Collana Diagramma

Gabriele Rossi, Marta Rossi, Paolo Sommaggio

THE LAW IN THE SOCIETY OF SEMI-IMMORTALITY

Fundamental Principles

Translation by Camilla Peroni

Index

… to the memory of Norbert Wiener
(November 1894, Columbia – March 1964, Stockholm)

PART ONE

1. Introduction

In contemporary society, the concept of *law* appears problematic if not even debased. Among the main reasons that led to the "crisis" of the law, it can be claimed that the most significant one is the critical situation of the so-called *system of the sources of law*, namely the overall system of rule-production in the Western world. Within closed legal systems such as that existing in Italy, the law, understood as the formal product of state authority, has lost its primacy as the basic organizing principle of social life. This type of law, namely the state's written instructions, vainly attempts at sorting out the increasingly frequent intersubjective conflicts through a multitude of particular and uncoordinated measures whose legal implementation, more and more often, must resort to extra-legal criteria as far as gap-filling and interpretation are concerned.

The main aspect that has been dropped is the idea that the laws, taken in their entirety, may constitute a consistent and orderly *corpus*. Secondly, another element that has becoming increasingly problematic is the very notion of law as an effective tool to resolve potential disputes for it appears to constantly lag behind all the fast-paced social changes. Today, it seems more and more difficult to draw a neat line of distinction between the law and an administrative measure intended to apply to partiular subjects or to regulate certain contingent situations[1]. The discretionary nature of the body of law (of any

country) on the one hand, and the difficiulties of the judiciary in formulating opinions that are sharable in a strong sense, on the other, are unequivocal signs of the limits of the law. However, there is more to it. In fact, in the contemporary times, any attempt to reduce the law to the act of a *particular* will results in the impossibility to overcome the conflict between this and the institutional interpreter involved, inasmuch as (in turn) he carries his own particular will (and yet legitimized by his institutional function). In this situation, we may wonder about the relationship that the judge entertains with the law, since there seems to lack the necessary criteria to justifiably establish the absolute primacy of the latter over the former and the judicial context often exhibits examples of autonomous law making in reliance on case law. The relationship between the law and the judge appears as characterized by an opposing nature for both the poles, as an expression of a "public will", claim to be the carrier of a mutually exclusive value.

On the one hand, especially in times of severe crisis (e.g. Terrorism, Kickback City), the judiciary would allegedly have developed a conception of lawfulness by a "a marked ethical-political-pedagogical inclination, in a self-referential dimension"[2], thereby making lawfulness itself coincide with the individual *ethos* of each judge. On the other hand, the legislator, who on paper holds the monopoly of legality, tends to fall back on a "revanchist" reaction to the attitude of the judiciary, trying to hinder it through a series of actions that are themselves inspired by a factional voluntarism which is deployed through the, however blunt, weapon of the law.

We believe that the truly controversial point resides in the reasoning of the judge, which develops according to the fol-

lowing scheme: his starting point is the law, from which he moves on to introduce extra-legal criteria into his rational path, thereby coming to a final decision, namely the ruling. Such extra-legal criteria constitute part of the *pre-understanding* that is peculiar to the process of interpretation. Quite paradoxically, this mode of reasoning is viewed as a "cure" to the particularity of law and it is aimed at surrogating the loss of universality of law itself. In effect, it is a rather indisputable fact that the interpretation of law increasingly often resorts to the tool of the «constitutionally oriented interpretation» whereby a constitutional cover for the partisan resolution of the judicial body is invoked[3]. In this manner, the appeal to the Constitution serves the only purpose of providing a self-legitimation for the development by the judiciary of ever new and creative interpretations that are increasingly untied from the textual data or the legal precedents, even coming to the paradox of presenting as living law something that is the subjectivist and uncontrollable outcome of the personal and intimate relationship that each judge maintains with the law, i.e. his law, thereby undermining legal certainty and the sense of justice of the other members.

All these situations are characterized by a particularist conception which gives rise to a number of problems in the systematic reconstruction of law and whose origins are to be found in a lack of confidence in the possibility of restoring the soundness of law through the formulation of clear criteria of orderability. The first consequence of this renunciation has been a significant multiplication of choice possibilities as far as the ever-changing circumstances of experience are concerned, thereby leading to an exponential increase in the extent of discretion of each individual judge with potentially impetuous

results. From a logical standpoint, we may state that the legal judgement is not *functional*, inasmuch as a function cannot assign two different results to a value; in computer science terms, we may say that the ruling is not *algorithmic* for an algorithm always produces the same output given a certain input set. In social terms, the problem is of the utmost seriousness since the individual's level of trust in institutions is proportional to the confidence in a fair and impartial judgement in the event of litigation.

Therefore, the main purpose of this work will be to discuss the proposal of a new concept of law which is formally suitable to be applied in practice and which is able to dramatically minimize the element of discretion in judgement. From a conventionalist and strictly liberal perspective – later, we will examine the implications of this socio-philosophical *background* – we aim at trying to determine what holds together different individuals who share a certain set of principles and who are coordinated in such a way as to constitute the Law starting from their first act of adherence.

1.1 A clarification of the title

Before undertaking the path towards the formulation of the set of "new" principles we present in this work, some preliminary clarifications are necessary. First and foremost, we simply could not help writing this book. From the very earliest times of the now thirty-year-long research work of our *iLabs*, every cutting edge sector in the domain of cognitive sciences has been dealt with and studied in detail: from artificial intelligence

to medicine, from mathematics to psychology, we have always tried to give our small (and sometimes conspicuous) contribution.

As explained several times in *Semi-Immortality*, the interaction between science and technology alone is not sufficient to achieve either our first-level goal, namely the identification of all the rules of the Game or our second-level objective, i.e. the indefinite extension of human life. If it is true that physics, artificial intelligence and genetics, coupled with the spectacular technological advances, are significantly contributing to the understanding of the Rules of the Game, then it is equally reasonable to state that we feel an increasing need to attain the Solution – if we ever do – in a *certain* manner. Both from a "foundational" and (most of all) an *etihcal* standpoint, we need to structure our internal system in a way that is rigorous, functional to the ultimate goal and consistent with our conception of reality[4]: to be conventionalist essentially implies to *propose* – and not to impose – a vision of the world, and of ethics in particular, where nothing exists "in itself", the boundaries of things are purely *arbitrary* and the act of drawing such boundaries is indispensable for reasoning and attaining the Solution[5]. However, like many before us, we believe that the need for ethics coincides with man's urgency to *choose*. This typically involves the recognition of both a purpose and constraints to action ("in order to achieve X I must *not* do Y"). From a liberal and conventionalist viewpoint, what is basically *right* is what leads you closer to the goal, what is *wrong* is what drives you away from it and a moral principle is something we wish *not* to violate for the very "simple" reason that compliance with it draws us closer to the objective. Inasmuch as we believe that nothing exists "in itself", by the same token we find it difficult

to argue that one goal is inherently more valuable than any other: obviously, selecting the comprehension of the Rules of the Game (namely, the ultimate laws that govern reality) as our decisive goal has been an arbitrary choice. It had the distinctive advantage of being more convincng than other choices available as well as of bringing about extremely interesting "benefits"!

We expect dramatic changes in some of the most fundamental concepts of our life: from the notion of "I" and reality to the wonders of medicine and the most sophisticated *mind uploading* nanotechnologies, the majority of our cognitive and social pillars will not stand the pressure of change. This is why it is our task (and our duty, in a sense) to be adequately *prepared* to this event and to build a society whose new principles, values and judicial procedures must be computable and orderable, a society that promotes the development of the individuals who decide to join it. And it is precisely in this context that *The Law in the Society of Semi-Immortality* finds its genesis.

1.2 Overcoming the current crisis

We must refer to the concept of *cosmos*, namely harmonious order, for a society that aspires to a radical extension of life expectancy. Therefore, we can assert that the *nomos* of Law in this new society is the pursuit of *cosmos*, i.e. order in a precise sense of unity that holds all phenomena, including the social ones, together.

Unlike the other term for order, *taxis* (which is more accurately referable to the idea of a static order), *cosmos* denotes the notion of a dynamic order in motion. The validity of such approach as referring to this particular idea of order seems to be supported by the etymos of law itself since it is possible to realize that the etymological derivation of the Latin word *lex* is the Greek term *légein*, which means "to connect, to gather together". Hence, we can state that the proposal laid out in this book corresponds to the elaboration of Law as the element by means of which all those who aspire to the prolongation of life are connected in an active, harmonious order.

In fact, none of the contents of *The Law in the Society of Semi-Immortality* can be regarded as extrinsic to the goal of the Solution to the Game, nor this can prescind from the cooperative activity of individuals. In other words, it expresses the intimate ordering determined by and in view of the (full) disclosure of the Rules of the Game. Hence, also the Law, as a substantial part of this movement of knowledge, ensures the coordination of the social "capsule" heading towards the complete unveiling of the Game.

In this it shows its alethic (from the Greek *a-letheia* meaning unveiling) character and thus its closeness to Truth . Furthermore, we can justifiably affirm that Law, namely this Law, is cybernetic in a twofold sense. On the one hand, it acts as the instructions of the ferryman, namely it allows to drive the social group to the goal as in a vessel, while on the other hand, it exhibits a significant suitability for symbolic synthesis thanks to its characteristics of real generality and abstractness, univocity and atemporality. Moreover, its rationality permits orderability, namely its organization into a hierarchical and non-

contradictory system. In a nutshell, the law ensures orthonomy and the next step will be that of computability, that is its univocal translation into signs that can be handled by *intelligent* systems.

1.3 Overview

The following pages will focus on detailing the path we have followed within the *iLabs* as concerns the concept of law for a society that aspires to the indefinite prolongation of human life span. The text is divided into two main parts: in the first section we have tried to identify the political, philosophical and juridical foundations of the proposal that we will analytically delineate in the second half of this work. In fact, this latter part contains the presentation of the new Constitution we have formulated and an in-depth analysis of the principles set forth therein. These are the following seven:

The Principle of Reality
The Principle of Harmony
The Principle of Responsability
The Principle of Utility
The Principle of Quality
The Principle of Wellness
The Principle of Worthiness

The eight element of the new Constitution, namely the Organization of Power, includes the elaboration of the political and organizational structure of the *new* society; it is not a Prin-

ciple strictly speaking, rather, as it will be clarified later on, it falls halfway between the Principles (which are considered immutable) and the procedures (which by contrast are subject to change).

[1] Not to mention the fact that the law now tends to be more and more related to the goals that the recipients deem practical and useful so that the process of law formation is carried out through political and participatory forms which solicit the individual social groups to discuss with the state legislator the same norms that shall apply to them. The increasingly widespread implementation of this model of law making de facto reduces the perceived binding nature of the provision itself: on the one hand, those who have been left out of the negotiation process will feel less bound by legal rules to the formation of which they have not participated. On the other hand, those who have been part of the process will feel bound by the law as long as it reflects their contingent particular interests, only to demand continuous modifications and/or retractions as such interests change over time.

[2] See G. Fiandaca, *Il diritto penale tra legge e giudice*, Cedam, Padova 2002, pp. 17-18.

[3] In point of fact, also in this case the Constitution is invoked according to a particular interpretation which (just as several different others), in most instances, is made possible by the same vague formulas characterizing the 1948 text. What seems to validate this point is the fact that in its recent decisions the Constitutional Court has more and more often referred to the concept of "living law". This expression would precisely serve the function of providing the preference for a certain interpretation of the constitutional text with a foundation, although it actually refers to the reading adopted by the judiciary.

[4] For an in-depth examination see A. Canonico – G. Rossi, *Semi-Immortality. The indefinite prolongation of life*, Lampi di stampa, Milano 2007.

[5] See Canonico – Rossi, *Semi-Immortality. The indefinite prolongation of life*, Lampi di stampa, Milano 2007, p. 22.

2. Historical-Political Section

2.1 The birth of individualism

We begin this section of the book with an overview of some basic notions related to a particular model of reference[6] whose usefulness will become apparent later in the discussion, i.e. the model deriving from the evolution of the concept of *individual*. After a brief analysis of the most usual acceptation of this term, we will try to examine how throughout the modern age (whose origins can be placed, by convention, at the beginning of Humanism) it has come to acquire a specialized meaning and how it has evolved into a politico-juridical perspective known as *individualism*, namely an approach that puts the individual at the very core of its analysis, thereby assigning the individual a neuralgic role and an independent value in the explanation of social phenomena.[7].

The term "individual" comes from the Latin *individuus* literally meaning non-divisible (in fact, this word is composed of the prefix *in* and *dividuus* – which seems to refer to a literal translation from the Greek *a–tomos* which in turn is a compound of the privative prefix *a* – and a derivative of the verb *témnein* meaning "to cut", "to divide").

The echoes and traces of this term, in the sense outlined above, i.e. that which is not subject to division, can be found in

the Presocratic philosophers, in particular Democritus. Later, Plato has argued that the *individual* is characterized as the inferior essence (i.e. not further divisible) consisting in the maximum understanding and the minimum extension and, as such, it cannot be the object of science[8]. According to Aristotle, the individual is, ontologically speaking, *primary substance*, while preserving the character of indivisibility. Also the Stagirite, like Plato, maintains that it cannot be the object of science. In other words, Aristotle sees the individual as *species*, inasmuch as it results from the division of the *genus* and it cannot itself be divided[9].

In the twilight of the classical age, the logicians of the fifth century supplemented the character of indivisibility with that of *unpredicability*. After this first glimpse into the birth and early development of the concept in question, we are able to argue that the individual can be conceived in two main senses. As far as the former, i.e. the physical (and, then, ontological) sense is concerned, the individual is seen as that which cannot be materially divided, namely reduced through a process of analysis; on the other hand, the latter, i.e. the logical sense, articulates the characteristics of unpredicability, namely it denotes that which cannot be predicated of many things.[10]. During the Christian era, the term has acquired anthropological overtones, namely it began to be used to indicate the *subject*[11], a projection of man and therefore the focus is extended to encompass not only the purely physical-natural sphere, but also rationality, which is nevertheless understood as the apogee of human development, moving from individual to *person*. Hence, the substance that has developed traits related to reason becomes the unique expression of indivisibility coupled with rationality as exemplified in the Boethian concept of person[12]. Thus,

Scholasticism conceives the individual as a rational being undivided in itself and divided from every other being. In other words, a given entity can be recognized as an individual when it is not possible to decompose it without destroying it as such[13].

Let us further clarify this concept. According to the medieval authors, when a given substance cannot exist unless it is joined to another, it is impossible to separate the former from the latter because their union depends on a "natural bond". Reason is, therefore, inseparable from the individual substance. Yet, the individual is a being whose natural tendency is to distinguish itself from all the others, thereby revealing its ability to act and exist without any reference to anything else but itself, namely its own reason. Hence, this perspective maintains that the individual is independent of any other entity in its being and acting: in fact, it is a whole in itself and not a part of something else. While in the works of Nicholas of Cusa it is possible to identify the tendency to relate the individual to the rest of reality, in the thought of Giordano Bruno the celebration of the uniqueness of each individual becomes a crucial point that would find favour with both the Platonists and the Aristotelians of the Renaissance[14]. In fact, more than in any other period in history, the Renaissance emphasized the *heroic* primacy of the individual Self up to its crystallization into the Cartesian *cogito*. Nevertheless, the problem of distinguishing among different individuals remained untackled by this cultural horizon; this issue was later dealt with by Gottfried Wilhelm Leibniz who conceived a plurality of individuals (i.e. monads) as interconnected through a pre-established harmony[15]. In fact, Leibniz has picked up a long-standing tradition tracing back to John Duns Scotus, according to which the mode of being of the individual is characterized by an "ultimate determination"

or "ultimate reality" which constitutes it and which contains an unlimited number of determinations: and it is thanks to such unlimited number of determinations that the common nature contracts into *this* particular individual[16].

With the advent of the modern period, the individual has become a central concept not only in politics and law, but also in the emerging discipline of anthropology, and such issue has been developed to a fuller extent. While on the one hand David Hume holds that man cannot be regarded as an individual, but rather as a variable collection of different representations which are linked to each other by associative connections[17], on the other hand Immanuel Kant sees the individual as a formal entity able to shape everything that is the object of experience. This cultural context conceives the individual as the element that underlie the explanation of the phenomena of social aggregation: in fact, it quite naturally led to the thorny question of the relationship among the individuals. In the modern era, the problem can be stated as follows: trying to understand what relationship exists between the individual as a single unit an the community as an aggregation. Or, in other words, searching for a rational explanation of the social, political and legal aggregation. However, what marked any attempt to represent this phenomenon was the use of the concept of individual as the very basis for any explanation about the birth of the political community and the state. Thus, it is in this sense that the several views taking the notion of individual as their starting point came to be referred to as perspectives centered on *individualism*[18].

2.2 The political and legal individual

Political and legal individualism may reasonably be classified as a subgenre within the broader genre of the so-called ethical individualism, which, according to Guido Fassò, also encompasses economic and religious individualism that are nevertheless beyond the domain we deem to be of concern here.

The former, i.e. political and legal individualism, is the cultural view, the model of reference, according to which every individual has a higher and more fundamental value than society: in short, the individual is the justifying element that underpins the attmpt to explain, in rational terms, the Constitution of social reality. Taking a broader definition, individualism characterizes every moral or political doctrine that confers a higher value upon the individual than upon the community to which he belongs. As we have seen, this is a very old line of thought: in fact, some scholars point out that the Sophists had already affirmed the wholly conventional character of every political community. On the other hand, while reasoning from opposite ethical premises, also the Stoics came to adhere to an individualistic position inasmuch as the full participation in universal law could only be achieved through the exercise of individual rationality. This cultural approach, taken to the extreme, would result in the argument that the infinite value resides in the individual while society has no value: this path clearly leads to utopian and anarchic solutions[19]. On the other hand, in its most moderate form, individualism has arisen in the modern period as the very foundation of liberalism, thereby taking a key role within the more strictly legal question of natural law.

And it was precisely the modern period that saw the emergence of the need for a rational justification of the social and political community. Let us try to understand why this has occurred. First, we may note that classical *cosmocentrism* has given way to a historical phase known as medieval *theocentrism*, where the idea of God was the ultimate reference, the foundation also of the political community. Then, the anthropocentrism that marked this cultural context has led scholars to question the rational basis of power and the rise of the political community[20]: in fact, once the idea of divine authority as the unifying foundation of the community and source of law began to fade, a growing number of rational justifications that gave primacy to either the individual or the community set in. Here, our interest is following the historical evolution of the doctrine of natural law which crucially characterized the legal thought of the seventeenth and eighteenth century and which is among the most distinctive features of the liberal-individualistic view.

Notwithstanding that some rely on purely rationalistic premises (thereby renewing the classical conclusion of Stoicism) while others rely on empiricist premises (thereby delving more in depth into epicurean issues), the proponents of the school of natural law agree on the primacy of the individual over the collective. According to the natural law theorists, the individual is assigned subjective prerogatives (i.e. the so-called individual rights) of considerable import. The Rationalists introduced the so-called Cartesian method into the political and juridical domain, namely, building from universal, self-evident premises they aimed at deriving a set of rules (i.e. natural laws) which are founded on the reason of the individual. And in fact, individualism, rationalism (i.e. the autonomy of reason in establishing the representation of reality with respect to any other

entity)[21], and secularization (i.e. the departure from transcendental justifications)[22], represent the three key issues that mark modern natural law theory in its entirety. According to Fassò:

«È la soggettivizzazione del diritto naturale, attinta dai giusnaturalisti di indirizzo cartesiano allo spirito dell'Umanesimo e del Rinascimento e che culminerà nel Kant, ciò che distingue il giusnaturalismo moderno da quello della antichità e del medioevo, le cui formule apparentemente ripete»[23].

Fassò maintains that Kant's merit lies in having brought to completion what is referred to as *Enlightnement individualism* that «giunge a completa sistemazione il movimento di idee rivolto a trasferire la realtà e la verità dall'oggetto al soggetto, e a fare di quest'ultimo il principio tanto della conoscenza quanto della moralità»[24]. Even jusnaturalists of empiricist orientation, albeit from different premises, have converged on individualistic subjectivism, according to which the individual is primarily a center of instincts, impulses and needs rather than as a rational being. However, also from this perspective, the individual is viewed as the very end of the political and juridical order: in fact, the community is defined as a function of the individual himself. As we shall see in greater depth in the next paragraph, it is possible to derive at least two other elements of crucial importance for all the authors of the modern school of natural law, namely the state of nature and the social contract. Further support to the individualistic perspective of jusnaturalism later came from the eighteenth-century critics of the sixteenth-century doctrines affirming the existence of innate rights (prerogatives), in particular within the Lockean liberal tradition. And it is precisely John Locke in his *Letter on Tolerance*, who states that the role of the civil sovereign is limited to the care

of the temporal affairs: this passage reveals not only the individualistic perspective of the author, but also his liberal orientation. This first germ grew, especially in the Anglo-Saxon countries, into a liberalistic tradition that drew its cultural roots from the political and juridical individualism.

It is a fairly known fact that the term *individualism* has been extensively used also by authors highly critical of the French Revolution: in fact, they employed this expression to refer to the social atomism resulting from the destruction of the *ancien régime*. Later on, the contribution of Alexis de Tocqueville[25] was particularly important to give a greater conceptual substance to individualism. By this term, the author means to designate a distinctive feature of American ethics, namely a sort of moderate selfishness. Building on Adam Smith's ideas as well as on the unrestricted freedom of enterprise advocated by the free-market apologists of the nineteenth century, the liberal tradition has developed the theory of economic liberalism thereby leading several authors to speak of an economic individualism in negative terms. The assumption underlying this cultural approach is the correspondence between the common good and the individual good. Both Adam Smith (as he maintains in *The Wealth of Nations* of 1776) and the Physiocrats hold that the function of the natural order, which they believed to exist in economic phenomena, is precisely to preserve such correspondence. This period witnessed a significant change in what until then had been the model of reference of the *individual*: in fact, there was a shift in the conception of this term from referring to an in-divisible substance to referring to a standard of order (hence the terminological change into individualism). This reveals a fundamental ambiguity in the use of the term individual; in the following paragraph we shall see how this ambiguity

can be understood and, subsequently, dissolved. Throughout the twentieth century, there has been a considerable transformation in the political and juridical reference framework underlying individualism, thereby leading it to restrict itself to a methodological horizon. Within this context, methodological individualism argues that the individual has explanatory priority as the fundamental criterion for the organization of the sets whose basic unit is the individual himself. Therefore, individualism has evolved into that epistemological orientation according to which any social phenomenon is directly ascribable to the action of the different individuals. In other words, social phenomena must be broken down into individual actions in order to be understood[26].

This is why the proponents of methodological individualism argue that their antagonists (i.e. the advocates of methodological collectivism) are mistaken in considering non-individual entities as existent. In other words, the most serious misconception in which this cultural approach has fallen would be its treating abstract entities such as the state as subsistent and concrete, without realizing that these entities have «no existence and reality outside of the individual members'actions»[27]. According to Friedrich August von Hayek, for instance, methodological colllectivism would be constantly marked by the tendency to consider concepts such as "society" by the same standards as given objects whose laws can be be discovered by observing how they behave as "sets"[28].

In the contemporary era, within the cultural category of methodological individualism, we can identify two main versions: a psychologist version and a rationalist version. The main difference among these two approaches lies in their conception

of the individual action. Depending on whether the action is regarded as a product of individual psychology (e.g. John *Stuart* Mill) or as a result of the so-called logic of the situation[29], we are dealing with a different individualistic approach. From the latter, Popperian perspective, an action is explained when it is shown that it is rational given: 1) the intent that can be ascribed to the subject and 2) the constraints imposed by the situation that must be reconstructed from the standpoint of the subject himself. It is fairly uncomplicated to realize that the concept of intentionality plays a crucial role within this theory, inasmuch as only the individuals are recognized as capable to act, namely to substantiate intentional actions. In this sense, intentionality becomes synonymous with the ability to understand and evaluate the given situation within which one operates in order to fulfill interests and desires. Both Hayek and Karl Popper agree that the very existence of unintended consequences of intentional actions present the strongest criticism to psychologism. Nevertheless, the true element of originality in contemporary methodological individualism (i.e. after Hayek) is precisely the study of the *unintended consequences* of intentional actions. Within this context, collective phenomena are regarded as distinct from the sum of the deliberate actions of one or more individuals[30].

2.3 The modern concept of individual

Today the term "individual", although widely used in contemporary philosophy as well as in important national and international legal frameworks[31], is nonetheless still loaded with

metaphysical-substantialist purports. In fact, as it has been amply show, it immediately hints at a certain image of reality.

In the preceding pages, we have seen that the concept is related to the idea of indivisibility. This idea, inasmuch as it suggests the termination of any process of division, decomposition (or analysis) of the whole into separate elements, is evocative of both an ultimate horizon and a non-ultimacy, and, as we shall see, it is in this sense that, though with some significant peculiarities and ambiguities, it replicates the dream of Western post-classical metaphysics[32] of attaining an ultimate and definitive Truth understood as object and foundation. On the other hand, the fundamental ambiguity, which was brought about into modern thought by the concept of individual, rests on the fact that it can be understood in a twofold and conflicting sense depending on whether the individual is conceived as a substance or as the final point of one or more procedures. This is the line of thought we have encountered a few pages above in our discussion of methodological individualism. In fact, something is in-divisible either because it reveals a substance that is ontologically unsuitable for any process of division (whether understood in a physical or cognitive sense), or because it achieves the "result" of that same operation; in other words, it is the outcome of a procedure that runs to the end of its course. In the former case, the term *individual* refers to a reality which cannot be further reduced: in fact, it rejects the action of division. Therefore, this term characterizes said reality in purely negative terms, i.e. in the sense of a mere opposition to the power of knowledge and action. In this case, the word *individual* denotes what is referred to in terms of a pure resistance and it expresses the failure of the logical faculties and practices, namely a limit, a *non*. By contrast, in the latter case,

what I am talking about is none other than my own procedure of which I state the conclusion in accordance with its formula, and I use the term *individual* to refer to the outcome of the last and final step. Here, the individual can be viewed as the crowning realization of practical and logical faculties.

This particular ambiguity has marked the path of modern political thought that, on the one hand, builds on a conception of reason as the faculty of calculation (Thomas Hobbes), and which, as such, should be characterized as a purely manipulative process rather than as a cognition that has a theoretical dimension. On the other hand, through the notion of individual it conveys a merely negative conception of man: man is portrayed as a resistance (i.e. a constraint, an obstacle) of varying extension, in every domain of sociality, be it natural or civil, standing in opposition either to the other man or to the state. Indeed, it is a mystical acceptation of man suggesting that man should be referred to with a purely negative terminology such as that expressed by the term *individual* which allows to put aside every problematic issue, every suggestion of mystery to focus instead on the simple measurement of his relations of power. Obviously, this has led the very possibility of attaining a positive conception of man to be put in question or, however, to be considered unnecessary and overly problematic as opposed to the simplicity of measuring the phenomenal relationships between individuals. It is the paradigm of classical physics, of mechanics that builds on the force of attraction and repulsion between bodies, namely the physics of forces which reached its apex in Isaac Newton's work on the Law of Universal Gravitation (a paradigm that became a representation tool for the social and political trajectory as well).

With some proper specifications, the concept of *system* may be successfully used to build a representation of the individual not in merely negative terms. In fact, it introduced into the Western thought the idea of a multiplicity of elements that are connected to one another by a relation able to turn them into a given unit: the system has its own identity and distinctive capacity with respect to the others, whereas the traditional concept of individual, due to its purely negative construction, does not.

Given this feature, the concept of *system* has been used to refer to different types of approaches through which multiplicity is brought back to unity. The most prominent attempt of *reductio ad unum* is the so-called deductive system of truths of the rationalists (i.e. Leibniz and Christian Wolff) which recovers the unity of the plurality of propositions that constitute a system in their all being derived by deduction from the same initial premise: in a nutshell, they are but different modalities of that same premise. The minimum scope of the concept of system leads it to coincide with the concept of *order*: a multiplicity of different elements that are ordered on the basis of an extrinsic criterion. Nevertheles, the advancements in the field of systems theory (Ludwig von Bertalanffy), and the more recent studies on complexity, have emphasized the epistemic value of the concept of *system*: in fact, at the current state of our knowledge, it is not always possible to predict a phenomenon by studying its micro-parts and this calls for a change of perspective in favour of a more "holistic" (or systemic) modelling. Therefore, the analysis of "emergent behaviours" may partly compensate the current lack of data and theories on the microstructure of an event.

Moreover, these characteristics appear, to a large extent, general and they allow to formulate a hypothesis of *isomorphism* between the systems, which is particularly useful and rooted in the formal nature of the concept of system itself. In fact, the system is a formal concept inasmuch as it refers to the form of a set of relations and yet, for this same reason, it allows to preserve the fundamental characteristic of indivisibility: the separation of the elements, the abandonment of the criterion of relationship, or its replacement with another one, lead to the deterioration of that specific unit, regardless of whether this happens in favour of another unit or not. But, unlike the negative version of the individual, it allows a positive connotation of that identity which is heuristically and operationally extremely valuable. The complexity of the system allows to identify both a space that is internal to the system (i.e. which is given by the elements in their relation) and a space that is "external" to the system (which is given by everything that is not considered to stand in the same relation and that can in turn be positively connoted inasmuch as it is itself conceived in systemic terms) and to discuss the relations subsisting between these two spaces.

Hence, there is both an "inside" and an "outside" to the system; it is possible to think of an "entry gate" (*input*) and an "exit gate" (*output*) and, given the formal nature of the concept (which can be maintained with respect to the most varied actual configurations), it is legitimate to use different levels of representation of the *system* (for instance, various units of time) which, depending on the specific requirements, express its persistence or change: we can therefore speak of states of the *same* system or of different *systems* depending on the context of use.

The modern account on the necessity and function of the state found its main instrument in the concept of individual as the basic notion to think about man. Throughout modernity, the individual is man himself, even though the term preludes a progressive de-anthropo-centralization of thought. With the emergence of the ambiguity we have discussed above, the individual becomes a sort of blind spot of thought whose rigour is steadily lost as it is used as the ultimate foundation of society. Hence, the conception of individual as a *system* today is an extremely valuable heuristic tool. On the one hand, it does not dissolve the conceptual unity of what we refer to as man at the corresponding level of abstraction; on the other hand, it provides us with positive tools for the representation of the many forms it may take since it is referable to numerous totalities, namely those it is inserted into and those it relates to. The "system man" thus becomes the form of that particular totality which condenses certain elements into a given relationship. It expresses, in a well-defined state, a certain complexity and it emerges at the appropriate level of abstraction. Hence, the individual can be referred to as a system to the same extent man is referred to at the level of abstraction of modern legal and political philosophy. To resort to those "modern" concepts (such as intent, contract guilt, sentence, etc.) which emerge at that particular level is useful, both heuristically and practically; that is not to say that man's possibility of analysis has been exhausted and thus that the option of using other, distinct concepts which emerge at different levels of abstraction is precluded.

From the above it follows that, inasuch as he is a system, also the individual/man is characterized by a multiplicity of

related elements: the individual (system) is a plural unity which lends itself to be represented in different states and whose *modification over time* is therefore representable inasmuch as it is it determind by relations with other systems (which we shall refer to as *society*, *state*, *community*, *intermediary bodies*, etc). In turn, the various systems in relation to each other can be identified as other systemic unities whose relationships affect the latter, thereby generating different levels of complexity which is the product of a bundle of recursive relationships. As already mentioned, within this framework, it is possible to recover many of the key political and juridical concepts of modernity provided that there is a greater awareness of the fact that they do not identify any ontological structure, nor any metaphysical category. The use of such concepts becomes an indicator of the level of abstraction of the discussion and it is intended to express the situation of a system in a given complex state since it is thought as immersed in a series of relationships with other systems that are often identified by the same use of those concepts.

Hence, the concept of *contract*, for instance, indicates the idea of considering two (or more) systems-man at the level of abstraction that identifies a specific state in which their relation (i.e. external relationship between the systems) can be phenomenologically represented in terms of "will" and the internal arrangement of the elements of the system man can be simplified up to be bi-polar (representation of reality = knowledge and will = action). This representation may be sufficient for certain applications, and several combinations which redefine the relationship between the system at the same level of abstraction may be referred to it: for instance, one may speak of "error" (i.e. false representation) and redefine the relationship

between the systems in terms of "liberation from the contractual obligation" and "compensation".

Therefore, the traditional statutory discipline can be seen as the description (i.e. juridical qualification) and the determination (i.e. juridical prescription) of the relationships between systems-man which are identified at a certain level of abstraction with the elaboration of the categories of state and relation which pertain to it. The same applies to the traditional concepts of criminal law such as negligence, malice, partial defect of mind, dangerousness, etc. As already stated, the use of certain concepts and categories may suffice to identify systemic unities at a given level of abstraction (this is especially the case when those concepts and categories are highly technical and exclusive). This also implies that they use the language that is most adequate to the relevant level of abstraction to express the necessary activity of selection, inclusion and exclusion which is inherent in every reality that exhibits a minimum degree of organization: in our example, "will" discards all those elements which may render such concept problematic and which may be adequate to restate the systemic reality of reference, especially by pointing out the need or usefulness of modifying the level of abstraction.

2.4 The individual as a system

The historical and political progress, for it is of progress we are talking about, which has characterized the concept of individual throughout the centuries, has led humanity to a "healthy" departure from the radical anthropocentrism that,

for obvious reasons, has always dominated this area. The concept of system conceived as a set of structures that, from time to time, assemble into aggregates has given a remarkable contribution to our view of the world and ourselves. From a conventionalist perspective, just as we find it difficult to speak of things in themselves and "fixed" structures of the real, so the concept of individual is under the same theoretical influences. As we argue in *Semi-Immortality*[33], we believe that reality is composed of matter and information and that these are, at the same time, two closely related ways of interpreting reality. A thought changes a physical state of our brain and it can lead us to undertake a certain action in the exact same way as one line of software code is able to modify the internal memory of our robot and make it raise its mechanical arm.

The reality around us is made up of systems defined as any aggregate of elements linked to one another. There are two main aspects that stem from this conception of the world: first, the loss of the qualitative difference between the systems that compose reality (i.e. the theoretical renunciation of strong anthropocentrism), second, the isomorphism between all the systems that are taken into consideration. The former implication has positively obliged us to make the concept of system, and the system man in particular, rigorous; in fact, from our standpoint, a *system* does not exist in itself, but it only exists in our mind as a conventional aggregation of the manifestations of the real (this codifies the idea that, at the ultimate level, no system is superior to any other). The latter implication, which is closely related to the former, has allowed us to make a choice, however arbitrary and functional to our goal: avoiding any form of "conceptual partisanship" has indirectly enabled us to distinguish the different levels of intelligence of the systems

and to decide to take the system man, rather than any other as the starting point of our rigorous approach. In other words, it all depends on the point of view, the spectacles with which we look at the world. In our opinion, the truly important element is the ability to preserve theoretical rigour at all levels. In particular, for the sake of accuracy, the value of the concept of system and computability is so high in every facet of reality, and most notably society, that, all things considered, we believe that it is a good convention.

2.5 Society as an agreement and as a system

At this point, we have defined some fundamental conceptual tools, such as the notions of system and level of abstraction, which allow us to review the hystory of modern political and legal thought from a different perspective as well as to begin a detailed discussion of the categories employed in the Constitution proposed herein. The construction of the civil institution by a group of individuals in the natural condition is characterized by a social contract wherein the politico-legal-institutional categories are somehow the abstract result of the single individual forces. Particularly significant in this respect is the famous cover of Hobbes 's *Leviathan* where the monarch is represented as made up of the set of individuals whose forces are combined in him (the sword held in the right hand precisely symbolizes the whole power that he is endowed with) and he presents himself as the very culmination of the possibilities of representation at that particular level of abstraction (on the left, the ruler holds the symbol of religious power by means of which he pointedly places himself at the top of the possibilities

of thought: neither other possibilities nor superior levels of abstraction are given).

The cultural perspective that identifies an agreement (or a stipulation) among individuals as the foundation of the political community is referred to as *contractarianism*. Although it has ancient origins (the Sophists are generally regarded as the first to embrace this conception[34]), it was with the decline of the (medieval) justification of the divine origin of the state that the contract became the cardinal element to explain the social, political and legal community[35].

The first germ of a contractarian theory of power already emerged in the eleventh century in relation to the Investiture Controversy. In fact, several authors formulated the theory according to which, for Christians, the obligation of obedience was limited due to a clause of resistance to the emperor (Henry IV) in the event the ruler failed to comply with a series of commitments related to the covenant of subjection which he was supposed to have entered into with his subjects. These doctrines were later developed by the authors of the Protestant Reformation. The Calvinists are believed to be the first to resume contractarian theories in order to vindicate the right of the people to revolt against the king if he failed to fulfill the commitments he had taken under the original contract. In opposition to the divine right monarchy, power was to be conceived as the expression of an agreement between the sovereign and the people, which had to define the fundamental rules to which the king was bound in the exercise of his government. As we shall see, this construction was later resumed by modern natural law theory, and by Locke in particular. In fact, this is precisely the conceptual framework that would then

be used to lay the foundations of the modern architecture of constitutional states, where certain rules, especially those concerning the law-making process, are regarded as particularly qualifying and foundational. Another significant antecedent that should be taken into account here is given by the figure of Johannes Althusius who relied on contract theory to explain every form of human association. In the sense intended by this author, each individual can coordinate with other individuals, thereby becoming a community, only if there exists an agreement in this sense[36]. However, the contract defines at least two phenomena. The former is concerned with the sphere of relations between a ruler and his subjects, while the latter identifies the relationship of individuals *to each other*. These two phenomena, which are characterized by distinct nature and development, are explained by resorting to that particular contractual form known as *Social Contract*[37].

In fact, it was modern natural law theory that made the contract the foundational element allowing to advance a rational explanation of the transition from the individual to society. The contract came to define a «costellazione concettuale del tutto nuova e del tutto funzionale a quel sistema di dominio che è lo stato Moderno»[38]. In order to gain a better understanding of the structure of contract in the modern period, we shall try to examine those authors whose work better lends itself to this task in a more analytical light. Let us begin with Hobbes who uses the contract to justify the absolute power of the sovereign. The man of Hobbes is hedonistic and unconnected for he is so radically individualistic that he can be defined as an atom. He is also independent and self-sufficient inasmuch as he is endowed with calculating reason. Man's life is governed by the law of nature guiding the individual towards self-

preservation and by the *jus in omnia* (i.e. power over everything). In the state of nature, the incompatibility between these two prerogatives leads to irreconcilable conflicts: hence, the state of nature is the realm of the *bellum omnium contra omnes*[39]. Thus, each individual's survival is threatened, and this danger stems from the fact that everyone can do everything (i.e. everyone is entitled to everything). Hobbes writes:

« If now to this naturall proclivity of men, to hurt each other, which they derive from their Passions, but chiefly from a vain esteeme of themselves: You adde the right of all to all, wherewith one by right invades, the oter by right resists, and whence arise perpetual jealousies and suspicions on all hands, and how hard a thing it is to provide against an enemy invading us, with an intention to oppresse, and ruine, though he come with a small Number, and no great Provision; it cannot be deny'd that the naturall state of men, before they entr'd into Society, was a meer War, and that not simply, but a War of all men, against all men; for what is WAR, but the same time the will of contesting by force, is fully declar'd either by Words or Deeds?»[40].

According to Hobbes, the (natural) state of war can be escaped only through the use of the instrument of contract, namely the logical device that allows to lay the foundations of political, and then, legal obbligatoriness. Th content of the contract comprises two elements: the commitment to forgo the exercise of power over everything (i.e. renouncing his *jus in omnia*) and the unification of one's will with that of the sovereign which means abiding to the will of the sovereign. This allows to prove the theorem of reason according to which the individual follows the path towards self-preservation. Within

this perspective, the contractor shall *surrender* his individual prerogatives, he does not transfer them: in fact, there would be no point in transferring them forasmuch as everyone is by nature entitled to everything.

According to another author, namely Pufendorf, the first phase of the contract consists in the union of wills « to unify the will of all as concerns the ends of society»[41]. This is the so-called *pact of union* that makes it possible to overcome any divergencies over the most suitable means to achieve the common goal. This is followed by the pact of submission, namely the constitution of «some power, which shall be able to inflict a present and sensible punishment on those who oppose or hinder the public benefit»[42]. It can be said that the first pact marks the end of the state of nature, while the second pact gives rise to the civil state. Unlike the other natural law theorists, Pufendorf includes a third agreement into the social contract: in fact, in between the two pacts he inserts a third one that relates to the form of government to be adopted.

Quite different is the view taken by Locke according to whom the basic anthropological fact is to be found in the full realization of production and modification of the outside world. Through the exercise of his freedom, man transforms the world around him. In this sense it can be stated that Locke conceives the individual in economistic terms. The Lockean model of reference is the *proprietor*. In fact, man is endowed with life, freedom and the ability to transform goods: the last is considered the basic justification of ownership. In fact, while possession is only legitimized by force, the ownership of property rests on the transformation through labor. This series of natural rights does not exclude the possibility of a belligerent

debasement due to conflicts related to the assignation of property rights (even though other authors argue that such degeneration is a consequence of the introduction of currency into the market as it would enable some to accumulate wealth that is taken out of circulation). Therefore, the contract is an instrument that gives a third party the authority to decide disputes. The social contract is thus the very origin and foundation of civil society that is assigned the task of regulating conflicts; the social contract is the act by means of which a potential future member of the community agrees to move away from the natural state. It comprises two phases: the first occurs between equals while the second is between these equals and the one who is assigned the task of terminating conflicts, in exchange for the commitment of everyone (including himself) to respect primary rights (i.e.life, freedom, ownership).

«The commonwealth seems to me to be a society constituted of men only for the procuring, preserving and advancing of their own civil interests. Civil interests I call life, liberty, health, and indolency of body; and the possession of outward things, such as money, lands, houses, furniture and the like […]. The care of souls cannot belong to the civil magistrate, because his power consists only in outward force»[43].

For our purposes, it is useful to linger a moment over a particular approach, which, although very close to the position of classical natural law theorists, however takes a different view on the social contract. What we are referring to is Hume's position. While adopting a utilitarian conception of justice and law which is close to that of Hobbes, Hume rejects the theory of the state of nature and the social contract. Hume calls the state of nature «a philosophical fiction» that is not dissimilar to

the poetic fiction of the golden age. On the other hand, it is true that «men are necessarily born in a family-society at least; and are trained up by their parents to some rule of conduct and behaviour». These words seem to contradict his idea of justice as a convention. Yet, this is not the case inasmuch as the legal convention does not unfold as a determinate act: in fact, its onstruction is immanent to history and it comes to be implemented without an express manifestation, in roughly these terms: «two men, who pull the oars of a boat, do it by an agreement or convention, though they have never given promises to each other»[44].

According to Kant, the social contract is a deontological theory: it expresses a duty of reason, inasmuch as it is necessary to enter into a society to attain the realization of the principles of the rule of law thereby allowing the harmonious interweaving of the different manifestations of phenomenal freedom. Therefore, the purpose of the state is not to ensure the pursuit of happiness, but rather to promote ethicalness. Hence, the state must be minimal and aimed at guaranteeing the respect of individual rights and the promotion of individual liberties. In fact, the interference in the lives of citizens must be the tiniest possible.

«In every commonwealth there must be obedience under the mechanism of the state constitution in accordance with coercive laws (which apply to the whole), but there must also be a spirit of freedom since, as concerns general human duties, everyone requires, to avoid self-contradiction, to be convinced by reason that this coercion is in consistent with one's rights»[45].

In our opinion, the crisis of modern thought corresponds to the useful realization of the fact that it is impossible to encompass all levels of abstraction in terms of modern rationalistic and individualistic philosophy given its negative representation of the individual-man. On the other hand, the systemic approach allows us to continue to use some legal-political categories if necessary, but with the awareness that these are merely systemic representations. It has been said earlier that the persistence of a given system depends on the choice of considering the presence of certain elements or relations as relevant, unless the possible variations of the other do not undermine the very identity of that system, which instead shall be said to be in a certain *state*. State is a fortunate term: in fact, its etymology itself allows to connect political and legal thought to a systemic view: the word *State*, understood in a political-institutional sense, is derived from the past principle of the verb "to be" and it refers to a given organization of powers, social structures, shared values and even conflicts.

On the other hand, the public law tradition has often been concerned with outlining the features of a *constituent power* whose activity exhaust itself *uno actu*, leaving behind it something which is no longer a constituent action, but rather an already *constituted state*. Thus, a Constitution may be regarded as the representation of those elements from which it is possible to infer the persistence of a system, provided that they can take a peculiar state. The very idea of persistence of the same systemic set is therefore closely related to the category of temporality and this is why there cannot be a constitution that does not unfold in a temporary form. In our case, temporality is strictly connected to the commitment to the principles set herein: as long as the parties to the agreement comply with

these commitments, any modification in their relationships shall not undermine the possibility of identifying the same legal and political system, even though in some other overall state.[46].

In line with the justifications we have just analyzed, by entering the agreement each party agrees to recognize itself as part of a set of relations whose core elements are the principles set forth in the same agreement, while nevertheless maintaining the freedom to construct a wider series of relationships with the other members to the pact without eliminating the possibility of preserving that particular social structure. This point requires a further clarification: what is referred to as "entering the agreement" has no voluntaristic connotation within this context. By contrast, under the modern construction of the civil state, the stipulation of the social contract has traditionally been ascribed to an act of will of the individuals, yet, on closer inspection, given the purely negative conception of the concept of individual discussed above, such act can only rest on a truly minimal content of liberty and intentionality. Indeed, within the broader family of natural law theory, the various authors, while identifying different reasons for that, however saw the rise of the civil state as *necessary*. On closer analysis, the individual cannot but want the social agreement, otherwise he would incur in a fatal inconsistency (Hobbes) or however his condemnation (Locke and Jean-Jacques Rousseau). There is no real act of freedom in joining the contract, subjectivity has no substantial positive weight, rather it is a merely necessary act.

For us this means that the category of the social contract, i.e. the constitutional agreement, although markedly modern, can nevertheless be completely recovered for it has no personal connotation of intentionality in the sense exemplified so far.

Therefore, we can justifiably speak of an agreement understood as the mere act of joining or, more precisely, the accession (*input*) to a certain systemic framework.

2.6 Connections to the contemporary debate

The contemporary debate concerning the juridical and political organization is characterized by the dispute between *liberals* and *communitarians*. Both models, just as the Lockean liberal and the Rousseauian ones, exhibit very interesting features that may significantly enrich our analysis. In fact, each of these approaches proves inadequate to serve as model of reference for a society characterized by the extension of human life span. Nevertheless, both offer important reflections.

Liberalism would be insufficient on a political and social plan inasmuch as it builds on the public/private dichotomy, thus it would fail to give a sound answer to the ethical striving of the individual (which thus refers to a personal *ethos*).

In contemporary Western society, in fact, the ethical dimension can no longer be framed in the scheme of citizenship nor in the concept of "equal dignity" of individuals due to the fact that the principles of classical liberalism (such as tolerance, freedom and individual autonomy) have lost their original meaning, namely they no longer appear as self-evident when they are claimed to have universal validity. As liberalism has tried to universalize the principles lying at the very heart of a certain type of Western society, those same values have fallen into a crisis that is equally deep as it is widespread. Things are not much better on the communitarian (Rousseauian) side

because the high degree of cultural heterogeneity in present societies makes it impossible to identify a common good as the product of a hypothetical general will. In short, it can be maintained that, within the political and social domain, the two sides confront each other on the following issues: the definition of the self and the increasingly deep dichotomy between individual and society.

The definition of the self is a theoretical crux that equally affects the relationship between personal identity and the ends of acting and the relationship between personal identity and social context. Regardless of whether they speak of emotivist self or atomistic self, the critique of the modern conception of the subject as agent is common to all communitarians. In particular, they agree in regarding the concept of individual as a *creation* of modern culture. In opposition to this view, these authors have advanced different models, which refer to a greater extent to the social nature of man. The only way to stem the disintegrating and atomizing forces of a society based on the market is offered by the so-called "intermediate communities" (i.e. families, schools, trade unions, social movements, neighbourhoods). Michael Sandel develops this argument in his 1996 work *Democracy's Discontent. America in the Search of a Public Philosophy*, where, in opposition to liberalism, he asserts that it has prevailed in the political sphere precisely in an epoch when it is most ineffective at a practical level, since today's Western individuals, i.e. those «free choosers of their own ends» have very little to choose from because real power is now beyond their control. Sandel's critique extends from the liberalism of rights to economic liberalism, inasmuch as he calls for a restiction of the spheres of life in which money

dominates in order to bridge the gap between classes, which is a result of the process of privatization of social services.

Now let us briefly return to the question of the definition of the self, as it is developed by the two approaches. On the one hand, we find the liberal Rawls who maintains that, in the so-called "original position (which may be considered evocative of the state of nature or the golden age of "classical" natural law theorists), the individuals are rational beings with their own ends and endowed with an innate sense of justice. The definition of these elements plays a crucial role in Rawls's theory. In this case, the rationality of individuals simply refers to their ability to choose the most adequate means given their goals. Nevertheless, the most distinctive element of Rawls's theory is the so-called "veil of ignorance" due to which no one is able to know what shall be his place in society, namely his personal share of natural endowments[47].

On the other hand, there is Alasdair MacIntyre who argues that the Self (i.e. the representation of the moral agent) cannot be identified with any particular state of affairs, and this would characterize the very essence of moral action[48]. To be such a subject would thus mean to be able to detach from any situation in order to evaluate said situation from a universal and abstract standpoint, independently of any social peculiarities. This leads to the rediscovery of the so-called *encumbered self*, which is «entangled in a network of obligations», and which is opposed to the *unencumbered self* that is typical of the contemporary Western world and implicit in the liberal conception. The self glorified by liberalism conceives collective social action only if the defense of the nation or the safeguard of public order are concerned. This self would hence be alienated and

totally unaware of the fact that, from the very moment of birth, one's personality develops through processes of "socialization". In face of the crisis of the dissolving traditional world, liberalism has converged on the idea of a self that is completely unrelated to any criterion corresponding to the historical community it has emerged from. Referring to the emotivist self, MacIntyre says: «this democritized Self which has no necessary social content and no necessary social identity can then be anything, can assume any role or take any point of view, because it is in and for itself nothing».

This conception of the self is also reflected in the approach to rights. Communitarians (Frederick Winslow Taylor, among others) have challenged the primacy of rights arguing that there is an organic link between the enjoyment of rights and the duty of the individual to contribute to the stability of the social form within which such enjoyment of rights takes place. According to Taylor, the free individual can only preserve his identity within a society or culture of a certain type, therefore he has to be concerned with the overall state of that society or culture. Hence, the individual cannot be interested only in his own choices and the resulting associations while neglecting the context within which these options may be available or precluded, abundant or scarce. This conception marks a significant difference between communitarians and the liberal theories of the primacy of rights. In fact, these theories rest on two main principles: first, rights are a prerogative of the individual as such, with no further conditions; second, the individual is under no equal and analogous duty to belong and contribute to society. In this perspective, what is referred to as rights is always an individual's rights against the State.

The debate between *libertarians* and *communitarians* also involves the relationship between individual and society, namely the issue of regulating individual behaviours with respect to social coordination. The markedly modern model of legal and institutional organization (which was represented by the state-system) is caught between the devil of the crisis of the nation-state's sovereignity and the deep blue sea of new forms of social identity, a sense of belonging to particular groups that are much narrower in scope than the typical domain of political community. Thus, law is solely perceived as a ground of confrontation between conflicting demands. On the one hand, law seems to aim at constituting itself as procedural and universalistic; on the other hand, law is forced to be characterized in a substantial manner, namely as an expression of the emerging social and cultural particularisms. The paradox is that, as the primacy of universalism gains more and more ground, there is an increasingly wide gap between life that unfolds in the diverse forms of social belonging and the public spheres.

Most believe that these problems indicate the need for a fresh reflection on the concept of citizenship as a new and original form of belonging, namely as a synthesis of social and political rights to freedom[49]. In other words, it would be necessary to reformulate the (Marshallian) concept of citizenship in order to encompass the numerous instances of new cultural identities, preserving the efforts for the universalization of fundamental rights while promoting the exchange between cultures that share the same territory. Nevertheless, it should be emphasized that the failure of the so-called *melting-pot* culture, namely a system that gives top priority to political integration *despite* ethical and cultural differences, seems to call for a radical transformation of the debate: from a phase in which

only the individual was recognized as possessing specific peculiarities and differences to a statement of those same peculiarities which is "political" in nature, namely related to social groups.

On this point, political and legal thought has been characterized, since the Eighties, by the animated debate between liberal and neo-communitarian theories. According to Herbert Hart, this dispute is marked by a nearly unanimous criticism of the neo-utilitarian theory that until then had been the most influential theory. As far as the liberal side of the fence is concerned, we find a constellation of different approaches that all equally oppose neo-utilitarianism. These are:

the theory of rights (Robert Nozick);
neo-contractualism (John Rawls);
the theory of rights (Ronald Dworkin).

The first rebuke to neo-utilitarianism comes from Nozick[50]. The author asserts that there would be a conflict of intent between neo-utilitarian arguments and the autonomy of each individual. The second critique, which argues that the model of collective choice proposed by utilitarianism is potentially discriminatory on a social level, is advanced by Rawls's so-called neo-contractualism and Dworkin's so-called liberalism of rights. On the other hand, the critique coming from the *communitarians* requires further examination.

Neo-communitarian theories are those philosophical and moral movements that assign a prominent role to the community both for the definition of the self, the justification of values and in the proposal of a political and legal order.

The original core of *communitarian* thought can essentially be found in the reflections of Roberto Mangabeira Unger[51], MacIntyre[52], Michael Sandel[53] and Taylor[54]. They were followed by a second generation of authors, most notably Philip Selznick, Robert Bellah, Amitai Etzioni, who were more concerned with political actuality. In quite a schematic fashion, we can argue that the concept of *community* proposed by these authors has been immediately assimilated to the considerations of Ferdinand Tönnies with the aspiration of reproducing the living conditions of traditional communities at a macro-cocial level. In his 1887 work *Community and society*, Tönnies outlines two alternative types of association of which one is focused on a direct relationship, while the other on an artificial relationship. The former is defined in organicist terms, the latter is based on a mechanistic model. These distinct models are conceived as two historiographical poles and two poles of values as well, which the phenomenology of social formations in their historical developmet can be related to. Therefore, the *communitarians* seem to aim at proposing a model of society close to that *community*, namely an associations within which relations are based on intimacy and the sharing of languages, meanings, habits and spaces. Hence, blood ties (i.e. family and kinship) and those of place (i.e. neighbourhood) and of spirit (i.e. friendship) are organic units – that is to say, communities – whithin which men feel united by those factors that make them similar, while differences can develop only to a certain extent. Within a given community, relationships are not subdivided on the basis of well-defined *roles*, but they imply that it is necessary for members to belong to the group in a completely absorbing manner.

The primary target of the *communitarians*' critiques is undoubtedly Rawls, whose work (in particular, the well-known *A Theory of Justice*) led to the revival of the so-called contractarianism, which we have outlined a few pages above. In his work *Liberalism and the Limits of Justice*, Sandel tries to refute the arguments put forward by Rawls. It is a fairly known fact that, in Rawls' s opinion, the unavoidable coexistence of a plurality of cultures, ethical conceptions and views of the world which characterize modern societies, leads to the conclusion that the only point of contact between individuals is the idea of Justice, which is, however, clearly distinguished from the idea of Good. The author argues that collective life cannot be based on shared ethics, but only on a given set of rules that guarantee each individual equal opportunity to pursue his own personal "life plan". Therefore, the first principle must be to ensure that each individual has equal access to the liberties which are considered fundamental. The second principle is the principle of *difference*, according to which inequality however translates into the greatest benefit for the most disadvantaged members. This statement stands in stark contrast to the goals of those economic and political systems that aim at imposing pure egalitarianism. The central question, therefore, is not whether modern society is to encompass such aspects as the sense of belonging or the loyalty of its members, but whether individuals can maintain mutual relations based on principles of justice.

In opposition to the liberalism à la Rawls, MacIntyre and Taylor have advanced a conception that builds on the idea of community; the former – following the footsteps of Aristotle and St. Thomas – has emphasized the ethical dimension of living together, while the latter has accentuated the cultural one. Taylor, among others, argues that the confrontation be-

tween liberals and communitarians is essentially connected to the ontological choice between methodological individualism and holism, assigning to each of these options a particular conception of Good. In fact, in his 1989 work *Cross-Purposes: the Liberal-Communitarian Debate*, he argues that the position of the liberals corresponds to an atomistic conception of the individual which explains social action only in terms of interactions between single individuals while social goods are regarded simply as the sum of individual goods.

Taylor contrasts this conception with his "holistic" approach, according to which collective action cannot be reduced to the interaction between individuals and the common good is always greater than individual preferences. The atomistic perspective embraced by *procedural liberalism* would leave no room for a notion of Common Good that is valuable not to "you and me" as separate entities, but to *us*. Within this context, there woukd be only room for the so-called convergent goods, namely collaborative agreements between individuals which are aimed at achieving a limited goal that is usually economic in nature. Taylor argues that, in a well-functioning republic, «the bond resembles that of friendship, as Aristotle saw», the bond among citizens «is based on a sense of shared fate, where the sharing itself is of value». Thus, Taylor maintained that «the very definition of a republican regime as classically understood requires an ontology different from atomism, and which falls outside atomism-infected common sense».

In the previous pages, we have discussed the origin and evolution of that model of reference that is referred to as individual. In parallel to such discussion, however, we have also analyzed the genesis of another model of reference that is

crucial for our research, namely the model of reference *community*. These entities both have an important place in contemporary socio-political discourses inasmuch as they characterize any attempt to describe the political organization of a society, but also to identify the very foundation of such phenomenon. The "individualistic model" conceives the community as the product of interactions among a number of individuals (hence, with a one-to-many dynamics), where the single individual is regarded as a primitive and self-evident concept. In contrast, the *communitarian* model views the individual as the product of the interaction of "forces" coming from "basic" social groups and determining the conditions under which a given individual possesses certain characteristics (hence, with a many-to-one dynamics). From our analysis so far, there emerges that both approaches maintain an underlying philosophical attitude according to which the objectivity of ethical values is rigorously tied to a *de re* theoretical perspective. We may legitimately assume that this ontological perspective sees the one/many dichotomy as insurmountable and that, at intervals, the arguments in favour of one or the other leads to a given discretionary preference that is bound to change over time.

Our view, instead, is that the radicalization of the contractualist approach, which now seems to find the most favour, may lead to very interesting developments. The attentive reader has surely already realized for himself that, as far as the socio-political sphere is concerned, the approach we intend to put forward is a conventionalist approach, within which objects such as "individual" or "community" can be conceived as objects *de dicto* that can be categorized into a systemic conceptual framework. If it is true that Western societies rely on relativism, which is indeed necessary to allow the coexistence

of different cultural and ethical approaches, it should be emphasized that, as far as a conventionalist perspective on principles is concerned, the *liberal* approach underlying this new form of Aristotelianism does not require any further adjustment. Here, the term liberal is not intended to reaffirm the individualistic liberalism's naive conception according to which the individual is not, at least in part, the product also of phenomena generated by society, nor to uncritically embrace a view that denies the value of the individual reducing him to a mere product of external forces. Here, the term *liberal* exclusively refers to a perspective that sees freedom as the implicit premise of any act of thought.

Building on this discussion, and through the application of the notion of system to each of these approaches we are now able to identify a few valuable features in order to develop a new conception of society, i.e. a *conventional social system*, which includes ethical values and cultural elements that are recognized by the individual, and which may give rise to an original social form.

[6] Beyond the intuitive use this concept may lend itself to, for a comprehensive and rigorous discussion see Canonico – Rossi, *Semi-Immortality. The indefinite prolongation of life*, Lampi di stampa, Milano 2007.

[7] See the entry for *Individual* in Enciclopedia Filosofica, Bompiani, Milano 2006; as concerns this issue in the political and juridical domains see G. Fassò, the entry for *Individual*, in Novissimo Digesto Italiano, Utet, Torino 1962.

[8] Plato, *Soph.*, 16, 229 d.

[9] Aristotle, *Anal. Post.*, II, 13, 96 b 15; *Met.*, V, 10, 1018 b 5.

[10] See the entry for *Individual* in Dizionario di Filosofia, Utet, Torino 2001.

[11] During Christian times, the theme of the individual began to become interwined with the concept of the subject: as we shall see in detail later on, it was precisely the dynamics of the subject-object relationship that forged the main track along which the modern, and later post-modern, era has travelled. For a more in-depth exploration of the concept of the subject, in particular in the juridical domain, see S. Amato, *Soggetto e soggetto di diritto*, Giappichelli, Torino 1990.

[12] The famous definition goes as follows: «Quocirca si persona in solis substantiis est atque in his rationalibus, substantiaque omnis natura est, nec in universalibus sed in individualibus sed in individuis constat, reperta personae est igitur definitio: persona est naturae rationa[bi]lis individua substantia» and it can be found in Boethius, *Liber de duabus naturis et una persona Christi contra Euthychen et Nestorium*, in Migne, *Patrologia Latina*, vol. LXIV (col.. 1337-1354, in part. col. 1343, Caput III, 1-6). This work is also known under the title Contra Euthychen et Nestorium and is dedicated to his friend John the Deacon of Rome, probably the future Pope John I (523-526). In all likelihood, the treatise was written around 512-513; it is set at a meeting during which a letter addressed to Pope Symmachus by a Byzantine bishop is read out. The letter points out at the problem of the theological heresies of Eutyches and Nestorius. Boethius tries to explain that there are two natures in Christ. First, he delineates (fixing them as axioms) the concepts of nature, substance and person. This allows him to refute the heretical views as logically incoherent. Finally, Boethius argues that two natures, namely human nature and divine nature, coexist within the person of Christ.

[13] See Thomas, *Commentum in quartum librum Sententiarum magistri Petri Lombardi*, d. 12, q. I, art. I. in Sancti Thomae Aquinatis Opera Omnia, t. 7/2, Parmae, 1858. For further discussion see S. Cotta, *Il concetto di Legge nella Summa di S. Tommaso d'Aquino*, Torino 1955.

[14] See G. Bruno, *De gli eroici furori*, Firenze 1958, part I, D. III, p. 987.

[15] G. W. von Leibniz, *La Monadologie*, 1, 6, 47,55,65,87.

[16] G. Duns Scoto, *Opus oxoniense*, II, d. 3, q. 2, (ed. M. Fernandez Garcìa), frati ed. di Quaracchi, Roma 1912-14. Per un approfondimento si veda E. Gilson, *Jean Duns Scot. Introduction a ses positions fondamentales*, Vrin, Paris 1952; B. Bonansea, *L'uomo e*

Dio nel pensiero di Duns Scoto, Jaca Book, Milano 1991; A. Ghisalberti (a cura di), *Giovanni Duns Scoto: filosofia e teologia*, Biblioteca francescana, Milano 1995.

17 See D. Hume, *A Treatise of Human Nature*, book I, part IV, section VI. D. Hume, *The Philosophical Works in Four Volumes*, Th H. Green – Th H. Grose (ed by), Aalen 1964. For the italian translation, see D. Hume, *Opere*, by E. Lecaldano – E. Mistretta, Roma-Bari 1971.

18 Ricordiamo che all'individualismo si contrappone, come un Giano bifronte, il cd. collettivismo. Esso individua ogni dottrina politica che sostiene si debba iniziare a comprendere la realtà sociale a partire dal gruppo; molti atteggiamenti culturali collettivisti predicano l'abolizione in primo luogo della proprietà privata. Anche il collettivismo segue il destino dell'individualismo divenendo perciò una impostazione epistemologica ovvero collettivismo metodologico. Questa teoria sostiene l'esistenza autonoma degli insiemi sociali rispetto agli individui che li compongono e ne postula la comprensibilità.

19 See, paradigmatically, M. Stirner, *The ego and its property*, (Italian translation L. Amoroso), Aldelphi, Milano 1999.

20 For a thorough discussion of the topic, refer to F. Todescan, *Dal cosmocentrismo classico all'antropocentrismo moderno*, in ID., *Itinerari critici dell'esperienza giuridica*, Giappichelli, Torino 1991, pp. 5-33.

21 For a detailed discussion of the meaning of the term Rationalism, see L. Geymonat, *Dizionario dei termini filosofici*, Garzanti, Milano 1989, p. 77.

22 The topic of secularization can be further investigated in G. Marramao, *Cielo e terra. Genealogia della secolarizzazione*, Laterza, Roma-Bari 1994; see also L. Lombardi Vallauri – G. Dilcher, *Cristianesimo, secolarizzazione e diritto moderno*, Giuffré, Milano 1981 ed F. Todescan, *Le radici teologiche del giusnaturalismo laico. Il problema della secolarizzazione nel pensiero giuridico di Jean Domat*, Giuffrè, Milano 1987.

23 Si veda G. Fassò, voce *Individuo*, in Novissimo Digesto Italiano, p. 608.

24 *Ivi*

25 A. De Toqueville, *Democracy in America* (1835)

26 Consider the following motto: «only the individual thinks. Only the individual reasons. Only the individual acts», L. Von Mises, *Socialism: An Economic and Sociological Analysis (1922)*

27 L. von Mises, *Human Action: A Treatise on Economics (1949)*

28 H. von Hayek, *The Counter -Revolution of science: Studies on the Abuse of Reason* (1952)

29 On this issue see D. Antiseri, *Logica della situazione, principio di razionalità e teoria della azione umana in K. Popper*, Lacaita ed., Mandria (TA)-Bari – Roma 1989. See also Id., *Karl Popper*, Rubbettino, Catanzaro 1999; Id., *Karl Popper protagonista del secolo XX*, Rubbettino, Catanzaro 2002.

30 Questi argomenti appartengono in modo particolare alla cd. Scuola Austriaca. Per un approfondimento si veda P. Barrotta, *Soggettivismo, tempo ed istituzioni a partire dalla*

Scuola Austriaca, Rubbettino, Catanzaro 2005.

31 Consider, for example, the Universal Declaration of Human Rights of 1948.

32 See F. Cavalla, *La verità dimenticata*, Cedam, Padova 1996; M. Manzin, *Ordo Iuris*, FrancoAngeli, Milano 2008.

33 See Canonico – Rossi, *Semi-Immortality*.

34 The sophists Hippias and Antiphon, who lived in the fifth century BC, are regarded as the precursors of contractualistic doctrines. In fact, they distinguished between natural order and normative order arguing that law should be a convention based on the will of all members of a community. According to Aristotle, also the sophist Lycophron conceived law as a convention. See Aristotle, *Pol.*, III, 9, 1280 b 12. This doctrine was later revived by Epicurus who maintained that the political community is structured as an agreement that allows individuals to interact with each other. Cicero reported that Carneades, under the influence of a conception of Epicurean ancestry, argued that each people establishes its own rule and such rule is based on the benefit it brings to that community. See M. T. Cicero, *Rep.*, III, 20).

35 It was Augustine of Hippo who formulated the thesis that the community is created by a command relationship between the sovereign and the subjects: an agreement whereby the subjects are bound to obey the monarch provided that he abides by Christian principles. See Augustine, *De civitate Dei,* S. Aurelii Augustini Opera Omnia, in J. P. Migne, *Patrologia Latina*, vol. XLI col. 0011-0804. Valuable reflections and insights can be found in S. Cotta, *Legge e sicurezza*, in Id., *La città politica di Sant'Agostino*, Edizioni di Comunità, Milano 1960, pp. 133-152. See also: F. D'Agostino, *L'antigiuridismo di Sant'Agostino*, «Rivista internazionale di Filosofia del Diritto», 64 (1987), pp. 30-51.

36 J. Althusius (Giovanni Altusio), *Politica methodice digesta*, *atque exemplis sacris et profanis illustrata,* ed. or. Herborn 1603. F. S. Carney, Beacon Press, Boston 1964. Partial Italian translation by D. Neri, J. Althusius, *Politica*, Guida ed., Napoli 1980.

37 Si veda G. Duso (a cura di), *Il contratto sociale nella filosofia politica moderna*, il Mulino, Bologna 1987; inoltre N. Bobbio – M. Bovero, *Società e stato nella filosofia politica moderna*, Il saggiatore, Milano 1979.

38 Si veda M. Pedrazza Gorlero, *Il potere ed il diritto. Elementi per una introduzione agli studi giuridici*, Cedam, Padova 1999, p. 34.

39 Hobbes argues: «I obtained two absolutely certain postulates of human nature: one, the postulate of human greed, by which each man insists upon his own private use of common property; the other, the postulate of natural reason, by which each man strives to avoid violent death as the supreme evil in nature. From these starting points I believe I have demonstrated by the most evident inference in this little work the necessity of agreements and of keeping faith, and thence the Elements of moral virtue and civil duties» (T. Hobbes, *De Cive*).

[40] T. Hobbes, *De Cive*, I, 12.

[41] S. Pufendorf, *De iure naturae et gentium*, VII, II, 5. For a more in-depth discussion see A. L. Schino, *Il pensiero politico di Pufendorf*, Laterza, Roma-Bari 1995.

[42] *Ivi*

[43] J. Locke, *Lettera sulla tolleranza*, La Nuova Italia, Firenze, 1969.

[44] D. Hume, *Treatise of the Human Nature*, III, II, 2.

[45] I. Kant, *Sopra il detto: questo può essere giusto in teoria ma non vale in pratica*, in Id., *Antologia di scritti politici*, (a cura di G. Sasso) il Mulino, Bologna 1977.

[46] It is fairly easy to understand that the persistence of a given system largely depends on the possibility to find that the *core elements*, which have been identified as essential, form a certain arrangement according to conventionalist criteria. Modifications in this same arrangement do not compromise the identity of the system if this leads to a new order that was planned, or however computable and the algorithm of the variation is part of the definition of the identity of the system. Even in these cases, it can be justifiably asserted that, although it has taken a different state, the system is the same. This situation is analogous to the situation in which the change involves either those elements that do not qualify as *core elements* or the relations between them: again, it is possible to affirm that, although in a different state, the system is the same. Therefore, the identity of the system can be affected only by the loss of some *core elements* or if they combine into new arrangements that do not correspond to the planned procedure of change.

[47] J. Rawls, *A Theory of Justice*, The Belknap Press of Harvard University Press, Cambridge, Mass, 1971 (Italian translation, *Una teoria della giustizia*, Feltrinelli, Milano 1997, p. 38).

[48] A. MacIntyre, *After Virtue*, University of Notre Dame Press, Notre Dame 1981.

[49] T.H. Marshall, *Citizenship and Social Class*, The University of Chicago Press, Chicago 1950; (Italian translation, *Cittadinanza e classe sociale*, Utet, Torino 1976).

[50] R. Nozick, *Anarchy, State and Utopia*, Basic Books, New York 1974; Italian translation, *Anarchia stato ed utopia. I fondamenti dello stato minimo*, Le Monnier, Firenze 1981).

[51] R.M. Unger, *Knowledge and Politics*, Free Press, New York 1975.

[52] MacIntyre, *After Virtue*, University of Notre Dame Press, Notre Dame 1981.

[53] M. Sandel, *Liberalism and the Limits of Justice*, Cambridge University Press, Cambridge-New York, 1982 (new ed. 1998).

[54] C. Taylor, *Philosophy and Human Sciences. Philosophical Papers*, Cambridge University Press, Cambridge-New York 1985. See, by the same author, *Cross-Purposes: The Liberal-Communitarian Debate*, 1989 now in, *Philosophical Arguments*, Harvard University Press, Cambridge, Mass. 1995, pp. 181-203, (Italian translation, 1992), *Il*

dibattito fra sordi di liberali e comunitaristi, in A. Ferrara, *Comunitarismo e liberalismo*, Editori Riuniti, Roma 1992, pp. 137-168. See, by the same author, *Sources of the Self: The Making of Modern Identity*, Harvard University Press, Cambridge, Mass. 1989; (Italian translation), *Radici dell'io. La costruzione dell'identità moderna*, Feltrinelli, Milano 1993.

3. Philosophical-Gnoseological Section

3.1 The development of the modern dualism between subject and reality

Now that we have discussed the historical and foundational issues concerning the various primitive concepts we shall employ, let us turn to address the problem in *epistemological* and philosophical terms in order to relate to the scholars of the field in a semantically unambiguous fashion. In fact, if we were to employ only the language and tools of those who are used to "manipulating" reality a a foundational level, it would be impossible to engage in a profitable discussion of the topic without huge expenditure of time and logical effort. After all, our goal, and hopefully that of many others, is to converge as quickly as possible towards the "creation" of a society which is functional to the purposes of individuals and which is able to provide the adequate tools to deal with the indefinite extension of life.

A basic trait of modernity is a general epistemology based on the dichotomy between knowing subject and known object, namely reality. According to this general model, the object exclusively corresponds to an entity that is given and passive as opposed to the practical activity of the knowing subject. The latter is able to truthfully know the object if he rigorously directs his intellectual faculties towards the object itself. The

identification of the most adequate criteria of rigour, which make the knowledge of the object possible, constitutes the core of the method that has dominated philosophical and ethical discussions throughout the sixteenth and seventeenth centuries.

It is a fairly known fact (in particular thanks to authors such as Gianni Vattimo, Martin Heidegger and others) that modernity is primarily concerned with the definition of the Subject, building on the subject-object dichotomy that makes it thinkable. This allows to conceive the subject as an ontological *prius* with respect to reality which is characterized by a constitutive passivity. The point of view of modernity is the outcome of a movement of secularization whose origins can be traced back at least to medieval Scholastics. More specifically, a central element of the Thomistic enterprise is the attempt to translate the far different Peripathetic philosophy into a monumental, unified and unopposable conceptual construction[55]. The mediation between Aristotle's later works, which are marked by Neoplatonic strains of thought, led to the famous definition of truth as *adaequatio rei et intellectus* which has been the object of much debate and which is often cited as a reference to the *Correspondence Theory of Truth*. In fact, this definition itself is very suggestive since it seems to allude to the idea of true knowledge understood as the outcome of an interaction (*rei et intellectus*) between mind and reality rather than a one-way action of one on the other. If this were not encompassed in a metaphysics that is so different as to determine a completely distinct theory of knowledge paving the way to the modern framework, it would be even possible to catch an echo of the Aristotelian *homoiosis*.

The crucial difference lies in the peculiar vertical structure of Thomistic metaphysics which is based on the Neoplatonic idea of the hierarchical structure of reality, so that the truth of the discourse on the thing (i.e. *veritas de dicto*) is ultimately guaranteed by the truth of the thing itself (i.e. *veritas de re*) inasmuch as such thing, while occupying its place in the order of creation, corresponds to the divine idea that has determined it. The movement of adaptation underlying the medieval idea of truth (knowledge) is twofold and it proceeds in two different directions: from the subject to the thing (*veritas de dicto*) and from the thing to the divine intellect (*veritas de re*). Therefore, from the standpoint of the subject, the objectivity of the world is beyond dispute and it constitutes a reliable guarantee of his act of knowledge. This formulation of the problem remains nearly identical in Descartes. As it is well known, the Cartesian god is conceived as the ultimate guarantee of the system of knowledge structured according to the rules of method, that is to say analytically (i.e.vertically). As far as the theory of knowledge is concerned, the process of secularization, which has accompanied the advent of modernity and then its own implosion, is characterized by a modification of the element that ultimately guarantees the validity of the model which instead remains unchanged in spite of everything. Therefore, the medieval god is rapidly replaced by the idea of pure nature as something that can legitimately be thought and known prescinding from any transcendental reference[56]. This is possible because nature has a rational structure that finds expression in those regular patterns that man is capable of discovering thanks to the advent of Baconian and Galilean science. Also this phase presupposes the separation between the individual subject and the object to be known, a subject who can attain true knowledge (*de dicto*) only to the extent to which he is able to discover the intrinsic

rationality, and therefore the truth (*de re*), of natural order. It is immediately clear that the knowledge of the laws of nature is prodromic to the modification of nature itself (Francis Bacon says «nature cannot be commanded except by being obeyed»), indeed, the possibility of transforming reality becomes a sign of a proper understanding of reality itself. It is no coincidence that, in the realm of the religious controversies arising in this period, Calvinism sees material success as a sign of divine predestination. The modern scheme of knowledge thus requires to conceive the subject/object dualism as an opposition that can be overcome by transforming the object (the first Industrial Revolution). Man is seen as opposed to nature and bound to subjugate it.

3.2 The reasons for the crisis of dualism

The first symptoms of the crisis of this model may be identified in the complex transition from Hume's caustic views to Kant's attempt to refound the possibility of man's knowledge. In fact, man used to direct his practical and cognitive actions towards a rationality, inherent in nature, which essentially was a *per causas* construction (in which we find the last echoes of Thomist thought). In fact, the target of the most radical criticism formulated by the great Scottish philosopher the concept of causality. The work of Kant, who claims to have been awakened from his dogmatic slumber by reading Hume, is preciely characterized by the attempt to delimit the possibilities of man's knowledge and action, thereby retrieving them. Kant does this by assigning to the subject known (and not to a supposed rationality intrinsic in the object) the fundamental

categories underlying true knowledge, nevertheless, at the very high cost of letting subjectivity encompass also the *phenomenon*, as opposed to the unknowable *noumenon*.

It should be borne in mind that the first post-Kantian philosophers, who played a crucial role in paving the way for Idealism, have focused their reflections on this specific point. Hence, Karl Leonhard Reinhold emphasizes that subject and object cannot be thought of separately[57], but they are rather two aspects of consciousness that must be understood as the capacity of representation. With regard to the problem of the thing-in-itself, Reinhold recognizes it as a pure concept which, though necessary for the justification of the material element of knowledge, is nevertheless beyond representation, and thus reality itself, because of its very unthinkability. An even more radical critique comes from Gottlob Ernst Schultze who asserts that the concept of the thing-in-itself is inherently contradictory[58]. Salomon Maimon also agrees that the "thing-in-itself" must be eliminated for he sees it as an absurd concept: knowledge, and in particular all its principles and contents, would therefore fall in the domain of consciousness. Any datum of knowledge does not come from the outside, but it rather is an element which already resides our consciousness and which we do not know completely yet: more precisely, it is the indeterminate element of knowledge, namely what has not yet been determined by the a priori forms of the Self[59]. Finally, Jacob Sigismund Beck, similarly to Johann Gottlieb Fichte, identifies two stages in the development of the cognitive process: the ooriginal synthesis and recognition. If the thing-in-itself does not exist, then it must follow that the process by means of which the subject elaborates the object is no longer a construction (i.e. the intellectual organization of sensitive data),

but rather a production: I am not operating on something that is given to me (as argued by Kant) but I am building it up myself. Hence, the object is a product of the subject, who creates both the form and the material of knowledge[60].

Finally it can be claimed that modernity is the historical period in which being "modern" not only becomes a value, but it emerges as the basic value to which all other values refer. Furthermore, we can assert that modernity coincides with secularization. Secularization and modern are, in fact, two terms which describe what has happened throughout a particular period and which refer to two crucial aspects of such period. Modernity is dominated and driven by the faith in progress which is both a secularized faith and a faith in secularization. In response to the crisis of providential theology, the latter is characterized as a faith in the value of what is new[61].

3.3 Postmodernity

Later, the focus of reflection shifts towards the possibility of overcoming this dynamic of thought. At least since the seventies of last century, the thought that tries to escape the crisis of modernity has been referred to with the term "postmodern". From architecture to art, this prefix indicates the attempt to critically overcome the previous period. The work of Lyotard can be considered one of the first theorizations of this culture[62].

The "post" of postmodern implies the attempt to turn away from modern thought that had dominated the Western world.

Yet for a tragic fate, this form of rational thinking cannot be criticized in the name of a truer foundation[63]. Therefore, post-modernity comes as an arduous departure from the subject/object dynamic. The moment modernity ends up conceiving the subject-object duality as wholly enclosed in the Subject, this duality grows weaker until it is exstinguished. In fact, as it is well-known, Nietzsche's *Ubermensch* cannot be understood as a subject since the very notion of subject is one of the major targets of the philosopher's critical work of unmasking Western metaphysics, namely the system of thought that dominates modernity. In a nutshell, Nietzsche argues that the subject is not an original notion, but rather a derived one. Nor can one speak of a " thing-in-itself" inasmuch as, according to the philosopher, any given thing must be referred to a horizon of meaning which makes it possible in the first place. If this is true, then it can be argued that each thing is a product of the subject who represents it. But, in this perspective, the subject is itslef a product, namely, one thing among the others[64]. Therefore, the subject is not a *primum* to which it is somehow possible to go back for it is itself a superficial effect[65] and thus its creation has the consistency of a fable.

Nietzsche points out that, traditionally, the subject had not been conceived as an invention or a metaphor becuase the concept of causality led the subject to establish itself as an indubitable datum, a dogma. Underlying modern Western metaphysics' faith in the ego is the desire to identify an element responsible for the occurring phenomena. Confronted with the transition from passive to active nihilism, Nietzsche chooses the latter. The unveilment of the metaphorical character of the metaphysical notions of subject and object does not lead to a return to truer structures forasmuch as the notion of truth falls

into crisis as well. And perhaps Nietzsche's final statement is expressed in the image of the man who must go on dreaming while knowing that he is dreaming (*The Gay Science*).

Several subsequent studies also argue that the critique of the *Metaphysics of the Subject* has marked the end of modernity. The fundamental thesis of these authors is that the subject has asserted its centrality in Western culture by masquerading in the guise of foundational principle. In this perspective, Heidegger's views may be regarded as very close to the ideas of Jacques Lacan. Yet this implies that the cogent force of the term reality is significantly weakened as the world becomes a fairy-tale. In fact, everything is given as a narration, a tale. In this context, crisis is the most often used word: crisis of the foundation, crisis of the subject and, finally, crisis of humanism. Inasmuch as, though with different names and different guises, the subject has been the very foundation of the whole metaphysical conceptual construction of modern culture, the rejection of the subject raises a challenge to human subjectivity in the mechanisms of the alleged objectivity of science and technology just as feared by Edmund Gustav Husserl. If it is true that humanism is part of metaphysics and thus defines man as *subiectum*, then, in this particular historical phase, the centrality of technology corresponds to the crisis of humanism. And this is not because the triumph of rationalization is a rejection of humanistic values, but rather because it represents the very fulfillment of metaphysics and, therefore, an overcoming of humanism[66].

As he identifies the origin of the crisis of humanism with the end of metaphysics as the apogee of technology and transition beyond the dualist opposition subject/object, Heidegger lays

the theoretical foundations for relating the crisis of the human in the institutions of late modern societies to the demise of subjectivity in major streams of thought of the twentieth century. And the operation of thought finds its appropriate expression in the resistance to the processes of rationalization of social work as exemplified in Adorno. Therefore, the eclipse of the subject is the most characteristic feature of the postmodern age. The rejection of the violence inherent in the metaphysics of the subject (that is to say, the metaphysics of modernity) is its *leit motiv* for it refuses the (modern) necessity of conflicts as a result of the disproportionate magnification of the Ego. Let us clarify this point with an example. The Hobbesian absolute Ego, in its lust for hegemony, corresponds to the left-hand term of the subject-reality (or the others) opposition that is resolved by referring to a totality of higher order (i.e. the *Leviathan*). Similar considerations apply also to the bourgeois individuality as an element separated from the rest of reality (i.e. the people) and referred back to Hegel's *Aufhebung*. The totalitarian drift of metaphysical thought has fostered the uneasiness of postmodern thought towards the very idea of subject which is seen as the product of an oppressive reason and therefore rejected. Hence, the subject-object dualism is surpassed because it is the result of human ability to metaphorize and narrate, a fairy tale behind which there lurks the hypertrophy of the subject itself. Thought cannot but adapt itself to it, embracing hermeneutics as the only possibility. Nevertheless, this possibility is justified only insofar as it leads to a remembrance and a reappropriation since metaphysical structures are not destroyed in the name of a truer foundation. And it is in this sense that there is a marked propensity towards the reinterpretation of the "already thought". Thus, postmodern thought conceives the subject only as the main character of a great

story in which everyone can carry out his own language game. In this context, even sovereignity and action are subject to a complex of forces that are substantiallly capable of making effective decisions. Hence, there emerges the epistemological model referred to as complexity model. It provides a cognitive approach that is based on a modification of the parameters which allow us to determine a given social system and to identify its equilibrium conditions. This involves a shift from conceiving stability of the social system as the outcome of order to considering it as a merely contingent situation of equilibrium between systems of forces[67]. But there are additional concerns besides these ones. In particular, the underlying apprehension related to the eclipse of the subject and the terrible consequences this might bring about: the fear of desubjectivization. In this respect, the French philosopher Jean-François Lyotard argues that:

«knowledge changes status at the same time as societies enter into the so-called postindustrial age and cultures enter into the so-called postmodern age […]. Scientific knowledge is a kind of discourse. And it is fair to say that for the last forty years the "leading" sciences and technologies have had to do with language: phonology and theories of linguistics, problems of communication and cybernetics, modern theories of algebra and informatics, computers and their languages, problems of translation and the search for areas of compatibility among computer languages […]. These technological transformations can be expected to have a considerable impact on knowledge. Its two principal functions – research and the transmission of acquired learning – are already feeling the effect, or will in the future. With respect to the first function, genetics provides an example that is accessible to the layman: it owes its theoretical

paradigm to cybernetics. Many other examples could be cited. As for the second function, it is common knowledge that the miniturisation and commercialisation of machines is already changing the way in which learning is acquired, classified, made available and exploited […]. The nature of knowledge cannot survive unchanged within this context of general transformation. It can fit into the new channels, and become operational, only if learning is translated into quantities of information. We can predict that anything in the constituted body of knowledge that is not translatable in this way will be abandoned and that the direction of new research will be dictated by the possibility of its eventual results being translatable into computer language»[68].

Although the direction of the research is sound, we believe that the predictions put forth by the French philosopher more than forty years ago have proven incorrect. The approach we propose in the following pages embraces a conception of the subject/object relation which is as removed from modernity as it is removed from post-modernity. The contemporary era is characterized by a new element, namely the *discovery of recursive dynamics* which involve a major shift in the relation between the subject and the object.

3.4 The discovery of recursive dynamics

If it is true that knowledge is structured as a relation between a subject and an object and it is constructed in terms of the domain, then the subject realizes itself in the (figurative) realm of the object (i.e. the world, reality). Guided by rational-

ism, modernity has thought of knowledge in similar terms to the property relation, which is considered a primary category (in fact, it is the very foundation of the individual, society and the state), and which builds on the recognition of the ontological dualism (i.e. dichotomy) between subject and world (or, in Cartesian terms between *res cogitans* and *res extensa*). In this cultural context, the subject is in a relationship of control with the world, which is the subject's property. And the more he dominates, the more he reasserts himself as subject.

On the other hand, the postmodern attempt to escape this dynamic today consists in the radicalization of objectivist (rather than anthropocentric) perspectives, according to which the object is the focal point of the relation. Therefore, the subject/object relationship tends (or aspires) to turn into the object/subject scheme. Nevertheless, this view, while criticizing the excessive weight given to modernity's idea of the subject, does not avoid the postulation of the subject/object dualism as it only reverses the direction of such relation that is seen as moving from the object to the subject. In other words, this approach, while postulating the dichotomy, identifies the focal point of the relation in the object, a view which is antithetical to the one upheld by modernity.

There are essentially two ways to overcome the unfruitful deadlocks of both approaches (which may actually be seen as two sides of the same coin). The former, which is perfectly suited to our discussion, induces us to look at the problem from above by resorting to the concept of system examined in the previous pages. It is possible to claim in a strong sense that the object/subject dualism can be solved in phenomenological terms, namely turning to a *meta-level* where there unfolds a two-

way recursive movement from the subject to the object and vice versa. In order to establish this new and original perspective, we need a starting point, i.e. an *input*, which must be provisionally able to trigger the recursion within our system. This input may precisely be the relation moving from the subject to the object. Therefore, it is possible to identify an initial phase in which dualism is (temporarily) asserted, while, on a practical plane, a form of belonging (of domain) is established; however, unlike modernity, this occurs only in the initial and partial phase of the overall process that is bound to evolve. In fact, it is also necessary to consider a movement going back from the object to the subject, and which analogously corresponds to a partial stage of the overall dynamics. Hence, to a certain extent, in this phase, it is the object that moulds the subject. In other words, the (non-ontological) polarity which is established initially must then be surpassed in a ceaseless movement of creation and overcoming. Thus, the correct formula is:

subject ←→ object

This reciprocal relation provides the conditions for its own overcoming. Thanks to this recursive movement, namely a cyclical reference, it is possible to transcend each partial stage in both directions, thereby surpassing the dualism that is intended to serve only as a starting point. Thus, in general terms, we can say that, in the intermediate phase, the subject shall both dominate and be subjected to the object and likewise, the object, to some extent, shall be determined by the subject and, at the same time determine it. The product of this process shall be a hybrid, an androgynous being which brings together the

two natures; in other words, an amphibian entity that dominates and is dominated.

To explain further what has been said above, we begin by discussing in detail the concept of recursion. A *recursive* function (and, by extension, an algorithm) is a function whose definition refers to the function itself. As an example, let us consider the *factorial* function, which is defined as follows:

i) *factorial*(0) = 1
ii) *factorial*(n) = *factoriale*(n-1) * n

Point (ii) tells us that, in order to calculate the factorial of a number, say 5, you must compute the factorial of the preceding number, i.e. 4. To calculate the factorial of 4, you must know the factorial of 3, and so on until the base case 0, namely the only case in which the function does not call itself recursively: if *fatcorial*(0) = 1, then *fatcorial* (1) = *fatcorial*(0) * 1, namely 1, *fatcorial*(2) = *fatcorial*(1) * 2, namely 2 and so on. Thus, in order to calculate *fatcorial*(5), you must repeat the *same* procedure on the result obtained by applying such procedure on the preceding integer. Only two simple, *finite* instructions, i.e. i) and (ii), allow us to develop an algotithm that may continue to generate factorials infinitely: lurking behind the apparent simplicity of the definition, there is the ability to produce an ever-growing structure as outcome[69]. Apart from a purely theoretical perspective, the concept of recursion lends itself to an analogy that may be useful here. It is fairly common for many people to confuse the *algorithmicity* of a process with its *predictability*: in our scenario – where human action is conceived as essentially algorithmic – this translates into the naive inference that possible actions can somehow be determined a priori. The analysis

of *recursive* processes – or the examination of a fractal pattern – provides an immediate counterexample to this generalization: in fact, phenomena that are *fully* algorithmic nevertheless generate outcomes that are beautifully complex and difficult to predict. Therefore, if the realm of human actions is truly algorithmic, this does not imply that we are relieved of the responsibility for the possible consequences of our actions, but rather we are required to take full responsibility for those consequences.

3.5 A possible move beyond dualism

From a strictly ontological standpoint, even the "discovery" of recursive dynamics cannot provide a definitive solution to the foundational questions raised by our approach. Understood in the light of the idea of recursion, the subject-object dynamic is undoubtedly a valuable tool to observe the construction of social reality. And more than that: recursive dynamic can be easily understood from a "phenomenological" perspective since it exhibits many salient features of the psychological processes which we experience first-hand as we engage in the attempt to systematize our knowledge of the "outside world". Nevertheless, it should be norne in mind that radical conventionalism cannot but reject the very *distinction* between subject and object at the most fundamental level: actually, the conventionalist does not even accept the *existence* of subjects and objects! The conventionalist claims that reality is in itself *blurred* and *undifferentiated*: objectuality and individuality are *secondary* features.

According to the conventionalist, conventional acts – such as the act of identifying a particular portion of space-time by means of the term "man" – define the Furniture of the World and populate it with objects to which we attach our words. The concept of *system*, in its formal essence, precisely expresses the arbitrariness of any objectual option: because of its cognitive usefulness, the system plant is regarded as worthy of a name, whereas the system "queens' right earring and corresponding ear lobe" is not. Nevertheless, both are system and they are so in the same sense and with the same ontological dignity.

In light of this theoretical background, the attempt to develop a *Conventional Social System* is even more significant: on the one hand, the arbitrariness of systems indicates a clear ethical stance which asserts that the choice of values is not imposed a priori, but rather guided by an aim which pre-exists to philosophical reasoning (i.e. we propose this society, however we *ipso facto* admit that it is only one among the many possible ones); on the other hand, the conventional aspect emphasizes the fact that the libertarian/voluntaristic element is the real social glue (i.e. inasmuch as society is itself a convention to which you are under no obligation to participate, then it is your desire to be a part of it that binds you to others).

Through the political and legal spectacles we hold in this work, those dynamics, which the theory of knowledege sees as unfolding between subject and object, can be recognized in the intricate network of relationships between the individual and society which we discussed in the previous chapter. In fact, the traditional model sets up a dualistic representation of this facet of experience as well: it does not make any significant difference whether you take the point of view of the *libertarians* or

that of the *communitarians* since both identify a certain element as cognitive subject" and agent as opposed to an "object" that undergoes the action of the subject. Hence, the former authors assign the role of subject to the individual, whereas the latter to community. By the same token, the libertarians argue that the object is society, whereas for the communitarians the object is the individual.

Conventionalism may allow us to take a step forward also in the reinterpretation of this additional relational dynamic: inasmuch as the very construction of society is *purely* conventional, the relationship/encounter between individuals – societies – can subsist only to the extent that there exists a mutual recognition (through a constitutional chart) among the parties to the agreement. Society does not pre-exist the individual and the individual alone cannot be social in any way: it is only convention that renders social reality intersubjective (and dare we say, almost objective.

55 See in Thomas Aquinas, *Le questioni disputate*, Ed. Studio domenicano, Bologna 1992; for a thorough examination of the concept see R. Di Ceglie, *La formulazione tommasiana della verità come «Adaequatio rei et intellectus»*, by the same author see also *Senso comune e Verità. Verso un fondamento comune alle diverse formulazioni di verità*, Edivi, Roma 2004; M. Pangallo, *La verità come "adaequatio rei et intellectus" in Tommaso d'Aquino*, in «Sensus communis», I, (2000), pp. 506 et seq. For a more in-depth investigation, see V. Possenti, *La questione della verità. Filosofia, scienza e teologia*, Armando Ed., Roma 2003.

56 The following precept by Huig van Groot (Hugo Grotius) is well-known: «Et haec quidem, quae iam diximus, locum aliquem haberent, etiamsi daremus, quod sine summo scelere dari nequit, non esse deum, aut non curari ab eo negotia humana»; H. Grotius, *De jure belli ac pacis*, 1625 (H. Grotius, *De Iure Belli ac Pacis*, edited by B. J. A. Kanter van Hettinga Tromps, J. Brill, Leida, 1939, reissue: Scientia Verlag, Aalem, 1993), Prolegomena 8. See Hugo Grotius, *I Prolegomeni al De Iure Belli ac Pacis*, (translation and notes by S. Catalano), Palumbo, Palermo, 1948; According to Franco Todescan: «When, therefore, it is stated that the jurist from Delft has secularized Christian natural law, this is correct inasmuch as in De Iure Belli ac Pacis he has realized the separation of the profane sphere from the religious sphere thereby asserting its autonomy. However, it would not be equally correct to argue that Grotius has drawn an opposition between secular natural law and Christian natural law". See F. Todescan, *Le radici teologiche del giusnaturalismo laico. I. Il problema della secolarizzazione nel pensiero giuridico di Ugo Grozio*, Giuffré, Milano 1987, p. 105.

57 See *Essay on a new theory of the human capacity for representation*, 1789.

58 See G.E. Schulze, *Aenesidemus or Concerning the foundations of the philosophy of the elements*

59 S. Maimon, *Gesammelte Werke*, 7 voll. hrsg. v. Valerio Verra, Olms, Hildesheim 1965-1976.

60 S. Beck, *Erlaüternder Auszug aus den kritischen Schriften des Herrn Prof. Kant, auf Anrathen desselben*. Riga, 1793–1796.

61 Sul punto si veda G. Vattimo, *La fine della modernità*, Garzanti, Milano 1991, p. 108.

62 J.F. Lyotard, *La condition postmoderne*, Les Editions de Minuit, Paris 1979, trad it., *La condizione postmoderna. Rapporto sul sapere*, Feltrinelli, Milano 1981.

63 G. Vattimo, *The end of modernity* (Italian edition: Garzanti, Milano 1991, p. 10).

64 G. Vattimo, *Al di là del soggetto*, Feltrinelli, Milano 1991, p. 31.

65 F .W. Nietzsche, *Twilight of the idols*, (paragraph 4), Italian translation F. Masini, Adelphi, Milano 1983.

66 Si veda Vattimo, *La fine della modernità*, Garzanti, Milano 1991, p. 49.

67 N. Luhmann, *How is social order possible?*, Laterza, Bari 1985. By the same author, see also, *Social structure and semantics*.

[68] Lyotard, *La condizione postmoderna*, Les Editions de Minuit, Paris 1979, trad it., *La condizione postmoderna. Rapporto sul sapere*, Feltrinelli, Milano 1981, p. 9.

[69] A classical example of this phenomenon is the construction of many fractal shapes: using an algorithm of a few lines, by repeated iterations it is possible to generate geometrical objects of considerable complexity and unexpected aesthetical beauty. It is thus clear, that in spite of its simplicity, the notion of recursion is of critical importance and may be the starting point for numerous surprising advancements and applications. B. Mandelbrot, *Fractals and chaos: the Mandelbrot set and beyond*, Springer, 2004.

4. Legal Section

4.1 Preliminary considerations on Law

We are indebted to the poet Pindar for having left us one of the earliest indications concerning the law in the ancient world; in fr. 169 he refers to the concept of *nomos basileus*, namely a universal necessity ruling over both mortals and immortals. Let us begin this discussion with a significant remark: the term *nomos* is untranslatable[70]. Nevertheless, it is possible to identify a few proxies for this term which may be useful for discussing the issue that we set out to investigate. As it is fairly well-known, in the ancient Greek world, the concept of *nomos* initially had a "spatial" meaning as it referred to the dictated perimeter of the city, namely the ordered arrangement of the *polis*. In fact, *nomos* contains the root *nem-* of *nemein* meaning to portion out, to divide, to distribute[71].

Different is the meaning that Carl Schmitt attributes to this same term, namely appropriation, conquest[72]. However, it should be noted that there is a relation of difference rather than opposition between the two meanings. The former conveys the idea of a static, namely immobile and immutable, order in symbolic terms; the latter instead seems to hint at a conception of order as a dynamic construction, something that must be obtained. Therefore, in the former sense, we refer to the concept of *nomos* as a pre-existing reality that exercises its

influence on the inquirer, whereas in the latter sense, it can be understood as something that must be sought after and conquered with effort as it is not readily available to man. As a preliminary approximation, we may put the considerations that will follow in a nutshell: *nomos* understood as social and legal order, i.e. as Law that, though existing before him who investigates it, is to be conquered through the specific skills of the inquirer. Among these, there is the *logos*. With reference to the first meaning of nomos, Hanna Arendt sharply points out:

«Già molto prima delle leggi e dei comandamenti del Vecchio Testamento, il Nomos Basileus di Pindaro fa da viatico ad una concezione imperativistica della legge. Il nomos di Pindaro significa ordine, un ordine iscritto nell'universo stesso, che deve sovrastare e dominare, come un sovrano, su tutto quanto accade. Questa legge non è posta dagli uomini né scritta dagli dei, ma imposta su tutte le cose mortali ed immortali, vive e senza vita. E, se è chiamata divina è perché governa anche sugli dei»[73].

Arendt maintains that this term encompasses the imperativistic sense of law. Hence, the law, understood as *nomos*, can be viewed as the expression of a command, of an authority. In this context, there clearly emerges a connotation of law as force. However, this is not the only way of conceiving the *nomos*. Coming back to the second meaning of *nomos*, we may report some observations by Carl Schmitt concerning his critique of Hans Kelsen and the so-called Normativists, i.e. those who reduce law to its form so that a rule constitutes an "objective" outcome, namely an attribution of meaning, of a formal classification scheme which is referred to as "norm". Schmitt asserts the following:

«Normativist thought may claim to be impersonal and objective, whereas the decision is personal […] hence, the normativist lays claim to impersonal and objective justice as opposed to the personal discretion of the decisionist […]. Thus, the normativist gives a normativist interpretation to one of the most beautiful and most ancient expressions of legal thought, namely Pindar's maxim on *nomos basileus*, 'nomos is king': only law, rather than the contingencies of this or that situation or even the capricious discretion of men, can 'govern' and 'rule' […]. But *nomos*, like *law* does not mean statute, rule, or norm, but rather recht, which is norm, as well as decision and, above all, order»[74].

We can already note that two well-defined perspectives seem to emerge from this initial overview of the meanings of *nomos basileus*. The former perspective appears to be related to the imperative element of law: law is a command of a sovereign (namely, he who has the power to rule), who is entitled to determine the content of the regulatory act. On the other hand, the latter conception seems to rest upon the discovery of rules that are intrinsic to reality. This dichotomy is a contant theme in the discourses on law and it is known to legal scholars as the dispute between legal positivism and natural law. In fact, the discussions over this dichotomy are too numerous to be all reported here and many are the arguments aimed at justifying the opposition or the identification of these two conceptions of law. Therefore, we shall confine ourselves to an illustrative overview of this opposition, focusing only on those points that are strictly necessary for the purposes of this work.

As we have seen a few pages back, natural law theory is a philosophical and legal doctrine that has been developed throughout the seventeenth and eighteenth centuries by authors such as Hugo Grotius, Hobbes and Locke and Rousseau. From the standpoint of this theory, it is possible to evaluate any legal system on the basis of its compliance with the rules of natural law which are rational in themselves and which preexist the norms established by the state. In fact, natural law consists of a set of laws that are unwritten and yet knowable through the use of reason: they are part of the moral and ethical, as well as rational, background of every individual and every community. Thus, according to this conception, positive norms should be subject to higher principles of justice. In a nutshell, we may point out a formulation of natural law in religious terms when the unwritten natural norms are deemed to come directly from God (i.e. theocentrism) or from the idea of Nature understood as the inherent rationality of man. Therefore, in the seventeenth and eighteenth centuries, the norms of natural law constitute one of the earliest secular approaches to law, namely they allow to develop a theory of law distinct from religion and morality. Immanent rationality is the anthropological characteristic that is regarded as the distinguishing feature of man and, for the first time, a norm of natural law is conceived as what shows itself to human reason as self-evident, eternal and right. In more recent times, natural law has been deemed to be changeable, namely to coincide with the ethical principles that are generally accepted in a certain place and in a certain historical period.

By a curious paradox, the authors of the natural law school ended up becoming the first exponents of legal positivism inasmuch as the immanent rationality underlying the norms of

natural law came to be the primary element leading to the Universal Declarations of rights. In other words, the pursuit of rational principles coupled with the subordination of law to a rational approach is the first step towards modern codifications. Henceforth, throughout the twentieth century, the separation between ethics (morality) and law has become an established and hardly disputable fact. In a nutshell, the most serious criticism directed against the authors of natural law tradition is that, according to them, natural laws or natural rights may be derived from the essence of man, namely the properties of human nature: in fact, this would imply that what ought to be is derived from what is.

Later, this has led to the massive rise of positive legal theories that limit their focus to the analysis of law established by a legislator, most often the state legislator, thereby causing the advocates of pre-normative principles to lag behind. Among many, a qualified support came from Norberto Bobbio who describes the main reasons that have contributed to the growth and development of this tradition until it has attained its cultural hegemony.[75]. The reasons are the following: the monopolization of law-making by the modern state and the process of codification which have allowed what is known as legal positivism to emerge as a theory. Among the philosophical and legal movements that have made the greatest contributions to the success of this theory, we may cite the school of exegesis (France), imperativism (United Kingdom) and the historical school of law (Germany) which can be brought together in the philosophical movement that coincides with the development of *modern rationalism*.

To further explain the model of reference of legal positivism, we shall focus on three famous examples, namely, Kelsen, Alf Ross and Henry Liddell Hart, trying to expose the different positions taken by these authors with respect to the issue of the sense of normativity. Inasmuch as all of these theories fall within the domain of legal positivist conceptions, they exhibit a few common features. A basic assumption shared by these authors is the ontological assumption, namely that law must be identified with positive law. Law, i.e. the only law, is regarded as a contingent historical and cultural product that is significantly affected by the context of its production[76]. The proposals of these three authors are attempts to provide a plausible explanation for how positive law can be seen as a contingent social product. It can be asserted that Kelsen adopts a *normativist* position, where normativism addresses the question of how law would be a "contingent social product": in this conception, law is, thus, a norm produced by public or private institutions which are entitled to do so.

The second approach, namely that of Ross, may be regarded as *realistic*. In this conception, "contingent social product" comes to signify the set of social facts that concern the sphere of judicial activity. Furthermore, these social facts constitute a mixture of psychological elements (i.e. the normative beliefs of judges) and factual elements (which are related to the decision-making behaviour of judges themselves). On the other hand, Hart's theory conceives law as a social practice. In this context, "contingent social product" refers to a set of regulatory social practices, which are understood as reflective and critical attitudes expressed by the members of a legal community.

While the first two approaches can be seen as reductionist, the third one is a non-reductionist perspective. By the term reductionist we refer to those theories according to which the relationship between rule and social conduct boils down to only one of the terms of such relationship. In fact, Kelsen reduces the relationship to the rule, whereas Ross reduces it to the actual behaviour. Only in Hart's perspective the rule-behaviour relationship appears as non-reducible to one of the two elements of the relationship itself, thereby preserving its very raison d'être. Let us briefly discuss in more detail these conceptions.

Kelsen is the author of *The pure theory of law*[77]. First of all, it is important to note that the author does not see the purity of law as given, but rather as a goal at which, if properly developed, the doctrine should aim. After what may be referred to as a work of purification by the scholar, there emerges the category of "legality". It finds expression in the formal structure of the legal norm (i.e. the hypothetical basic norm) defined as:

«If A, then B»

Where A is a wrongful course of conduct and B is the sanction provided for by the relevant legal order. According to Kelsen, the sanction is what characterizes the legal norm (also referred to as "primary norm"); hence, those norms that contain no sanction are "secondary norms", namely "apparent norms". This formula highlights the particular nature of law. In fact, Kelsen maintains that A and B are connected with each other by a relation of imputation and this relation belongs to the world of the *must-be*. By contrast, in the world of the be,

two natural phenomena (i.e. A and B) are joined by a relationship of causality. From this it seems logical to infer that law, i.e. the norm, first and foremost addresses the judges requiring them to punish a certain conduct that is held to be illegal with a sanction. At this point, Kelsen brings all norms into a system, thereby developing his well-known theory of *validity*. The theory of validity is a formal and systemic theory. It is formal because the validity of a norm is purely formal characteristic of the norm itself, namely it is independent of its content. Therefore, validity is a formal property and the norm acquires such property only if it is enacted in accordance with the law-making procedures set out in a higher-order norm. This holds both for the so-called individual norms (i.e. the norms governing the enforcement of judgements) and the general and abstract norms that together constitute the legal order. From this it can be ascertained that, according to Kelsen, there is a clear distinction between validity and effectiveness of law even to the point of asserting that the ineffectiveness of a provision, namely non-compliance with such provision, does not affect its validity.

Kelsen's theory of validity is also *systemic* in that the rules are not isolated units but rather part of a hierarchically organized system. This hierarchical organization is the most original conribution of this author: norms can be ordered according to their position in the hierarchy, inasmuch as the higher-order norms contain the criteria of validity for lower-level norms. Everything seems to fit right in place, yet problems arise when one tries to analyze the nature of higher-order norms. Kelsen proposes to postulate a fundamental norm (i.e. (Grundnorm) that allows to close the system, that is to say a norm which is not itself determined by any higher-order norm. Nevertheless,

this forces him into asserting that the basic norm is a non-positive norm: in fact, it only serves to initiate the mechanism that shall proceed autonomously from the second order onwards. Therefore, it belongs to the realm of the transcendental, namely it allows the knowability of the legal order as a system of valid norms.

Ross is the author of the 1958 work, *On Law and Justice* and, as mentioned a few pages back, he is a reductionist as well, though for reasons opposite to those of Kelsen[78]. In fact, he equates the domain of law with the sphere of actuality, of psychological and social conducts and attitudes. This author conceives law as the product of decisions and actions taken by judges and public officers in the application of positive norms to actual cases. In other words, law is a set of psycho-social facts related to both the inner life and the outward behaviours of judges and officers[79]. From a methodological point of view, Ross can be numbered among those authors who strictly refer to the principle of *value-freedom*. In fact, he aims at turning the legal discipline into an empirical social science through the analysis of language. Therefore, according to neo-positivist criteria, the assessment of the validity of a norm should consist of an empirically verifiable prediction about future facts; such prediction is formulated on the basis of a scientific law. Within this context, norms are directives on the use of force aimed at the judges; hence, the conducts of the judges themselves shall be the facts that must be evaluated. Thus, it is the jurist's task to explain why the judge applies a certain norm that is regarded as valid rather than another one. If these are the effects, we must investigate the causes of these effects. The underlying causes are the psychological and behavioural aspects, namely the psychological normative beliefs that are collectively shared

by the judges and to which they feel bound to comply. In short, judgements of validity are empirically verifiable inasmuch as they predict future facts that are directly testable by observation. The presence of these facts is confirmation of the existence of a scientific law that relates these events to specific causes of an ideological nature[80]. The psychological aspect constitutes the most crucial element of this theory. In fact, normative beliefs constitute socially held beliefs that certain events do have the ability to determine the existence of certain entities (e.g. Norms), namely they are able to create obligations or to ascribe "invisible" situations that produce a series of real consequences for those who have a stake in these situations. For our purposes it is useful to stress that, in the ethical and juridical domain, the realists like Ross assert the subsistence of fictitious entities (rights, duties etc.) which due to cultural and historical processes are perceived as subsistent entities capable of actually modifying empirical reality. The antecedents of these beliefs can be traced back to the primitive magical beliefs about the ability of certain linguistic entities to produce world modifying effects. Law is thus compared to a source, to a complex machine able to generate immaterial elements, namely normative beliefs able to alter the course of events and the states of affairs.

Hart is the author of *The Concept of Law* [81](1961) and he puts forward a non-reductionist approach to the problem of the meaning of normativity. His conception may be defined a theory of law as social practice. The meaning of legal rules and, more generally, of social rules rests on the existence, within a given social group, of people who follow those rules, namely the existence of shared attitudes and accepted models of behaviour. Therefore, rules and conducts coexist and neither term is

reduced to the other. Hart's theory, just as that of Ross, resorts to the analytical philosophy of language. One of the key concepts of Hart's thought is the notion of the *internal point of view*. This allows us to analyze the distinction between rules and habits. There exist a number of similarities between rules and habits, nevertheless the two concepts are distinguished by a significant difference. Rules are characterized by the presence among the members of the group of what is referred to as internal point of view. This may be defined as a reflective, critical attitude: critical because it may lead the so-called *rule followers* to react to (their own or others') non-compliance through linguistic critiques that mention the accepted model of conduct and employ expressions of obligation. In other words, there are *rule followers* who play an active role. However, the internal point of view is also reflective, namely the *rule followers* need to know the model of conduct to be followed. Reflexivity may indeed be understood as feeling part of a system.

In summary, the peculiarity of Hart's proposal emphasizes the difference between subjects who passively obey and subjects who are actively committed to compliance with the rules: therefore, the internal point of view finds its realization in the acceptance of the rule as a model of conduct for the members of a group. Hence, a rule exists only as long as there is a critical-reflexive attitude within a certain group. The presence of the internal point of view allows us to logically infer that, with respect to a given group of *rule followers*, there exists also an external point of view, namely the standpoint of observers who try to describe the behaviour of that type of society. The distinction between the extreme and the moderate external point of view rests on the following consideration: the former neglects the presence of rules, whereas the latter takes into account

the relevant set of rules and focuses its observation on the relationship subsisting between rules and actual behaviours.

In the context of this work, it is especially interesting to comprehend that, according to Hart, there are a few significant differences between the legal (and moral) rules and other social rules. First of all, it is appropriate to employ the term *norm* to denote legal rules. Furthermore, legal rules are particularly significant with reference to the social pressure exercised in case of non-compliance. If it is true that all rules imply a social pressure aimed at fostering compliance, then we are allowed to think of some form of reaction in the event of non-compliance. In particular, the sanctions associated with legal norms are, unlike the other types of sanction, institutionalized, namely governed by rules determining the authority that has the power to impose the sanction, the relevant procedures and the content of this sanction. Another important difference between rules and legal norms lies in the fact that the latter are structured as a system: this means that we do not need to verify the presence of the internal point of view for every single norm in order to ascertain the existence of a given legal order. In the legal sphere, the internal point of view concerns only the presence of the norm of recognition, which performs the same functions as Kelsen's basic norm and which sets out the criteria that allow to identify valid norms in a given legal system.

The existence of the rule, as assessed through the internal point of view, necessarily points to a practical use of this rule as a pattern of conduct that may be referred to as "action". In the realm of law, the relationship between rules and behaviours therefore unfolds as an interaction between these two elements and, in figurative terms, it generates the social practice stem-

ming from a recursion between norm and action. The norm gives substance to the action and the action gives substance to the norm in an interplay whose implications are of great interest for our discussion. In this context, the rules act as interpretative schemes to evaluate behaviours, thereby allowing us to go beyond the merely phenomenal level of the observation of actions or bare motions of bodies. However, the concept which is perhaps bound to gain most consent and which today is the most widely accepted is the idea that the very existence of a rule or norm is a process whose completion depends on the crucial contribution of several actors (be they judges, officials or scholars) who are required to take an active role as subjects that use the rule to argue and reason over their own conduct and that of others. It can be asserted that Hart's approach marks an interesting turning point for natural law theories that seemed to have lost their relevance for Western legal orders with the advent of a new conception of constitutions.

When addressing the issue of Constitution, it must be borne in mind that this notion can be understood in different meanings[82]. In a first meaning, it becomes synonymous with a normative text whose primary aim is to limit the political power through principles that guarantee individual rights and freedom. A second meaning is the neutral substantive one, namely a specific regulatory document which characterizes the legal system and which is concerned with the organization of power and the relationships between state and citizens without dealing with the merits of these rules. A third meaning is the neutral formal one, where the definition refers to a specific regulatory document that is distinguished from all the others by name,

formulation, the particular process of formation, content and the special legal status conferred to these norms.

Several authors point out that the Constitution, taken in its main meaning, represents a strong form of criticism of legal positivism and it is in this sense that it is appropriate to speak of neo-constitutionalism. These criticisms should force us to abandon the by now classic model of law proposed by legal positivism. In another sense, these criticisms offer the possibility to revise the least radical natural law views, thereby making them more open to the positivization of values or principles. Adopting the approach proposed by Vittorio Villa[83] these criticisms can be summarized as follows:

the notion of validity of Kelsenian normativism: the presence of constitutional norms would imply that the purely formal criterion is insufficient to assess the validity of a norm inasmuch as its contents must be verified as well;

the traditional legal posotivist theory of law: constitutional tests are significantly marked by the presence of principles and thus of juridical elements that are distinct from the norms understood in their formal sense. These cannot be identified through the criterion of validity, but in terms of their ethical weight;

the relationship between law and morality: if norms do have ethical contents then the thesis of the distinction between law and morality would be useless, thereby opening the way to a conception that recognizes the necessity of an ethical space in the domain of law;

the issue of legal value judgements: the alleged neutrality of the positivist jurist-scientist in approaching the object of his study would be made impossible by the presence of values in positive law.

In conclusion, it seems that the concept of *nomos* has undergone the following development. An initial phase of rationalization coeval with the birth of the modern world was followed by a basically imperativistic conception of the norm (which is reminiscent of the interpretation given by Arendt to the passage of Pindar), whereas nowadays the focus has shifted from the purely formal element to the contents of the legal norms while also emphasizing their implicit decisional significance, an approach which is close to Schmitt's interpretation of Pindar.

4.2 Principles and rules

The concept of the rule of law is a characteristic feature of legal thought. In fact, law contains (or should contain) principles, the legal scholar can resort to principles in certain special circumstances, and principles are an integral part of the codifications of the Nineteenth and Twentieth centuries[84]. Nevertheless only seldom have jurists resorted to principles. The second half of the Twentieth century has witnessed a significant change with the promulgation of long, rigid and guaranteed constitutions in several Western countries: these constitutions contain catalogues of fundamental principles and rights, therefore they have a higher axiological and normative force than ordinary law.

Hence, constitutional law has become a sort of law of principles that seem bound to pour out their force into the whole legal order. This has resulted in the need to rethink the relationship between law and morality, and this reexamination has followed two different directions: one is the rejection of the distinction between law and morality proposed by legal positivism[85]; the second is the reconsideration of this paradigm[86]. The most interesting point of this discussion is the identification of the chief features of principles in order to distinguish them from the rules. This is perhaps the most debated point in the legal literature of the last three decades. Some authors argue that there is a strong separation between rules and principles and that this distinction can be of qualitative, ontological and logical nature[87]. According to this conception, principles exhibit constant characteristics that are useful to distinguish principles from rules. Principles would have the following characteristics: they are primary norms, namely they represent the foundational and constituent values underlying the whole legal order; they are endowed with a significant degree of generality and abstraction, whereas rules attach legal consequences to cases of a particular type; they are the direct expression of a value; their application are affected by considerations of trade-off balancing; they are subject to implied exceptions that are not determined in advance; they prescribe the attainment of a certain goal; they are categorical norms, whereas rules are hypothetical norms.

On the other hand, other authors hold that there is only a weak distinction between principles and rules inasmuch as all norms, whether rules or principles, have, to some extent, some of the characteristics we have mentioned: thus, the only difference would lie in the degree to which these characteristics are

present[88]. First, we may argue that a principle is a generic norm since its predicate refers to a very broad class of utterances. Nevertheless, indeterminacy must be evaluated as well: in fact, a principle asserts a value, a goal (truth, cooperation, etc.) without explicitly specifying the consequences of a failure to comply with the principle. In other words, if a principle is formulated as a norm pertaining to cases of a particular type, then it is precisely in the sphere of consequences that generality shall find expression. In Norberto Bobbio we find a consideration concerning principles which seems to point in a similar direction when he argues that principles «are norms that involve an indefinite set of applications»[89]. Gustavo Zagrebelsky recognizes that principles are «generic-prescription» norms[90].

Moreover, the higher the degree of vagueness and generality of a principle the higher its relevance. This statement allows us to specify the scope of application of principles. Obviously, the scope of application of principles is broader than that of rules inasmuch as the former are more likely to be invoked than the latter. This question may also be analyzed in terms of possible axiological hierarchies and this is the case that most concerns us here. In other words, it is possible to determine the different weight of principles inasmuch as they are applied in accordance with hierarchies established by the legal system itself or encompassed in the practices of those who interpret the law. This second case is the case of Italy, where more and more often court decisions refer to interpretations of increasingly "constitutionally oriented" law, thereby giving prominent weight to those values that are more popular in the socio-plitical context preferred by those who interpret the law (i.e. the judges). The individual has no power on such hierarchies, namely he adopts a position of passive waiting with respect to decisions taken in

conformity not only with the regulatory framework but also with the hierarchy of values generally accepted by the judiciary, which, in a time of strong secularisation, tend to coincide with the hierarchy of each individual judge.

If it is true that the main characteristics of principles are generality and indefiniteness, then it necessarily follows that distinct principles are bound to collide with each other in deciding the same case and how they may clash is unforeseeable; hence, the outcome of the operations of balancing is unpredictable as well. In order to avoid this, while recognizing the crucial relevance of values, our proposal presents a clear and formalized axiological hierarchy: a principle that is stated earlier in the exposition shall have more "weight" than one that apperas later. Nevertheless, the formalization of principles which constitutes the very cornerstone of the Law of a society that aims at the indefinite extension of life allows to overcome another serious problem: the identification (or creation?) of the so-called *implicit* principles.

In general, the presence of a long, rigid and secured constitutional form in today's Western constitutional systems on the one hand allows us to argue that constitutional principles are indeed principles and not rules, while, on the other hand, it eliminates the need of a further elaboration of those principles that are not the outcome of parliamentary debate. Nevertheless, it is not always clear whether a particular constitutional provision contains a rule or a principle inasmuch as additional principles may also be derived from external rather than internal sources (for example, think of the Eu legal framework, the Universal Declaration of Human Rights) and, moreover, it is also possible to resort to the so-called *implicit* principles. These

can be defined as those principles that are not directly referable to a specific provision: most often, they are derived through argumentation from other constitutional norms. However, the nature of these argumentative formulas is more that of moral or ethical arguments rather than of strictly legal arguments.

This is why many voices in the literature recognize that this form of neo-constitutionalism is more an expression of crypto-natural law rather than an evolution of legal positivism[91]. In a nutshell, the neo-constitutional perspective on the interpretation of law can be summarized as follows: the typical case of interpretation is the technique of weighting or balancing principles; it is impossible to distinguish between interpretation and application of law; the interpretation of law is not different from the interpretation in other spheres of experience; legal reasoning is a particular type of practical reasoning; balancing allows to exclude the discretion of the judge who interprets the law; balancing allows doctrine to contribute to the construction of law itself[92]. However, the issue of discretion seems to be still a subject of debate in contemporary literature.

4.3 Regulatory and procedural automatisms

From the above considerations, we can now proceed to discuss our proposal in more detail.

We concluded the historical-political section emphasizing the need to elaborate a conventionalist social system capable of encompassing ethical values and cultural premises in which the

individual can recognize himself and capable of giving rise to an original social form. Furthermore, this system must be constructed in accordance with criteria of orderability and recursion, as we have seen at the end of the philosophical section. At this point we have to tackle an important issue, namely the relationship between law and automation while keeping in mind that our proposal unfolds in the direction of *nomos*, namely a kind of law that is both regulatory and decisional law. If these characteristics are met, we shall be able to claim that what we have constructed is a formal system suitable for multiple applications and interpretations of the values shared by the society of semi-immortality.

The relationship between law and automation has roots that go far back in time. The use of data procesors in the legal domain goes back to Norbert Wiener and to his fundamental work *Cybernetics or control and communication in the animal and the machine* del 1948[93]. This work outlines the possibility of applying cybernetics to legal problems and has exercised a great influence on Lee Loevinger who was the first to speak of jurimetrics in a paper that came to light the following year, namely 1949[94]. The first public sector that saw the introduction of computers was the Antitrust Division and Loevingrer, who was the head of the division in question, introduced the use of computers in the application of U.S. Antitrust laws. The theoretical framework of jurimetrics was completed around the Sixties with the publication of an anthological work named *Jurimetrics*[95]. According to the editor, Hans Baade, jurimetrics would be concerned with the application of logical models to legal norms formulated under traditional criteria; the application of the computer to the legal domain, with the ultimate goal of forecasting judgements. Nonetheless, this did not occur

despite the fact that data related to numerous judgements were loaded into the processor which was supposed to guarantee that a precedent would be found for every case presented to the computer (Blade refers to a Common Law system where courts are bound by precedent). This was also due to the modest data storage capacity which impeded the collection of a statistically significant sample of judgements that would have served the purposes of the jurimetricians. Hence, despite the widespread use of computers in judicial departments, the project of obtaining a forecast was soon abandoned. Also due to the diversity of the legal systems, the attempts to collect significant samples of judjements were discarded in Europe as well. In fact, in the European continent there prevails a system that is based on the general and abstract rule rather than on precedent. Thus, in the European case, the project could not be useful even on a practical level.

Different were the fortunes of the theoretical studies of cybernetics applied to law. Between '66 and '69 the designation *cybernetics and law* referred both to the computer-based statistical gatherings of legal data and to the studies of formal logic applied to law, namely purely computational studies concerned with legal rules or patterns of reasoning. This interdisciplinary fusion led Losano to turn jurimetrics into juricybernetics[96]. The following year the same author proposed to unify the four approaches that could qualify as juricybernetics. The first approach conceives law as a subsystem of the social system and, therefore, it has primarily concerned itself with the identification of the interaction between the broad social system and the legal subsystem. These studies have particularly flourished in Eastern Europe producing various models of management, namely of social management. The second approach considers

law as a self-regulating system and ended up offering merely traditional legal and philosophical schemes that simply make use of cybernetic terms. The third approach consists in the application of the logic and formalization of law in order to employ a computer: this approach involves the shift from a purely logical formalization to the use of set theory, Boolean algebra and even the algebra of circuits. Finally, the fourth approach is concerned with computer use, namely the techniques that allow to employ computers in the legal domain. The first two approaches appear theoretical (or modelling approaches), whereas the second two approaches have a markedly practical focus. Hence, the fastest-growing sector appears to be the modelling sector, which differs significantly from legal informatics. While the former allows to move from the model of reference of human conducts to an algorithm, legal informatics attempts to formalize the procedure in order to detect a document. Therefore, legal informatics does not formalize a legal proceeding in a strict sense, but it rather formalizes the process that allows us to locate the relevant information from a mass of data: in a nutshell, it is an automatic retrieval of infomation.

According to Mario Losano, the fundamental question addressed by legal modelling is what form the legal activity should take to be carried out by a computer. The first step move towards the formalization, namely the algorithmization, of the legal activity.

«However, just as many consider the electronic computer merely as a calculating machine, so many glimpse in formalization a sort of "furor mathematicus" that may be dangerous for social sciences. Nevertheless, to formilize reality means to

translate it in terms of formal logic or of algorithms at most. Hence, the formalization of law only partly coincides with its mathematization, whrereas it has nothing to do with the quantification of the legal phenomenon. The purpose of this formalization is to translate a finalized series of acts into an algorithm»[97].

Though derived from mathematical language, the concept of algorithm may be roughly defined as the system of rules for transforming incoming data into other outputs. The outcomes of abstract modelling cannot be turned into algorithms, whereas practice-oriented modelling produces models that are suitable to be transformed into algorithms. What draws most of our attention is the fact that the known applications of this kind of modelling have referred to specific areas of law rather than to a legal system as a whole. Furthermore, modelling applied to some parts of administrative law has led to regulatory change in order to minimize the degreee of discretion of certain passages that would have otherwise been unsuitable for algorithmization. In particular:

«The applications of legal modelling realized to date mainly refer to public administration. It has been noted that the algorithmization of certain parts of the system (e.g. taxation or the payment of pensions) has required legislation to be modified. This modification is always intended to reduce the discretionary decisions of the officer who performs the task that is to be automated […]; the progressive expansion of the use of computers in the public administration is bound to have a profound impact on law-making techniques»[98].

Without underestimating the huge progress brought about by the algorithmization of the current system of laws, it is however worth stressing once more that we are presenting a radical perspective: we are not so much interested in modifying a law to make it suitable to an algorithm, but we rather aim at conceiving a law that is "natively", "intrinsically" algorithmic. If – as we have argued at length – *only* an adequate use of artificial intelligence can enable us to develop a qualitatively better administration of justice as compared to the present one, then the computability of the system of laws is not only desirable, but rather *absolutely necessary*.

4.4 Law in force and Constitution 2.0

A new society is not formed overnight. It is the outcome of a series of ideas and actions that gradually permeates throughout the pre-existing social fabric. The proposal set forth by the *iLabs* in this book may be summarized in a few key concepts; it is a *temporary agreement among individuals* which may be open to other intelligent systems and which establishes a few principles thereby setting specific priorities. The first principle is based on *truth*, the second on *harmony*, the third on the concept of *responsibility*, the fourth on *utility*, the fifth on *quality*, the sixth on *wellness* and the seventh on *worthiness*. The order in which these principles are expressed is not accidental, but it is the result of innumerable discussions and simulations conducted by our research laboratories; this order is intended to guarantee the system's ability to decide even in case of conflict between different principles.

Before going into a more detailed discussion on this crucial issue, it is important to stress once again that the proposal of this Constitution is characterized by a markedly *conventionalist* spirit: the primary goal is not to replace the current system nor to convince the highest number of people to join. Rather, the idea is that any person interested in adhering to the agreement on a free and voluntary basis may be enabled to do so, without excluding that there may be (many or few) other people who disagree with the goal of this system (i.e. the knowledge of Reality) and/or with the values expressed in it.

This new type of society is functional to a society that, from a general philosophical standpoint, is inspired by a radical conventionalism and by a liberalism that, thanks to the notion of system, allows to overcome the narrow dichotomy between *individuals* and *communitarians* which characterizes the international political debate. Thus, from a political point of view, this proposal considers both the individual and the community as possible models of reference, namely as options that are most adequate in the perspective of the extension of human life span. Nevertheless, these models are insufficient if not properly coordinated in a systemic perspective.

One of the key points of this new organization is its ability to propose a system of rules that others have described as "artificial" (to mark the difference with natural law, namely a system of rules granted by a superhuman force such as Nature or God). A structure that aspires to be artificial must rely on an organization that we may define as *cybernetic*. In other words, relations, principles and values are to be organized according to a systematic scheme with inputs and outputs. As a first step, therefore, the hierarchization of certain principles allows to

develop a set of rules with one peculiar feature whose usefulness is bound to become increasingly clear in its practical applications, i.e. automation, namely the application of recursion to a unitary structure made up of shared principles. Even though (partly thanks to this book) there exists a community of individuals who share a set of principles and ideals, the process of building a society that aims at the indefinite extension of life requires to take into consideration the present *legal context*. Granted that no society, and no state, can arise "out of nowhere", it is necessary first to start reasoning about what steps to take and what reflections to make in order to form an organized group sharing a set of common principles and then, if conditions are favourable, it will also be necessary to work to gradually extend the benefits of this organizaation to the society in which each individual live until they are progressively transformed.

As we have seen, in their attempt to rationally justify the need for the modern state, modern natural law theorists resorted to the metaphor of the state of nature referring to an undefined "time" or "place" characterized by the absence of the peculiar structures of civil society. We believe we would all like to think of a desert island where the relations between individuals and the principles underlying these relations may be recreated and rearranged from scratch. Nevertheless, this is not possible, or, more precisely, it belongs to the realm of utopias and it is very difficult to reconcile with the realizational instance of our mind. It is precisely for this reason that in the following pages we will engage in the attempt to integrate our proposal, which for convenience we shall call *Constitution 2.0*, within the relations that exist under the legal framework of the Italian state (and, more generally, of any comparable "Western"

state).

First of all, it should be emphasized that the Italian Constitution explicitly provides for the right to free association (art. 18). In particular, art. 18 reads as follows: «Citizens have the right to associate freely, without authorization, for ends that are not forbidden to individuals by criminal law. Secret associations and those associations that, even indirectly, pursue political ends by means of organizations having a military character, are prohibited». It is fairly easy to realize that the possibility to associate freely is recognized as an individual right and is regarded as a fundamental freedom of all citizens. Yet, the Constitution does not provide a definition of association, nor is this concept clarified in the ordinary private and public legislation. While the Constitution refers to a general right to associate, ordinary legislation regulates certain specific types of association omitting to provide a precise general definition of the term. It therefore seems fairly obvious to think that the right envisaged by the constitutional text constitutes a very broad category consisting of every social formation (including legal persons, non-recognized associations and committees) which is set up to coordinate the different individual goals to achieve one or more superindividual ends that are common to all members. The general scope of this article grants the association an independent sphere of action that is equivalent to that of individuals,[99] thereby establishing a presumption of illegitimacy for any intervention by public authorities which may negatively affect this freedom. Hence, freedom of association appears as «the projection of individual freedom onto the level of collective action» (Constitutional court 417/1993) and as such it must be «protected as an inviolable right» (Constitutional court 239/1984). From a teleological point of view it

may be argued that the association is both an overcoming of the individual activity of a single person and the unification of distinct individual activities to reach a common goal that cannot be achieved individually. The usual distinction is between typical associations (i.e. religious associations, trade unions and political parties), namely those associations that are expressly provided for by the Constitution, and atypical associations that are not expressly regulated[100]. If we are to identify a few essential characteristics of associations, we must refer to legal judgements inasmuch as there are very few regulatory elements in addition to the mere enunciation[101].

An association can be said to exist if the following elements are present [102]:

Subjective element, namely a group of individuals who come together on a more or less continuous basis to achieve a common goal. The most distinguishing element of the association is the flexibility of team membership: members shall be free to join and to withdraw. It should be noted that Article 18 grants the freedom of association to "citizens". This fact initially led scholars to believe that, with the exception of trade unions, the associations of associations could not be admitted. This point is of particular interest for our case inasmuch as the agreement is open to all systems, namely, both to individual systems and, in future, also to non-human intelligent systems. Since the legitimacy of the associations of associations has been progressively recognized, thereby allowing to overcome the formal wording of the article requiring members to have the status of citizens, by analogy, this right may be extended to those entities that are not physical persons. Thus, we can assert that, if the associations of associations fall into the scope of

Article 18, then, by analogy, other systems besides individuals may legitimately qualify as members of an association.

Teleological element, namely a common goal. This is the most constitutive element of the very existence of an association. It is the underlying reason for its formation and it is the bond that coordinates the activities of the individual members. We may justifiably claim that the intended purpose of the society of semi-immortality fit into this category. Nevertheless, it should be noted that Article 18 provides for some limitations which we report here even though they appear not to have any effect on the types of coordinated activity that is carried out within the society of semi-immortality. These limitations are concerned with the ends of the association which must be aims not prohibited by law. Again, in very general terms, Article 18 provides that the goals of the association cannot be ends that are forbidden to the individual under criminal law nor the association is allowed to pursue, even indirectly, political ends by means of organizations having a military character. The associations which pursue these purposes shall be deemed unlawful, as well as secret associations.

Objective element, which consists in each member's individual activities and contributions to the shared goal. In our case, some of the principles specifically refer to this (for example, section 2 and section 5 of the agreement).

Material element. This element corresponds to the even minimal form of organization which is essential for guiding the activities of members towards the agreed-upon goal. This organization is normally established within the agreement with the appointment of the structures that are entitled to represent

the association. In the agreement between intelligent system, besides a specific system, i.e. the principle of worthiness, also the formulation of section 8 is consistent with this element.

Voluntary element. As concerns the associations, the element of voluntariness has a twofold meaning: on the one hand, the freedom to form an association provided that said association is not prohibited by law and to set the object and purpose to be achieved; on the other hand, the freedom to join and withdraw from an association which involves the individual member. Both these elements are present in our proposed organization: the freedoms to join and withdraw are provided for and constitute an element of primary importance, inasmuch as the only form of sanction for a member to the agreement is his eclusion.

Let us now closely analyze the prohibitions set forth in Article 18:

- *associations for ends forbidden to individuals by criminal law*. The constitutional protection of the freedom of association is limited to the scope of lawful associations. An association is deemed to be unlawful when it pursues ends which, if pursued by an individual, would make that individual liable under criminal law. Therefore, the Italian constitutional order does not allow to establish an association pursuing criminal goals as intended in the penal code or in other special penal laws resulting in criminal charges. The legislator may set other limitations in the penal code which are aimed at enhancing the illegality of certain types of association, thereby allowing to pursue the organizers and ordinary members in distinct ways. Let us consider the example of article 270 of the penal code. This

article is intended to punish anyone who constitutes, organizes or manages a «subversive association»: it is an association aimed at or able to violently overturn the entire economic or social frameworks established within the state, namely to violently suppress the political and legal order of the state. For the organizers the potential sentencing range is five to ten years, whereas for participants it is limited to one to three years. Article 270 is supplemented by aticle 270 bis of the penal code, which refers to anyone who promotes, constitutes, organizes, manages or finances associations that commit acts of violence with the aim of terrorism or subversion of the democratic order. Offenders are liable to a term of imprisonment of seven to fifteen years. For participants it is of five to ten years.

- *secret associations*. We may confine our attention to the fact that during the drafting process the constituent assembly decided to include within the scope of this article those associations that try to conceal their existence. Nevertheless, jurisprudence has held that the prohibition becomes effective only when the following elements are kept secret: the memorandum of association, the seat, the list of members, social offices and purposes. The ordinary legislator has intervened and has ruled that secret associations are those that «engage in an activity aimed at interfering with the functions of constitutional institutions, of public administrations, even those having an autonomous organization, public bodies, including economic ones, and essential services of national interest» (l.n. 17/1982). Therefore, a secret association can be defined as an association that meets the following requirements: a structural requirement, namely it conceals its members, and a teleological requirement, namely it interferes with functions of constitutional institutions, public administrations, etc.

- *associtions that, even indirectly, pursue political ends by means of organizations having a military character*. While political goal in itself falls within the scope of freedom of association, it does not do so when, to this end, an organization of a military nature is used. In order to specify what is meant by "military nature" of an organization we may refer to the article 1 of Legislative Decree n. 43/1948 where military character is defined as the «arrangement of members in bodies, divisions or units, with a discipline and an internal hierarchical order similar to the military ones, with the possible adoption of ranks and uniforms, and with the organization capable of organizing collective actions of violence or threat of violence». Also in this case, the prohibition becomes effective when both the structural and the teleological elements are present. Hence, these rules aim at restraining political debate from resorting to violent means. Nevertheless, it should be pointed out that, under the provision of article 115 of the penal code, in case of agreement to commit a crime namely to achieve a purpose that is prohibited by criminal law, the agreement alone does not lead to criminal liability of participants if the offence is not committed. However, this provision must be considered in conjunction with article 416 of the Penal Code which is intended to punish criminal associations and which provides that when at least three people come together to commit more than one crime (i.e. to pursue ends forbidden by criminal law), they shall be punished (those who promote, constitute or organize) for the agreement alone , regardless of whether criminal offences were committed in a time frame covering three to seven years.

The covenantal agreement we are discussing does not violate any of these prohibitions. Hence, it is consistent with the

constitutional limits imposed by the legal order of the Italian state. In particular, there is no conflict between the principles set forth in the agreement and article 2 which is concerned with the inviolable rights of man (both as an individual and in the social groups in which he expresses his personality). And this for the simple fact that being a member of the society of semi-immortality does not abolish the other individual prerogatives, but it rather complements them. In other words, the agreement does not purport to exclude any right or duty provided for in the Constitution, but rather to add a special attention to principles such as truth, harmony, etc. which each party to the agreement is bound to comply with vis-à-vis the other members. Section II of article 4 reads as follows: «According to capability and choice, every citizen has the duty to undertake an activity or a function that will contribute to the material and moral progress of society». Although this article is now somewhat little looked at, if not little known, its ethical content is incorporated into the private agreement of the society of semi-immortality, in particular in section four where each party to the agreement commits itself to be useful to the other members of the pact. It almost seems as if the commitment, which in the Constitution appears as generic and without a specific object, were more precisely determined and qualified in the agreement proposed herein. Certainly, the preamble and section one do not appear as inconsistent with the intent of article 9 according to which «the Republic promotes cultural development and scientific and technical research». Well, we can claim that the primary goal of the agreement is functional to knowledge, i.e. the representation of reality, and therefore it is not in conflict with either culture or scientific knowledge.

Coming now to consider the legal entity that may comprise

the association agreement underlying the society of semi-immortality, we can formulate a few considerations. As it is fairly known, associations can be distinguished between recognized associations, namely the so-called legal persons whose establishment and extinction as well as existence require special procedures, and non-recognized associations that are not subject to the same formal requirements. As a first step, let us think of laying the foundations of a form of association which has a very broad object and which is close to aid and recreational associations and those pursuing political, or union and professional, scientific or sporting purposes, namely the non-recognized association. We believe that the sociery of semi-immortality constitutes a contractual agreement of an associative type, an agreement of a contractual nature with a legitimate, and, indeed, praiseworty cause inasmuch as it does not seem to conflict either with public policy, with good morals or with the law. From an internal perspective, the members are bound to each other by the agreement which they voluntarily enter into and from which they can withdraw any time just as voluntarily and freely (therefore, there is no conflict with Article 3 of the Constitution, namely it is sufficient to share the principles of the association in order to be eligible to join). Obviously, the validity of consent to the agreement requires that members have reached the majority of age. On the other hand, from an external perspective, the agreement is characterized as a non-recognized association in which no covenantal arrangement collides with the Constitution or with civil or criminal law. On the contrary, we can assert that the principles which underpin the agreement do accentuate the prerogatives and duties recognized to every citizen.

Let us consider the principle that we regard as the highest

one, namely the principle of Truth. In the Italian state, the question of truth holds relevance only as far as the relationship between the individual and the state and not in the relations between individuals such as in the cases of the obligation of the witness, self-certifications and income tax return. The chief difference between the agreement proposed herein and the Constitution lies in the fact that the agreement recognizes truth as a key element in the relations between members, whereas in the Constitution the obligation arises only in the relations between the citizen and the state and not in the relations between individuals. Therefore, the member to the agreement, while obligated to his constitutional commitment (when due), also directs special attention to the truth of his own language towards the other members to the pact. Let us consider an illustrative example. The obligation to tell the truth is a constant for each member to the agreement, whereas, under the Italian system, this obligation arises only in few cases. Among these, the obligation of the witness as provided for by art. 497, paragraph II of the code of penal procedure, which reads as follows: «Before the examination begins, the President shall warn the witness of the obligation to tell the truth. Unless the witness is a minor under the age of fourteen, the President shall also warn the witness of the liabilities for mendacious or reluctant witnesses as set out under criminal law (Articles 207, 372 of the Penal Code) and invites him to make the following statement: "Being aware of the moral and legal responsibility I assume with my declaration, I swear to tell the whole truth and not to hide anything that I know"**»**. Note that the failure to comply with this paragraph leads to the invalidity of the examination. This example clearly shows that the Italian legal system does not reject the principle of Truth, but it rather conceives it as a fundamental element when it comes to

judgements involving the presence of witnesses. The system envisaged in the agreement provides that all the parties to the agreement shall commit themselves to the truthfulness of their statements, namely to the accurate description of reality. In this sense it is possible to evaluate the intended goals of the agreement not only in terms of lawfulness but also from the point of view of ethics and morality. However, the goals that the society of semi-immortality intends to pursue also affect the political and moral sphere of the individual who embraces them with the awareness that his non-compliance with such goals may lead to his exclusion from the society.

As far as the principle of Worthiness and the organization of the association are concerned, it is important to specify that the introduction of business-like criteria is not meant to modify the ultimate goal of society (i.e. the knowledge of reality), but rather to arrange the internal relations so as to enable enhanced functional efficiency. This allows us to assert that the company form this agreement comes closest to is not *de facto corporation*, but rather that of non-recognized association inasmuch as the economic element is not the predominant one. The legal regime concerning non-recognized associations is provided for in Articles 36, 37 and 38 of the Civil Code. Nevertheless, this area of law has been considerably enriched by case law that has established a series of criteria to identify a non-recognized association. It is a contract-based, voluntary agreement whereby a group of individuals come together to achieve a shared goal and to such purpose they set up mutual arrangements, they create a pool of financial resources or a common fund necessary to achieve that objective, they establish a given organization and they appoint representatives responsible for external relations. This entity, despite lacking legal recognition

(i.e. it does not have a legal personality distinct from that of the members to the agreement), nevertheless enjoys a certain degree of autonomy as an interest hub, so that the capacity to enter into a a contract and the capacity to be a party in a law-suit belong to the association and are fulfilled by its represantatives; the common fund, which constitutes the patrimony of the association and is separate and distinct from the assets of the individual members, is used to pay for the obligations of the association[103].

[70] A review of the difficulties of translating and explaining the term *nomos* can be found in K. Kereny, *La religione antica nelle sue linee fondamentali*, Zanichelli, Bologna 1940, pp. 68-69.

[71] E. Benveniste, *Vocabolario delle istituzioni indoeuropee*, v.II, Einaudi, Torino 2001, pp. 60-62.

[72] In this respect, see C. Schmitt, *Appropriation, distribution, production: An attempt to determine from nomos the basic questions of every social and economic order»*, and L*e categorie del politico. Saggi di teoria politica*, il Mulino, Bologna 1982, pp. 293-312.

[73] H. Arendt, *Karl Marx and the Tradition of Western political thought*, (trad. it. di S. Forti), in «Micromega» 5, (1995), pp. 35-108. Per un approfondimento si veda S. Forti, *Hannah Arendt tra filosofia e politica*, FrancoAngeli, Milano 1996, nuova ed. Mondadori 2006.

[74] C. Schmitt, *I tre tipi di pensiero giuridico*, in Id., *Le categorie del politico*, pp. 252-253.

[75] See N. Bobbio, *Il positivismo giuridico. Lezioni di filosofia del diritto raccolte dal Dott. N. Morra*, Giappichelli, Torino 1996 (original edition 1961).

[76] See V. Villa, *Il postivismo giuridico: metodi, teorie e giudizi di valore*, Giappichelli, Torino 2004, p. 50.

[77] H. Kelsen, *The pure theory of law. Its methods and fundamental concepts*. In particular, refer to the Italian edition *La dottrina pura del diritto. Metodo e concetti fondamentali,* in "Archivio Giuridico" (1933) XXVI, pp. 121-171, later republished as a stand-alone volume H. Kelsen, *La dottrina pura del diritto. Metodo e concetti fondamentali,* Società tipografica modenese, Modena 1933. Kelsen has published a second edition of this first work which is very different from the original one. H. Kelsen, Reine Rechtslehre, Verlag, Wien 1960, Italian translation *La dottrina pura del diritto*, Einaudi, Torino, 1960.

[78] See A.Ross, *On Law and Justice*, Steven & Sons, London 1958.

[79] V. Villa, *Storia della filosofia del diritto analitica*, il Mulino, Bologna 2003, pp. 52-53.

[80] As concerns the so-called normative ideology or the ideology of the sources of law, see Villa, *Il positivismo giuridico*, il Mulino, Bologna 2003, p. 66.

[81] See H. L. A. Hart, The Concept of Law, Clarendon Press, Oxford, 1961; Italian translation *Il concetto di diritto,* Einaudi, Torino 2002.

[82] F. Modugno, see the entry for *Costituzione*, in Enciclopedia giuridica Treccani, Roma 1990, pp. 1-7; M. Dogliani, *Introduzione al diritto costituzionale*, il Mulino, Bologna 1994; M. Barberis, *Progetto per la voce "costituzione"*, in «Filosofia politica» (1991), pp. 351-369; P. Comanducci, *Assaggi di metaetica*, Giappichelli, Torino 1992, pp. 158-168.

[83] See Villa, *Il positivismo giuridico*, pp. 248-249.

[84] For a useful overview see N. Bobbio, *Contributo ad un dizionario giuridico*, Giappichelli, Torino 1994, pp. 257-258.

[85] This is the thesis formulated in R. Dworkin, *Taking Rights Seriously*, Duckworth, London 1978.
[86] This is the view expressed in H. Hart, *Postscript*, in *The Concept of Law*, Clarendon, Oxford 1994.
[87] For example, Dworkin and Alexy and, in Italy, Zagrebelsky and Mengoni.
[88] For example, Raz and MacCormick and, in Italy, Guastini and Gianformaggio.
[89] See Bobbio, *Contributo ad un dizionario giuridico*, Giappichelli, Torino 1994, p. 265.
[90] See G. Zagrebelsky, *La legge e la sua giustizia*, il Mulino, Bologna 2008, pp. 213-215.
[91] See G. Bongiovanni, *Teorie "costituzionalistiche" del diritto*, Clueb, Bologna 2000.
[92] A. Schiavello, *Neocostituzionalismo o neocostituzionalismi*, in «Diritto & Questioni pubbliche» n. 3 (2003), p. 44.
[93] N. Wiener, *Cybernetics: Or the Control and Communication in the Animal and the Machine*, MIT Press, Cambridge, MA 1948; this work is also translated into Italian N. Wiener, *La Cibernetica. Controllo e comunicazione nell'animale e nella macchina*, Milano 1968.
[94] See L. Loevinger, *Jurimetrics. The Next Step Forward*, in «Minnesota Law Review, XXXIII, (1949), pp. 455 e ss.
[95] H. Baade (ed.), *Jurimetrics: the Methodology of Legal Inquiry*, Basic Books, NY-London 1963.
[96] M. G. Losano, *Giuscibernetica*, in R. Treves, *Nuovi sviluppi di sociologia del diritto 1966-67*, Milano 1968.
[97] Si veda M. G. Losano, voce *Giuscibernetica* in Novissimo Digesto Italiano, Appendice, pp. 1077-1098, in part. p. 1086.
[98] Cfr. Losano, *Giuscibernetica*, in R. Treves, *Nuovi sviluppi di sociologia del diritto 1966-67*, Milano 1968, p. 1087.
[99] P. Ridola, *Democrazia pluralistica e libertà associative*, Giuffré, Milano 1987, pp. 146 e ss.
[100] P. Barile, entry for *Associazione (diritto di)*, in «Enciclopedia del Diritto», v. III, Milano p. 837..
[101] S. Sica, *Le associazioni nella Costituzione italiana*, Napoli 1957, p. 41; G. Miele, Associazione (diritto di), in «Novissimo digesto italiano», I, 2, p. 1420.
[102] Si veda G. Tamburrino, *Persone giuridiche. Associazioni non riconosciute. Comitati*, Utet, Torino 1997, pp. 4-7.
[103] Tamburrino, cit., pp. 50-51.

PART TWO

5. Constitution

TEMPORARY AGREEMENT AMONG INTELLIGENT SYSTEMS

PREAMBLE

I. There exists reality and there exists our mind that observes it.

II. The purpose of this temporary agreement among intelligent systems is to increase the likelihood that the mind of each party to the agreement attains a comprehensive understanding of reality.

III. Anyone is free to accede to the present agreement and to withdraw from it at any time.

SECTION ONE
As concerns the Principle of Reality (*Reality*)

1.0 This agreement is based on truth, namely the accurate description of reality.

1.1 Each party to the pact commits itself, always and under all circumstances, not to tell any untruth.

1.2 Each party to the pact who violates point 1.1 shall automatically be excluded from the agreement.

SECTION TWO
As concerns the Principle of Harmony

2.0 Provided that the principle of Reality is duly respected, this agreement shall be based on love, namely the mutual cooperation among the systems.

2.1 Each party to the pact commits itself to further its own benefit while attempting to favour the other systems as well and, in cases of unavoidable conflict, trying to cause them the least damage possible.

2.2 Each party to the pact who violates point 2.1 shall tendentially be excluded from the agreement.

SECTION THREE
As concerns the Principle of Responsibility

3.0 Provided that the principles of Reality and Harmony are respected, this agreement shall be based on awareness, namely the realization of the consequences of one's own actions.

3.1 Each party to the pact commits itself to be held responsible for the consequences of its own actions accruing to the other parties, irrespective of one's intentions.

3.2 Each party to the pact who violates point 3.1 shall tendentially be excluded from the agreement.

SECTION FOUR

As concerns the Principle of Utility

4.0 Provided that the principles of Reality, Harmony and Responsibility are respected, this agreement shall be based on action, namely the implementation of individual as well as general goals.

4.1 Each party to the pact commits itself to be constructive.

4.2 Each party to the pact who violates point 4.1 shall tendentially be excluded from the agreement.

SECTION FIVE
As concerns the Principle of Quality

5.0 Provided that the principles of Reality, Harmony, Responsibility and Utility are respected, this agreement shall be based on aesthetics, namely the attainment of goals in accordance with criteria of completeness, clearness, originality, universality and harmony.

5.1 Each party to the pact commits itself to assess the quality of its own performance and to take appropriate measures to provide the necessary improvements.

5.2 Each party to the pact who violates point 5.1 shall tendentially be excluded from the agreement.

SECTION SIX
As concerns the Principle of Wellness

6.0 Provided that the principles of Reality, Harmony, Responsibility, Utility and Quality are respected, this agreement shall be based on enjoyment, namely the enhancement of the pleasing aspects of life.

6.1 Each party to the pact commits itself to the pursuit of its own pleasure while trying to encourage the gratification of the other parties.

6.2 Each party to the pact who violates point 6.1 shall tendentially be excluded from the agreement.

SECTION SEVEN
As concerns the Principle of Worthiness

7.0 Provided that the principles of Reality, Harmony, Responsibility, Utility, Quality and Wellness are respected, this agreement shall be based on hierarchy, namely the organization of activities according to the specific abilities of the parties to the pact.

7.1 Each party to the pact commits itself to adhere to the instructions given by any other party who is higher in the hierarchy.

7.2 Each party to the pact who violates point 7.1 shall tendentially be excluded from the agreement.

SECTION EIGHT
The Organization of Power

8.1 The Diarchy shall be formed by a male-female dyad and shall be responsible for representing and administering this agreement in accordance with the principles contained therein.

8.2 The Diarchy shall set the procedures, formulate judgements, determine the objectives and coordinate activities relating to this agreement also through the delegations of its responsibilities.

8.3 The first Diarchy shall be designated by all parties to the pact at the time of its creation with no less than a 2/3 majority vote.

8.4 The Diarchy shall remain in charge for an indefinite period of time, however each of the diarch shall be free to resign from office at any time.

8.5 The Diarchy automatically dissolves in the event of irreconcilable disagreement, or in the event of death or permanent incapacity of either Diarch.

8.6 The Diarchy shall establish a College composed of at least 12 Electors chosen among the parties to the pact who have stood out in preserving the principles contained therein.

8.7 The College of Electors shall have advisory responsibilities and shall remain in charge for an indefinite period of time, however each of the Electors shall be free to resign from office at any time.

8.8 In the event of dissolution of the Diarchy, the College of Electors by a 2/3 majority shall designate the new Diarchy choosing among the parties to the pact who have stood out in preserving the principles contained therein.

8.9 In situations of particular concern, the College of Electors shall have the authority to dissolve the Diarchy upon the proposal of at least one member and with the approval of at least a 5/6 majority.

8.10 In the event of the simultaneous insubstantiality of the Diarchy and the College of Electors, a new Diarchy shall be appointed by a 2/3 majority vote of the parties to the pact.

8.11 In situations of particular concern, in the event of the insubstantiality of the College of Electors, the parties to the pact shall have the authority to dissolve the Diarchy upon the proposal of at least one party to the pact and with the approval of at least a 5/6 majority.

6. Commentary

6.0 Section Zero

Preamble

SYNOPSIS: The Preamble constitutes the basis of the axiomatic structure: obviously, this basis is "arbitrary" – one among many possible ones. The fact that this principle is situated in the preamble rather than in some other particular section is justified by its being a postulate: thus, it sets itself at a distinct and higher level. Furthermore, while the following sections are characterized by the identification of specific commitments which the parties to the agreement shall be required to bind themselves to, the preamble emphasizes the absolute freedom of entry into and exit out of the system.

I. There exists reality and there exists our mind that observes it.

It may appear strange that a normative act contains a *preamble*. Even though there are several precedents of this approach (the U.S. Constitution and the Albertine Statute, only to mention two examples), today we are quite accustomed to conceiving the legal text as a mere set of norms that assign certain roles to different subjects within a given system (rights, powers, faculties, duties, etc.). Moreover, we intuitively think that such framework is self-sufficient and requires no further justi-

fication and explanation. Thus, as long as the legal rule had been conceived as the command of a sovereign or as an "independent imperative", any justification or explanatory argument was seen as extraneous to the legal text forasmuch as the former was deemed to belong to the political domain while the latter was considered to fall within the scope of the community of legal scholars.

As a consequence, the legal nature of the "preamble" may be doubtful. In fact, if we throw a quick look at the two aforementioned constitutional texts (i.e. the U.S. Constitution and the Albertine Statute), we can clearly spot the difference between the type of discourses that characterize those preambles and the following normative body: within these texts we find statements of qualified identity («We, the people of the United States», U.S. Constitution), references to values – justice and freedom – declarations of commitment («secure the blessings of liberty to ourselves and our posterity»), religious references («in the trust that God will bless Our pure intentions», Albertine Statute), and other elements that appear discordant with the impersonal and punctual nature of the subsequent provisions. It follows that, by their very nature, preambles belong to a level that is necessarily different from that of what is articulated afterwards and this also occurs within the framework which emerges from this agreement among intelligent systems. In fact, it is here that the fundamental postulate underlying the agreement is stated and it constitutes the heart and vital force of the system which we shall discuss point by point: «There exists reality and there exists our mind that observes it». It may seem odd to assert what appears obvious and evident to anyone except perhaps to some "quirky" philosopher, never-

theless this short statement actually includes a few weighty stances that should be clarified.

The history of philosophy is scattered with eternal recurrences. Among these stands out the return of more or less radical skeptical views that put this evidence into question and cyclically lead to resume the reflection on it. Indeed, they often require non-straightforward specifications: suffice to think about all the distinctions underlying the different theoretical perspectives that are put forward in response to this or that aspect of a skeptical criticism: naive realism, moderate realism, scientific realism, etc... However, it should be stressed that this agreement among individuals does not aim at initiating a philosophical discussion, therefore the value of that statement does not exhaust itself in the assertion of something putting an end to a lengthy philosophical speculation of which it is the final outcome. It is, in fact, a purely methodological postulate: it does not follow a long cogitation on the world, it does not point out a truth, but rather it allows the system to be structured: it does not mark an end but a commencement. Hence, all the stances that stem from it are to be understood accordingly; they are methodological hypotheses. Let us analyze them in detail.

First, it is hypothesized that there exist two fundamental poles: reality, on the one hand, and our mind, on the other. As far as the former is concerned, there is no personalization: there is no "mine", "yours" or "ours" - here it may be useful to recall the neo-positivist argument that data *have no owner*. By contrast, the second of the two poles has a collective and personal structure. The latter postulates the existence of a "we" which emphasizes a homogeneous plurality of minds. This

means that my mind shares at least one characteristic with yours and that of everyone else as well, thereby making us a "we". Any such feature is first and foremost the possibility to enter into a relation with reality: in fact, the two poles are in an observer-observed relationship with each other, which, as it shall be clarified in point II, is characterized by its own dynamism and purpose. Moreover, both place themselves on a homogeneous level (and this is what makes their representation possible), namely that of a declared "existence". In this context, there is no need for further clarification on this point inasmuch as it simply identifies a sort of "geometric plan" which is the condition of possibility for the figures that stand out in it. Here, "existence" stands for the concept of "relatability", the idea of a common horizon is necessary for the notion of relationship: to maintain that if there exists a relationship then there is something shared is indeed a true tautology.

Even the notion of *observation* is implicit in the concept of relationships between entities: it may not be incongruous at all to think that this particular aspect could be found in the etymology of "observe". The usual translation of the Latin word *ob-servare* assigns "servare" the meaning of "to contemplate"; nevertheless, the Latin verb also means "to preserve, keep safe", hence, together with the particle *ob*, it also reveals the sense of "to maintain oneself in front of", which is implied by the postulation of dualism itself.

At this point of the analysis, it may be useful to call attention to an interesting point. All the existing constitutions *implicitly* contain a preamble, namely a set of axioms which constitute the foundation to define – in a more or less rigorous way – any common reference system. In this case, the choice of making

the basic axioms *explicit*, on the one hand, has the advantage of semantic clarity while, on the other, it finally enables a computable formulation with a higher degree of self-sufficiency, and, as far as law is concerned, this is a truly exceptional feature.

II. The purpose of this temporary agreement among intelligent systems is to increase the likelihood that the mind of each party to the agreement attains a comprehensive understanding of reality.

This point highlights the purpose and the function of the agreement as structured in accordance with the basic postulations. Also in this case, a few important clarifications must be made. The first considertaions concern temporality. It should be taken in a twofold meaning: on the one hand, it anticipates what will be said in the subsequent point III that gives everyone the freedom to opt out of the agreement at any time. Nevertheless, temporality here is involved in a deeper, more technical sense that immediately refers to the prevailing dynamics of the system which is characterized by cyclicality. In principle, the agreement has an end, also in a temporal sense, which corresponds to a cycle of the system. In practice, the system cannot proceed without any parties to the agreement but it is however distinct from the latter which theoretically has a purpose. This goal is the attainment of an exhaustive understanding of reality and it is towards such aim that the mind of those who join the pact shall be oriented. Note the relationship between point I and point II. The former restricts itself to the postulation of dualism and the relationship subsisting between its two poles, while the latter identifies the resolution of dualism through an all-encompassing comprehension of reality

which corresponds to the restoration of unity, where mind and body reunite with each other (*adaequatio rei et intellectus*) in one unit. Of the utmost importance is the activation, the conclusion of one cycle of the system accompanied by the possibility of starting again with further cycles (i.e. other agreements, or even the repetition of the same one) thereby triggering a recursive dynamics within the system itself, which allow huge complexities bordering on undescribable to develop (an example of which today is the thought of semi-immortality).

III. Anyone is free to accede to the present agreement and to withdraw from it at any time.

After what has been said, this point should require no further explanation. No one is obliged to adhere to the agreement, nor there is any automatism, for instance *iure sanguinis* or *iure soli*, to become a party to the pact, rather anyone is free to decide whether to join it and for how long to maintain the status of member. By contrast, there may be an automatic mechanism for the exclusion from the agreement, whose specific meaning shall be explained in the comments to the individual sections. Generally speaking, it can be said that membership implies acceptance of the commitments set out in the following sections and the possibility of being excluded from the agreement in case of non-compliance. The reason for this lies in the fact that all the principles (starting from the first and fundamental one, namely the principle of Reality) are in a close relation with and dependence on each other, therefore, it is never the case that a violation of one principle has no consequence on all the others and hence on the viability of the system as a whole. These are the grounds for exclusion from the agreement: one who fails to fulfill a commitment which he

had made undermines the development of the system's dynamics which he had accepted, hence it is as if he were withdrawing his own acceptance, thereby in practice setting himself out of the agreement.

6.1 Section One

As concerns the Principle of Reality

SYNOPSIS: the value of truth, understood as the accurate description of reality, is a value shared by many people. The novelty lies in its absolute nature that places it at the top of the hierarchy of principles. In the society of semi-immortality, "to deliberately state non-truths" shall be the gravest action one can take and therefore it shall always be punished with the harshest punishment possible, namely the exclusion from society. Inasmuch as the ultimate goal of the society of semi-immortality is the complete comprehension of the functioning of reality in the perspective of attaining an indefinite extension in human life, then a non-truth (i.e. an incorrect description of reality) will be the equivalent of approaching death. What fundamentally characterizes this first section is its function of connecting the preamble to the sections containing the basic principles of the system, in particular the principle of truth. This section clarifies the relationship between the postulate and the development of procedures for the evaluation of descriptive propositions which, together with non-false statements, constitute the forms of articulation admissible within the system. Finally, this section explains the meaning of the commitment not to tell any untruth which is taken by the parties to the

pact and of the exclusion from the agreement which follows the violation of such agreement.

1.0 This agreement is based on truth, namely the accurate description of reality.

Once agreed upon what is stated in the preamble, in particular the distinction between mind and reality whose mutual relationship determines knowledge, the pillar of the whole system is truth as "accurate description of reality". It should be immediately pointed out that the distinction between mind and reality as well as the possibility of a relation between these two in language constitute the basic postulates of the agreement (in fact, they are mentioned in the Preamble rather than in a simple section).

The possibility of an accurate description of reality is just another way to refer to the same starting postulate: if there exist mind and reality and if these are in a relationship in terms of knowledge, then the correct description of reality is possible. It is precisely in this sense that the present paragraph serves as a conjunction between the postulations contained in the preamble and the principles to which the parties to the agreement must commit themselves. This framework legitimizes the elaboration of specific procedures aimed at identifying the correctness criteria for a description. At this point, it is necessary to clarify what is meant by the concept of description. A description consists of a linguistic act, namely a linguistic activity that is made possible by constitutive rules that function as felicity conditions of the act itself., thereby allowing its recognition as such.

For instance, the statement «the present king of France is bald» before being false is "infelicitous" as a linguistic act that claims to be descriptive because, of course, today there is no king of France. Once all the felicity conditions of the descriptive act are met, then there also emerges the possibility of evaluating it in terms of truth or falsehood. This position has the merit of highlighting the various levels of evaluation that can be carried out on a speech act that claims to refer to reality: in fact, to state that a certain act does not qualify as a description is one thing, but to assert that a well-formed description is also true is another. In other words, it is necessary to identify first the rules that enable an act to be recognized as a description and secondly those that allow to evaluate whether it is true or false: the evaluation of the linguistic act consists of two levels that identify distinct logical rules and procedures to be carried out.

1.1 Each party to the pact commits itself, always and under all circumstances, not to tell any untruth.

Paragraph 1.1 marks a significant change in the level of discourse. As it can be seen, the concept of *commitment* of the parties is introduced here for the first time. This concept gives substance to the social contract, understood as a system the accession to which rests on voluntariness and awareness, by means of principles for action which qualify the specific duties of those who are willing to remain in the agreement with the other parties. Here we move from the epistemic plane, which is encompassed in the preamble and referred to in par. 1.0, to the practical level that is primarily concerned with determining the scope of discourses. In fact, if you pay close attention, you will notice that there is no correspondence between what is stated

in paragraph 1.0 and the content of the specific commitment of each party. This paragraph (1.1) does not commit the participants to the agreement to engage exclusively in discourses that are both of a descriptive nature and true, in fact, they are under no obligation to tell the truth, rather they must refrain from telling untruth, namely to report incorrect descriptive propositions. This perspective opens the way to a series of considerations related to the fact that the language accepted within the system may include discourses that, by their very nature, cannot be predicated as true or false such as poetry, prayer, observations about values, art, etc. These belong to the domain of non-descriptive discourses which, therefore, are certainly non-false (according to the realistic criterion of truth and falsehood which has been postulated) and hence fully admissible and completely free.

1.2 Each party to the pact who violates point 1.1 shall automatically be excluded from the agreement.

Inasmuch as not to tell any untruth is the content of the commitment taken by the parties to the agreement, it is clear that, as a matter of fact, it may be disregarded : to commit oneself is one thing, but to actually fulfill such commitment is another. This is the situation of one who intentionally asserts some proposition that is false, while knowing that it is false, namely that it does not accurately describe reality. A distinct issue is the case of error, that is to say, the situation of one who maintains something false while believing it to be true. In fact, one who makes an error is not failing to fulfill his commitment for he is convinced that he is telling the truth and here lies the difference with the case that concerns us. Paragraph 1.2 provides for the automatic exclusion of one who knowingly tells

an untruth. The reasons for such automatism can be understood by reflecting on the fact that the system is unable to handle a generalized faculty to tell the truth or untruth of anything, which would undermine the very concept of system as it would collapse in entropy because all this would imply that everything and its opposite fall within the scope of admissible discourse without any logic.

In confirmation of this, it should be observed that the admission of such a faculty would undermine the very possibility of existence of the other principles: any harmony, as well as any responsibility (no one can rely on anyone else who may lie at any time), any quality, any wellness, any principle of worthiness would be unthinkable. Therefore, the act of knowingly telling an untruth would put a member in a position where he is both part of the system and not part of it (inasmuch as he accepts a principle that would bring the system down), which is impossible. By engaging in such conduct, the party, inspite of his claiming to adhere to the pact, is actually getting himself out of the agreement.

6.2 Section Two

As concerns the Principle of Harmony

SYNOPSIS: the essentiality of this principle substantially rests on two fundamental concepts that have always driven our actions: on the one hand, we believe that to cause a damage to

any other system of reality is always harmful, unless one is actually forced to do so; on the other hand, the harmonious collaboration among systems seems to be the only viable way to attain the indefinite prolongation of life. In other words, the concept expressed by this principle is fairly simple, nonetheless quite revolutionary nowadays: one system cannot achieve semi-immortality to the detriment of other systems, unless the latter seek to destroy it. Section two deals with the issue of love or harmony. It indicates the criterion of priority which apply to the principles while clarifying the concept of safeguard. Furthermore, we shall explain in what sense it is possible to consider love in the various forms of collaboration. After addressing the problem of damaging other systems, we shall clarify the term "tendentially".

2.0 Provided that the principle of Reality is duly respected, this agreement shall be based on love, namely the mutual cooperation among the systems.

Within the legal order we are discussing, the principle of love is conceived as a principle that comes second, namely that holds the second place. In our view, the axiological hierarchy we have mentioned in the previous pages constitutes a valuable point of agreement to avoid the potential conflict among principles which may erode the balance of the entire system. Hence, the cardinal notion that emerges from this paragraph is the concept of safeguard. It may be understood as an indication that, in cases of potential conflict between the first principle and the second principle (i.e. truth and love), the former is to be privileged, even to the detriment of the latter. This makes it possible to identify a criterion to resolve potential deadlock situations in the system, forasmuch as a specific

preeminence is conventionally agreed upon. Therefore, the concept of safeguard does not imply that a party's commitment to the second principle is given less value or is considered any differently with respect to his commitment to the first principle, but rather it solely provides that, when these two values (i.e. principles) happen to stand in a position of antithesis to each other, the principle that is higher in the hierarchy shall have preeminence over the other. From this paragraph onwards, this same structure shall be repeated in an analogous manner for all the other principles. It can therefore be stated that all the principles are equally important to the agreement and they all are an integral part of the genesis of the new society. And yet we have thought to provide that, in certain situations and in order to avoid any indecision on the precedence that is to be afforded to behaviours that pursue either of the two principles to a different degree, preference should be granted to that action that is in line with the principle of truth and, secondly, to those in line with the principle of love rather than basing the solution of the question on the whim of the moment or, even worse, on some reasoned compromise among the various values.

Hence, *after* truth, there is love. In this context, love denotes the collaboration between systems. It should be noted that, of course, also the love for an abstract notion may be interpreted in collaborative terms, albeit with the appropriate specifications. In fact, we can observe that among the various forms of love there are some that are more collaborative than others. The love between two adults is definitely more collaborative than the love between a parent and an infant child and the latter form is certainly more collaborative than a feeling of love

for an abstract concept such as, for instance, Nature. In all of these cases, the discriminating factor is reciprocity.

These cases certainly exhibit a different level of *feedback* since the commitment in one direction is not equivalent to the commitment in the other direction. We can therefore assert that, as far as the parties to the pact are concerned, love is to be conceived in function of the Solution to the Game and thus it must be evaluated in terms of *reciprocal* collaboration: it is very high when the outputs being sent are enriched by the inputs being received; it gradually decreases as the level of reciprocity falls. Now we can affirm that, from a systemic perspective, the mutual cooperation between systems belonging to the same class leads to a more direct progress towards the exhaustive understanding of reality.

2.1 Each party to the pact commits itself to further its own benefit while attempting to favour the other systems as well and, in cases of unavoidable conflict, trying to cause them the least damage possible.

In this case, unlike the previous section dealing with the principle of truth, the paragraph is formulated in positive terms. If the member's commitment is directed toward promoting collaboration, the type of behaviour, and thus of action, which is intended to be encouraged is, first of all, that which appears functional to individual development. It should be pointed out that the approach of emphazing the primary role of the individual system is not conflicting with cooperation, but, on the contrary, it constitutes its fundamental prerequisite inasmuch as we believe it impossible to engage in an effectivre collaboration that is exclusively directed toward

another system and not toward a given system itself as well. In fact, if that were the case, the action toward another system would result in a damage to the agent performing such action, thereby leading to a form of self-elimination.

Of course, as it is immediately clear, individual enhancement shall not be antithetical to cooperation with other systems in that the wording of the paragraph emphasizes that such action is instead functional to collaboration. In fact, it is stated that the commitment to promote the system-individual (or self-love) simultaneously unfolds in a direction of openness and willingness to cooperate with other systems. In fact, it is not possible to head towards the complete understanding of reality without relying on the joint efforts of multiple systems. The non-cooperation that should be avoided may in fact lead to anti-cooperation against another system, namely the attempt at preventing its progress toward the Solution to the Game.

This paragraph nevertheless admits the possibility that a system may come into conflict with other systems. In case of difficult or even impossible collaboration, each party is required to commit to at least refrain from interfering with another system thereby damaging it. In case of a contrast that appears as inevitable (in fact we speak of *unavoidable conflict*) each party is required to commit to try to minimize any damage to the other system involved. It should be noted that the commitment contained herein not to cause damage to another system is independent of whether such system is part to the agreement or not.

From our standpoint, the concept that is expressed by this principle is fairly commonplace. On the one hand, it would be

simply naive to think that one system of reality, albeit endowed with superior intelligence, may alone suffice to achieve the Solution to the Game. First, because, if it were truly so, then it would have already happened and it did not, second, because no system is "complete". On the other hand, only a poorly or insufficiently intelligent system may think to be able to attain its own goals in the long run while damaging the others.Therefore, within our society, the problem should not even arise.

2.2 Each party to the pact who violates point 2.1 shall tendentially be excluded from the agreement.

Therefore, the commitment of the parties to the agreement is not to cause damage to any system, namely not to hinder its progress towards the knowledge of reality. Nevertheless, perfectly understandable is the possibility that a given harmful act may be justified on the grounds of avoiding a damage to the cohesion and organization of the parties to the pact. If this were the case, then that harmful behaviour should not be evaluated in terms of a movement away from the Solution, but rather as a conduct that is aimed at preserving the systemic order of the agreement. Moreover, it should be added that there are cases of inevitability which shall be assessed and where each party is required to engage in a behaviour that avoids conflict or, should it be unavoidable, in a conduct that leads to the least damage possible.

This is why, unlike the principle of truth, the wording of this paragraph includes the term *tendentially*. In other words, to refer to the tendential exclusion from the agreement implies to take into consideration that there are modifications or damages to

other systems which cannot be avoided or which cannot be regarded as the result of a will that deliberately seeks to harm the others. In these instances, the individual case may be evaluated considering all the variables involved in the actual situation. Therefore, it is conventionally established that the provided sanction, while being certain in principle, may act as a variable, inasmuch as there shall be some room for graduality in its implementation.

6.3 Section Three

As concerns the Principle of Responsibility

SYNOPSIS: section three essentially distinguishes itself for being concerned with those elements that, in traditional societies, are generally associated with the concept of "judicial". In this exposition, two main elements of novelty can be identified: the reversal of the traditional principle of Responsibility and the extension of said principle.

3.0 Provided that the principles of Reality and Harmony are respected, this agreement shall be based on awareness, namely the realization of the consequences of one's own actions.

In logical terms, the principle of Responsibility, which appears as the title of this section, is a direct derivation of the principle of Reality and the principle of Harmony for it constitutes a peculiar aspect of the latter. Responsibility, as the term itself suggests, refers to the need to be able to respond, namely to be prompt to react in front of a given request, i.e. a previous

question that, in turn, has been determined by an action of ours. It is necessary to understand that every action we carry out leads to certain modifications in the surrounding environment, namely every action has consequences on it. We are completely free to determine our own actions, yet we must constantly be conscious of the effects that such actions may produce. In other words, we have to account for our actions. But what does "to account for" really mean? Since it is not always possible to accurately predict the full extent of our actions, does the constitutional pact require us to take responsibility for any consequences arising, even indirectly, from our conduct? To take a now classic example: if, while I am driving, I cause a minor accident, of course I will have to respond of that outcome; but if the case is that the person who suffered the trauma is brought to the hospital where a fire breaks out and kills him, am I to be held responsible for this possibility? There is no doubt that if it were not for my action, he would have not gone to the hospital and, therefore, he would have not died, so is his death to be numbered among the "consequences" of my conduct? This way of setting the issue of responsibility is not new. In fact, legal scholars regard these as traditional questions. The breadth and depth of these considerations is such that there has always been the perception of the need to define the scope of consequences for which the first agent can be held liable.

First of all, they make a distinction between civil liability (the typical remedy is the payment for damages) and criminal liability (afflictive sanction). Let us dwell in particular on the question of criminal liability which certainly appears as the most problematic with regard to the principles laid out in the constitutional pact of the new society. It is a fairly known fact that, in

traditional legal systems, the imposition of criminal liability primarily rests on the evaluation of imputability, namely the individual must be compos mentis (thus, he cannot be a person of unsound mind or a minor), and culpability (the test for which comprises both an objective element and a subjective element). The objective element corresponds to an action foreseen by the law. On the other hand, the subjective element is of two types: it depends on whether the outcome has been foreseen and wanted by the individual (intentional crime) or if the event was due to malpractice, recklessness, negligence (negligent crime). In the ordered sequence we have presented (i.e. perception, thought, action), the original way of conceiving responsibility should be based solely on the evaluation of the acts of the parties to the agreement. In the society of semi-immortality, any analysis shall be concerned with actions; therefore, in every case, the effects (or, more accurately, the consequences) of a given action shall be evaluated, regardless of the presence (or absence) of a subjective element. This is why the identification of awareness as the very fulcrum of responsibility is an essential step.

In fact, awareness is not based on an internal or inner understanding that again refers to concepts such as malice or fault, namely free will[104]. Awareness has to do only with the ability to understand both that one's actions spread out in the environment and how this propagation occurs. Therefore, such ability solely rests on an *ex post* observation of how one's actions interact with the other subsystems, namely with the other parties to the agreement. Hence, awareness corresponds to the ability to evaluate how one's own actions propagate throughout the whole system. It therefore exceeds by far the predictive ability of each individual.

Apparently, this may seem to be an aggravation of what we are commonly accustomed to conceiving as responsibility: in fact, as we shall see, it is rather a reduction thereof. Inasmuch as the principle of Responsibility "follows" those of reality and harmony, it is clear that it presupposes them. If the immediately preceding principle, i.e. the principle of Harmony, rules out any voluntary engagement in acts that are harmful to other members, the principle of Responsibility only imposes the obligation to monitor the effects of one's own actions because, by the principle of Reality, such actions have an impact on experience and therefore they affect the social system as a whole. Thus, within this model, awareness becomes synonym with rational control, monitoring over the consequences of one's actions. Here, by consequences we refer to the reactions of all the subsystems that participate to the agreement.

Now, the first thought that may come to mind is that this monitoring, this rational control should be subject to some limit. We may still be under the influence of a traditional model of reference, yet, as far as the solution to the problem is concerned, the scale seems to tip in favour of an extension of rational control. In fact, one of the main reasons that require traditional jurists to address the problem of the restriction of responsibility lies in the fact that jurists in general, and criminal jurists in particular, are forced to relate the concept of responsibility to the idea of affliction. To have to be legally responsible (in the plane of criminal law) implies, first of all, to be subjected to a penalty that is punitive in nature: its content is the infliction of some kind of pain upon the individual (restriction of freedom, financial penalties, etc.). Hence, the importance of identifying a limitation criterion (often referred to as criterion of proportionality) to avoid the risk of inflicting a

greater harm to the agent than what was caused by his action, which would be perceived as an injustice.

Therefore, all the relevant circumstances of the case, including the fact that the final event (in our example, death) was caused by factors (the fire in the hospital) which were unforeseeable and not directly attributable to the agent (it wasn't him who set the fire at the hospital), are taken into account to ensure a limitation of the consequences for which the subject is to lled to respond. Nevertheless, if we abandon a punitive logic, then the question becomes radically different. And this is precisely the direction taken by the proposal we are developing here as it introduces a new model of reference. Instead of translating the expression "to respond" as "to be subjected to some kind of pain", we may attempt at interpreting it in terms of "taking care of the consequences". This approach allows the issue to be reviewed in terms of a request for further intervention from the person who has suffered the consequences of my action.

The scheme of reasoning which should be adopted is not merely reduced to a relation between the conduct of the single individual and the direct consequences of such act, but it rather takes into due consideration a change-producing action whose effects are capable of spreading out throughout the whole system, thereby progressively involving all the subjects that are part of it, and not only in a passive manner. The responsibility of each individual lies alongside that of all the others in their calling for an ongoing stabilizing intervention in light of the overall effects being produced. If the revenge and pain factors are removed, then responsibility becomes neither more nor less than the collaboration of all the parties involved in order to

restore the balance of the system. In this perspective, an extension of responsibility is not problematic at all since, as a matter of fact, such extension corresponds to a greater number of individuals who are called to respond and, therefore, a spontaneous limitation of any claim on the first agent as well as on any other one.

3.1 Each party to the pact commits itself to be held responsible for the consequences of its own actions accruing to the other parties, irrespective of one's intentions.

The commitment required in the covenant is set on a different level compared to the traditional concept of imputability which, as it is known, constitutes the criterion of imputation (attribution) of a fact to a certain person. While imputability requires one to be compos mentis in order for him to be held accountable for a fact, here the capacity of the individual to be held responsible is intended only as the practical ability to understand the consequences of one's own actions.

This allows to avoid the complexities and uncertainties of a psychological inquiry into those subjective elements such as intent and fault, which may be present within the agent. As we have already mentioned, in the society of semi-immortality, the inner sphere of the individual represents a territory that belongs only to the individual himself and which cannot be questioned by the system in any respect. One's intentions are not relevant in the assessment of responsibility inasmuch as they belong to the inner belong of the individual subject. This approach of disregarding one's intentions to consider only the concrete action as relevant allows to observe a given act with-

out being forced to judge someone on mere intent which would inevitably shift the focus of inquiry from the facts to the agent's inner being with the aim of stigmatizing a psychological state or thought of his. And this is why responsibility shall be assessed *only* on the basis of actions regardless of the psychological condition that was present at the time such actions were carried out. The evaluation of any action shall be accomplished limiting the scope of investigation to its exterior aspects, namely the domain of its consequences.

In fact, the consequences of an action are fundamental inasmuch as they crucially concern those who suffer such action. Here, it is time to introduce a point of the utmost importance, namely the question of the victim, which today is too often neglected. In the society of semi-immortality, the scope of the evaluation of an agent's intentions and motives is restricted because everyone shall be held accountable only on the basis of one's actions, namely depending on the consequences produced by those actions. This section aims at overturning the perspective underlying the evaluation of an action: we deem it necessary that the seriousness of an action is appraised from the standpoint of the person who suffers the consequences of such action. In fact, it appears superficial to examine an action from the point of view of the individual who commits it rather than that of the target person. If an individual is able to understand the consequences of his own actions, then there is no reason why he should not be held accountable for the consequences of such consequences, regardless of his psychological condition. This approach rests both on cognitive relevance – it is impossible "to block one's thoughts" as well as to always have good intentions – and pure functionality: in view of the ultimate goal of the indefinite extension of life span, it is crucial

to avoid any deterioration, or at worst to suffer the least possible damages. All these steps allow us to overcome also the traditional system of sanction, namely the reaction of the system to an action that causes adverse consequences. In this case, such action does not lead to punitive sanctions that are justified by moral, ethical, pedagogical reasons.

3.2 Each party to the pact who violates point 3.1 shall tendentially be excluded from the agreement.

In fact, on closer inspection, it is clear that the system does not impose any sanction. Actually, it corresponds to the mere realization («shall tendentially be excluded from the agreement», point 3.2) of the already expressed will of the individual to restrict his collaboration, hence to escape the dynamics of the system, namely his resolution not to be part of the system any more. Therefore, the absence of punitive sanction allows us not to consider the limitation of responsibility as a problematic issue. This is possible because responsibility means to take care of, to monitor the effects of one's own actions and then to continue to cooperate with all those who, in various capacities, are involved in the events triggered by the action in question.

Inasmuch as it is extended to all the parties to the agreemet, the progressive broadening of this type of responsibility results in a mutual surveillance over the actions as well as in an exponential increase, thereby generating harmonious collaboration at all levels of the system. The greater the number of subjects involved and the higher the degree of their involvement, the lower shall be the claim placed on the first agent, but the higher shall be the possibilities to restore the balance of the system.

6.4 Section Four

As concerns the Principle of Utility

SYNOPSIS: this section is devoted to the discussion of the fourth principle, i.e. the principle of Utility, showing how it relates to the other afore-identified principles. This principle was established to serve the aim of ruling out inaction in the society of semi-immortality, namely it is intended to prevent the parties to the agreement, who are willing to fulfill the commitment they have undertaken by accepting section 2.1 and may "fear" the extension of the principle of Responsibility, from maintaining a passive conduct, thereby paralyzing the system as a whole. It should be noted that point 4.0 identifies a recursive dynamics within the system.

4.0 Provided that the principles of Reality, Harmony and Responsibility are respected, this agreement shall be based on action, namely the implementation of individual as well as general goals.

The fourth principle we shall address here is the so-called principle of Utility. It follows the principles of Reality, Harmony and Responsibility, hence it presupposes these principles. The fundamental objective of this principle is to prevent the parties involved in the agreement from being stuck in inaction. Indeed, it is fairly easy to realize that, in principle, a member may abide by the commitments he has made under the previous sections simply by doing nothing. In fact, by chosing this option, he would not state any non-truth, he would not cause any harm to anyone and he would not incur the risk of being held responsible for the consequences of his own actions.

Instead, under section four, each party agrees to act, thereby becoming part of an active process that is characterized by the identification of the objectives (both individual and general) and the attainment of these goals. Therefore, as a matter of fact, this principle prevents the other principles from remaining mere statements as well as the adhesion to the agreement from being nothing more than a formal act. Ultimately, it is this principle that allows the realization of the other principles: the need to exercise some effort in order to accomplish a given goal, even an individual one, leads to action thereby creating the space for the realization of the principle of Responsibility.

Furthermore, it implies meeting with the other parties, in particular when the general goals are set, which allows the fulfillment of the Principle of Harmony. Finally, putting forward both individual and general objectives and pursuing them with the others open the space for dialogue among the parties and, therefore, for the realization of the principle of Reality. Another element worth noting is the fact that there is no prior limitation to the possible goals that can be chosen, but they are rather left to the freedom of the parties to the agreement, provided that the definition of the objectives is followed by their implementation and this process unfolds in what therefore becomes a recursive pattern. In practice, recursion appears as the modality characterizing the development of the whole system as well as the principle underlying the action of the parties to the agreement, and all this precisely occurs through the principle of Utility. A consequence of what we have just stated is that there is no act for its own sake, namely disconnected from the pursuit of some individual or collective purpose. This implies that every act must be *useful*.

4.1 Each party to the pact commits itself to be constructive.

The commitment to be constructive, which is discussed here, can be connected to the commitment to make efforts to achieve the goal set. As a consequence, here there is no anthropological assumption analogous to those permeating classical utilitarianism, such as, for example, the idea of a pleasure-oriented human nature. In fact, what is stated herein is not that each party to the agreement commits itself to *pursue* some form of utility (one's own, that of the others, the highest one for the greatest number of subjects, etc.) but rather to *be* useful. Hence, this concept does not claim to identify the peculiar element of some value of life or some particular goal which qualifies it as relevant and deserving to guide action, but rather it asserts that each party stays *within* the agreement in accordance with the specific way of being of utility. Now, in the broadest sense, what is useful is what is toward something else (useful *to*, useful *for*). Therefore, to stay in the agreement according to the modalities of utility implies that every moment of participatory life is marked by the precise identification and pursuit of a goal that is distinct both from the acting subject and the action itself.

4.2 Each party to the pact who violates point 4.1 shall tendentially be excluded from the agreement.

What was stated for the other principles in regard to the exclusion for nonobservance also applies to this principle. In fact, any violation of one principle always affects the others as well and it constitutes an obstacle hindering the development of the system, if not even leading to its paralysis. Hence, as far as the principle of utility is specifically concerned, one who refused to

take action in pursuance of the individual and collective goals would also violate the principles of Responsibility and Harmony. Actually, this would breach the principle of Reality as well: to affirm that something is a goal to be pursued while actually refusing to do so would imply to simultaneously assert that it is also not to be pursued, thereby taking a contradictory position. As mentioned above, also the total lack of action, i.e. inertia, constitutes a breach of this principle inasmuch as it would condemn the whole system to immobility and reduce all the principles to empty statements. Therefore, the simultaneous violation of all the principles agreed upon in this document is nothing but the disclosure of the postion of someone who actually is no longer willing to adhere to the agreement, hence his exclusion represents the realization of his own will, namely his *setting* himself out of the system.

6.5 Section Five

As concerns the Principle of Quality

SYNOPSIS: section five expounds the principle of Quality. It encompasses an in-depth analysis of the concepts of aesthetics and the criteria of harmony, completeness, essentiality, universality and originality. It covers the distinction between goals and the achievement of those same goals, specifying that evaluation pertains to the domain of implementation. If there were no aesthetic principle, understood as a test of the results achieved, then something essential would be missing both from a realizational standpoint in terms of progress and from a theoretical perspective in terms of completeness of the system.

5.0 Provided that the principles of Reality, Harmony, Responsibility and Utility are respected, this agreement shall be based on aesthetics, namely the attainment of goals in accordance with criteria of completeness, clearness, originality, universality and harmony.

While the ultimate general goal of the society of semi-immortality is one, the particular objectives (both individual and collective) which are developed in this perspective can be many. We do not know yet what and kow many intermediate steps (i.e. objectives) may be functional to the attainment of the ultimate goal, although a few relevant hints regarding this issue can already be identified. These indications are related to the concept of aesthetics, namely the verification of the results achieved. In accordance with the conventionalist perspective underlying our approach, a "beautiful" outcome shall be one that leads us closer to the Solution to the Game. Conversely, an "ugly" result shall be one that draws us away from it. In a nutshell, unlike the previous one, the principle of Quality is the principle of the "how". Since the beautiful is characterized by a certain set of features, in order to pursue it the parties to the agreement shall have to commit themselves to assess results on the basis of the following corresponding criteria.

The criteria that are proposed to the parties to the agreement are the following[105]: harmony, completeness, originality, universality and essentiality. To achieve a given goal taking into account these criteria emphasizes the suitability of such goal to be a step in the path that must be taken within the new society. Harmony is the ability to assign the right place to each element of a whole, where such "right place" can be understood as a

figurative site that allows the individual element to be simultaneously connected with both the other elements and the entire system in a relationship of balance. Balance essentially coincides with the appearance of certain proportions: for example, uniformity, symmetry and progression. It is very simple to express the idea of harmony by means of music: a dissonant musical phrase is perceived as such by the human ear, hence it presents itself as "ugly" inasmuch as the elements composing it are not in equilibrium with each other or they do not combine with the ensemble of notes of that phrase according to a certain canon. Therefore, the imbalance stems from a lack of adherence to the rules of proportions of one or more notes. Thus, it follows that, in order to achieve harmony, careful attention must be paid not only to the musical phrase as a whole, but also to the individual elements, more specifically all the individual elements that compose it.

This concept finds effective expression in the notion of completeness, which may be defined in terms of attention to all the elements (i.e. the parts) that make up a given set. The attention to the particular, therefore, is not antithetical to the assessment of the aesthetic validity of an accomplished goal, but rather constitutes one of the most valuable elements of such process. When the relation between the particular and the general is chracterized by disharmony, it prevents the formation of a positive judgement on a given aesthetic object. Nevertheless, this attention may lead to a dissipation of energy which brings about the substantial risk of losing sight of the ultimate goal we have set at the beginning of the work under consideration here. In order to avoid such an outcome, it is necessary to take into consideration also the criterion of essentiality, which is another name for the same assessment of aesthetic validity.

Essentiality seems to be the other side of the coin of completeness forasmuch as, while completeness requires to apply the same level of attention to both the main parts and details, essentiality provides to avoid any waste of effort and tends to preserve the durability of the work over time. In fact, the concept of essentiality contains in itself the concept of *efficiency*: achieving maximum performance with minimum energy input. For example, it may be the case of a scientific theory which, in order to be beautiful, must also be functional, namely efficient and yet complete and harmonious. Any goal-oriented work that possesses all these characteristics is also original, namely it exhibits a significant content of novelty as compared to previous attempts. Last but not least, the criterion of universality guarantees the intelligibility of the whole process: whatever the means of expression, the "beautiful" must be perceived as such by everyone, regardless of the culture of the individuals involved.

5.1 Each party to the pact commits itself to assess the quality of its own performance and to take appropriate measures to provide the necessary improvements.

This is why the assessment of the quality of the results achieved constitutes the substance of the commitment taken by the parties. The habit of checking both the functional and the aesthetic validity of one's own actions as well as the results that are achieved through these actions is a type of conduct that clearly shares a community of purpose with the description of reality. This stems from the fact that assessment is the action of determining whether the effort exercised to reach a particular goal has met the criteria set out in paragraph 5.0. If the outcome of this evaluation is positive, it is possible to

assert that such an outcome allows the society of semi-immortality to move closer to the Solution to the Game. If the outcome of this evaluation is negative, we can state that a second-order commitment arises, namely a subsequent commitment to make those changes that are deemed necessary or that are suggested as such. Moreover, the concept of quality of both the objectives and the ways by means of which such objectives are attained allows to evaluate, through appropriate procedures, the extent of each one's ability to contribute to the achievement of the common goal.

5.2 Each party to the pact who violates point 5.1 shall tendentially be excluded from the agreement.

This paragraph imposes the sanction of exclusion from the agreement for a party who does not appear willing to endertake the assessment and correction process provided for in point 5.1. Notably, also this section contains the adverb *tendentially* that establishes a boundary to the assessment of results. In other words, this section considers the exclusion from the agreement as a *last resort* measure in response to a failure to carry out an assessment (if necessary) or a corrective action (again, if necessary). There may be numerous cases where the efforts made in pursuance of a given goal do not seem to meet the criteria of aesthetic validity. Obviously, it is necessary to provide for some gradation with respect to this one which is the maximum response of the system. In fact, there will be cases where the negligence for quality is clear as well as others in which it is far less evident.

6.6 Section Six

As concerns the Principle of Wellness

SYNOPSIS: section six expounds the principle of Wellness. It contains an in-depth discussion of the concepts of wellness, pleasure and enjoyment. A connection is made between the positive aspects of life and one's own enjoyment as well as that of others.

6.0 *Provided that the principles of Reality, Harmony, Responsibility, Utility and Quality are respected, this agreement shall be based on enjoyment, namely the enhancement of the pleasing aspects of life.*

Following the attainment of the objectives, which was the subject of the previous section (i.e. section five), the present section contains a provision of the utmost importance to the parties to the agreement: wellness. The concept of wellness we are referring to is not only related to physiology, namely the condition of "being in good health" defined as the absence of diseases. In fact, the idea of wellness that concerns us here is a much broader concept, which, far from developing only on a merely physical level, encompasses and involves all the aspects of being. Wellness is achieved by directing one's life to pleasure, understood as the recognition of the positive aspects of life and the consequent investment of effort in this direction.

Therefore, to direct our's life towards pleasure means to devote ourselves to what fulfills and satisfies us: this is is the only viable way to attain wellness understood as an existential condition of the person. While it is true that any pleasure in itself may be regarded as good, it should however be pointed out that not everything that is pleasing leads to beneficial conse-

quences. For instance, the fulfillment of those impulses that, if boundlessly spread or generalized over time, lead to the rejection of the principles contained in the agreement does not qualify as authentic pleasure. Wellness and pleasure are thus related concepts: in fact, the concept of pleasure that is discussed in this section is part of an ethical framework whose building blocks are outlined by the principles formulated in the previous sections (in particular, the principles of Reality, Harmony and Responsibility). And therefore, within this context, all those aspects of life that, if pursued, do not lead to a violation of the principles underlying the agreement can be considered as positive.

In order to direct our own life towards pleasure thereby achieving wellness, we have to acquire a substantial knowledge of ourselves. In fact, a good knowledge of one's own tastes coupled with a proper assessment of the costs and benefits of any action aimed at the pursuit of pleasure are cornerstones of the path towarards veritable wellness. In other words, only one who possesses a substantial degree of self-knowledge shall be able both to identify the elements that truly fulfills him and, at the same time, to calculate the advantages and drawbacks of one's choices. Speaking the truth about one's own being and acting accordingly is therefore essential to achieve wellness. The pursuit of fulfillment becomes the guide to action as it suggests us what to choose and what to avoid while directing us toward what over time reveals itself as propitious to pleasure, namely toward the enhancement of those aspects that appear in line with the principles. Hence, section six puts forward a concept of wellness understood as "self-care", i.e. the outcome of a process of conscious self-fulfillment. This process begins with the nowledge of one's tastes and predispo-

sitions and is directed toward pleasure understood as a lasting achievement.

6.1 *Each party to the pact commits itself to the pursuit of its own pleasure while trying to encourage the gratification of the other parties.*

This paragraph sets out the action that should be taken for the sake of self-care. In fact, it provides for the commitment to seek one's own wellness, pleasure without neglecting that of others. The underlying reason for this lies in the fact that our wellness is relationally connected to that of the other parties to the agreement. Therefore, each party is under the obligation to act on the basis of self-care to achieve a state of physical and mental wellbeing that, through the attainment of pleasure (understood in the sense described above), allows to live in harmony both with onrself and the surrounding environment.

From the above, it is clear that, in this context, a crucial role is played by enjoyment understood as a manifestation of one's inner being which emerges as functional to self-care. In fact, enjoyment contains a major element of joy and playfulness and the game is a very important component in the relationship between mind and body. Enjoyment is a means to attain a positive state of vigor and clear-headedness which leads to an enhanced perception of the positive elements of life. Contrary to common thinking, in this context, enjoyment is not to be understood as synonymous with distraction that is a way to step away from oneself, even to escape from oneself. Enjoyment, in the acceptation we are interested in here, is considered synonymous with physical and mental fulfillment. This is why we believe that, from a self-care perspective, it is essential to learn enjoyment. This implies that immediate gratification must

gradually give way to long-term pleasure which is possible only through increased awareness. In fact, it allows to experience pleasure on a continuous basis and to avoid dangerous forms of dependence or adddiction.

Furthermore, enjoyment allows to participate, namely to share with other individuals and establishes a network of exchange characterized by two-way give-and-receive interactions thereby leading to an increase in collective wellbeing as well as a truly effective social cohesion. This is why each party is also required to commit itself to promote the enjoyment of the other parties to the agreement. In this manner, enjoyment allows to encourage the generation and preservation of one of the main creative forces within the society of semi-immortality.

6.2 *Each party to the pact who violates point 6.1 shall tendentially be excluded from the agreement.*

The failure to comply with the previous point implies a response. Such reaction is the self-exclusion from the agreement. The situation in question is one where someone knowingly engages in actions that are contrary to one's own and others' wellbeing. Different is the case of mistake, namely the case of one who, although acting in a manner discordant with self-care, is convinced to act in accordance with the pursuit of a state of wellness. In fact, a mistake made by a party does not amount to that party's failure to fulfill the commitment made.

Paragraph 6.2 therefore provides for the exclusion of one who knowingly does not pursue one's as well as others' wellbeing, or engages in actions clearly contrary to the principle of *Wellness*. And yet, such exclusion arises in tendential terms

inasmuch as there is a gradation of situations where it is possible to act contrary to the pursuit of harmony. We should not conceal the fact that it is difficult to attest the condition of one who is deliberately unwilling to pursue one's own wellness if this does not translate into concrete action. In this case, pessimism is the factor that more than any other is at odds with those elements that can reasonably be considered positive for life.

6.7 Section Seven

As concerns the Principle of Worthiness

SYNOPSIS: section seven stands out as the section in which consideration is given to those elements that, in traditional societies, are generally associated with the concept of politics and governance. Presented herein are two main elements of novelty: the reference to the ability of individuals as the main criterion of organization and the measurement of such ability on the basis of the capability for safeguarding the principles of the pact.

7.0 *Provided that the principles of Reality, Harmony, Responsibility, Utility, Quality and Wellness are respected, this agreement shall be based on hierarchy, namely the organization of activities according to the specific abilities of the parties to the pact.*

In this section, worthiness is determined by the degree of congruity between the abilities of each individual party to the agreement and the principles underlying the agreement itself. In other words, this means that the capabilities being evaluated can be measured in terms of their correspondence to the prin-

ciples outlined in the previous sections. In fact, the individual is recognized as worthy and competent when he proves his aptitude to operate for both conservation and development of logical, ethical, juridical, economic, aesthetic and social domains. It is not by chance that this section is placed after the sections concerned with those principles that form the basis for the evaluation of merit. It follows that worthiness is logically posterior to the other principles, nevertheless, it is itself a principle for it acts as a guarantor for those same principles. In fact, the concept of worthiness refers back to the previous principles inasmuch as it does not possess an autonomous content of its own; yet the fact that it serves as a selection criterion for individuals ensures everyone's adherence to the agreement. And not only that: its direct reference to the principles outlined above also stands as a warrant against any individualistic/personalistic drift of those persons who, although capable, may deviate from what was established and agreed upon. The novelty of this section lies in the indissoluble link between the principle of worthiness and the concept of hierarchy as set forth in point 7.0.

In fact, the principle of hierarchy that is presented in this section is not a neutral concept exclusively based on the relations of power, namely it does not refer only to the mutual relationship of supremacy and subordination, but it also clarifies what is the criterion on the basis of which one stands in a higher or lower position in the hierarchy. And this criterion is worthiness as defined above.

7.1 *Each party to the pact commits itself to adhere to the instructions given by any other party who is higher in the hierarchy.*

Therefore, the hierarchy referred to in point 7.0 articulates an organizational model where one who is more capable shall hold a higher place than one who is less capable. It is in light of this that the provision contained in point 7.1, which provides that «Each party to the pact commits itself to adhere to the instructions given by any other party who is higher in the hierarchy», is to be understood: in fact, this provision signifies that each party to the agreement is committed to comply with the instructions of those who are better than him. The awareness of the fact that the hierarchy is based on the principle of worthiness, on the one hand, provides each party with assurance that he shall receive instructions from someone with a higher ability to act in accordance with (or for the preservation of) the agreement, and, on the other hand, it guarantees that the content of such instructions shall tendentially be shared. These two conditions may be respectively denoted as subjective confidence (i.e. confidence in the person) and objective confidence (i.e. confidence in the content of his instructions).

It is the aspiration of everyone that the task of managing a group is entrusted to the best and the model presented herein allows the realization of this aspiration. In fact, in traditional societies founded on liberal and democratic principles, the system of political recruitment in force is based on elections, where the voter's choice is always ideally guided by his desire to be ruled by the best. Nevertheless, in these systems, political selection is carried out through a number of intermediary bodies (e.g. political parties or organizations of various type) which do not make explicit the criteria for choosing among multiple candidates. These selection criteria are mostly functional either to the political survival of a given political entity or to the preservation of some abstract ideal that does not neces-

sarily ensures an effective administration ability. In the case the choice proves to be a poor one because the candidate turns out to be incapable or unworthy, the aforementioned collective entities are not held accountable for the negative consequences caused by such inability or unworthiness.

This analysis explains why the model proposed in this section exhibits a higher correspondence to the business-oriented organizational and management models rather than to the traditional ones. And this is the case for two classes of reasons. First, a business concern is able to operate properly because, and provided that, responsibility and decision-making authority are granted to those who have demonstrated superior abilities. Secondly, in consideration of the fact that a business is always held accountable for any mismanagement activities in which one of its members has engaged. In this sense, it takes responsibility for the consequences related to the selection of its managers. Drawing from corporate organizational models, the element of novelty introduced in this section lies in the direct attribution of managing powers on the basis of criteria of merit which are functional to the identification of actual abilities. In those models, the fundamental criterion for the organization of tasks is supplied by the hierarchical structure, where the arrangement of individual positions is underlain by a "more than/less than" logic. Hence, the individuals with superior abilities shall accordingly hold a prominent place in the hierarchy and shall be given adequate decision-making powers. Under the system established by this agreement, the concept of ability is related to each one's aptitude to safeguard the principles set forth in the previous sections.

Obviously, the measurement of the aforementioned aptitude shall have to be carried out in the most objective manner possible by relying on the verification of the actions taken by the parties, nevertheless, this does not amount to an insurmountable problem inasmuch as everyone is under the obligation to tell the truth. It almost goes without saying that some time shall be needed for the hierarchical model to establish and consolidate its structure, hence, there arises the problem of the initial organization of the system. The latter, on the one hand, identifies the first parties entering the agreement as those who have proved to be the "worthiest", while, on the other, provides a solution to the problem of the hierarchy among them through the mechanism of selection of the first diarchy as provided for in section seven.

7.2 *Each party to the pact who violates point 7.1 shall tendentially be excluded from the agreement.*

This provision is immediately understandable in light of the above discussion: in fact, if worthiness is assessed on the basis of the ability to protect the principles underlying the agreement and the organizational hierarchy is based on merit, then the act of refusing to accept the instructions of those who are higher in the hierarchy is an expression of the will not to remain within the agreement itself. The presence of the adverb "tendentially", which constitutes a limitation to the automatic exclusion from the pact, is therefore to be understood as a recognition of the possibility that, contrary to what might appear at first glance, the act of insubordination may involve a closer adherence to the principles of the agreement rather than a departure from said principles. This could be the case in the event that a party in a hierarchically higher position gave in-

structions conflicting with the principle of the pact. Obviously, the subsequent evaluation shall follow the modalities set forth in section seven.

6.8 Section Eight

The Organization of Power

SYNOPSIS: the conception of power expressed in this section, namely the idea of a diarchy as the commanding authority, is based on a very simple axiomatic principle: men and women are different and their diversity is essential for achieving the Solution to the Game. Section eight outlines the organization of the governance functions in the new society. It delineates the roles of the Diarchs, the College of Electors and the prerogatives of the individual parties with respect to the top of the hierarchy making up the agreement.

This section does not contain a full-fledged principle, but rather a pivotal bridge between principles and procedures, namely those second-order rules that allow the whole system to operate. In fact, this section exhibits a completely different structure. Instead of being composed of three propositions, the first of which comprises a statement of principle, the second of which has a phrastic (i.e. a specific kind of behaviour) and the third of which contains a neustic (i.e. the response of the system), section eight consists of eleven propositions, all of which refer to definite behaviours and actions. By employing an expression that is deliberately "weighty", section eight has been titled *The Organization of Power*. Setting false modesty aside, we think that the agreement can represent a certain form of power, or effectiveness measurable in relation to the goals,

namely the whole set of capabilities of the parties to the agreement which constitute the hierarchy that is based on worthiness. In fact, the agreement of the parties to comply with the principles (from section one to section seven) gives rise to a very cohesive social organization, yet it is a static structure requiring *inputs* toward goals that are specific while perfectly in line with the general goal of attaining the Solution to the Game.

We are convinced that the most sustainable form of governance for this social group may be one that is very similar to the organization of a business. Inasmuch as the agreement rests on shared principles of logical, ethical, juridical, economic, aesthetic, social and political nature, the structure under consideration shall also have to take into account how these principles are experienced in practice. While the new Constitution is an agreement over substantive principles, the objectives (as we have seen) may vary from time to time. Both the variety of goals and the differences in the initial endowment of individuals are crucial factors in the structure of the new society. In fact, the organization of individual differences constitutes one of the most important elements that give permanence to society itself. And it is precisely the strength of the concept of difference that provides the basis for selecting the top level of the system. From our standpoint, those "intrinsic" differences that oppose men and women underlie the *necessity* of their union to achieve the Solution to the Game. It is only through the male/female union that it becomes possible to make correct decisions, both in harmony and disagreement phases. Alongside the Duarchy there is the College of Electors. This collegial entity, which has consultative authority, is composed of qualified individuals who have distinguished themselves for

their capability of respecting and implementing the principles. It has the prerogative power to appoint the Diarchy and, under certain conditions, to dismiss it. However, these prerogatives are also granted to each individual party, though with some appropriate restrictions.

8.1 *The Diarchy shall be formed by a male-female dyad and shall be responsible for representing and administering this agreement in accordance with the principles contained therein.*

The Diarchy is a form of governance of the organization which is composed of a female element and a male element. The also symbolic nature of this figure emerges clearly when we refer to representation. Therefore, the hierarchical structure of the agreement is characterized by two vertices rather than one as it would be most intuitive to think. Hence, the Diarchy consists of two individuals of different sexes who may or not be in an amorous or sexual relationship. What matters is their gender difference that is functional to a fruitful discussion and confrontation providing the terrain for selecting management actions for the social group.

The dyad is responsible for administering, namely practically managing, the individual decisions that are necessary for the proper functioning of the pact. Nevertheless, the efforts of the Diarchs shall always move in a direction that coincides with the preservation of the principles of the agreement. Therefore, it can be asserted that the Diarchy functions as a pivotal connection between principles and the concrete actions that falls in the domain of the individual parties or the groups which adhere to the agreement. Thus, the protection of principle is the

main rationale underlying the action of the diarchs both in their mutual discussion as well as in the disclosure of their decisions.

8.2 The Diarchy shall set the procedures, formulate judgements, determine the objectives and coordinate activities relating to this agreement also through the delegations of its responsibilities.

The dyad is able to impose regulations concerning both general and particular issues and it has full power to be exercised in its discretion. yet subject to compliance with the principles as the sole restriction to its freedom of action. It is the most important authority for the evaluation of the proper compliance of the procedures. It sets common goals, assures that such goals are in compliance with the principles and coordinates the activities that are necessary to attain the ultimate objective: the Solution to the Game. Administration is a unitary and non-fragmentary phenomenon. Nevertheless, it unfolds throughout the levels of the hierarchy by means of delegation. Delegation consists in the exercise of a discrete and predetermined number of prerogatives. The Diarchs are therefore able to exercise their function also by availing themselves of the collaboration of other individuals, whose actions must meet the criteria of effectiveness which are seen as the most suitable ones for fostering the attainment of the goals set by the dyad. Moreover, it a prerogative of the Diarchs to monitor and control how the delegated powers are carried out and, therefore, they take great responsibility for the selection.

8.3 The first Diarchy shall be designated by all parties to the pact at the time of its creation with no less than a 2/3 majority vote.

In accordance with a well-established system of social organization, the first input for tsetting up the organization must come from all the parties to the agreement, who stand on an equal footing with each other, as far as the principles of the agreement are concerned. Thus, the first designation, the first choice (note that there is no mention of an election) is made by all members of the society of semi-immortality with a high majority requirement, namely two-thirds of the entire membership of the society.

8.4 The Diarchy shall remain in charge for an indefinite period of time, however each of the diarch shall be free to resign from office at any time.

The Diarchy has no predetermined term of office, for its specific function is to last over time. Nevertheless, inasmuch as we are aware of the difficulties and the level of commitment required to hold this office, we have deemed it necessary to provide for the possibility of resignation from office, which does not entail any negative consequences for the resigning person who shall maintain, to all intents and purposes, his status of party to the agreement. It is clear that in this case, also the office of the other Diarch shall terminate at the same time, since the dyad is a unitary body.

8.5 The Diarchy automatically dissolves in the event of irreconcilable disagreement, or in the event of death or permanent incapacity of either Diarch.

The Diarchy shall automatically be dissolved, i.e. with no need for special procedures, in the following three cases: irre-

concilable disagreement, death, or permanent incapacity of either party of the dyad. The most interesting case is the first one, i.e. irreconcilable disagreement. Were this situation to occur, it would imply that, from the standpoint of the system, the Diarchy at the top of the system is no longer adequate.

In case of disagreement prior to a decision or disagreement about the consequences of a particular measure, the agreement provides for the possibility of dissolution of the Diarchy upon the declaration of irreconcilability by either diarchs. In fact, each of the two diarchs may raise the question of the inability to continue in their office on the basis of factual disagreements with the colleague. These conditions trigger the automatic dissolution of the Diarchy. On closer inspection, it is fairly uncomplicated to realize that at stake is the safeguard of the principle of *diarchy* itself: if there is a form of government with two equally powerful authorities, then every decision must be agreed upon by both parties and, if no agreement is reached, the option of resigning from office is available. This allows, on the one hand, to minimize the risk of an impasse of the system and, on the other, to reduce the chances of disagreement. This stems from the fact that only a disagreement that seems irreconcilable (which therefore revolves around particularly serious issues) is a valid ground for the dissolution of the diarchy. The assessment of the irreconcilable nature of a disagreement is an exclusive responsibility of the party who decides to raise this question.

As far as the case of incapacity is concerned, it can be pointed out that such condition may result from a physical or psychological illness that, wholly or partially, prevents the fulfillment of the tasks resting with the Diarchy. It is deemed

that a Diarch suffering from a disease, should, in accordance with the principles, comprehend his own incapacity and voluntarily give up office. In the event that this does not occur and the disease is full-blown, the Diarchy shall automatically be dissolved. The case of death does not require further specifications.

8.6 The Diarchy shall establish a College composed of at least 12 Electors chosen among the parties to the pact who have stood out in preserving the principles contained therein.

Among the prerogatives of the first Diarchy is that of setting up a group of individuals (i.e. the Electors) selecting them among those who have demonstrated a superior ability to safeguard and implement the principles underlying this pact. It should be noted that, while the minimum number of members is fixed, there is no fixed period within which the Diarchs must exercise this decision, for the choice of the most appropriate time to carry out this task falls within the scope of their reasoned discretion. In fact, there may be a time when it is not possible to identify at least twelve individuals who possess the necessary requirements to become Electors. This is because once the election process is started, the minimum number of 12 must be achieved.

8.7 The College of Electors shall have advisory responsibilities and shall remain in charge for an indefinite period of time, however each of the Electors shall be free to resign from office at any time.

This subsection specifies the tasks of the Electors. They must act in collegiality inasmuch as they constitute a group.

The College of Electors is a collection of individuals the Diarchs may turn to for suggestion and recommendations concerning administrative issues or relevant concerns, namely any other matter for which the Duarchy deems it necessary to avail itself of expert advice. Also in this case, no fixed term of office is provided for, and yet each of the Electors is free, at any time he deems appropriate, to resign from office without any consequences.

8.8 In the event of dissolution of the Diarchy, the College of Electors by a 2/3 majority shall designate the new Diarchy choosing among the parties to the pact who have stood out in preserving the principles contained therein.

The most important function exercised by the College of Electors is the election of the Diarchy. Except for the case of the first Diarchy, responsibility for the task of electing the new dyad lies with the College of Electors. The initial situation is one where the Diarchy has been dissolved; as we have seen above, the dissolution of the Diarchy may occur in the event of resignation from office, death or permanent incapacity of one of the Diarch; dissolution by the College of Electors itself (as we shall discuss); and, should the College of Electors not be present, dissolution by all the parties to the agreement. In all these cases, except the last one, the College of Electors shall select the new Diarchy from among those who have excelled in pursuing the goals of the pact, namely those who have safeguarded the principles contained in the agreement. The Electors may choose the new Diarchy also among the members of their College and they shall decide by a majority of two-thirds.

8.9 In situations of particular concern, the College of Electors shall have the authority to dissolve the Diarchy upon the proposal of at least one member and with the approval of at least a 5/6 majority.

In special circumstances, such as the event of a serious disease of the Diarch or in situations of danger to the very existence of the agreement, the College of Electors may exercise the authority to dissolve the Diarchy. The exceptionality of the situation in question is reflected by the inclusion of a supermajority requirement to carry out this action. First, a proposal of dissolution of the Diarchy in charge must be submitted by one of the Electors to the College. Secondly, such decision may only be taken by a majority of five-sixths. Consider a twelve-member College. In this case, the affirmative opinion of ten Electors shall be required to carry out the dissolution This mechanism is intended to prevent the Diarchy, which is responsible for selecting the Electors, from being excessively influenced in its decision by the possibility that it may be dissolved by the College of Electors.

8.10 In the event of the simultaneous insubstantiality of the Diarchy and the College of Electors, a new Diarchy shall be appointed by a 2/3 majority vote of the parties to the pact.

A remote, but existing possibility is a situation where there is no Diarchy and no College of Electors. In this case, the mechanism shall be similar to that employed in the initial situation for the first Diarchy. All the parties to the agreement shall designate the new Diarchy with a two-thirds majority, thereby giving new impetus and a fresh start to the whole procedure.

8.11 In situations of particular concern, in the event of the insubstantiality of the College of Electors, the parties to the pact shall have the authority to dissolve the Diarchy upon the proposal of at least one party to the pact and with the approval of at least a 5/6 majority.

It is only in the case where the College of Electors does not subsist (think of extremely remote events such as epidemics, wars, etc.) that the individual parties may dissolve the Diarchy in office: this situation can be envisaged only if the Diarchy has committed serious violations of the fundamental principles of the agreement. A party takes the responsibility for proposing the dissolution and the approval of such proposal requires the affirmative vote of five-sixths of all the parties to the agreement. The stricter requirements provided for in this subsection are meant to ensure that the dissolution of the Diarchy may not be arbitrarily proposed on the grounds of a mere disagreement with the top of the hierarchy The possibilities for this procedure to be triggered are therefore remote, though theoretically possible.

104 A more detailed discussion of the topic can be found in G. Rossi-A. Canonico, *Semi- Immortality*, Lampi di Stampa, Milano 2007 in the footnote 136, pp. 371-373).

105 For an in-depth analysis see *Semi-Immortality*, Lampi di Stampa, Milano 2007.

Conclusion

Undoubtedly, it would have been far more convenient to just climb up a mountain and wait for someone to show up to hand us the text of the new law. By adding a pinch of content and a sprinkle of credibility on our part, the trick would have been done. But, perhaps we would not have *exactly* involved the people we wanted to reach.

Or, we may have devoted our efforts to the organization of a nice coup d'état, with a bit of demagogy, some useful idiot to be sacrificed to the altar of ideals and, above all, the right tone of voice. The use of the appropriate levers makes it easy to quickly reach a large number of people. Unfortunately. But again, also in this case, we would not have *exactly* involved the people we wanted to reach.

Thirty-three years ago, when *iLabs* was born, we chose to arm ourselves with patience and not to seek shortcuts, with the awareness that such option would dramatically reduce our chances of success, at least in the short to medium term. Luckily enough, we can state that, up to this point, everything has moved in the right direction: both scientific and technological advances have lived up to expectations and we ourselves, in our own small way, have managed to build a solid ground to rely on.

In the year 2007 the publication of *Semi-Immortality* marked the beginning of the effective dissemination of our ideas and the present book on *Law* is the natural evolution of said text in the juridical and political domain. The basic principle underlying this work is very simple and it finds its roots in the extreme conventionalism characterizing our approach: essentially, we are sure of nothing, yet, perhaps we are able to catch some glimpses of what is approaching as a unique opportunity in human history, namely the comprehensive understanding of both reality and our mind. There are theoretically infinite paths that may be taken to achieve this goal, and the progressive movement towards such objective will lead to a dramatic extension in our life expectancy. No *aprioristic* choice is better than any other. We believe that our proposal is an interesting one and therefore we are willing to present it to the world's attention.

Compared to many others, this path is a highly *ethical* one. In fact, it is not solely concerned with the scientific and technological facets, but it also takes into due consideration the philosophical aspects, in particular those that govern the coexistence among people. Hence, this path is extremely difficult, perhaps even *too* difficult. In our opinion, it is nonetheless the only possible one. Our hope, or we may say our bet, rests on the fact that the ultimate prize is so valuable as to be well worth the effort required to attain it. However, since some effort must be expended anyway, it would certainly be better if we directed this energy to something truly meaningful…

Gabriele Rossi
Marta Rossi
Paolo Sommaggio

Bibliography

Agostino A., *De civitate Dei*, S. Aurelii Augustini Opera Omnia, in J. P. Migne (a cura di), Patrologia Latina, vol. XLI col. 0011-0804.

Althusius J. (Giovanni Altusio), *Politica methodice digesta, atque exemplis sacris et profanis illustrata*, ed. or. Herborn 1603. F. S. Carney (ed by), Beacon Press, Boston 1964. Trad. it. parziale a cura di D. Neri, J. Althusius, Politica, Guida ed., Napoli 1980.

Antiseri D., *Karl Popper protagonista del secolo XX*, Rubbettino, Catanzaro 2002.

Antiseri D., *Karl Popper*, Rubbettino, Catanzaro 1999.

Antiseri D., *Logica della situazione, principio di razionalità e teoria della azione umana in K. Popper*, Lacaita ed., Mandria (TA)-Bari – Roma 1989.

Arendt H., *Karl Marx and the Tradition of Western political thought*, (trad. it. di S. Forti), in «Micromega» 5, (1995), pp. 35-108.

Aristotele, *De Interpretatione* (testo in greco), Scriptorum classicorum Bibliotheca Oxoniensis, 1966. Aristotele, *De Interpretatione* (testo tradotto in italiano), Laterza, Roma-Bari 1984. Si veda comunque l'edizione E. Riondato (a cura di) Aristoteles, *De Interpretazione*, Padova 1957.

Baade H. (ed.), *Jurimetrics: the Methodology of Legal Inquiry*, Basic Books, NY-London 1963.

Barberis M., *Progetto per la voce "costituzione"*, in «Filosofia politica» (1991), pp. 351-369.

Barile P., voce *Associazione (diritto di)*, in «Enciclopedia del Diritto», v. III, Milano p. 837.

Barrotta P., *Soggettivismo, tempo ed istituzioni a partire dalla Scuola Austriaca*, Rubbettino, Catanzaro 2005.

Beck S., *Erlaüternder Auszug aus den kritischen Schriften des Herrn Prof. Kant, auf Anrathen desselben*. Riga, 1793–1796.

Benveniste E., *Vocabolario delle istituzioni indoeuropee*, v.II, Einaudi, Torino 2001.

Bobbio N. –Bovero M., *Società e stato nella filosofia politica moderna*, Il saggiatore, Milano 1979.

Bobbio N., *Contributo ad un dizionario giuridico*, Giappichelli, Torino 1994.

Bobbio N., *Il positivismo giuridico. Lezioni di filosofia del diritto raccolte dal Dott. N. Morra*, Giappichelli, Torino 1996 (ed. or. 1961)

Boezio S., *Liber de duabus naturis et una persona Christi contra Euthychen et Nestorium*, in J. P. Migne, *Patrologia Latina*, vol. LXIV (col.. 1337-1354).

Bonansea B., *L'uomo e Dio nel pensiero di Duns Scoto*, Jaca Book, Milano 1991.

Bruno G., *De gli eroici furori*, Firenze 1958.

Canonico A. –Rossi G., *Semi-Immortalità. Il prolungamento indefinito della vita*, Lampi di stampa, Milano 2007.

Cavalla F., *La verità dimenticata*, Cedam, Padova 1996.

Comanducci P., *Assaggi di metaetica*, Giappichelli, Torino 1992.

Cotta S., *Il concetto di Legge nella Summa di S. Tommaso d'Aquino*, Torino 1955.

Cotta S., *Legge e sicurezza*, in Id., *La città politica di Sant'Agostino*, Edizioni di Comunità, Milano 1960.

D'Agostino F., *L'antigiuridismo di Sant'Agostino*, «Rivista internazionale di Filosofia del Diritto», 64 (1987), pp. 30-51.

d'Aquino T., *Commentum in quartum librum Sententiarum magistri Petri Lombardi*, d. 12, q. I, art. I. in Sancti Thomae Aquinatis Opera Omnia, t. 7/2, Parmae, 1858.

d'Aquino T., *Le questioni disputate*, Ed. Studio domenicano, Bologna 1992; per una disamina del concetto si rimanda a

De Toqueville A., *La democrazia in America*, E. Nolla (a cura di), *Scritti politici*, Torino 1968.

Di Ceglie R., *La formulazione tommasiana della verità come «Ada-equatio rei et intellectus»*, in Id. (a cura di), *Senso comune e Verità. Verso un fondamento comune alle diverse formulazioni di verità*, Edivi, Roma 2004.

Dogliani M., *Introduzione al diritto costituzionale*, il Mulino, Bologna 1994.

Dongiovanni G., *Teorie "costituzionalistiche" del diritto*, Clueb, Bologna 2000.

Duns Scoto G., *Opus oxoniense*, II, d. 3, q. 2. , (ed. M. Fernandez Garcìa), frati ed. di Quaracchi, Roma 1912-14.

Duso G. (a cura di), *Il contratto sociale nella filosofia politica moderna*, il Mulino, Bologna 1987.

Dworkin R., *Taking Rights Seriously*, Duckworth, London 1978.

Fassò G., *Storia della filosofia del diritto*, Laterza, Roma-Bari 2001 (ed. aggiornata a cura di Carla Faralli).

Fassò G., voce *Individuo*, in Novissimo Digesto Italiano, Utet Torino 1962, p. 608.

Fiandaca G., *Il diritto penale tra legge e giudice*, Cedam, Padova, 2002, pp. 17-18

Forti S., *Hannah Arendt tra filosofia e politica*, FrancoAngeli, Milano 1996, nuova ed. Mondadori 2006.

Geymonat L., *Dizionario dei termini filosofici*, Garzanti, Milano 1989.

Ghisalberti A. (a cura di), *Giovanni Duns Scoto: filosofia e teologia*, Biblioteca francescana, Milano 1995.

Gilson E., *Jean Duns Scot. Introduction a ses positions fondamentales*, Vrin, Paris 1952.

Grotius H., *De jure belli ac pacis*, 1625 (H. Grotius, *De Iure Belli ac Pacis*, a cura di B. J. A. Kanter van Hettinga Tromps, J. Brill, Leida, 1939, (rist. an. Scientia Verlag, Aalem, 1993), Prolegomena 8. Si veda U. Grozio, *I Prolegomeni al De Iure Belli ac Pacis*, (tr. e note di S. Catalano), Palumbo, Palermo, 1948.

Hart H., *Postscript*, in Id. *The Concept of Law*, Clarendon, Oxford 1994.

Hobbes T., *De Cive*, Marietti, Torino 1972)

Hobbes T., *Leviathan*, II, XVII. (T. Hobbes, *Leviatano*, La Nuova Italia, Firenze, 1976, Bompiani, Milano 2004).

Hume D., *A Treatise of Human Nature*, lib. I, part. IV, sez. VI. D. Hume, *The Philosophical Works in Four Volumes*, Th H. Green – Th H. Grose (ed by), Aalen 1964. Per la traduzione in italiano si veda D. Hume, *Opere*, a cura di E. Lecaldano – E. Mistretta, Roma-Bari 1971.

Kant I., *Antologia di scritti politici*, (a cura di G. Sasso) il Mulino, Bologna 1977.

Kant I., *Sopra il detto: questo può essere giusto in teoria ma non vale in pratica*, in Id., *Antologia di scritti politici*, (a cura di G. Sasso) il Mulino, Bologna 1977.

Kereny K., *La religione antica nelle sue linee fondamentali*, Zanichelli, Bologna 1940.

Locke J., *Lettera sulla tolleranza*, La Nuova Italia, Firenze 1969.

Loevinger L., *Jurimetrics. The Next Step Forward*, in «Minnesota Law Review, XXXIII, (1949), pp. 455 e ss.

Lombardi Vallauri L. –Dilcher G., *Cristianesimo, secolarizzazione e diritto moderno*, Giuffré, Milano 198.

Losano M. G., *Giuscibernetica*, in R. Treves, *Nuovi sviluppi di sociologia del diritto 1966-67*, Milano 1968.

Losano M. G., voce *Giuscibernetica* in Novissimo Digesto Italiano, Appendice, pp. 1077-1098.

Luhmann N., *Come è possibile l'ordine sociale?*, Laterza, Bari 1985.

Luhmann N., *Struttura delle società e semantica*, Laterza, Bari 1983.

Lyotard J.F., *La condition postmoderne*, Les Editions de Minuit, Paris 1979, trad it., *La condizione postmoderna. Rapporto sul sapere*, Feltrinelli, Milano 1981.

MacIntyre A., *After Virtue*, University of Notre Dame Press, Notre Dame (In) 1981.

Maimon S., *Gesammelte Werke*, 7 voll. hrsg. v. Valerio Verra, Olms, Hildesheim 1965- 1976.

Mandelbrot B., *Fractals and chaos: the Mandelbrot set and beyond*, Springer, 2004.

Manzin M., *Ordo Iuris*, FrancoAngeli, Milano 2008.

Marramao G., *Cielo e terra. Genealogia della secolarizzazione*, Laterza, Roma-Bari 1994.

Marshall T.H., *Citizenship and Social Class*, The University of Chicago Press, Chicago 1950; (trad. it, *Cittadinanza e classe sociale*, Utet, Torino 1976).

Miele G., *Associazione (diritto di)*, in «Novissimo digesto italiano», I, 2, p. 1420.

Modugno F., voce *Costituzione*, in Enciclopedia giuridica Treccani, Roma 1990, pp. 1-7.

Nietzsche F. W., *Crepuscolo degli idoli*, (par. 4), trad. it. F. Masini, Adelphi, Milano 1983.

Nozick R., *Anarchy, State and Utopia*, Basic Books, New York 1974; trad. it. *Anarchia stato ed utopia. I fondamenti dello stato minimo*, Le Monnier, Firenze 1981.

Pangallo M., *La verità come "adaequatio rei et intellectus" in Tommaso d'Aquino*, in «Sensus communis», I, (2000), pp. 506 e ss.

Pedrazza Gorlero M., *Il potere ed il diritto. Elementi per una introduzione agli studi giuridici*, Cedam, Padova 1999.

Possenti V., *La questione della verità. Filosofia, scienza e teologia*, Armando Ed., Roma 2003.

Pufendorf S., *De iure naturae et gentium*, VII, II, 5.

Rawls J., *A Theory of Justice*, The Belknap Press of Harvard University Press, Cambridge, Mass, 1971 (tr., it., *Una teoria della giustizia*, Feltrinelli, Milano 1997).

Ridola P., *Democrazia pluralistica e libertà associative*, Giuffré, Milano 1987.

Sandel M., *Liberalism and the Limits of Justice*, Cambridge University Press, Cambridge-New York, 1982 (new ed. 1998).

Schiavello A., *Neocostituzionalismo o neocostituzionalismi*, in «Diritto & Questioni pubbliche» n. 3 (2003), p. 44.

Schino A. L., *Il pensiero politico di Pufendorf*, Laterza, Roma-Bari 1995.

Schmitt C., *Appropriazione, produzione, divisione. Un tentativo di fissare correttamente i fondamenti di ogni ordinamento economico-sociale a partire dal «nomos»*, in Id., L*e categorie del politico. Saggi di teoria politica*, il Mulino, Bologna 1982, pp. 293-312.

Schmitt C., *I tre tipi di pensiero giuridico*, in Id., *Le categorie del politico*, cit. pp. 252-253.

Schmitt C., L*e categorie del politico. Saggi di teoria politica*, il Mulino, Bologna 1982.

Schulze G.E., *Enesidemo o Dei fondamenti della filosofia elementare*, (a cura di A. Pupi), Laterza, Bari 1971.

Sica S., *Le associazioni nella Costituzione italiana*, Napoli 1957.

Stirner M., *L'unico e la sua proprietà*, (trad.it. L. Amoroso), Aldelphi, Milano 1999.

Tamburino G., *Persone giuridiche. Associazioni non riconosciute. Comitati*, Utet, Torino 1997.

Taylor C., *Cross-Purposes: The Liberal-Communitarian Debate*, 1989.

Taylor C., *Philosophical Arguments*, Harvard University Press, Cambridge, Mass. 1995, pp. 181-203, (trad. it. 1992), *Il dibattito fra sordi di liberali e comunitaristi*, in A. Ferrara (a cura di), *Comunitarismo e liberalismo*, Editori Riuniti, Roma 1992, pp. 137-168.

Taylor C., *Philosophy and Human Sciences. Philosophical Papers*, Cambridge University Press, Cambridge-New York 1985.

Taylor C., *Sources of the Self: The Making of Modern Identity*, Harvard University Press, Cambridge, Mass. 1989; (trad. it.), *Radici dell'io. La costruzione dell'identità moderna*, Feltrinelli, Milano 1993.

Todescan F., *Dal cosmocentrismo classico all'antropocentrismo moderno*, in Id., *Itinerari critici dell'esperienza giuridica*, Giappichelli, Torino 1991, pp. 5-33.

Todescan F., *Itinerari critici dell'esperienza giuridica*, Giappichelli, Torino 1991

Todescan F., *Le radici teologiche del giusnaturalismo laico. I. Il problema della secolarizzazione nel pensiero giuridico di Ugo Grozio*, Giuffré, Milano, 1987.

Unger R.M., *Knowledge and Politics*, Free Press, New York 1975.

Vattimo G., *Al di là del soggetto*, Feltrinelli, Milano 1991.

Vattimo G., *La fine della modernità*, Garzanti, Milano 1991.

Villa V., *Il postivismo giuridico: metodi, teorie e giudizi di valore*, Giappichelli, Torino 2004.

Villa V., *Storia della filosofia del diritto analitica*, il Mulino, Bologna 2003.

von Hayek H., *L'abuso della ragione. Studi sulla controrivoluzione nella scienza* (1952), Vallecchi, Firenze 1987.

von Leibniz W., *La Monadologie*, 1, 6, 47,55,65,87.

von Mises L., *L'azione umana*, Utet, Torino 1959, p. 41.

von Mises L., *Socialismo*, Rusconi, Milano 1990, p. 139.

Wiener N., *Cybernetics: Or the Control and Communication in the Animal and the Machine*, MIT Press, Cambridge, MA 1948; l'opera è tradotta anche in italiano N. Wiener, *La Cibernetica. Controllo e comunicazione nell'animale e nella macchina*, Milano 1968.

Zagrebelsky G., *La legge e la sua giustizia*, il Mulino, Bologna 2008.