of this chapter.

At least four possible classifications of realistic postulates (together with implied deductive rules) can be set forth:

a. Postulates directed to the deduction of general principles demanded for pressing reasons of organizational efficiency; such principles will act as gravitational points, exerting strong attraction upon social processes. *These postulates must express very significant features of the general conditions of development*; they are, therefore, long-lasting, a product of the path of history, and they exclude specific ideological, technological and naturalistic elements and innovations. We denominate the general organizational principles so deduced *functional imperatives* and we shall see in the next section that, as so defined, the term 'functional imperative' has a very different meaning from the term as used by T. Parsons (1987 and 1964).

b. Postulates expressing conditions of nature that have important institutional and organizational implications. These conditions are local and played a decisive role in characterizing the societies of the past (for instance desert, steppe, agricultural or seafaring peoples). Technological development has greatly reduced their influence (and hence the importance of the relative postulates), mainly through the increasing role of artifacts and the tremendous speed of communications. However, the

[26] Long lasting discussions and controversies on axioms and postulates have agitated logical-formal sciences notwithstanding these sciences need, by their nature, a very limited number of postulates. The situation with regard to postulates is much more complicated when deductive procedure is applied in the social sciences; nevertheless, these sciences have dedicated little attention to the question of postulates.

[27] See H. Albert (2012[1963]) and 1993: J. Kapeller (2013)

conditions of nature underline the important role that *scarcity* has played from the first appearance of human beings on the Earth. The importance of scarcity traverses the whole history of the world and has always obliged humanity to work bravely and to realize its potential genius. Scarcity gives rise to the man as builder and as organizer, while the binary *scarcity-curiosity* generates the man explorer. Also basic technologies (i.e. indispensable to make possible the existing level of development) can be included in this category.

c. Two postulates concerning respectively *the unfolding of human evolutionary potentialities*, (i.e. of the natural human ability to develop) *and social cohesion*. The two postulates are strictly linked to each other social cohesion being an important condition for the expression of human evolutionary potentialities, and are both deeply rooted in basic aspects of human nature. We denominate their implications '*ontological imperatives', which express the true engine of social development.* These imperatives have a very general character, more general and more enduring than functional imperatives of point (a); but many of them can be violated over very long periods of time (and often have been in the so-called closed societies) since their violation does not affect organizational coherence and, indeed, can even enforce it. It may be useful to make a distinction relating to two very important aspects of this postulate sub c about human evolutionary capabilities.

c'. 'Human rational skills': an excess of the rational drive with respect to the creative drive may promote social organization and admirable developments (as B. De Finetti points out).

c". 'Human creative skills': an excess of the creative drive with respect to the rational drive may cause social disintegration.

d. Postulates concerning ideological aspects, choices and creative events. The organizational and institutional forms deriving from these postulates define the field of 'choice-possibility-creativity'. They do not pertain, therefore, to the field of 'necessity', even if the most important of them, i.e. the choices of *civilization*, are characterized by long duration and pervasiveness. This makes it clear that the usual identification of durability with 'necessity' is erroneous.

The realistic postulates (a) and (b) together with their implications give the field of 'necessity' in the organization of social systems (but, of course, not with regard to individual decisions, where what is necessity under some circumstances may be choice under others). *In the modern age of dynamic society, postulate sub c on evolutionary potentialities with its implications must be added as a component of the field of 'necessity'.*

The rules above illustrate the methodological «separation» between 'necessity' and 'choice-possibility-creativity' in the social sciences, as well as its importance. Thus we arrive at the methodological succession and procedure CRP-TD (classification of realistic postulates-theoretical deductions) in place of O-H-O_c (observation-hypotheses-control observation) typical of the observational inductive and deductive methods, or the H-O_c typical of the Popperian hypothesis-falsification.

Our summary rules seem to add a more general and stringent treatment on the question of postulates and their specification to the one by Albert and Kapeller. However, those rules alone cannot guarantee appropriate selection of postulates. The fruitfulness of the selection depends also on the scholar's own intellect and sense of reality, and needs careful control.

In short, our method's relationship with reality basically concerns the search for fecund realistic initial postulates, not ex post verification of theories (the very nature of social reality makes such verification meaningless). All the deductive methods that are used in social thought ignore the classifications we propose and so fall into a generic deductivism, or Popper's hypothesis-falsification deductivism. For their part, those deductions that follow the abstract rationality standard forget reality. So the methodology we suggest begins with the *classification and selection* of 'realistic' postulates, and then proceeds to deduce their implications for the organization of social

systems. *Such a procedure implies the combination of being (realistic postulates) and doing (the organization of society).* Let us remember that, unlike observational rationality, which is based on the acceptance of existing conditions (with the underlying idea that the real is rational) and is typical of positivist and evolutionary thought, prescriptive and organizational rationality is appropriate to a reality that is constructed by humanity.

To summarize, the method of social sciences must be *deductive* and must derive deductions from *realistic postulates* on the basis of the principle of *organizational rationality*. Moreover, it must be centered on the *specification of rules and procedure of classification* that lead scholars in their research into and corroboration of significant initial postulates, thus supplying some efficient tools to deductive analysis to replace the term $H\text{-}O_c$, i.e. *warranting the solidity of deductions notwithstanding the absence of an empirical verification of the theory*.[28] So the proposed method, while suggesting a need to concentrate on the definition of procedures and rules suitable to facilitate the specification of initial hypotheses, which in social reality may be much more accurately defined than in natural reality, at the same time refuses the observational search for falsifying (or confirming) events, since social change causes a substantial evaporation of the usefulness of falsificationism as well as of other kinds of observation. In some sense, then, the falsification (observational) procedure might only be referred to initial postulates, i.e. the first term (O-H) of the succession $O\text{-}H\text{-}O_c$. In sum, the method we propose, instead of being based on the criterion of observational verification of theories, implying that reality means necessity, is based on the analysis of plausibility, efficiency and realism of postulates. *This implies that an important factor in the evolution of social science is represented by changes over time in the degree of plausibility and effectiveness of postulates.* Therefore, the method we propose differs from all deductive methods: the Popperian one; the method based on the principle of abstract rationality; and the deduction method based on mere observation, i.e. abstracting from the rules and classifications specified above. The nature of the difference will be further explored in the next section, devoted to the derivation of general principles.

2.2 The formulation of general principles in the social sciences.

2.2.1 The notion of functional imperative and the methodological centrality of institutional analysis.

We have noted above that the observer of social reality sees an effervescent world, replete with contradictions and changes that make orientation difficult. The overcoming of this disorientation requires an answer to the following questions: toward what long run order does the auto selective process that converts disorder into order, through often extremely painful trial and error, push the system? Which existing situations best approach such an adventurous tendency, and how best to accelerate the convergence of spontaneous behavior toward it? More precisely, the overcoming of this disorientation needs a method that allows for the articulation of the gravitational attractions and other stabilizing forces or, in other words, derives some solid and reliable generalizations that act as fundamental explanatory and leading principles. As just seen, the satisfaction of this requirement requires some appropriate classifications, as well as some methodological rules that help to select realistic postulates[29] in the unfolding of the process of the deduction of general principles.

[28] C.S. Peirce underlined the sterility of induction as a supposed seed of creativity, as well as the conservative inclination of logical deduction. He added, therefore, a third category to induction and deduction that he termed "abduction", which concerned creative formulation of explanatory hypotheses. But this new category has not generated any elaboration on method that facilitates creativity in formulating theoretical hypotheses. The role that Peirce attributes to metaphor in this regard must be considered with great caution; in fact, and as pointed out above, methods elaborated by other sciences are completely inappropriate to social research.

[29] Note that structural change due to creativity impedes the use of conventional modeling and stability analysis, i.e. analysis based on a precise quantitative structure from which are derived eigenvectors and which allow the development of quali-quantitative analyses of the effects of changes in parameters.

Not everything is free to change. In every society, the forces of continuity and necessity flank those of change. As we know, it is crucial to distinguish the elements expressing choice from those expressing necessity. Change is due to innovations. We shall see later the way in which innovations enter into modeling and explanatory analyses. Here we must concentrate on permanence, the factors of duration that allow the derivation of general principles, the skeleton of scientific knowledge, and bench-marks of theoretic modeling, that unable the scientist to find his bearings within the vortexes of changeable social reality. This section will discuss the method of deriving such general principles. Clearly, these general principles must concern necessity, not choice, as choice generates particular; besides, our principles must concern long duration. We are going to outline a notion satisfying those requisites, in particular, embodying both the aspects of *permanence* and *necessity*. We shall denominate this notion *functional imperative*, following T. Parsons' terminology[30].

As is well known, Parsons listed some imperatives valid over time and space that the social system must satisfy in order to preserve interior equilibrium and its own existence. Unfortunately, the fact that Parsons' notion of functional imperative aspires to express historical constants gives the analysis a stationary imprint. In particular, Parsons' insistence on his functional imperative concerning the preservation of the value premises mixes necessity, duration and choice, thus causing a total confusion of those elements and thereby severely obstructing the progress of social theory. In effect, *Parsons' functional imperatives express, more properly, merely functional exigencies.* Moreover, Parsons proposes a treatment of the ethical-ideological aspect focusing upon the functional side, while almost completely neglecting the optional-innovative and conflictual sides, which are crucial for social change. But value premises mainly express choice, even when they involve long duration. The notion of functional imperative, if it is to possess all its potential explanatory power, must be emancipated from such limitations as well as from any confusion between necessity and choice. In particular, it is important to distinguish this notion from that of civilization (see next section), which, by contrast, is completely embodied within Parsons' concept of functional imperative. It is urgent to enunciate a definition and some rule for the derivation of the functional imperative immunizing it from these ambiguities.

The functional imperative must express an organizational order or principle imposed by mere reasons of systemic efficiency, it expresses necessary conditions of efficiency; in sum, *it must refer to pure organizational rationality. As such, it concerns the element of necessity, not of choice; in particular, it must not embody ethical-ideological 'options' irrespective of their possible great importance and solidity.* It is also useful to underline that the functional imperative cannot be directed to the designation of some historical constants as these can be referred only to stationary societies; rather, it must express some dynamic entities that are variable over the very long run. A primary task for social theory is thus the definition of some rules that allow for the discovery of organizational categories fulfilling the above requisites. Let us attempt this task with more detail than hitherto.

Clearly, the greatest adversity with which the social sciences must contend in their effort to generate enduring principles, possibly valid over a wide geographical range, is the process of ideological and technological selection and revision – in a word, innovation. To deduce such principles, then, one must generalize with respect to innovative phenomena.[31] More specifically, the deduction of general principles for the social sciences must begin from premises that concern the general aspects of the social reality considered, which descend from its general conditions of development; it must not begin from premises (postulates) that themselves include specific ideological or technological conditions and choices, or specific aspects of nature, however important and decisive (and even if extremely long-lasting), because these are particular, optional aspects.

A useful rule for the derivation of functional imperatives may consist in concentrating on the existing general conditions of development, in order to extract from them some extremely general and meaningful aspects, which will then act as postulates from which to derive all implications for the

[30] See T. Parsons (1987 and 1964)

[31] Of course, abstracting also from the particular conditions of nature.

efficient organization of social systems, in the form of functional imperatives. Of course, the imperatives derived in such a way vary with the general conditions of development, thus providing a basic expression of the dynamics of society. In sum, these organizational categories emerge over the course of history, as the product of the *sedimentation* of successive innovations, moral or ideological value judgments and technological choices (as opposed to specific choices and innovations). The realistic premises (postulates) from which these categories are derived are extracted from the previous sedimentation, making these organizational entities relatively steady points of reference demarcating continually changing social reality; they embody the aspect of duration. Clearly, these initial hypotheses derived by the general conditions of development are not some mere conjectures in the sense of Popper; they represent some clear and well corroborated premises, supplying solid foundations to deductive procedure.

As the product of a rationality that is not conditioned by specific technological or ideological assumptions but only by the general configuration of the situation, functional imperatives will reflect functional needs that are not linked to the pursuit of specific objectives and particular choices. Rationally speaking, the substance of these general principles is simply not a matter of choice. Ignoring them means adopting quite illogical and irrational courses of action and solutions, that is, entailing costs with no offsetting benefits, in that such actions are neither imposed by nor connected with a choice of aims. It follows that these general principles constitute some *necessary conditions of efficiency*. They are relevant to all situations characterized by similar levels of development, and their degree of generality obviously depends on the degree of generality of the postulates from which they are derived. The theoretical relevance of our notion of *functional imperative* mainly depends on the fact that *it embodies both the aspect of necessity and permanence.*

The above functional imperatives are eminently concerned with institutional order. They may contribute greatly to the methodological systematization of social theory and to remedying some misunderstandings characterizing the debate on institutions that confines this debate to a marginal position with respect to the great theoretical tradition. In particular, the concept of functional imperative may provide a stronger methodological base and legitimacy to institutional and neo-institutional analysis, as well as many formulations of economics distinguished by their closeness to reality.[32] These imperatives represent the pillars of social systems and point to the great necessities that these imperatives must uphold. People must clearly see them in order to build the new functional imperatives imposed by changes in the general conditions of development.

It may be useful to confirm that, according to our methodological proposal, observation must concern only initial propositions and postulates (as derived, for instance, from the general conditions of development), but not the verification of theoretical formulations. In other words, the term O of the procedure O-H-O_c operates only initially, not in the final stage devoted to the control of theory. In fact, reality may differ widely from functional imperatives, which latter only represent some gravitational attractions of the auto selective process of trial and error. There is no guaranty that they will be present in reality and thus constitute a possible object of experimental verification; indeed, very often they are not reflected by reality. It is a task of theory to enunciate their functional role, properties, the necessity of building them and the way to do so. The verification of general theories (i.e. characterized by high permanence) may cautiously be based on observation, but only in the special case that social organization satisfies (i.e. embodies) the functional imperatives pertaining to the considered development phase with its general conditions.

The above treatment allows us to understand that social research currently uses a deductive procedure more insidious than the *abstract deductive method*. This particularly problematic deductive procedure is represented by *observational deductivism*, which does not follow the rule of derivation of

[32] For instance, and as we shall see in the paragraph on exemplification, Kirzner's analysis of economic process implicitly specifies (and is hinged on) some basic functional imperatives of modern dynamic economies (the entrepreneur, market process, decentralization of decision making). Again, Williamson's analysis centered on transaction costs, as well as the economic analysis of rights (EAR), are substantially aimed at pointing out that the firm’s organization and some rights represent functional imperatives.

functional imperatives expressed above, but rather pretends to derive general principles from postulates that include particular ideological aspects; in this way, this procedure mixes indistinctly necessity and choice, ignoring the optional-creative aspect on the assumption that reality means necessity. Economics, which is the most advanced branch of social theory, contains numerous examples not only of the abstract deductive method (mainly represented by models of general equilibrium) but, even more, of observational deductivism (as represented by, for example, the opposite Smith's and Marx's appreciations on the market and the entrepreneur, which consider these synonymous with the capitalist market on the basis of an historical observation that shows these organizational forms strictly embodied in a specific kind of civilization, the capitalistic one, and on the associated value premises).

2.2.2 The commensurability of social knowledge, ethical relativism and natural rights; the scientific derivation of some value premises and the notion of ontological imperative.

1. The above notion of functional imperative entails some basic results concerning the crucial issue of value premises and the cumulativeness of social knowledge. We saw before that an important rule for the derivation of these imperatives is the exclusion from postulates of particular technological and ethical-ideological aspects, as these are objects of choice. The exclusion from postulates of specific ideological aspects denies the Weberian assumption that the building of theory cannot abstract from value premises and, therefore, this avoids the incommensurability (i.e. non comparability) of the theoretical principle (functional imperative) in question. The rationality principle and the comparability of social theories receive another important support from the fact that functional imperatives may also concern some basic values with which the system of values as a whole must cohere (we considered this already in speaking of 'necessity' and we shall further clarify this important point later through some examples). This circumstance has another important consequence. The statement that some ethical aspects may represent (be derived as) functional imperatives and therefore express necessity, implies a scientific limitation (in addition to limitations of a religious and metaphysical type) to cultural relativism: the scientific, i.e. objective character of some value premises proves the groundlessness of the equal rank that cultural relativism attributes, in principle, to all such premises. The current failure to grasp this crucial point concerning value premises generates numerous, profound and well rooted misunderstandings in social theory, most notably an extremely harmful confusion between the elements of necessity and choice, impeding the building of a scientific theory of social and historical development.

In other words, the notion of functional imperative considerably reduces the indeterminacies and strong contrasts fueled by the idea of the inescapable pervasiveness and equal dignity of different "points of view". This result amplifies remarkably the role of scientific analysis in the field of social phenomena and, in particular, the cumulativeness of scientific knowledge.[33] But it may be useful to underline, in this regard, that Parsons' approach, which emphasizes, as we have just seen, the duration of values and their functional role, forgets that the value premises not constituting functional imperatives are object of choice, i.e. are characterized by a scientific ambiguity. Some contemporary scholars insist upon the possibility of scientific investigation of impersonal, objective, social values that are shared by a large number of people, as distinct from strictly personal, subjective, individual values that cannot be the object of science. We think our notion of functional imperatives goes beyond such assertions and clarifies some of their limitations. The scientific nature of functional imperatives is unquestionable, even when they concern value premises, independently on their degree of sharing among people. Weber's denial of the possibility for science to investigate ethical aspects of phenomena is exaggerated, while Parsons' position on the matter seems too extensive as social values do not escape

[33] The results presented in this and the previous paragraph may provide a substantial contribution to the solution of the "post positivist puzzle of relativism" and the incommensurability problem, pointed out by M. Ardebili (2003). R. Bhaskar's solution here is not exhaustive since it eludes the ontology of science, i.e. "the scientists' conception of reality".

– in principle and in contrast to Parsons' imperatives – options and creativity, and, hence, some sort of scientific ambiguity (except in the case that they represent functional imperatives in our sense).

The scientific derivation of values based on the notion of functional imperative does not deny the historical nature of social events and it does not need metaphysical supports, as does the doctrine of natural rights. In some sense *our notion of functional imperative lies between historicism and* jus *naturalism.* The theoretical principles that this notion allows us to formulate, being derived from the general conditions of development concerning the investigated society, represent a result of historical processes. But these principles share with the theory of natural rights a derivation based on the rationality principle and a non-relativistic content. *They express an inevitable need for social organizations belonging to the same phase of development.* Functional imperatives do not depend on some specific civilization but, rather, and as we shall see, influence such civilization as this must be congenial to them. They express all that science may say on ethics that, for the remainder, admits only criteria of justification based on faith. We shall see in chapter 8 that these imperatives may offer a basis for a contractualist notion of right immune to the criticism formulated by juridical positivism, and provide a foundation upon which to build a theory of right hinged on a science of social institutions and organizations.

2. The notion of 'ontological imperative' concerning, as we saw, the unfolding of human evolutionary potential, provides another important support to the scientific derivation of ethical values. This notion expresses some general and basic characteristics of human beings. In contrast to functional imperatives, ontological imperatives do not vary with the general conditions of development and hence are not pushed to impress themselves upon it over the course of history but, rather, remain valid for ever. They may be repressed, however, for unlimited periods of time if a particular social order is characterized by a civilization adverse to them. Their triumph is warranted only if the evolutionary process is not obstructed, so that they are transformed, sooner or later, into functional imperatives; at that point, the past insistence upon them by some scholar, wise man or religious seer will appear retrospectively as a sort of prophecy. One particularly important ontological imperative is the tolerance principle. This is a consequence of the limitations and the intensive differentiation of human knowledge, which both imply that nobody has a complete monopoly upon reason and that human beings may profitably use reason only if they accept (and look for) confrontation with different and dissident points of view; in fact, knowledge proceeds by trial and error and heterodox propositions may indicate some fruitful solutions to the problems of daily life. Another important ontological imperative concerns the role of the individual. The fact that the individual is the first source of both creativity and of the dynamics and variety of social processes implies the (ontological) importance of individual action and dignity and of the principle of personal responsibility as indispensable in warranting the social profitableness of that action.

The presence or absence (i.e. by violation) of ontological imperatives is a distinguishing mark of, respectively, open and closed societies. As we shall soon see, with the advent of the stage of modern dynamic societies some important ontological imperatives also become functional imperatives, for they are indispensable to the preservation of social dynamism

2.2.3 Some examples.

The five chapters in Part II of this book will consider a wide number of ontological and functional imperatives with reference to the most important fields of social sciences. However, it is indispensable to provide soon some examples of those imperatives, aimed at reducing the abstractness of the analysis and improving understanding. It may be useful to start from some further examples of *ontological imperatives*.

An important ontological imperative is represented by the *division of labor*. In fact, such a division is an immediate consequence of the great variety of individual capabilities and hence a main organizational tool allowing for the expression of human potentialities. An important feature

of this ontological imperative is its achievement, from early primitive societies onwards, also of the role of functional imperative, i.e. a principle strictly indispensable to the organizational efficiency of society. Of course, it is of the utmost importance to manage labor division in such a way that individuals' work corresponds to their natural skills, professional work being an important means of expression of human evolutionary potential.

The principle of reciprocity and the sense of fraternity, underlined by C. Lubich and S. Zamagni, are important ontological imperatives deriving from the postulate sub c representing social cohesion. Other ontological imperatives flanking the autonomy, dignity and sacredness of the principles of individuality and tolerance, are distributive justice and the practice of power as service instead of domination, i.e. according to well defined responsibilities that avoid abuse and 'free' judgment in the practice of power. In fact, the evolutionary potential of humanity springs from creative processes that, in order for them to happen, need the respect that flows from personal dignity and hence the elimination as much as possible of abuses of power and injustice. Moreover, the efflorescence of creativity and knowledge needs free confrontation between ideas, achievements and points of view, for human beings, possessed as they are of limited intellective skills, require pluralism and tolerance. The degree of self propulsion of any one particular civilization depends on the manner and extent to which it incorporates the above ontological imperatives.

We come now to some example of *functional imperatives*. Let us refer, at first, to social systems characterized by advanced general conditions of development. These societies are *obliged* to satisfy the postulate concerning the unfolding of the human evolutionary potentialities at the base of the notion of ontological imperative. Therefore, they give expression of the transformation of some ontological imperatives into functional imperatives. In particular, we may deduce that the high degree of dynamism of these societies needs the work of innovators and, more generally, a social organization satisfying the following criteria: that it is open to criticism and to full appreciation of individual initiative and skill, it is able to deal with the high uncertainty caused by non-stationary change, that it is therefore agile, versatile, well-informed and quick to perceive and anticipate the changes in progress. Therefore, and as we saw, we deduce the need for a decentralized organization, for the entrepreneur, the market and exchange value as necessary tools of information and coordination in the presence of high uncertainty, and of profit, as an indispensable measure of the efficiency of entrepreneurial action and decision making. These fundamental economic categories appear to be tightly connected to modern dynamic society, being indispensable requisites of its organizational efficiency and the source of its dynamism; therefore, they are *functional imperatives* of these societies.

The above deductions tell us that some important *value premises* connected to institutional decentralization – such as pluralism, the acceptance of deviants and of criticism and the full appreciation of individual initiative – constitute (as with decentralization) objective necessities for the existence and efficiency of modern dynamic societies, i.e. constitute functional imperatives. We can see, therefore, that some ontological imperatives considered above become, in modern dynamic societies, functional imperatives. This makes evident *an important law of social development: with the variation and advancement of the general condition of development, propelled by the presence of a civilization that incorporates important ontological imperatives, these latter become also (in modern dynamic societies) functional imperatives, that is, the satisfaction of these ontological imperatives becomes an organizational 'necessity' of the resulting societies*. The violation, in a social organization that has reached this stage of development, of the above imperatives, generates weighty inconsistencies. Such a society must hurry to satisfy them, thus bringing itself in syntony with historic development; otherwise it will be destroyed by its internal contradictions and the competition with rival systems satisfying those imperatives.

Functional imperatives represent, as we saw, great gravitational centers exerting strong attractive force upon the spontaneous processes of trial and error; therefore, they cannot be eluded. It is important to consider this point with attention in order to accurately edify them, avoiding such edification is

obstructed and delayed by misunderstandings, prejudices and the particular interests of dominating powers. One may give many examples across history of these basic organizational categories of society expressing historical necessity. So, those who study primitive societies see the relative familial organization at their centre. Such an organization clearly constitutes a functional imperative, after depuration of the various and sometimes eccentric ideological forms associated with family relationship in various cases. Levi-Strauss' analyses of the form of family relatives have clarified this aspect well.

The multiplication of functions and social differentiation, the development of transportation, of the size of territorial groups, of exchange, wealth and conflicts determine the need for a more sophisticated social organization. In particular, such multiplications and developments compel the birth of a more impersonal power than that embodied in the relative organization, endowed with a higher compulsory force: the command power. This new functional imperative, which first made its appearance through the phenomenon of companion-in-arms and other similar aggregations, later took the substance of state power that assumed various forms over the course of the development process; some expressions of them are imperial state, national state, and various forms of the centralization of political power.

The acquisition of a central position in the social process by the economy has some new functional imperatives pushed onto the scene. Economies characterized by small operational unities and markets regulated by demand and supply need very different institutions than do economies dominated by market power. For instance, in the latter case the functional imperative of the control of aggregate demand arises as a counterpart to the deficiency of effective demand. Economies passing through the takeoff phase need institutions and strategies suitable to combat the underdevelopment trap, while dualistic economies require structures capable of avoiding the trap of dualism.

The historical phase that we are now passing through imposes new functional imperatives that merit an accurate investigation. The rapid increase of international exchange and the advent of the global economy require new economic institutions. More generally, the planetary breadth of modern societies determines an increasing need for supranational compulsory powers[34] that, together with the need for decentralization expressed above, favors federalism over the national state; moreover, a penetrating operation of reciprocity is needed in order to warrant social cohesion, as underlined by S. Zamagni.

The entry of the masses onto the scene of contemporary society determines an increasing need for institutions capable of conjugating operational efficiency and social justice, for instance: the 'separation' of the firm from the conflict for income distribution thereby making the market a pure mechanism for efficiency and accountancy, the rationalization and redefinition of welfare state, the definition of indicators of efficiency concerning activities characterized by market failure.[35]

Basic technologies, i.e. technologies that are fundamental to the existence of the general conditions of development, and the organizational forms that they imply, are also functional imperatives.

It is important to underline that the specification of ontological and functional imperatives is based on our notion of *organizational rationality*; they are inconsistent with other notions of rationality, previously criticized. A reference to S. Zamagni's development of this matter may allow some further clarification. Zamagni opposes Ulysses' *instrumental rationality*, exemplified by the command of this mythological Homeric hero that he be fastened to the mainmast so that he might listen to the song of the Sirens without being drawn to wreck his ship, to Jason's *relational rationality*, i.e. Orpheus' use of extraordinary lyrical and musical skills to allow the Argonauts to freely listen to the song of the Sirens without risking a shipwreck. Zamagni underlines that the virtues of relational rationality are: to conjugate efficiency and freedom, to allow the possibility of combination with different values, to not separate the head from the heart. This is wonderful, but it illustrates some scientific ambiguity. The heart is an ambiguous advisor; it is important to avoid it operating against the head, and this end requires some objective specification concerning both ethical values and the relation

[34] Such powers might be substituted by forms of imperialism; but these are strongly opposed by the conscience of modern Man.

[35] See (H. Ecksted and A. Fusari 2010), chapter 8.

between efficiency and freedom. Our notion of *organizational rationality* has a much wider extension than instrumental rationality, in particular regarding important values that we proved to have an objective substance (in the form of ontological and functional imperatives), e.g. the values of reciprocity and fraternity (which Zamagni underlines) as deriving from postulate c regarding social cohesion; moreover, our distinction between necessity and choice-possibility provides a scientific conjugation of efficiency and freedom. These extensions avoid the possible ambiguities of relational rationality. Unfortunately, instrumental rationality is often considered the most genuine expression of scientific thought. This widespread conviction is helped by the above mentioned ambiguity of relational rationality.

We hope that we have satisfactorily developed, in this section, the aspect of 'necessity'. We shall concentrate now on the aspect of specificity and choice that evokes conflict.

2.3 From general to particular: continuity and permanence versus change.

Functional and ontological imperatives constitute, so to speak, the skeleton of social knowledge. Of course, theoretical research can hardly be content with such a high level of generalization, relevant to any number of different social systems. Theory requires more highly developed articulation if it is to be suited for more circumstantial analysis. The emergence of value-ideological and technological choices, innovations and specific natural conditions, together with their implications, are of decisive importance in characterizing individual social systems. It is here that we identify what forges and shapes societies. Thus, general principles need to be complemented by theoretical formulations concerning these particulars.[36] Note that the 'particulars' considered here generate some clearer initial hypotheses, even if they be more changeable than those suggested by the general conditions of development.

In contrast to the analysis of the preceding section, which concerned the aspect of permanence-necessity, this section is mainly devoted to the aspect of choice and social change. But there are some choices that remain unvaried for a very long time. It may be useful to analyze them first of all, with the primary purpose of deepening our understanding of the distinction between necessity and duration.

The conditions of nature express an important and long lasting element of reality; but they vary widely across geographical areas, thus representing the particular side of theory. This is quite obvious. But it may be useful to insist on the relation between duration and value choices; this will illustrate with lucidity the difference between the notions of duration and necessity, as the first may also concern value choices. Besides, such analysis will lead us, in addition to functional and ontological imperatives, also to enunciate another important pillar of the interpretation of social process: the concept of *civilization*.

2.3.1 Grand options and civilizations; their relations with functional imperatives. About the concept of utopia

That which is the result of choice does not always imply change and temporariness. One important exception is given by the basic ideological choices around which the entire social fabric revolves, is structured and is integrated. Such exceptions may be defined as *grand options*. The following are examples of grand options: the idea of progress typical of Western societies, worship of the autocrat and of the state, the spirit of conformity and the culture of obedience typical of bureaucratic centralized systems. These key ideas define the fundamental physiognomy of the social system; they are its supreme, guiding criterion, the inner fire that warms its hearth. They are the product of very long lasting elaborations and cannot be overturned by sharp, sudden decisions but can only be removed gradually over a protracted period of transition; for their removal implies the dismantling

[36] For instance, a desert people and a seafaring people will be induced by their differing environmental circumstances to construct dissimilar institutions and social orders. Institutional and organizational dissimilarities will also mark the social systems of peoples with – for example – different religious beliefs and/or different technological conditions.

of an entire and relatively cohesive set of concepts, behaviors, ideals, institutions, and so on. In a word, the removal of *grand options* implies the waning of the old social universe and the construction of a new one. Such *grand options* constitute an important factor of continuity. Their extensive persistence over time and/or their derivation from protracted sedimentation and synthesis assimilates them to the postulates from which functional imperatives are derived. But they differ from the latter (concerning necessity) in that they imply specific value-ideological choices. There can be no doubt but that they represent elements crucial for systems modeling. There exists a correspondence between the concept of grand option and that of *civilization*. *We define a civilization as an institutionalized set of value-ideological and technological choices, together with the organizational forms consequent to those choices and to the conditioning of the natural environment, marked by the grand options.* This concept of civilization differs from that of society and that of 'social system' in that it excludes: those ideological and technological choices and innovations not yet institutionalised, functional imperatives plus basic technologies (in that these categories characterize all societies at a given level of development, whatever their form of civilization)[37]. We shall se in chapter 4 that the concept of civilization plays a central role in the construction of a theory of social development and the historical process, in interaction with functional and ontological imperatives and with non-institutionalized innovations and choices.

There exists an opposition between the concepts of civilization and functional imperative. Both concepts refer to the long run, but the first concerns choice, while the second refers to the formulation of general principles and necessity. This opposition makes clear the great importance of the distinction between necessity, duration and choice. Civilizations are always the result of choice, notwithstanding their duration. As such, they have a conflictual character: they do not change automatically together with the general conditions of development, as do functional imperatives, but have rather a strong propensity to preserve themselves, together with their peculiarities. Thus, civilizations constitute an important conservative factor. More precisely, while they are born from a great creativity, which provides a strong initial momentum to their developmental processes, their inherent conservative tendencies make them subsequently a cause of sclerosis. Functional imperatives, by contrast, refer to the whole of societies characterized by similar general conditions of development. They have no conflicting content, as they express necessity. Functional imperatives assemble nations and individuals under the flag of similar exigencies. Moreover, they have no conservative inclination, but express rather some functional needs that vary with the general conditions of development. *The advent of new functional imperatives propels existing civilizations toward extinction and promotes new ones that are consistent with the new functional imperatives and, hence, more efficient and therefore more competitive (in the new phase of development).*

It is necessary to clarify that their integrating and inner role does not warrant the permanence of the *grand options* and their transformation into the moral duties that E. Durkheim, T. Parsons and some other sociologists identified as a milestone of social order. As a matter of fact, and as utopian movements clearly show, *grand options* may be the object of rude conflicts (mainly in modern dynamic societies), generating explosions of disorder as opposed to instilling social order. The circumstance that the grand options imply choice confers upon them (and, of course, the connected social values) an inherent ambiguity.

So the explanation of social order cannot simply hinge upon the integrating nature of ethical rules; it requires also the notion of the functional imperative. *The stabilizing nature of the grand options operates through their tight links with functional imperatives.* They may introduce themselves and

[37] It should be noted that the term *civilization* as so defined means something different than does the term *culture*. Even when this latter term is taken in the wide sense attributed to it by anthropologists, the notion of civilization just given is, still, the wider and more stringent one. Of particular importance, the term civilization as so defined expresses better than the term culture the imprinting of what I have called 'grand options' upon the basic features of the social system, side by side with the other basic organizational categories that I denominate functional and ontological imperatives, and avoids mixing with these categories.

resist only if they concord with functional imperatives, primarily those concerning value premises. Their strength and limits are due to this dependence, which confers upon them the attribute of necessity that warrants their permanence and, at the same time, determines their decay as soon as some long run change happens to reveal existing grand options as inconsistent with some functional imperatives. We shall discuss – and so elucidate – all this further in the chapter on social and historical development.

The notion of civilization underlines the role and the great importance, for social theory, of value premises and choices – therefore, of *utopian phenomena* that embody the more intensive expression of ethical-ideological aspects. On the notion of utopia, our previous analysis sheds some useful insight. Utopia may only concern choice. In this sphere it can operate without limits, violently challenge civilization and provoke (or try to provoke) great fractures. It is a primary cause of great qualitative jumps. Its fecund power usually emerges after long periods of incubation and often follows some strange and tortuous routes. The greatest propulsive strength pertains to the utopia that states some ontological imperative and anticipates some future functional imperatives, i.e. as supporting ethical principles destined to reveal themselves, in some more advanced phase of development, as necessary organizational conditions for efficiency. This kind of utopia can be seen as the scientific equivalent of *prophecy*; it possesses an extraordinary force and a great capacity to accelerate the development process. The Christian prophecy concerning the role and dignity of the individual (as referred in chapter 10) probably constitutes the most important example of this kind of utopia. A closer inspection will often reveal these prophecies to be ontological imperatives.

It is also important to underline the opposite case of utopia contrasting with ethical-ideological aspects concerning existing or future functional imperatives. Utopia is impotent against these, as they represent historical necessity. Therefore, if utopia pretends to unhinge or deny them, it condemns itself to certain failure and acts as but a sterile and degenerate phenomenon. The struggle for existence among systems will sweep away this *degenerate utopia*, notwithstanding the forces sustaining it. It may be useful to meditate attentively on the above statements, as the history of utopian movements is tragically marked by senseless confusion between the aspects of necessity and choice; with the vicissitudes of communistic utopia acutely underlining the implications of such confusion.

2.3.2 Innovation and choice: the factors of change and their enemies.

The factors behind evolutionary motion are choice and innovation. More precisely, only innovative choices generate such a motion. A stationary system (e.g. a stationary economy) carries out choices; but these latter, which can be defined as adaptive choices to distinguish them from truly innovative choices, express stationary-repetitive motion and, as such, may be explained through some model of interaction.

We classify innovations in relation to two distinct categories.[38] On the one hand we have ideological and value innovations, which are relative to the sphere of ideas, values, and world views. On the other hand we have technological innovations, which in an advanced state of knowledge stem from the application of the appropriate sciences to problems of life. In contrast to functional imperatives, these aspects of the social system are specific, contingent and reversible. They may be removed or altered without necessarily violating rationality or organizational efficiency, provided that one has the strength, capacity and resolve to do way with the premises (i.e. the specific choices and innovations) from which they derive. Of course, they provide some well defined initial hypotheses for deductive procedure.

It is important to articulate accurately the position that innovations occupy in the building of theory. Theory may explain innovation at the aggregate level, but cannot do so with regard to the specific character of innovations, as this depends crucially on creativity, which is unpredictable by definition. It

[38] Naturally, the two types interact; indeed, the same innovation may belong to both categories. Other types of innovations, such as radical and incremental ones, should be considered; they play a crucial role in economic modeling (see, for instance, Fusari and Reati 2013; Ekstedt and Fusari 2010)

is senseless to try to foresee or explain specific innovations. But this is no reason for alarm. It simply is, and all we can do is to recognize the fact. Some of the chief tasks of the social sciences comprise ensuring that society is as open as possible to the infinite variety of possible innovative choices, pointing out their implications and teaching us how to prevent or promptly remedy any de-structuring consequent to the advent of the new. The social process is largely described by the interaction between two phases: the innovative dash and the subsequent structural organization. Such an interaction provides the engine of evolutionary motion.

The processes by which innovative choices mature are varied. They may be conflictual or participatory; they may be propelled by religion, by art or by science, and so on. Factors that put a brake on the occurrence of innovations are no less important. Changes in the way in which human needs are served, in custom and tradition, in life styles and decisional rules, in the very conception of life generated by the appearance of new technologies and new knowledge, cannot and do not impinge continuously upon everything and everyone. Entrenched habits and customs, especially the *grand options*, offer powerful resistance to the rise of technological or intellectual innovations that conflict with established ways. Although for reasons of efficiency they will eventually give way, arriving at that point will be a long drawn-out process involving a great deal of friction and not infrequently entailing postponement and only gradual introduction of the new ways. Besides, changes in moral or value premises are limited by the fact that they must not contradict those value premises constituting functional imperatives. Finally, some technological choices are broader in operational scope and more enduring in their effects than others. This applies to fundamental technologies, i.e. those that are an essential element of the general conditions of development and whose absence therefore implies that the corresponding level of development is unattainable. Such technologies have a vast and enduring impact on the social sphere. The well known phenomena of path dependency and lock-in confirm the above considerations.

Studying the diffusion and capacity for endurance of customs, traditions, value premises and technologies is of the greatest importance and allows an assessment of the friction and the contradictions that technological developments and other innovations (such as a plan of social reform) will have to overcome.

2.4 Synthesis of the methodological framework. The interrelationships among social subsystems.

The first and crucial work that must be performed by the method of the social science is the definition of rules, procedures and classifications that facilitate the definition of postulates, which latter stand at the basis of the process of scientific construction. In particular, the first steps must derive: a) general principles (functional imperatives) from realistic postulates not including specific choices and conditions of ideology and technology but concerning very general, significant features of society; b) ontological imperatives. The next steps consist in the identification of the grand value-ideological options and the *civilization* that they characterize and which govern the society being studied or, in utopian constructs, the civilization to which one aspires. The resultant framework can then be enriched by considering more specific aspects of reality, for instance, conditions of nature. Hence, the implications of all that on the organization of social system may be deducted. It is important to specify, with reference to the forces of evolutionary motion, the interaction between innovation and adaptation, as well as the endogenous factors stimulating innovation, the way social system selects and systematizes innovations (or obstructs them), and restores its interior consistency (see chapter 4).

The requirement that all postulates and deductions must form a consistent theoretical framework implies that each step, commencing with the general principles, entail suggestions as to subsequent steps and systemic relationships.[39] It would be useful to extend the general model to all the subsystems

[39] For example, it must be ascertained that the value premises adopted constitute a consistent set, headed by supreme ideals, followed by some other general value premises and, still further down, specific value premises. In other words, each norm must be coherent with the overarching system of ideals.

of society, in order to make explicit the linkages, in the context of social theory, between economics, political science, anthropology and sociology. Much more than the natural and logical sciences, social theory needs to structure its contents within an overall framework. This for at least two reasons:

Firstly, because the social sciences are not restricted to inquiry into what exists (or the investigation of abstract propositions), but are also implicated in the construction of social systems; and this entails bearing in mind the interconnections between the various aspects (political, economic, juridical, and so on) of the systems, as well as those between normative and positive aspects and between reality and ideals.

Secondly, because the social sciences involve both institutional and non-institutional mechanisms that, due to social change, are subject to multiple transformations that radiate from them. A science the aim of which is to master this unstable reality must be fully aware of the repercussions on the individual subsystems of these transformations, and this awareness can only derive from a unified basic method and an organic overview of the society in question.

If the model is accurately built, the differences between it and reality will provide an approximation of the difference between spontaneous phenomena and rational-efficient solutions, in the course of the gravitational process toward such solutions, based on trial and error. In this regard, it may be useful to underline that the study of social phenomena, although unlike the natural sciences in that it is deprived of the advantage inherent in the relative constancy of the reality observed, does have at its disposal a different, significant advantage which, properly exploited, can greatly facilitate research. This advantage consists in the fact that social studies deal with a reality forged by human beings and thus is in theory more readily intelligible to them than is the natural world. But – and this is the key point – it is more intelligible, not by virtue of introspection, but because the social sciences, eminently concerned as they are with the rational organization and administration of social systems (as opposed to individual actions), must proceed by deductive procedures (based, as noted, on realistic and well established postulates and on the canon of organizational rationality), which constitute a standard of inquiry more rigorous and incisive than that based on experimentation, to which we must necessarily resort when the object of study is a reality (nature) not constructed by human beings. But there is an obstacle that stands in the way of the work of the social researcher and with which the natural scientist needs not contend, namely that social change requires incessant revision of principles and deductions.

The analyses of social researchers are often based on the experiment-verification methodology that is appropriate only to the natural sciences; other social researchers rely on deductive procedures that fail to develop properly the principle of organizational rationality and, taking reality to mean necessity, develop a quintessentially observational character; and others, failing to ensure the realism of their postulates, overstep the border and enter the territory of that abstract rationality that is proper to the formal-logic sciences.

2.5 The notion of freedom and necessity areas as an indispensable tool for the understanding of function and conflict.

A pivot of the methodological approach outlined is the rigorous distinction between *freedom* and *necessity* in the organization and development of social systems. Such a distinction permits us to delimit the fields of function and conflict and to overcome functionalist equivocations deriving from the erroneous assimilation of necessity to duration.

We saw that in human society, *necessity* is embodied by:

a) Functional imperatives.

b) Natural conditions and their implications.

c) The basic technological innovations and the organizational forms imposed by them.

Together these categories constitute the *necessary conditions for efficiency*.

Choice is represented by:

d) Value-ideological activity, headed by the grand options (or choice of civilization) and corresponding organizational forms.

e) All non-fundamental technological solutions and their corresponding implications.

For their part, ontological imperatives stand half way between necessity and choice

However, we must bear in mind that the range of the choices listed under (d) and (e) is defined by the limits of their compatibility with the ideological aspects comprised in functional imperatives.

The necessary conditions for efficiency identify the area of function, while the process of choice identifies the area of conflict. Of course, as soon as a value choice has prevailed, it will imply some definite functions: the grand options and the connected form of civilization require some precise institutions. But the point is that the value choices generating them may be suppressed without damaging efficiency.

The elements of choice and the working out, through innovation, of man's creative capacities correspond to *freedom* in the development of social systems. This freedom is not significantly limited by the fact that choice must not contradict necessity as represented by functional imperatives (the necessary conditions for efficiency). This appears evident when it is recognized that *the realistic postulates in the general configuration of reality, from which our functional imperatives are derived, are generated by the historical accumulation of innovations*. In addition, this *sedimentation* of choices and innovations *will eventually alter* not only the general conditions of development but also the conditioning power of both nature and of the basic technologies themselves, that is, *all the elements constituting the aspect of necessity*, while the fulfillment of ontological imperatives determines the evolutionary strength of the social system.

It might seem that the above considerations darken our distinction between necessity and choice. But the point is that a society may not violate functional imperatives, natural conditions and basic technologies without seriously compromising its organizational efficiency. These are the necessary conditions of efficiency. Unfortunately, the ingrained tendency of choices, especially when they touch on the grand options, to take root and vigorously resist revision not infrequently induces people to mistake these optional elements for necessities and to give the preference to them over and above those functional and ontological imperatives with which they are not consistent. To further clarify the analytic importance of this distinction would require a treatment of social development and historical explanation (see chapters 4 and 5).

In social discussion, the failure to separate the merely functional from the ideological, necessity from choice, aggravated by the frequent identification of necessity with duration, inextricably entangles science and faith, thus generating fierce and irresolvable disputes. Operationally, the consequences are more harmful still, for the result is two diametrically opposed tendencies the effects of which are simply devastating on the planetary scale. **First** is the tendency, which can be termed "pseudo reformist", to reduce necessity to the rank of ideology, i.e. to substitute value-ideological options, mainly grand options and the related civilizations, for the necessary conditions of efficiency. This tendency has inflicted terrible defeats on movements for social reform. **Second** is the tendency, which can be labeled "pseudo-scientific", to raise ideology to the rank of necessity, i.e. to mistake (or pass off) value-ideological elements for purely functional necessities, as well as to justify and exalt moral choices for their alleged purely functional quality (functionalist prejudice). This latter tendency is strengthened by the propensity of optional elements to take root which, together with the axiomatic equivalence of reality and necessity implicit in the observational method, confers upon it a seeming seal of scientific standing. Confusion here is aggravated by the fact that the character of ontological imperatives stands half way between necessity and choice, thereby obscuring the importance of fulfilling these imperatives.

We have these confusions and theoretical shortcomings – among others – to thank for the fact that mankind has steadfastly condemned the just and elevated frauds and impostors.

2.6 The problem of prediction in the social sciences; from micro to macro theory.

We saw that it is impossible, using the observation-verification method, to derive "laws of motion" of the economy (or society) that can then be used to predict the future of the social system. This

impossibility stems from the succession of innovative events and consequent social change. To forecast future events and social arrangements, we would have to be able to foresee the specific value-ideological and technological choices and changes that will ensue and derive all their implications. But making predictions concerning specific innovations, i.e. acts of creativity, is senseless. We can but put forward hypotheses in this regard, and the results obtained by such a procedure will not be predictions but merely hypothetical elaborations. This does not mean, however, that the effort to make predictions about social reality is useless.

We know that functional imperatives are enduring and that the replacement (or emergence) of grand options requires the dismantling (or realization) of a vast system of consistent and compatible arrangements, propensities, and so on, that can only be achieved over the very long run. These imperatives and grand options thus trace riverbeds along which social life must proceed and unfold, and this facilitates prediction. Furthermore, the formation of functional imperatives and grand options by protracted historical sedimentation implies the possibility of recognizing, within a broad margin of error, those new functional imperatives and/or grand options that are in the process of maturing. Moreover, the very notion of ontological imperative provides some basic and enduring knowledge about the social system. The above knowledge will furnish far-reaching and in-depth information concerning the features of the stage of development on the threshold of which we stand and with regard to the main problems that beset it. Reference to basic technological innovations, with their great permanence and multiple repercussions, will also help in forecasting future events. Adaptation, for its part, embodying as it does a large part of the social process, is in principle foreseeable. Moreover, social theory may profitably use the method O-H-O_c with reference to the long lasting aspects related to functional imperatives. For instance, the necessity of the entrepreneur in modern societies implies that it will be fruitful to conduct econometric studies on entrepreneurial decisions concerning innovation, investment and the output level.

It may also be useful to underline that, at the aggregate level, the traditional method O-H-O_c, i.e. one based on observation and empirical verification, may sometimes facilitate reliable foresight over short time intervals, primarily if the observed reality reflects functional imperatives so that it is not shaken by any confusing and sharp gravitation toward them. This reliability of the O-H-O_c methodology is due to aggregation that suppresses specific innovations, thus warranting some substantial invariance of structural relations[40]. Macro theory is able to conjugate, in the investigation of social reality, both the O-H-O_c observational method (with its quantitative content) and deductive procedure previously discussed and proposed.

Nevertheless, a qualitative gulf separates micro from macro theory; a distance that is not due to the choice of a holistic perspective but results simply from aggregation. The dimension of this gulf varies according to whether one or other of the two following situations is in operation: a) micro variables and macro variables act in the same sense, so that the observation of the latter permits the immediate perception of the behavior of the first; b) the behavior of micro variables are not unidirectional and they take unexpected directions at the aggregate level. Situation (a) is frequent in the economy (think, for instance, of the aggregated and disaggregated functions of demand and supply); in this case, the discontinuity existing between the aggregated and disaggregated levels is to be imputed simply to the fact that aggregation suppresses particular innovations, on which evolutionary movement depends. But the economy also falls under case (b). For instance, the phenomenon of deficiency of effective demand may only be expressed at the aggregate level. L. Pasinetti defines as genuinely macro conditions "those relations that represent characteristics of the whole economic system",[41] and accurately analyzes them. Sociologists are acutely conscious of cases falling under (b), for instance, that individual discontent does not translate into collective discontent and mobilization.

[40] Such an invariant structure permits quali-quantitative mathematical analyses directed to investigate the existence of equilibrium, its stability or to point out the existence of strange attractors shaping chaotic areas.

[41] See L. L. Pasinetti (1993), page. 49.

The true disadvantage of aggregation derives from the fact that the suppression of variables can markedly distort the representation of reality. But this limitation goes hand in hand with some advantages, principally the fact that macro analysis is able to represent some phenomena that micro analysis does not perceive, and also the wide spectrum of methodological tools available to macro theory. However, the above two fields display complementary roles for the development of knowledge. It is important to be conscious of their methodological differences.

2.7 Economic and social planning

Economic and social planning and related instruments of reform have roused great expectations on a world-wide scale, but have been followed by bitter disillusionment. It may be useful to analyze the causes of such unhappy outcomes from the perspective of our inquiry into the method of social thought.

The main cause of the failure of centralized planning has been implicitly set out by our above analysis of the 'necessities' of dynamic economies, primarily the necessity of the market, entrepreneurship and related ethical values. Much more difficult is the explanation of the failures of economic and social planning in market economies.

Some important mathematical approaches to planning came to light in the context of the Soviet experience, for instance the linear programming of L. Kantorovich, L. Pontryagin's maximum principle for the optimal control theory of dynamical systems, and the input-output approach of V. Leontief that flourished after this author's migration to West; but the major usefulness of the first two has proved to concern firms' planning while the major usefulness of the third has been in regard to statistical national accounting. The sixties and the seventies of the last century witnessed an efflorescence of what can be denominated the programmatic approach, which emphasizes *doing* in the context of economic and social planning. R. Frisch, J. Tinbergen, L. Johansen played a leading role in the field. Their teaching was concerned by the main lack of constructivism, that is, an inclination to disregard *being* in the name of *doing*; an issue previously considered but that warrants some further discussion. We shall see that economic and social planning offers the best grounds for a criticism of the constructivist perspective.

Many economists who lean towards the free market have underlined the ingenuousness and abstractions inherent to planning projects. Hayek is associated with some of the most caustic and sarcastic polemics against constructivism in the name of spontaneous behavior. Unfortunately, Hayek did not understand that constructivism and spontaneity mutually feed upon one another, owing to gaps in both of these schools of thought that allow each to assert itself as the remedy for the errors of the other. The more problematic of the two is no doubt constructivism, for its pretension to deviate from spontaneous tendencies infuses heavy error and turbulence into those already contained within spontaneous processes, if a science of the organization of social systems does not exist. One major theoretical consequence of constructivist errors and ingenuousness is represented by the blossoming of the most scientifically consistent kind of spontaneity represented by evolutionary social thought, which has expanded its tentacles into a large part of institutional thought, notwithstanding the intrinsically constructivist nature of institutional phenomena.[42]

The Keynesian discovery of 'the principle of effective demand', which was in the air from the beginning of the nineteenth century and that, as a matter of fact, must be basically attributed to Hobson's analysis of imperialism, opened the door to an age of great reformist hopes and to a large diffusion, in the Western world, of national planning. In fact, during the Great Depression and later, the violation of such a principle took the form of a deficiency of demand and this suggested therapies designed to increase aggregate demand that raised an extensive and attractive possibility

[42] The European Association for Evolutionary Political Economy (EAEPE) provides one of the best instances of the attempt to marry evolutionary and institutional thought. This is expressed well, for example, in the convergence of the institutionalism of G. M.. Hodgson and the social evolutionism of U. Witt.

of social reform related to income redistribution, the building of the welfare state, and increased public spending. But later bitter disillusion followed, caused by the partiality and one-sidedness of the approach and by inherent shortcomings of the diagnosis that will be diffusely considered in the last section of chapter 3.

It may seem that the crisis of economic and social planning contradicts our statement that the organizational view, which stands at the basis of planning, is appropriate to social reality. We need to explain, therefore, why, if our analysis is correct, economic and social planning has failed, the consistency of its constructivist character with social reality notwithstanding. The explanation is that the appropriateness of the vision at the basis of a method is, in itself, insufficient to ensure the correct investigation and management of the considered reality; some other requirements are needed, and these, unfortunately, have often been ignored or misunderstood by social planners. Let us investigate this matter more closely.

The vulnerability of planning is primarily derived from a lack of methodological rules allowing for the definition of realistic postulates in order to warrant the combination of being and doing and make possible the distinction between necessity and choice-possibility. We have seen that in both observational and spontaneity positivism, *being* dominates while *doing* is absent and that, by contrast, doing, i.e. the guiding aspect, dominates in social planning. Unfortunately, however, the reference of planning to being, i.e. *de facto* reality, is weak and confused; it is this that has generated the abstractness and the unconstrained constructivism that are often reproved to the various approaches to economic and social planning. A coherent combination of being and doing does not exist in social thought, as far as we know. More precisely, we have seen that social thinking disregards the selection of realistic postulates, notwithstanding the fact that this is indispensable to replace the control and verification of theories based on facts, such verification being prevented (as we know) by the non-repetitiveness of observed events. It must be added that planning and related schemes of reform constitute some further elements militating against the hypothesis of the repetitiveness of events. This makes it a terminological and substantial contradiction to hinge the (limited) reference of planning to *being* on the observational method. Notwithstanding, economic and social planning has used *strict* observation in the attempt to escape unrealism, as testified, among other things, by the extensive use of econometrics, which is a strongly observational science.

The dissociation between reality and the guiding aspect is well expressed by the distinction between economics (with its laws of motion) and political economy. In fact, the inductive or deductive experimental procedures typical of positive economics are inconsistent with the guiding character of political economy, since such a character (implicitly constructivist) contradicts the hypothesis of repetitiveness, which is indispensable to the inductive or deductive experimental method. Constructivism, specifically the guiding character of political economy, needs, let us repeat, a non-observational method of inquiry into reality. But economic and social planning has not been able to satisfy such a methodological need.

The difficulties and failures of planning can be better understood by returning to the distinction between necessity and choice-possibility. We know from our proposal on method that such a distinction derives from the rules of selection of 'realistic postulates'. The distinction cannot be enunciated otherwise, for instance, through the optimization models that can be considered the canonical formulation of planning. In fact, and as seen in section 3 of the previous chapter, the distinction between necessity and choice-possibility precedes the logical structure of optimization approach. We shall try to further clarify this through some simple considerations.

The optimization principle (taken in Kantorovich, Pontryagin's etc. forms) is just a mathematical technique aimed at improving decision processes. By contrast, the distinction between necessity and choice-possibility acts at a much deeper level; it involves the meaning of institutions, ethical values and the whole substance of social phenomena. A centralized social system can readily turn to the principle of constrained optimization; in effect the Soviet reforms of the 1960s trusted in mathematical optimization to recover efficiency, but in vain. Well, the reason for that failure (and

others) lay in the ignorance of the central planners of the 'necessity' of the entrepreneur, the market, etc. On the other hand, the distinction between constraints and objectives in the model of optimal choice requires the capacity to discriminate between necessity and choice-possibility. In the absence of such a distinction, substantial mistakes can be made in the definition of constraints and objectives. For instance, utility maximization may be pursued, implying a consumerist vision that the modern world should not venture into; furthermore, the objective function may include some ethical values inconsistent with opposing values expressing objective necessities.

We should also take note that constraints may include some technologies that do not represent necessities but only alternative choices to others. Even in the theory of the firm, the use of constrained optimization does not escape the equivocations caused by the absence of the distinction between necessity and choice-possibility. In short, constrained optimization does not remedy (and does not consider) the methodological problems that we have scrutinized. Such optimization is different from and subsequent to the procedure and rules of selection of 'realistic postulates' and the distinction between 'necessity' and 'choice-possibility' considered previously. In the absence of these rules and distinction, optimization supplies a poor support to programming; as a matter of fact, it may cause great misunderstandings.[43]

Planning projects will become weak and confused in the absence of a rigorous distinction between necessity and choice-possibility. As we know, such an absence implies that choice-possibility can easily be smuggled in as necessity by people interested in some choice, while necessities that are not convenient to dominant classes can be indicated as a matter of choice and hence set aside. This will generate heavy inefficiencies, thus leading reform projects to fall into discredit and to fail. Such failures enable the adversaries of planning to proclaim that we must all place our trust in spontaneous processes. In chapter 1, we saw that the distinction between normative and positive side may imply crucial misunderstandings and that such a distinction needs to be replaced by that between necessity and choice- possibility. Well, such a replacement is of a central importance with regard to programming.

Social planning and reforms always present a challenge because reforming actions invariably collide with existing interests and so engender opposition. The almost inert kindness of a lot of friends does not counter the rancor and determined opposition of only one enemy infuriated by the injury of his interests. If it is not scientifically evident *what must be done and what can be the object of mediation*, every social plan and proposal for reform is doomed to fail and spontaneous tendencies will prevail. More precisely, planning and reforming action, if deprived of scientific foundation, will succeed only if they are able to promote fanaticism or obtain the support of powerful interests.

The failures of social planning have been mainly caused by the analytical privations considered above. With significant exaggeration, national plans have sometimes been described as 'dream books'. But if planning is a book it should have been a book with two chapters: one chapter on 'necessities' and one on 'choice-possibility', the latter being a matter of political mediation. Reforms concerning 'necessity' should have priority and should never be omitted or postponed. What remains may be the object of political discussion.

The confusion between necessity and choice-possibility, between what must be done and what may be done, has often caused a deep fracture and contrast between the short and the medium term. More precisely, it has favored the advent of critical conditions that have suggested or determined short-term measures (monetary, budget and demand regulation policies) thus postponing structural reforms. In short, the urgencies of the short run have often been addressed at the expense of their structural roots. In this way, political action became the servant of spontaneous tendencies, thereby

[43] F. Archibugi has argued acutely against positive economics. His emphasis on the 'programmatic approach' highlights the most relevant tools on optimal planning. But this kind of constructivism, which emphasizes doing and almost forgets being and ignores the distinction between 'necessity' and 'choice-possibility', expresses a totally unilateral constructivist feature, which is the main reason for the failure of the method of economic and social planning. See (F. Archibugi 2007), Preliminary draft, Italian.

substantially undermining reform projects. It may be useful to provide a brief illustration of an outstanding failure of economic planning where this is highly necessary, that is, in the presence of extensive advanced and backward sectors and areas, as Italian experience shows.

Italian planning was largely inspired by the Keynesian teaching. The so called Reference Framework of the first national plan used a static Leontief model and the second national plan a dynamic Leontief model, thus taking the sectoral final demand as the engine of the economy. Detailed reference, in the plan, to the question of the territorial dualism represented merely an addition arranged outside the general framework. The industrialization of the South of Italy (almost one half of the country) was mainly committed to capital intensive investment by state industries benefiting from high incentives irrespective of productive efficiency. This, together with high wages paid by the sectors productivity leaders and aimed at promoting mass consumption (consumeristic capitalism) and at establishing constant prices in those sectors (i.e. avoiding prices declining), did not help the creation of employment in the South but, instead, favored a mass exodus from traditional sectors and backward areas, mainly agriculture and handicraft, the abandonment of social and residential capital existing in those areas, and a parallel shortage of housing and urban congestion in the regions to which migration was directed. Only one part of this massive migration from the South found employment in the dynamic sectors of Northern Italy. The consequence was a rapid expansion of a 'refugee sector' (the retail trade and other low productivity sectors with market power, employment in the public administration and other forms of public assistance). The imitational extension to refugee sectors of the wage increases in the advanced sectors, and inefficient public expenditure mainly in the South, fostered a large inflationary potential and a growing public deficit and debt, thus obliging the turn to restrictive policies and hence pushing the economy toward stagnation. These absurdities were favored by a diffused Keynesian conviction as to the expansionary virtue of demand, whatever its content, that contributed to justifying all sorts of waste as useful in order to stimulate growth. Economic and social planning, as largely inspired by Keynesian view, did not propose policies to counteract those pathologies that constitute an unfortunate inheritance oppressing Italian society and stand at the heart of present day difficulties. Such vicissitudes of fortune bear witness to an impressive ignorance of the binary 'necessity-choice possibility'. Some rethinking of the Italian experience of planning was expressed by one of its main authors, Giorgio Ruffolo[44], but within an overall Keynesian view.

A formal model describing this case and its vicissitudes, together with some econometric applications, may be found in A. Fusari (1987).

2.8 Conclusion

The initial development of social theory was heavily influenced by the thought and discussion of philosophers. Later, the separation of social from philosophic thought, fully justified by the deviations from scientific method generated by the links between the two, and the steady advance of specialization have led to the progressive narrowing of the scope of social theory. Furthermore, this provides an unsatisfactory treatment of the ethical-ideological problem, of the organic-functional and conflictual aspects and, more broadly, the distinction between choice and necessity and other related issues. The work of three of the most wide-ranging and famous social theorists – Marx, Weber and Parsons – fully bears witness to the analytical shortcomings of current social theory. The harm that results from this state of affairs, especially in the sphere of the organization and management of social systems, is glaringly obvious, and the present tendency is for the situation to be exacerbated.

We have seen in the previous chapter that reliance upon methodology based strictly on observation (and in this context it does not matter whether it is deductive or inductive-experimental) entails the implicit assumption that everything that happened had to happen and, furthermore, privileges the idea of spontaneous process: from the careful observation of reality (conceived of as necessity) one seeks to derive scientific "laws" as guides to action. We have also seen that the constructivist method that

[44] See, G. Ruffolo (1973) Rapporto sulla programmazione, Laterza, Bari

replaces the observation of being with an emphasis on doing does not offer a more satisfactory perspective; indeed, we have provided an extensive analysis of the shortcomings of such a method with reference to the main ground of its application: economic and social planning.

The existence of the optional-innovative aspect refutes the validity of the observation-verification method. At the same time, it complicates the derivation of general principles. This chapter has sought a way toward possible solutions to these methodological difficulties and a way to remedy the failures of constructivism by delineating a proposal on method able to meet those basic features of social reality and to marry being and doing in the context of an organizational and realistic perspective upon the social sciences.

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