

***ANALELE
UNIVERSITĂȚII DE VEST
DIN TIMIȘOARA***

FILOSOFIE

***ANNALES
UNIVERSITATIS
OCCIDENTALIS
TIMISIENSIS***

PHILOSOPHIA

**VOL. XIII
2001**

ANALELE UNIVERSITĂȚII DE VEST DIN TIMIȘOARA
SERIA FILOSOFIE

ANNALES UNIVERSITATIS OCCIDENTALIS
TIMISIENSIS
SERIES PHILOSOPHIA

Collège de rédaction

Rédacteur en chef
VIOREL COLȚESCU

Membres
CONSTANTIN GRECU (Logique)
ALEXANDRU PETRESCU (Métaphysique)
ILONA BÎRZESCU (Histoire de la philosophie)
IOAN BIRIȘ (Philosophie de la science)

Secrétaires de rédaction
GHEORGHE CLITAN
CLAUDIU MESAROȘ

ISSN 1224 – 9688

© Universitatea de Vest din Timișoara

**Les manuscrits, les livres et les publications proposés en échange du titre ci-dessus,
ainsi que toute correspondance, seront adressés à la rédaction:**

UNIVERSITATEA DE VEST DIN TIMIȘOARA
FACULTATEA DE LITERE, FILOSOFIE ȘI ISTORIE
BD. V. PÂRVAN NR. 4, 1900 TIMIȘOARA

SOMMAIRE :

I. ETUDES:

Dana JALOBEANU: <i>Forms, Laws and Active Principles: What happened with the Laws of Nature in the Scientific Revolution?</i>	5
Cristina IONESCU: <i>Hegel's Thesis of the Identity of Cause and Effect in the "Science of Logic"</i>	35
Ilona BÂRZESCU: <i>Le silence des valeurs chez Wittgenstein.....</i>	57
Adriana NEACȘU: <i>Liberté et facticité chez Sartre</i>	65
Florentina-Olimpia MUȚIU: <i>Rationalité et raisonnabilité.....</i>	77
Alexandru PETRESCU: <i>The Cultural-Stylistic Approach of Science in Lucian Blaga's Philosophy.....</i>	91
Laura GHEORGHIU: <i>Romanian's Mental Univers towards the European one..</i>	119
Constantin STRUNGĂ: <i>The Moral shapening of the Youth.....</i>	135
Eutimiu Ștefan LIFA: <i>Problèmes concernant l'ancienneté du christianisme au Bas Danube. Les sources littéraires.....</i>	141

II: LA VIE SCIENTIFIQUE

Comptes rendu	147
Thèses doctorales.....	155
Manifestations scientifiques.....	213

COMPTES RENDUS

**Ion Dur, *Noica – the Portrait of a Young Journalist*,
Editura Saeculum, Sibiu, 1999.**

More than the Portrait of a Journalist

We would expect *The Portrait of a Young Journalist*¹ to offer us a portrait of Noica more or less similar to a well-known paradigm – that of the *30's hooligans*² – and/ or to a portrait predicting the future wiser in Paltinis. Ion Dur proposes us much more than a portrait, it is a whole life inserted in a game. Not static image, but a personage with very many appearances, hipostasis, problems. We are told that he has a serious disease: strabismus that is he looks in a direction and aims at another. We do not know how grounded the diagnosis is, but the game itself is a *louche*³ one. *The Young Journalist* is only a part of the whole. Therefore, any reader who looks for it will be discover himself caught in a labyrinth. *The Journalist* was only the pretext for Ion Dur to invite us inside the labyrinth, where he provokes his personage to revive his juvenile years sometimes with the impetuosity of that age, other times with the maturity of some late ages. Being attentive to the scenery as well as to his personage, the author detects some less accessible aspects of them, relations known only by some initiates, shades that were well hidden during the time. The argument for this entire job is that: "the context, the subtext and the text form together a unit that is significant for the existence and the meanings of a paper, especially when it is a

¹ We refer here to Ion Dur's book, *Noica – the Portrait of a Young Journalist*, Ed.Saeculum, Sibiu, 1999.

² so as they were described by Mircea Eliade in the novel with the same title

³ We take over Ion Dur's expression in order to use the same terms:

philosophical construction"⁴. Besides, after 1970, "the context had pure and simple devoured the text and had imprinted some existential invariable"⁵.

The truth is that Noica's work and especially some parts of it had been taken over by some people that used them to argue their thesis, without taking in account the whole Noica's system. Frequently, the fact of taking out of some fragments from their genetic context do modify the signification of some hypothesis, of the whole fragment or even the author's intentions. As concerning Noica, this risk is already fulfilled. He is much more quoted than read and understood in the very intimacy of his thoughts. Each one cuts up what it fits to him, ignoring the unguiltiness presumption. One of the greatest merits of Ion Dur was to notice this risk and to try to replace Noica in his real context. The first message of this book is just the obligatory meeting of the text with its premises. As a consequence, the first chapter is an example of a double game of the author's: he promises a discourse about "the young journalist" but he postpones it in order to be sure that his readers will be able to read it correctly. Sometimes you suppose that he "forgot" the true destination of this trip and "cheats" you with a lot of other landscapes. For the one who is looking for "a story", this start as well as the multitude of notes and explanations seem to be excess of scruples. Everything takes place with a patience worthy of a classical philologist who takes care of shades and of the infinitesimal differences between meanings that were never supposed. In fact, this start is a real Noica *file*: editions, notes about the errors of understanding Noica, friendships and obsessions, risks and naivetes. Especially the risks are here discussed! The inter-war age is fascinating but we also take only some fragments, being afraid not to find facts that we do not know how to interpret. Here come the risks. Ion Dur assumed the ungrateful task to present *the case* in its whole complexity.

We find an up/to/date register of Noica's editing, as a sign that we don't have an integral Noica edition. So much the little we have the right of some "definitive" interpretations or the right of some trenchant ones. Ion Dur also presents the "non-meetings" with Noica, meaning those readings that brought him great bad turns. For example, he analysis Adrian Marino's position that accuses Noica of collaborationism. He starts from Noica's declaration when getting out of prison⁶ and accuses him to have been a servile ideologist of communism because he seems

⁴ Ion Dur, *Op. cit.*, page 13.

⁵ *Idem*, page 52.

⁶ cf. Noica's book, *Prey for Brother Alexander!*

not to have refused to offer. Here comes interpret spirit and takes everything on the sake of a double game. Ion Dur brings in front of a possible instance the fact that Noica “lived on his own the bite: he felt it during the imprisonment as a brutal, animal one. Then, he felt it when getting out of prison, when the bite became a treacherous manner to recruit people in the chorus of barking”⁷ This allow us to say that Noica “grasped the tragedy where totalitarianism pushed us”⁸. Here starts Noica’s “refuse to an opened critics of the totalitarian system”.⁹ What is amazing to Ion Dur, too as to all those that understood Noica’s non-implication into communist policy, is the fact that he does not insist on Noica’s *louche* game although he grasps it and might transform it in the strongest contra/argument. This is the fact that the philosopher proposed to his investigators to let him become “trainer” in Hegel, Kant, Aristotle, mathematics or other sciences. *He wanted to prepare a correct perception on Marx*. But, it is well-known that a correct understanding of those great thinkers that Noica has proposed for a detailed study does not necessarily lead to Marx’ fetishism. On the contrary, a correct reading on Marx would emphasize de deviations of the Romanian totalitarian system face to Marxism. Here there is a double level of approximations that could be detected and would never produce devoted activists. Sooner, they might be “escapes into culture”. This culture would than be prolonged into policy so it would never be a “skidding into utopia”¹⁰. Much more, mathematics and all the other sciences that do not take part to the political game and are able to undermine its grounds as well as the trust that is active on a field of total ignorance.

Ion Dur invokes Noica’s temptation of doing nothing, as a solution to the crises of that times.¹¹ It does not belong to the “journalism without perspectives”¹², but to a journalism that lacks of being’ sense. The perspective comes from the temptation of getting out aside (*lățuriș*)_as Noica enjoyed saying. It was the joy of getting out from the games of history in order to perform his own ones. The fact that these texts are not parting of the anthologies that the philosopher has gathered is explained by the fact that their author would have said: “neither this or this is the being”. But, the temptation of getting out from a game that he considered

⁷ Ion Dur, page 38/39

⁸ *Idem*, page 39

⁹ *Ibidem*

¹⁰ *Idem*, page 16

¹¹ “I propose the following revolution: let’s do nothing at all” – C.Noica in Ion Dur, page 33

¹² *Ibidem*

to be out of being as well as his advice not to do an opened opposition have hinted – we believe – a more profound hermeneutic level. This would contain the idea that the greater, the more generalized would be the withdraw from the political life, the easier would be to compromise the game, grace to the absence of the players. We do not discuss how valid this option is in the socio – political world, but we believe that one has to take it into account as a consequence of the whole nicasian thought.

What does Ion Dur do with this entire hypothesis? He suggests them and hides them, prolonging the game of his personage. Our sensation is that he was so much preoccupied not to loose a leaf of his file without discussing it that he even did not look for a conclusion. Much more, we have already suggested that the incomplete edition of Noica's work might be a reason for this delay. On the other hand, there are proposed so many possible conclusions that it seems that Ion Dur invites us to a *symposium* about his personage. The suggestions he insist on, are strabismus and the *louche* thought, as well as young Noica's dandysm. It is a dandysm in the name of philosophy and especially searching for it. There was a continuous searching for the Idea beyond the immediate, beyond sense, beyond any ground. Noica's basic lesson is that any thing is valid when it has a ground. The first to experience it is just the "journalist". Ion Dur proves that all the articles that refer to the most concrete events, to the surrounding reality have a ground in the books he read/ wrote during that time, as well as a clear goal: prolonging the ground. He tried to insert under its incidence as many facts, options, attitudes as possible. "There was too little that he let himself provoked by empiric, by the narrow empiric that occults any road to transcendent, to an abstract ideatic substance".¹³ The empiric aspect was only the appearance grasped by Noica while he was hinting the sphere beyond it. Here starts the impression of a *louche game* that the philosopher did practice, because Noica did not announce his projects. Searching for the concept seemed to him absolute necessary and unchallenged. Therefore, those who stop at the texts only for their comment do usually find some elliptic judgements. Their aim was not to shock but to continue one and the same reasoning that he followed all his lifetime.

Another aspect of nicasian dandysm would be what Ion Dur called the *fall into excess*, that is the practice of an "ethics as an empty virtuosity". Noica's "will had imprinted the two faculties of spirit a

¹³ *Idem*, page 26.

metabolism worthy of a frantic campaign, of a harsh competition.”¹⁴ So does the author interpret Noica’s withdraw in Sinaia for four years and the translation of some detective novel in the same time with the “absence of a vision, of an ideological coherence”¹⁵ in the articles published in *Buna Vestire* or even the fact of reading some minor authors.

We were saying that Ion Dur does not offer so many solutions, but many, many suggestions and hypothesis. This book is a really starting point. Immediately after some of these “accuses” there comes a nicasian idea that contradicts any futile, rigid decision. “Ethics does not need to get to a virtuosity, but only to the inner consistency of what you are doing”¹⁶. This idea sends us to that *legato* he will require in all the gestures and works of his disciples. This is just the revenge that Noica takes over those who accuse him of “paradoxes”, of lack of constancy, of existing as two or more Noicas.¹⁷ This is another point that Ion Dur’s material here may offer to any possible “lawyer” in Noica’s case, all the necessary arguments.

Another problem he discusses is Noica’s *communitarian solitude*. It was largely discussed by now whether Noica’s “aptitude” for totalitarian offer: that of legionarism or of communism do not represent a defiance of the individual, of a man with its determinations in the favor of an standardizing general. Ion Dur’s indictment produces an answer beyond the common one: no, it’s not so! Using a language full of metaphors and overwhelming suggestions, the author grasps the Hegelian temptation to transcend duality grace to a beyond-of term. There is nor individual, nor general. But such a profound understanding of the general that it leads to a full description of the Ego, with all its determination. There is here the process of taking over the general into the new language of the individual, a reinterpretation of the communitarian element trough the grid of an individual who has already founded him. This is why it can find all the others in their very essence and can relate to them trough what they have in common. Here starts the suggestion of a profound Christianity in Noica’s thought.

As a consequence, the portrait of a journalist is only a pretext. Ion Dur realizes a continuous go and come between the inter-war journalist and the thinker of the 70’s. If Noica enjoyed playing games / so as any

¹⁴ *Idem*, page 139.

¹⁵ *Idem*, page 191.

¹⁶ *Idem*, page 139.

¹⁷ We refer here to Alexandra Lavastine’s book, *Philosophy and Nationalism. Noica: a paradox*, Bucharest, Ed.Humanitas, 1998:

subtle thinker does / Ion Dur invites us to throw away all the masks his personage use to show us, searching for his real face. Noica was obsessed of finding his face. This means, the idea that was only his. We may find the answer if we shall study attentively his dance!

Laura GHEORGHIU
West University of Timișoara

**Ioan Biriș, *Sociologia civilizațiilor (Sociology of civilizations)*,
Editura Dacia, Cluj–Napoca, 2000, 170 p.**

The main preoccupation of Prof. Ioan Biriș in this book is the problem of the cultural integration. This issue is part of the present context of the sociological debates that are revealing the importance and the specificity of studying the civilizations for the understanding and the explanation of the social life.

This work is formed of five chapters, explicitly and coherently structured.

In the first chapter *Culture and civilization. Conceptual features*, the author starting from the theories of Habermas and Parsons referring to the statute of sociology among the social sciences, treats some aspects regarding the conceptualization of society and culture. The methodological approach suggested by the author has determined him to specify his preference to analyze types of cultures or societies not the cultural or social systems.

From this point of view it is considered that the concepts of sociology have a typological character which gives them a specific statute that has been studied from the epistemological perspective. The author presents the conceptions of R. Carnap, E. Durkheim and C. Levi–Strauss underlining the difficulty of typifying concerning the phenomena classification criteria. Referring to the meanings diversity of the notion of culture, Mr. I. Biriș is asserting that the conceptual dimension can be systemized and clarified if we are taking into consideration two main aspects: the references in function of which the notion of culture (nature, civilization, society, personality and value) is defined and the analyzing plan of the notion. The specification that the first aspect is subordinated to the second permits to the author to examine the concept of culture from the most important perspectives of the contemporary research: philosophical (E. Cassirer), anthropological (E. B. Tylor, R. Linton, A. L.

Kroeber, C. Kluckhohn, L. A. White), historical (F. Braudel, J. Cazeneuve, L. Febvre, R. Aron, O. Drimba), informational (A. Moles, E. Leach), sociological (A. Mucchielli, P. Andrei, A. Mihi).

In the second chapter *Attempts at typifying cultures and societies*, Prof. I. Biriş is treating different modalities to classify cultures and societies, observing their limits. We noticed that these modalities are explained beginning from the idea that the choice of criteria for this purpose is depending of the perspectives analyzed in the previous chapter. The author mentions the classification attempts for each of these perspectives, using specific criteria.

Referring to the classification of cultures, the author reveals the points of view formulated in philosophy (Sorokin, Schubart, Kroeber, Northrop, Berdiaev, Danilevski, Spengler and Toynbee), anthropology (E. B. Tylor), history (J. Cazeneuve), communication (M. McLuhan), sociology (A. Mihi). As the author says, we can not give a univocal and categorical answer to the questions raised by these perspectives. The approaching modalities and the answer are in function of the comprehension level reached by the specialists in different social sciences.

In order to obtain a classification of societies offering different typologies, the best being the typology of Guy Rocher, Mr. Biriş considers that there are necessary some specifications referring to the external criteria of the social organization (J. Baechler, T. Parsons, A. Mihi) and to its internal criteria (H. Spencer, E. Durkheim, T. Parsons).

In the third chapter *The logic of the civilizations: a macromodel for an analysis*, the author is interested in the dynamic perspective of the social organization and builds a macromodel for the analysis of different cultures and civilizations. He is asserting that at the level of macrosociology there is a pluralism of factors explaining the social evolution, theorized by divers philosophers and sociologists (E. Durkheim, L. Mumford, A. Comte, J. Baechler, M. Weber – whose conception is the reference point for the model elaboration). The author distinguishes three main parts of the macromodel, which he describes and explains: the external part (external medium), the internal part (internal medium) and the relationship of representation that establishes the link between the two media. The author uses this macromodel to elaborate a typology of civilizations in function of the cultural creativity orientation.

In the fourth chapter *Cultural phenomena: content and structure*, Prof. I. Biriş is remarking that in the case of the civilizations sociology and of the researches from the culture area, the cultural phenomena are representing the main object of study. Referring to the content of these

phenomena, the author underlines the diversity of the sociologists and anthropologists opinions (B. Malinowski, A. Mucchielli, L. A. White, E. Morin, G. Rocher). The author adopts the opinion of the last one, which he develops presenting in detail the cultural elements: values, norms and symbols. He reveals that all these elements shall be organized in structures. That's why he presents the E. Malinowski's opinion regarding the integrative principles. The author observes that the sociological and anthropological analysts are elaborating their own theories in their attempt to answer to the question referring to the modality of structuring the cultural elements. All of them are agreeing that cultural phenomena structure has two main components: the nucleus and the fluid zone, each of them having a specific function: homogenizing – integrative and differentiating. The cultural integration forms in different societies and human collectivities are depending of the modality in which the two structural components are relating.

In the fifth chapter *Ways of cultural integration. Concepts and markers*, Mr. Ioan Biriş is trying to surpass the conceptual difficulty, regarding the cultural reality, that has the origin in its simultaneous factual and axiologic character, as well as the difficulty, regarding the sociology statue, investigated by L. Apostel, that is concerning the fact that the phenomena studied by the sociology are also studied by other sciences. For this purpose, from perspective of a logic of the socio-cultural totalities, the author establishes the types of integration and underlines that between them and the types of structures exists a correspondence, but not necessary a similarity. The typology of integration proposed by Prof. I. Biriş is including the uniformity, unity, multiplicity and diversity.

The originality of the analytical–explanatory approach consist in the modality of joining the logical, axiological, anthropological, sociological and historical aspects concerning the cultural phenomena, the author elaborating a remarkable synthesis of them.

Florentina-Olimpia MUȚIU
West University of Timișoara

THÈSES DOCTORALES

Ioan Biriș, *THE CULTURAL PHENOMENA AS SOCIAL INTEGRATORS*, The University "Babeș-Bolyai" Cluj-Napoca, The History-Philosophy Department, Scientific Adviser: Prof. Achim Mihu, Cluj-Napoca, 2000

Summary of the doctoral thesis

The aim of the present work is the study of the cultural phenomena from the perspective of integration function of them. In order to achieve this purpose, in *the first chapter* we have examined the main perspectives upon the notions of culture and civilization. Before that we have underlined the idea that the notions of sociology are essentially typological. From this point of view we prefer to talk about "types of culture" or "types of societies" instead of calling them as "cultural systems" or "social systems".

The analysis of the phenomenon of social integration from the perspective of culture supposes a step that could permit a certain clasification of cultures and societies. Though the notion of "type" (the same with these of "structure", "system", "function" etc) may contain some ambyguity, however, at least beginning with Durkheim, the procedure of establishing" the types "or" social species" proved productive enough for an analysis of the social organization.

The notion of culture is used in a great number of acceptions. With all these, the conceptual dimension may be systematize and therefore clarified if we take into account two principal aspects: 1) the references of notion of culture; 2) the plan of analysis of the notion. Referring to the first aspect, which forms a kind of "external structure" the main references that we can identify in the conceptual analysis of culture are nature, civilization, society, personality and value .

Taking into account that these references can work in any plan of analysis (philosophical, sociological, anthropological etc) we have to subordinate this criterium to the above mentioned one, that is, the plane of analysis of the notion of culture.

In this way there appears the main perspectives for analysing culture: philosophical, anthropological, historical, informational and sociological. The investigation of these perspectives leads us to the conclusion that while the studies of philosophical, anthropological, historical and informational types tend to accept the notion of culture in a generalizing way, coextensive to human or history, the sociological perspective expresses rather a restrictive tendency, of specification especially in relation with the social group and with the field of values.

After the clarifications in the field of concepts concerning the notions of culture and civilization, in *the second chapter* we analyse the ways of classifying cultures. The step from the previous chapter allows us to notice that, usually, the choice of the criteria of classification depends on the perspectives in which culture is studied. So, in the philosophical perspective, in theories like those of Spengler, Toynbee, Berdiaev, Northrop, Kroeber, Danilevski, Schubart and others, there dominate the organicist models of classification. The anthropological, ethnological, ethnographical studies use their own classifications (as criteria being technical, religious etc. factors), the historians use, too, varied classifications (based on geographic or temporal criteria) and from an informational perspective we can find attempts of typology culture according to the changes, which occur in the field of means of communication.

As concerning the sociological perspective, an important problem having connections with the classification of cultural phenomena is that of the dimensions of the group which should be taken into consideration in order to be able to talk about a specific culture. At the same time it is necessary that the typology upon culture should be correlated with the attempts of classification of the societies. In this context some specifications in connection with the notions of "social reality", "society", "social system" and "social structure" are necessary. Then we insist upon the possibilities of typologising the society on external criteria of social organization analysing concepts as those of Comte, Marx, Tonnies, Max Weber and others. On the other hand one can see the attempts of classification of the societies on the internal criteria of the social organization, like the theories of Spencer, Parsons and others.

If the first two chapters have the mission of making familiar the concepts and the main positions of the literature of this speciality, *the third chapter* is by excellence a constructive one, proposing a

macromodel for analysing cultures and civilizations. In making this model we use especially W. Balzer's suggestions from the structural analysis which he is doing upon the social institutions.

Starting from the hypothesis that in order to understand the logic of the civilizations as well as the possibilities to typologize we have to follow the aims of the cultural creation, that is the relation between the cultural tradition and the cultural innovation. The cultural traditions represent both guides of direction for the social actions and sources of identification. In its turn innovation holds a fundamental importance in the evolution of the society. The relation between tradition – innovation should not be regarded to a rigid, determinist scheme, the relationship between these two terms does not involve a rupture, as there are many cases in which the innovations prove to be progressive reasons of some traditional practices.

The first element we need to build a macromodel centred on the relationship between tradition – cultural innovation is that one of cultural influence. This is a rather neutral term and at the same time simple enough to explain the complexity of the socio-cultural relations. Usually by influence means any efficient action of a person or groups of persons orientated in the direction of changing the option and manifestation of other persons or groups. Even if the notion of influence is sometimes associated with the relations of power and social control, it is different from this in a more elaborate sense, just by the fact that it does not use coercion but to the capacity of persuasion, in this way being associated with the socialization and communication processes.

Without doubt that the talk concerning the cultural influence exercised by the tradition can be stressed according to the context that is to be analysed, but at a macrosociological level it is enough to take into account the factor "tradition" as a kind of "agent" or "corporative actor". Namely, we may conceive "tradition" – in the Durkheimian way – as a factor of solidarity, as a form of cultural organization whose functionality can be expressed (manifested) similarly with the solidarist ethics of the professional corporation.

After these specifications we may try a more exact formulation to the question "how tradition (*T*) acts as a factor of cultural influence".

Tradition (T) exerts an influence by means of its manifestations ("m") upon the social actors ("a.s") so that these do the actions ("n").

We use the term "social actors" correlated with that of cultural tradition in order to present the circumstances in which the individuals or the groups act according to the roles prescribed for them. Respectively, this conduct is a reproductive one for a given society, one based on tradition. Then when the actions of the individuals or of the groups are

opposite to the functions of the system, creating new effects being emergent and against tradition, we use the term “social agents”. This term is associated with the transforming type actions and with the notion of cultural innovation.

2. *Inovation (“I”) has influence by its manifestations (“m”) on the social agents (“s.ag”) so that these ones do the actions “n”.*

Naturally, in a society the different actors and social agents have actions based on tradition, and other groups may have characteristic actions corresponding to the needs of changing, of innovation. That is why for creating the macromodel we need a characteristic function, too.

3. *We call a characteristic function (“ch”) that one which arranges each social group (“g”) (actor or social agent) on a lot of types of actions (t_1, \dots, t_n):*

$$ch(g) = (t_1, \dots, t_n)$$

We have to consider the fact that among the different groups of the society, as well as between the cultural standards and the cultural values of any society there is a certain hierarchy. The position of a person to a group or a cultural value in a hierarchy is expressed by the notion *status* and by the *relation of social status*.

4. *A relationship of status (“st”) should be: a) transitive and b) of only one univocal determination.*

So far we have given shape only to the outer side of the macromodel: (T, I, ch, st). We will have to consider the inner side of it, too, as well as a relationship of representation which could connect the outer and the inner medium.

Both the individuals and the social, groups create their own, inner models, by means of the processes of socialization and of cultural influences. But these inner models are not simple “reflections”, simple “images” of the outer medium but they are active entity, of which we have to keep in mind a few aspects: a) the ability of inner modelling maintains in time tradition and the stability of the cultural institutions; b) the existence of intentions, of the actions directed according to certain purposes; c) inner models, beliefs and people’s ideas can act causative; d) inner models are component parts of social systems.

As the inner models are built in a relationship with the outer medium, there is a certain symmetry of the structures both in the inner and outer mediums. Respectively, tradition (T) of the outer mediums corresponds to an inner model of the traditional belief (T^*), to the innovation (I) has a correspondent of the inner model of the transforming ideas (I^*) and the characteristic function (ch) has a correspondent

function (ch^x) in the inner model whose mission is to arrange mentally the actors or the social agents on the multitude of types of the represented actions. As far as the relation of status (st) it should be associated rather to the third part of the macromodel, respectively to the representing relationship whose mission is to mediate between the two media. So we will obtain the following structure for the inner medium:

$$(T^*, I^*, ch^*)$$

In the way how for the outer medium the characteristic function (ch) arranges each social group "g" based on the multitude of actions ($t1...tn$), there is a characteristic function (ch^*) which arranges the representations for the inner medium:

$$Ch^*(g^*) = (t1^*, \dots, tn^*)$$

Specifying that ch^* is an internalizat characteristic, that is, it represents an arrangement within the inner model according to the represent actions of g^* . In order to connect the outer and the inner media we should introduce a coordinating function by which the inner model (T^*, I^*, ch^*) should correspond with the social groups (g) of the outer world. For this we introduce:

5. *The coordinating function "x" is that one which coordinates a social group "g" (social actors or agents) with its inner model which is coordonated by the characteristic ch^* .*

$$X(g) = (T^*, I^*, ch^*)$$

(that means that a group "g", of the outer medium has and uses an inner model of forms $\langle T^*, I^*, ch^* \rangle$).

Until now we considered only the need to coordinate a social group (social actor or agent) with its inner model. But is necessary to consider too the fact that the different social groups create representations not only about themselves but also about other social groups, and culture depends very much upon these images which "the others" have about a certain "we". That is why in our macromodel we should introduce another component, that is, the relationship of representation. With this relationship our own representations and those of the others will be coordinated.

6. *The relationship of representation ("rep") is that one which puts into correspondance the social groups ("g"), the types af actions ("t") and characteristic functions ("ch") with their representations*

$$g \{rep[g']\} g^*$$

(g^* expresses the representation of the group g in the inner model of the group g');

$$t \{rep[g']\} t^*$$

(t^* expresses the representation of type of action t in the inner model of the group g');

$$ch \{rep[g']\} ch^*$$

(ch^* expresses the representation of the characteristic function ch in the inner model of the group g').

Naturally, if we pass to another group, let's say g'' , then we have $rep(g'')$ and so on. Now, if we agree to symbolize the multitude of the inner models $\langle T^*, I^*, ch^* \rangle$ with the letter " M ", we can express our analysed macromodel under the following form:

$$\text{The macromodel} = \langle T, I, ch, st, M, x, rep \rangle$$

As this model of analysis is created we may pass the its application to the study of civilizations and of the significant cultural phenomena. We consider that at the macrosociological level we cannot speak strictly of a clasification of the civilizations but no more than a tipology of them.

Normally we deal with a clasification when the distinction can be achieved based on unique criterium. But when more criteria are used we deal with typologies, these being a particular form of systematization.

Actually, to the applied model in order to typify the civilizations we used as a fundamental criterion the relationship between tradition-inovation ($T-I$), regarded from the perspective of the result of the cultural achievement. Included into this basic criterion we use a set of subordinate criteria, the same as the report between the cultural unity-and cultural diversity, the ways of imagining the sense of becoming and the space-time horizons shaped in the imaginary collective. In estabilishing these criteria we have taken into account a series of the ideas of M. Weber, P. Sorokin, T. Parsons, Ch. Moraze, L. Blaga, C. Noica and others. The estabilishing of typology was not done in a normative way but by extracting the different characteristics of the semnificative studies regarding the great cultures and religions wich we find within the frame of civilizations as well as from the studies referring to collective mentalities. So we have come to the forming of the following image of civilizations:

The Type of civilization according to its orientation of cultural creativeness	The conception of the sense of becoming	The report between unity and diversity	The spacial horizons	The temporal horizons
I. Civilizations with orientated creativity prevalent conservative	Identical cycles infinitely repeated	The repetition of the unity	Close, stagnant spacial horizons	The turning to account of the present
II. Civilizations with orientated axiotraditional creativity	Regressive orientated cycles (great fidelity for the origins)	Unity in multiplicity	Spacial horizons as concentric receptive	The turn into account of the past
III. Civilizations with a polio-centric orientated creativity	Non uniform cycles and often non orientated	Unity and multiplicity	Diverse spacial and competitive horizons	The turn into account of the past in the perspective of the future possible
IV. Civilizations with a pragmatic rationalized creativity	Progressive orientated cycles	The multiple unity	Unlimited, open spacial horizons	The turn into account of the future

In the frame of the first type of civilizations are included those societies and cultures which are often called archaic or "tribal" etc. Tradition is predominant in these societies, facing the innovation manifesting fear, as in front of any unknown. The repetition of the unity is so constraint that within the potential diversity or even the present one are not separately perceived, with the statues of differentiating and innovation, but in the existing context, in the traditional context. The innovation is quasiannulled, thus our macromodel may have the following form for this type of civilization.

<T, ch, st, M, x, rep>

For the second type of civilization we keep in mind, especially, the Chinese and Hindu cultures. These cultures have a remarkable continuity from the cultural antiquity up to our days due to the fact that, in principle, the creative finalities in the cultural level are often centred on the axiotraditional valoric nucleus. Unlike the first type of civilization, in the second one the initial unity is not repeated indefinitely, but it permits a certain heterogeneousness, that is it permits the birth of some cycles which are reabsorbed. Marking with "C" the temporal cycle, and with t_0, t_1, \dots, t_n the successive phases the becoming in these cultures is of the following form:

$$C=(t_0Vt_1V\dots t_n) \& (t_0Vt_1V\dots t_n) \& \dots$$

As the innovation is done by juxtaposition, the time and space appear in these cultures as a kind of concentric horizons.

Keeping in mind the fact that, beginning with these cultures, the connection between tradition-innovation becomes more flexible, we introduce in our analysis an indicator of cultural influence, namely, *the coefficient of cultural influence depending on stability*. Respectively, according to the way in which the social actors and agents turn to account the situations of stability, of social and cultural order, they will give more or less importance to tradition and innovation. If we consider the social stability as a sum of tradition and innovation, and the vocation towards tradition and innovation as relationships between the variation of tradition and that of stability, and, respectively, between the variation of innovation and that of stability, we can write:

$$\Delta S = \Delta T + \Delta I$$

$$t = \Delta T / \Delta S$$

$$i = \Delta I / \Delta S$$

From where it results that:

$$t+i = \Delta T / \Delta S + \Delta I / \Delta S = \Delta S / \Delta S = 1$$

$$t = 1 - i$$

$$i = 1 - t$$

where: S = stability, T = tradition; I = innovation;
 ΔS = the variation of the stability;

ΔT = the variation of the tradition;
 ΔI = the variation of the innovation;
 t = inclination towards tradition; i = inclination towards innovation.

The inclination towards tradition (t) shows how much the importance of tradition will increase when on a scale of the social groups' subjectivity the stability increases with a unity, and the inclination towards innovation (i) expresses the progress of innovation when the stability increases with a unity.

As both tradition and innovation are variable sizes (being considered, relatively, at a certain moment of reference) consequently we will be able to express the coefficient of cultural influence with a report between the relative sizes of the tradition and innovation and the relative size of the stability:

$$K_{if.ci/S} = \frac{\Delta I/I_0}{\Delta S/S_0} = I_1 - I_0/I_0 : S_1 - S_0/S_0$$

where: $K_{if.ci/S}$ = the coefficient of cultural influence of the tradition depending on stability ; T_0 = the tradition of the moment of reference; T_1 = tradition in a later moment; S_0 = the stability at the moment of reference; S_1 = the stability in a posterior moment.

Similarly we will have the formula for the coefficient of cultural influence of the innovation:

$$K_{if.ci/S} = \frac{\Delta I/I_0}{\Delta S/S_0} = I_1 - I_0/I_0 : S_1 - S_0/S_0$$

Concretely talking about the cultural cores of the Chinese and Hindu civilizations we can appreciate that tradition has constantly excelled the innovation, that is:

$$T > I$$

In this way our macromodel will have for this type of civilizations the following expression:

$$\langle (T > I), ch, st, M, x, rep \rangle$$

The third type of civilization of our classification includes a series of spread ancient cultures, according to Ch.Moraze, from Indus to the Atlantic. Though much different, the cultures as the Egyptian,

Mesopotamian, Persian, Hebrew, Greek and Roman have in common the fact that the cultural innovation obtains more and more position, more liberty of manifestation. The cycles of becoming very often do not seem uniform, the spacial and temporal horizons begin to be competitive and the connection unity-diversity act under the scheme of unity *and* multiplicity. Generalizing we can say the cultural innovation can often equalize the tradition:

$$T \geq I,$$

and our macromodel will have the form:

$$\langle (T \geq I), ch, st, M, x, rep \rangle$$

In the end, the fourth type of civilization includes, by excellence, the modern occidental cultures. Within these cultures the innovations are especially reported to the temporal dimension of the future, with the stress on rationalization and efficiency. Here the diversity is the first, the unity being in fact a multiplicative one, the cultural scheme being the *multiple-unity*.

These cultures put innovation in front in all the compounds of life, so that:

$$T < I$$

and the adapted form of our macromodel for this type civilization becomes:

$$\langle (T < I), ch, st, M, x, rep \rangle$$

But for a sociology of the civilizations, as for as the applied research in field of culture, the subject of study is the cultural phenomena. That is why in *the fourth chapter* of this work we deal with the content and the structure of the cultural phenomena. The work assumption is that one that the cultural phenomena present both integrative structures between the own elements of the cultural universe, and the integrative structures between the elements of the cultural system and those of the social system.

In a systematic treating we consider that the main elements which are part of the cultural phenomena can be grouped into three categories: the values, the norms, and the symbols. In connection with the values, in our work we draw the attention that the sociological study of these, as H. Mendras underline, can be in a delicate position. While the study has to relate the values to the groups, to communities and individuals, the

individuals who live these values confer them the dimension of the transcendence and of the absolute.

As we are particularly interested the integrating function of the cultural phenomena, as regarding the classification of the values we choose a classical typology: the scope-values and means-values. The former have by excellence a creative and integrating function and those belonging to the means-value open way to the norms found in the society.

Under a sociological aspect, the values are irrelevant if they are not connected to the norms. As the values can be "aim" or "means", the norms of the society can be divided into "final norms" and "means-norms". So the scheme of accepting the judgement of value within the normative arguments should take into account the hierarchy of the values and the norms on the "scope-means" axis. If we note N_0 the final norms, with N_m the norms with a role of "means" and with V^+ the universe of the positive values, then the scheme of the reasoning of accepting a judgement of value " $X \in V^+$ " will have the following form:

$$\begin{array}{r} X \in V \text{ as } N_m \\ N_m \text{ as } N_{m-1} \\ \hline N_1 \text{ as } N_0 \\ \hline X \in V^+ \text{ as } N_0 \end{array}$$

This scheme points out the fact that there is a distribution of the values by norms, a value transfer which makes possible an integration from the cultural standards towards the actors' or social agents' conduct.

The socio-cultural integration of the type of conformity to the standards was especially studied by the functionalist orientation in sociology. But there is also a line of searching suggested by H. Mead and then continued by Goffman, Garfinkel, Cicourel and others, a direction which draws the attention on the integration by cooperation. In this case we underline the idea that the social groups and the individuals do not merely act within the frames of a rigid conformity but their comportment can also have an innovating, creative character with possibilities of negotiation.

Another very important resource for the integrating function of culture is the symbols. The prestige, the power, the rank and their symbolic signs are criteria used to hierarchize the social life. The function of the society cannot work, as P. Bourdieu says, in the absence of the symbolic capital. The fight between the individuals and groups for

obtaining the symbolic capital leads to the conversion of the force relationships of the society into relationships of significations. Then the society can be analysed in the terms of "cultural field" and "symbolic field".

The idea of symbolic integration implies the fact that there is a symbolic efficaciousness, an investigation of the different cultures and civilizations shows us that the symbolic efficiency can be especially obtained by means of technologies of making actual. By means of these technics there are recreated, reedited happenings or texts which should often be present in the collective memory.

But the cultural components in order to be able to carry out its integrative function, should be organized in certain structures. Most of the analysts (sociologists and anthropologists) seem to agree that the cultural elements are usually organized in a structure which includes a "hard core" (with an integrating force), on one side, and a "fluid zone", an area in which we can find series of alternatives, on the other side.

Within the cultural core are included those elements which are reciprocally adapted, so that they constitute a cultural unity with a certain degree of integration, of coherence. The identity cultural core acts- according to R. Benedict- as a way of language, that is it is learnt, it has its own rules and carries a certain vision about the world. The core is that one which confers a general orientation of a certain culture. This cultural core can be an "ethos" (M. Weber), a "factor of synthesis" in history (N. Iorga) or an "intellectual continuation" (A. D. Xenopol), a "cultural style" (L. Blaga) etc.

The other important part of the structure of the cultural phenomena is represented by the fluid zone. In the fluid zone there are included some cultural elements which can be called options or alternatives in relation with the general orientations instituted by the core (R. Linton). Here we can find different cultural innovations, the new literary and artistic trends, the new ideologies, etc.

While the core is homogeneous and integrating, the fluid zone has a differentiating function, bringing in front the diversity of the alternatives. According to the way in which the two structural components act, one in report with the other, the forms of cultural integration in the different human societies and collectives depend.

The fifth chapter just tries to systematize those forms of cultural integration and to point out the main concepts and indications by means of which the forms of integration can be expressed. The specific logic of the integration is that one of totalities.

Keeping in mind the types of structures established by R. Boudon, as well as some of Kant's suggestions referring to the classification of

the connections, in our work we have chosen a quaternary typology of the integrations, as seen in the table below.

Elements (parts) Relationship	Of the same type	Different
Of the same type	Uniformity	Unity
Different	Multiplicity	Diversity

The uniformity expresses conservative integration, a *repetition* of the same, the unity renders a subordination of the diverse to the same structure, being *one in the multiple*, the multiplicity reflects a structure of the one *and* of the multiplicity, and the diversity expresses a very dynamic integration, of the type *one–multiple*.

A classical reference in the typology of the integrations is Werner S. Landecker's study "Types of integration and their measurement" in which to speak about the cultural, normative, communicative and functional integration

Considering this classification we may have the following remarks: a) Landecker's typology is based on the criterion of the integrating domain, which implies an open series of the types which can be established; b) the *established* types are not independent as, for example, it is difficult to sustain that the communicative integration is not a cultural one, and vice versa.

The typology proposed by us is more general and its advantage is that it simultaneously takes into account the elements which are object of integration (values, norms, symbols, etc) and the relationships in which these elements are included. In the case of integration of "uniformity" type, at the limit and in a similar way with the mechanical solidarity of Durkheim's classification there is no differentiation or, more exactly said, the differentiation is very much blurred. In our typology regarding cultures and civilizations the integration of the uniformity type can especially be found in the civilizations with a cultural orientation conservatively orientated.

Uniformity can be considered the simplest form of integration, namely an aggregation, a collection. But aggregation, too, should have a minimum unity, this "minimum" can be the territory, the need of a common defence, but also a common tradition, certain beliefs, values etc.

With the integrating form called "unity" we are in the position of keeping the same structures but in the presence of a certain heterogeneousness of the component elements. The type of relationship is "form one to more", being a co-homogeneous relationship, of

superiority or inequality. Under the social-cultural aspect, this form of integration can especially be found in the cultures with an axio-traditional orientated creativity. But it can also be found in the groups with a strong hierarchy, where the same structure that integrates functionally the different components is kept, as in the case of the army, in the job relationships based on a strict hierarchy, in the religious hierarchy etc.

In order to express this type of integration the notion "pattern" is used in the Anglo-Saxon sociology and anthropology. This notion "pattern", renders an integration based on certain cultural constants and the principle of reductive identity. In the integrations of this kind the stress is laid on what is typical. But according to R. Benedict's intuition, a cultural pattern should achieve (have), in order to deserve this name, the condition of consistency. This condition points out the fact that the pattern has on one side a distributive function, by means of which it subordinates the diversity, and on the other side, the function of a "filter", as what appears as an innovation as a new, different element, will have to be taken to the state of compatibility with the existing facts, so preserving the structure.

When speaking about the integration of the "multiplicity" type, the relationships are from the "multitude to one", that is from different structures towards parts of the same kind or being in the same situation, in the same position etc. Suggestive for this type of integration is, for example, the intersection of two classes or of two multitudes, the elements of the intersection being in the same situation (as common elements of the two multitudes, but belonging to different structures). From a cultural – historical point of view, this form of integration can be found in its typical expression with the civilizations with a creativity polycentrically directed. As an example in the Egyptian culture, the institution of the Pharaoh represented the articulation of two different orders, the sacred and the secular ones. In the Mesopotamian civilization, the cultural integration had the mission to correlate two parallel, geminate orders, the order of the Heavens and the order of the Earth. The Persian Zoroastrianism should answer in an integrative way to a generalized dualism. The Hebrew religion constitutes of an implicative relationship of the different orders, implying a transference and an intersection between the two registers. The ancient Greeks accept without any reserves the multiplicity of the structures, and the Romans continued this opening, the tradition and the innovation manifesting themselves with the same power.

But the integration of multiplicity type is not present only in certain historical cultures. In this form of integration are included all the situations in which, for example, the same individual belongs, at the

same time, to more groupal structures. These integrations may be best expressed by means of the relationships of status, respectively by the consistency and the inconsistency of the status.

For the integrations in a group, inclusively for the relationship of status, the sociological analysis was especially developed in the frame of sociometry. A more and more important position in the contemporary sociological studies have the integrations of the network type. If the pyramidal integrations imply the assimilation of the elements, the integrations of the network type imply the reciprocal exchanges, the communication. The analyses done in this direction can be subordinated to three types of models of theories regarding the integrating into the structures or multiple groups: a) the model of the election; b) the model of the balance; c) the model of the domination.

The model of the election starts from the premiss that the actors or the social agents can choose for the different alternatives, for certain cultural values with the view of the integration in some groups or structures. Though the logic of choice, of the elections is very important for all the socio-humane sciences, it has remained according to von Wright's appreciation "not enough studied". In this logic the "subjective probabilities" work called by von Wright "degrees of confidence". At a microsociological level, in order to point out these degrees of confidence, respectively the interest regarding the groupal structures one can use some indexes as:

a) the index of interest for the own group:

$$I = \frac{n}{KN},$$

where n = the number of elections emitted for the members of the group;

N = the number of the members of the group;

K = the number of permitted elections;

b) the index of interest for other groups:

$$I = n/K(N - N_1),$$

where n = the number of elections for the members of other group;

K = the permitted number of elections;

N = the total number of the population;

N_1 = the number of the members of the own group;

But at a macrosocial level, the application of these indexes is difficult. The suggestion of the economists can be used at this level. In the way how the consumer of economic goods, has in view that by his

choice to obtain a maximum of usefulness, the consumer of symbolic goods too, tries to obtain a maximum utility (of status, of prestige, etc) So we can use the formule for utility in analysing the elections:

$$U = u (x_1, x_2, \dots x_n),$$

where U = total utility;
 u = individual utility;
 $x_1, x_2, \dots x_n$ = the elections.

The second model of the balance starts from the principle that each participant will try to obtain from the organization a payment at least equal with the contribution he considers that he has. Here, the same in the theory of election, a utilitarian logic works. The sociological analysis in this field has as a reference M.Olson's attempt to point put the costs and of the gain based on the formula:

$$Gp = Pp - C + R,$$

Where Gp = the gain of the participant;
 Pp = the public profit obtained;
 C = the cost of participation;
 R = the reward ofered by the organization;

If $R > C$, the individuals will be more interested to take part at it and to integrate in the new structure, and if $R < C$, then the participation is minimum.

As concerning the third model, that of domination, the multiple integration is analysed trough the notions of power, dependence and exchange, emphasizing the idea that any integration into new structures is not only a question of choice and equilibrium of the costs and gains, but especially a negotiable one depending on the power wich the negociator, individuals or groups, has.

Finally with the integration of diversity type we have come to the most complex correlation, as it permits both the multiplicity of the structures and of the constitutive elements. From the point of view of history we especially find this type of integration within the civilizations with a pragmatic – rationalising creativity, where the innovations are not related only with the past, but especially with the future. If in the previous form of integration the unity stands side by side multiplicity, in the present case the unity must be multiplier by itself, as it is a matter of a cultural synthetical scheme, of the one – multiple. This form of cultural integration can especially be found in the modern occidental civilization.

With diversity-integration, sociology, through the sociology of culture, demonstrates, in our days, that the notion of conflict abandons its "pathological" character for an integration of diversity type and the conflict becoming a "natural fact". The contemporary sociologists have to admit more and more clearly that not only cooperation but also the conflict have social functions. So there appeared the thesis that the societies, the organizations and the groups without conflicts do not necessarily presume a more stability but, on the contrary, the more the internal conflicts have a larger possibility to express themselves, the stronger the integration is. Therefore, the conflicts are functional as long as there are institutions which can reabsorb them.

We uphold the idea that the integration-diversity (which alongside consensus, can assimilate the conflict too) expresses itself more properly by the notion of "field". This notion has a long history, today it is used both in nature studies and in the social ones, and in the field of culture it has a good career by phrases of "cultural field" or "stylistic field" (with Blaga).

For a better understanding of the context in which the need of the notion of "field" in the social domain is felt, we have to consider the affirmation of two traditions in the history of sociology. On one hand it is about Durkheim's tradition, according to which the social reality should be considered as an ensemble of "faits" and "objects", and on the other hand, we have Tonnies's tradition where the stress should be put when conceiving the social as a "relationships" as a "network" of significations. For the idea of "field" the second tradition is interesting.

One could notice that Tonnies's ideas are protean for a sociological research especially when his notion of "community" is used with the meaning of a "network of significations", of "cultural network". In this direction the idea of field is used now by the French sociologist P. Bourdieu. This notion competes with other notions as those of "system", "context" and "pattern". If the notion of "system" better corresponds to the needs of generalization, that "field" better corresponds to the needs of individualizations. It is not accidental that the ideas of "social field" and "cultural field" are mainly used from the perspective of the ethnomethodological and ethnocentrist orientation in the social sciences.

In the case of "field" the parts can neither be reduced between themselves and cannot be strictly separated either. The core of a "field" fulfils, on one side, a "generative function", and on the other hand, an "integrative function". While the generative function has generalizing effects (e.g. the function of the gift studied by M. Mauss), the integrative function has individualizing effects, of specification.

We consider that by a more intensive use of the idea of field, the research in the social science can advance in at least the following principal directions:

a) to reveal the identity, the typology of some social phenomena according to the subiacent symbolic field; b) the analysis of the cohesion of the human collectivities through the meaning and significance which the social actors confer to the interactions; c) the analysis of the mechanism of constitution of the dominant collective representations in the concret historical and social situations.

Content

Chapter 1. Culture and civilization, Conceptual aspects

- 1.1 The typological character of the sociological notions
- 1.2. The philosophical perspective on the concept of culture
- 1.3. The anthropological perspective on the concept of culture
- 1.4. The historical perspective on the concept of culture
- 1.5. The informational perspective on the concept of culture
- 1.6. The sociological perspective on the concept of culture

Chapter 2. Attempts of typifying cultures and civilizations

- 2.1. Modalities of classifying cultures
- 2.2 The classification of the societies based on external criteria of their social organising
- 2.3. The clasification of the societies based an the internal criteria of their social organising

Chapter 3. The logic of the civilizations: a macromodel for an analysis

- 3.1. Macromodel
 - 3.1.1. The tradition
 - 3.1.2. The innovation
 - 3.1.3. The characteristic feature
 - 3.1.4. The relationship of status
 - 3.1.5. The function of order
 - 3.1.6. The relationship of representation
- 3.2. The typifying of the civilizations based on the report between cultural tradition and cultural innovation
 - 3.2.1. Civilizations with a cultural creativity which is directed predominantly conservative
 - 3.2.2. Civilizations with their creativity directed axio-traditional
 - 3.2.3. Civilizations with their creativity polycentric directed

3.2.4. Civilizations with a pragmatic rationalization

Chapter 4. *The content and structure of the cultural phenomena*

4.1. The cultural elements

4.1.1. The values

4.1.2. The norms

4.1.3. The symbols

4.2. The structure of the cultural phenomena

4.2.1. The core

4.2.2. The fluid zone

Chapter 5. *Forms of cultural integration. Concepts and indicators*

5.1. Logical aspects of the socio-cultural totalities

5.2. The uniformity

5.3. The unity

5.4. The multiplicity

5.5. The diversity

Notes and bibliographical references

Bibliography

Abercrombie, Nicholas, Stephen, Hill, Bryan, S.Turner, *Dictionary of Sociology*, Third Edition, Penguin Books, 1994.

Abric, Jean-Claude, „Reprezentările sociale: Aspecte teoretice”, în *Reprezentările sociale* (coord. A. Nicolau), Editura Polirom, Iași, 1997.

Aluaș, Ion, „Weber sau filosofia ambivalenței eroic asumate”, în *Studii Weberiene*, (coord. Traian Rotariu, Andrei Roth, Rudolf Poledna), Clusium, 1995.

Andrei, Petre, *Opere sociologice*, vol.1, Editura Academiei, București, 1973.

Andrei, Petre, *Opere sociologice*, vol.III, Editura Academiei, București, 1978.

Apostel, Leo, „Științele umane: mostre de relații interdisciplinare”, în *Interdisciplinaritatea în științele umane*, Editura Politică, București, 1986.

Aristotel, *Fizica*, Editura Științifică, București, 1966.

Badie, Bertrand, «Communaute, individualisme, et culture», in *Sur l'individualisme*, Presses de la Fondation Nationale des Sciences Politiques, Paris, 1991.

Baechler, Jean, „Grupurile și sociabilitatea”, în *Tratat de sociologie* (coord. R. Boudon), Editura Humanitas, București, 1997.

Balzer, Wolfgang, *Soziale Institutionen*, de Gruyter, Berlin-New York, 1993.

- Bates, Frederick, L. Harvey, Clyde C., *The Structure Social Systems*, Gardner Press, Inc., New York, 1975.
- Bateson, Gregori, Reusch, Jurgen, *Communication et societate*, Seuil, Paris, 1988.
- Bădescu, Ilie (coord.), *Istoria sociologiei*, Editura Eminescu, București, 1996.
- Bădescu, Ilie, „Factor de sinteză”, în *Dicționar de sociologie*, (coord. Cătălin Zamfir, Lazăr Vlăsceanu), Editura Babel, București, 1998.
- Băican, Eugen „Tendințe organizaționale în dinamica societății contemporane” (I), în revista *Gândire, cultură și societate*, Universitatea Avram Iancu, nr.1, anul 1, ianuarie-iunie 1997, Cluj-Napoca.
- Becker, Gary S., *Comportamentul uman*, Editura All, București, 1998.
- Benedict, Ruth, *Patterns of Culture*, The New American Library, New York, 1960.
- Bernal, J. D., *Știința în istoria societății*, Editura Politică, București, 1964.
- Biriș, Ioan, „Aspecte logice ale totalităților”, în volumul *Logică și ontologie* (coord. C. Grecu și I. Lucica), Editura Trei, București, 1999.
- Biriș, Ioan, „Dimensiuni culturale ale metafizicii timpului”, în *Timp și melancolie*, Editura Hestia, Timișoara, 1996.
- Biriș, Ioan, «La fonctionnalité de l'idée de champ dans les sciences sociales», *XX-th World Congress of Philosophy*, Boston, 1998.
- Biriș, Ioan, *Istorie și cultură*, Editura Dacia, Cluj-Napoca, 1996.
- Biriș, Ioan, *Raum und Zeit in der Gestaltung der kulturellen Mentalitäten*, Institut für Philosophie, Logik und Wissenschaftstheorie, München, 1996.
- Biriș, Ioan, *Totalitate, sistem, holon*, Editura Mirton, Timișoara, 1992.
- Biriș, Ioan, *Valorile dreptului și logica intențională*, Editura Servo.sat, Arad, 1996.
- Birnbaum, Pierre, „Conflictele”, în *Tratat de sociologie* (coord. R. Boudon), Editura Humanitas, București, 1997.
- Blaga, Lucian, „Trilogia valorilor”, în *Opere*, vol. 10, Editura Minerva, București 1987.
- Blaga, Lucian, *Opere*, vol. 8, „Trilogia cunoașterii”, Editura Minerva, București, 1983.
- Blake, Judith and Davis Kingsley, “On norms and values”, in *Theory in Anthropology*, Edited by Robert A. Manners and David Kaplan, Aldine Publishing Company, fourth printing, Chicago, 1973.
- Bondrea, Aurelian, *Sociologia culturii*, Editura Fundației „România de Măine”, București, 1993.
- Botezatu, Petre, „Formalisme și structuralitate”, în Botezatu P., *Interpretări logico-filosofice*, Editura Junimea, Iași, 1982.
- Botezatu, Petre, *Schită a unei logici naturale*, Editura Științifică, București, 1969.
- Boudon, Raymond, Besnard, Ph., Cherkaoui, M., Lecuyer, B. P. (coord.), *Dicționar de sociologie*, Editura Univers Enciclopedic, București, 1996 .
- Boudon, Raymond, *La logique du social*, Hachette, Paris, 1979.
- Boudon, Raymond, *Le juste et le vrai*, Fayard, Paris, 1995.

- Boudon, Raymond, *Texte sociologice alese*, Editura Humanitas, București, 1990.
- Boudouris, Constantine, "Dialogue and Conflict of Cultures in a Technological Age", în *Philosophy and Culture*, II, 1988.
- Bourdieu, Pierre, „Cel mort cuprinde pe cel viu – relațiile dintre istoria reificată și istoria încorporată”, în *Cercetări contemporane de sociologia culturii*, antologie îngrijită de Mihai Dinu Gheorghiu, Iași, 1988.
- Bourdieu, Pierre, *Economia bunurilor simbolice*, Editura Meridiane, București, 1986.
- Braudel, Fernand, *Gramatica civilizațiilor*, 2 vol., Editura Meridiane, București, 1994.
- Brill, Jacques, *Un crepuscule incertain*, Payot, Paris, 1993.
- Bunge, Mario, *Știință și Filosofie*, Editura Politică, București, 1984.
- Buzărnescu, Ștefan, *Sociologia opiniei publice*, Editura Didactică și Pedagogică, București.
- Carnap, Rudolf, *Les fondements philosophiques de la physique*, Armand Colin, Paris, 1973.
- Cassirer, Ernest, *Eseu despre om*, Editura Humanitas, București, 1994.
- Cazeneuve, Jean, *Dix grandes notions de la sociologie*, Editions du Seuil, Paris, 1976.
- Chelcea, Septimiu, „Relații de grup (sociometrie)”, în *Dicționar de sociologie* (coord. C. Zamfir, L. Vlăsceanu), Editura Babel, București, 1998.
- Chombart de Lauwe, Paul - Henry, *Cultura și puterea*, Editura Politică, București, 1982.
- Coandă, Lisette, Curta, Florin, *Mic dicționar de sociologie*, Editura All, București, 1994.
- Dennett, Daniel C. D., *Tipuri mentale*, Editura Humanitas, București, 1998.
- Descola, Philippe, Lenclud, Gerard, Severi, Carlo, Taylor, Anne-Christine, *Les idées de l'anthropologie*, Armand Colin, Paris, 1988.
- Diaz, Raymond, *Les cadres sociaux de l'ontologie sartrienne*, Librairie Honore Champion, Paris, 1975.
- Dîncu, Vasile-Sebastian, „Individ și societate”, în *Sociologie*, (coord. T. Rotariu și P. Iluț), Editura Mesagerul, Cluj-Napoca, 1996.
- Drimba, Ovidiu, *Istoria culturii și civilizației*, vol.1, Editura Științifică și Enciclopedică, București 1984.
- Dumitriu, Anton, *Culturi eleate și culturi heracleitice*, Editura Cartea Românească, 1987.
- Durkheim, Emile, *Regulile metodei sociologice*, Editura Științifică, București, 1974.
- Durkheim, Emile, *Despre sinucidere*, Institutul european, Iași, 1993.
- Duverger, Maurice, *Methodes des sciences sociales*, P.U.F, Paris, 1961.
- Eibl-Eibesfeldt, Irenaus, *Agresivitatea umană*, Editura Trei, București, 1995.
- Eliade, Mircea, *Cosmologie și alchimie babiloniană*, Ediția a II-a, Editura Moldova, Iași, 1991.
- Enescu, Gheorghe, *Fundamentele logice ale gândirii*, Editura Științifică și Enciclopedică, București, 1980.

- Farley, John E., *Sociology*, Prentice Hall, Inc., 1990.
- Fevrier, Paulette, «Polysemie et polymorphie culturelles», în *Philosophy and Culture*, II, 1988.
- Fossaert, Robert, *La société*, vol. I, Seuil, Paris, 1977.
- Friedberg, Erhard, „Organizația”, în *Tratat de sociologie*, (coord. R. Boudon), Editura Humanitas, București, 1997.
- Fronzizi, Risieri, “Is Science relevant to values”, in *Proceedings of the XV-th World Congress of Philosophy*, vol. 2, Sofia, 1973.
- Galimberti, Andre «Deduction logique de la notion de culture», în *Philosophy and Culture*, II, (*Proceedings of the XVIIth World Congress of Philosophy*), 1988.
- Gennep van Arnold, *Riturile de trecere*, Editura Polirom, Iași, 1996.
- Gheorghe, Nicolae, „Tradiție”, în *Dicționar de sociologie* (coord. Cătălin Zamfir, Lazăr Vlăsceanu), Editura Babel, București, 1998.
- Goblot, Edmond, *Traite de logique*, (cincieme edition), Colin, Paris, 1929.
- Goff, le Jacques, *Civilizația Occidentului medieval*, Editura Științifică, București, 1970.
- Goff, le Jacques, *Pentru un alt Ev Mediu*, 2 vol., Editura Meridiane, București, 1986.
- Gusdorf Georges, *Mit și metafizică*, Editura Amarcord, Timișoara, 1996.
- Habermas, Jurgen, *Cunoaștere și comunicare*, Editura Politică, București, 1983.
- Habermas, Jurgen, *Theorie de l'agir communicationnel*, tome 1, Aubin, Paris, 1987.
- Hallowell, Irving, “Culture, Personality, and Society”, în *Anthropology Today*, The University of Chicago Press, Chicago / London, 1965.
- Hartmann, Nicolai, *Ethik*, Walter de Gruyter, Berlin, 1926.
- Hebermas, Jurgen, *La Pensee postmetaphysique*, Colin, Paris, 1993.
- Herskovits, Melville J., *Les bases de l'anthropologie culturelle*, Payot, Paris, 1967.
- Hoebel, E. Adamson, “The Nature of Culture”, în *Man, Culture, and Society* (Edited by Harry L. Shapiro), Oxford University Press, New York, 1960.
- Huntington, Samuel, *Ciocnirea civilizațiilor și refacerea ordinii mondiale*, Editura Antet, București, 1998.
- Iluț, Petru, *Structurile axiologice*, Editura Didactică și Pedagogică, București, 1995.
- Iluț, Petru, *Abordarea calitativă a sociumanului*, Editura Polirom, Iași, 1997.
- Ioan, Petru, *Logică și filosofie*, Institutul european, Iași, 1996.
- Iorga, Nicolae, *Istoria vieții bizantine*, Editura Enciclopedică Română, București, 1974.
- Kant, Immanuel, *Critica rațiunii pure*, Editura Științifică, București, 1969.
- Krishna, Daya, „Cultura”, în *Interdisciplinaritatea în științele umane*, Editura Politică, București, 1986.
- Kroeber, A.L., C. Kluckhohn, *Culture, a Critical Review of Concepts and Definitions*, New York, Vitange Books, Randon House, 1963.

- L. Novikova, «La notion de <<civilisation>> et ses fonctions cognitives», în *Philosophy and Culture*, II, (*Proceedings of the XVIIth World Congress of Philosophy*), 1988.
- Lallement, Michel, *Istoria ideilor sociologice*, vol.I, Editura Antet, 1997.
- Lallement, Michel, *Istoria ideilor sociologice*, vol.II, Editura Antet, 1998.
- Landecker, Werner S., "Types of integration and their measurement", in *The Language of Social Research* (ed. P.F. Lazarsfeld and M. Rosenberg), The Free Press, New-York, London, fifth printing, 1966.
- Lazăr, Marius, „Cultura”, în Rotariu Traian, Iluț Petre (coord.), *Sociologie*, Editura Mesagerul, Cluj-Napoca, 1996.
- Leach, Edmund, *Culture and Communication*, Cambridge University Press, 1985.
- Liiceanu, Gabriel, *Introducere în politropia omului și a culturii*, Editura Cartea Românească, București, 1981.
- Linton, Ralph, *De l'homme*, Minuit, Paris, 1968.
- Lorenz, Konrad, *Așa-zisul rău*, Editura Humanitas, București, 1998.
- Lucica, Iancu, *Concepte și metode matematice în logică*, Editura Paco, București, 1998.
- Mackie, J.L., „Subiectivitatea valorilor”, în *Valorile și adevărul moral* (editor Valentin Mureșan), Editura Alternative, București, 1995.
- Malinowski, Bronislaw, *Une theorie scientifique de la culture*, Maspero, Paris, 1968.
- Mauss, Marcel, *Eseu despre dar*, Institutul european, Iași, 1993.
- Mauss, Marcel, *Sociologie et Anthropologie*, P. u. F., Paris, 1950.
- McLuhan, Marshall, *Galaxia Gutenberg*, Editura Politică, București, 1975.
- Mehedinți, Simion, *Civilizație și cultură*, Editura Junimea, Iași, 1986.
- Mendras, Henri, *Elements de sociologie*, Colin, Paris, 1975.
- Mezei, Smaranda, „Integrare socială”, în *Dicționar de sociologie* (coord. C. Zamfir, L. Vlăsceanu), Editura Babel, București, 1998.
- Mihăilescu, Ioan, „Protestantism și capitalism”, în Max Weber, *Etica protestantă și spiritul capitalismului*, Editura Humanitas, București, 1993.
- Mihu, Achim, *Introducere în sociologie*, Editura Dacia, Cluj-Napoca, 1992.
- Mihu, Achim, *Sociologia dreptului*, Editura Argonaut, Cluj -Napoca, 1996.
- Mișcol, Oltea, „Cultura – un concept polisemic”, în *Perspectivă filosofică în abordarea fenomenelor sociale*, Editura Academiei, București, 1983.
- Moles, Abraham A., *Les sciences de l'imprecis*, Seuil, Paris, 1995.
- Moles, Abraham A., *Sociodinamica culturii*, Editura Științifică, București, 1974.
- Moraze, Charles, *La logique de l'histoire*, Galimard, Paris, 1967.
- Morin, Edgar, *La methode*, vol. 2, *La Vie de la Vie*, Seuil, Paris, 1980.
- Morin, Edgar, *La Methode*, vol. 4, *Les idees*, Seuil, Paris, 1991.
- Moscovici Serge, „Fenomenul reprezentărilor sociale”, în *Reprezentările sociale* (coord. A. Nicolau), Editura Polirom, Iași, 1997.
- Mucchielli, Alex, *L'identite*, P.U.F., Paris, 1986.
- Mucchielli, Alex, *Les mentalites*, P.U.F., Paris, 1985.

- Nadel, S. F., "On Social Structure", in *Theory in Anthropology*, Edited by Robert A. Manners and David Kaplan, Aldine Publishing Company, fourth printing, Chicago, 1973.
- Nagel, Ernest, "Wholes, Sums, and Organic Unities", in *Parts and Wholes* (ed. Daniel Lerver), The Free Press of Glencoe, New-York, 1963.
- Naisbitt, John, *Megatendințe*, Editura Politică, București, 1989.
- Noica, Constantin, *Modelul cultural european*, Editura Humanitas, București, 1993.
- Nozick, Robert, „Valoare și sens”, în *Valorile și adevărul moral*, Editura Alternative, București, 1995.
- Nozick, Robert, *Anarhie, stat și utopie*, Editura Humanitas, București, 1997.
- Olson, M., C.P. Hermann, M.P. Zanna, *Relative deprivation and social comparison*, Hilsdale, London, Ed. Laurence Erlbaum.
- Otovescu, Dumitru, *Sociologia culturii românești*, Scrisul Românesc, Craiova, 1992.
- Panou, Stavros, "Kultur oder Zivilisation?", în *Philosophy and Culture*, II, 1988.
- Parsons, Talcot, Edward A. Shils (editors), *Toward a General Theory of Action*, Harvard University Press, 1959.
- Parsons, Talcot, *Societies*, Prentice – Hall Foundations of Modern Sociology Series, Alex. Inkeles, Editor New Jersey, 1966.
- Pârvu, Ilie, *Teoria științifică*, Editura Științifică și Enciclopedică, București, 1981.
- Passeron, Jean-Claude, *Le raisonnement sociologique*, Editions Nathan, Paris, 1991.
- Pereira, de Queiroz, *Reformes et revolution dans les societies traditionnelles*, Anthropos, Paris, 1968.
- Piaget, Jean, *Etudes sociologiques*, Droz, Geneva, 1955.
- Popeți, Corneliu, „Protestantismul și nașterea spiritului modern. Controverse post weberiene”, în *Studii weberiene*, (coord. Traian Rotariu, Andrei Roth, Rudolf Poledna), Clusium, 1995.
- Poupard, Paul, *Les Religions*, P.u.F., Paris, 1987.
- Pugliese, Abel Orlando, «État de nature, relativité culturelle et universalité scientifique», în *Philosophy and Culture*, II, (*Proceedings of the XVIIth World Congress of Philosophy*), Editions Montmorency, 1988.
- Rocher, Guy, *Introduction a la sociologie generale* (3 vol.) Editions HMH, Ltee, 1968.
- Rotariu, Traian, „Stratificarea socială”, în Traian Rotariu, Petru Iluț (coord.), *Sociologie*, Editura Mesagerul, Cluj-Napoca, 1996.
- Rotariu, Traian, Iluț, Petre, *Ancheta sociologică și sondajul de opinie*, Editura Polirom, Iași, 1997.
- Roucek, Joseph S., *Social Control*, D. Van Nostrand Company, Inc., New-York, 1947.
- Sapir, Edward, *Anthropologie*, Edition de Minuit, Paris, 1967.
- Schaefer, Richard T., Lamm, Robert P., *Sociology*, fourth edition, Mc Graw - Hill, Inc., 1992.
- Shils, Edward, *Tradition*, The University of Chicago Press, Chicago, 1981.

- Simenschi, Theofil, *Cultură și filosofie indiană în texte și studii*, Editura Științifică și Enciclopedică, București, 1978.
- Smelser, Neil J., *Comparative Methods in the Social Sciences*, Prentice – Hall, Inc., Englewood Cliffs, N J., 1976.
- Sorokin, Pitirim A., *Modern Historical and Social Philosophies*, Dover Publications, Inc., New York, 1963.
- Sozialwissenschaftlich angewandte Logik* (Philosophische Fakultät der Universität Zurich), ADAG, Zurich, 1983.
- Sperantia, Eugeniu, *Introducere în sociologie*, tomul II, ediția a II-a, Casa Școalelor.
- Stănciulescu, Elisabeta, *Teorii sociologice ale educației*, Editura Polirom, Iași, 1996.
- Strauss, Claude-Levi, «Reponses a quelques questions», în *Esprit*, novembre 1963.
- Strauss, Claude-Levi, *Antropologia structurală*, Editura Politică, București, 1978.
- Thom, Rene, *Apologie du logos*, Hachete, Paris, 1990.
- Tonies, Ferdinand, *Communaute et societe*, Editions de Decouverte, Paris, 1944.
- Touraine, Alain, *Pour la sociologie*, Seuil, Paris, 1974.
- Toynbee, Arnold J., *Studiu asupra istoriei*, 2 vol., sinteză a volumelor I-X realizată de D.C.Somervell, Editura Humanitas, București, 1997.
- Trigg, Roger, *Înțelegerea științei sociale*, Editura Științifică, București, 1996.
- Turcin, V.F., «Contribuții la modelarea matematică a integrării sociale», în *Modelarea proceselor sociale*, Editura Științifică, 1973.
- Ungureanu, Ion, *Paradigme ale conoașterii societății*, Editura Humanitas, București, 1990.
- Valade, Bernard, „Cultura”, în *Tratat de sociologie* (coord. R. Boudon), Editura Humanitas, București, 1997.
- Valade, Bernard, „Schimbarea socială” în *Tratat de sociologie* (coord. R. Boudon), Editura Humanitas, București, 1997.
- Vianu, Tudor, *Studii de filosofia culturii*, Editura Eminescu, București, 1982.
- Vianu, Tudor „Introducere în știința culturii”, în *Opere*, vol. 9, Editura Minerva, București 1980.
- Vlăsceanu, Lazăr, „Diferențiator semantic”, în *Dicționar de sociologie*, Editura Babel, București, 1998.
- Vlăsceanu, Lazăr, „Inovație”, în *Dicționar de sociologie* (coord. Cătălin Zamfir, Lazăr Vlăsceanu), Editura Babel, București, 1998.
- Vlăsceanu, Mihaela, „Influență socială” în *Dicționar de sociologie* (coord. Cătălin Zamfir, Lazăr Vlăsceanu), Editura Babel, București, 1998.
- Wallace, Anthony F.C., “The Psychic Unity of Human Groups”, in *Theory in Anthropology*, (ed. Robert A. Manners and D.Kaplan), Aldine, Publishing Company, fourth printing, Chicago, 1973.
- Weber, Max, *Etica protestantă și spiritul capitalismului*, Editura Humanitas, București, 1993.

Weber, Max, *Wirtschaft und Gesellschaft*, funfte, revidierte auflage, J.B.Mohr, Tübingen 1985.

White, Leslie A., "The Concept of Culture", în *Culture and The Evolution of Man* (edited by M.F.Ashley Montagu), Oxford University, Press, New York, 1972.

White, Leslie A., *The Concept of Culture*, Beth Dillingham, Burgess Publishing Company, Mineapolis, Minnesota, 1974.

Wright, Georg H.von, *Normă și acțiune*, Editura Științifică și Enciclopedică, București, 1982.

Xenopol, A.D., *Teoria istoriei*, Editura Fundației Culturale Române, București, 1997.

**Paul Kun, *Sujet épistémique et Rationnalité scientifique*,
L'Université "Babeş-Bolyai" de Cluj-Napoca, Le Département
d'Historire et Philosophie, Cluj-Napoca, 2000,
Coord. scientifique: Prof. Constantin Grecu**

Résumée

Introduction

Le but principal de cet ouvrage est celui de montrer la solidarité qui existe entre la théorie du sujet et la théorie de la rationalité, comme principales composantes de l'épistémologie.

Notre conception suppose une certaine image sur la situation actuelle de la réflexion philosophique, que nous présenterons, d'une manière assez sommaire, plus loin.

La philosophie contemporaine est divisée dans deux grandes courrentes divergentes de pensée: «la philosophie analytique» ou «anglo-américaine» et «la philosophie post-moderne» ou «continentale». Les tentatives de les définir sont relativement nombreuses, mais, je pense, elles ignorent ce que les opposent d'une manière décisive: pendant que le premier courant reste attaché à l'idée de la valeur gnoséologique de la démarche philosophique, le dernier rejette ouvertement une telle signification de la réflexion philosophique, en la pensant plutôt comme «une forme de vie» – pour utiliser une expression wittgensteinienne – qu'un «jeu de langage». Autrement dit, la philosophie analytique considère que la réflexion philosophique doit satisfaire certaines exigences communes pour toute démarche épistémique, qu'elle est une forme de connaissance, même si d'un type très particulier, pendant que le post-modernisme considère que la démarche philosophique est un certain type de pratique, ce qui a une valeur comme telle, en soi-même et non par ce qu'il vise. À cause de cette différence de conception, les deux orientations lui attribuent des buts différents, même incompatibles: ainsi, la philosophie analytique cherche, généralement, à déterminer les conditions les plus générales de la connaissance qui découlent de l'analyse de certains concepts fondamentaux, comme ceux de «la connaissance», de «la vérité», de «la signification», de «la rationalité» etc. – en pensant, ainsi, que le but de la philosophie est, essentiellement, épistémique –, pendant que la philosophie post-moderne considère que la réflexion philosophique doit se rapporter directement à elle-même comme pratique, donc comme modalité d'être dans le monde.

La philosophie analytique, à son tour, est divisée dans deux orientations, qui ont apparu à la suite de l'échec enregistré par le programme très courageux du Cercle viennois, c'est-à-dire de transformer la démarche philosophique dans un démarche strictement scientifique. L'une, qui a lié son destin du développement des sciences cognitives, a son origine dans le projet de réforme du programme néo-positiviste présenté par W. O. Quine dans son classique étude sur «La naturalisation de l'épistémologie». Par ce projet, il a ravivé les espérances des philosophes attirés par le néo-positivisme, concernant la possibilité d'une connaissance philosophique à l'intérieur de la connaissance scientifique. Dans cet essai, il dessine un programme par lequel l'épistémologie peut être «libérée» de la tyrannie des préjugés philosophiques; toute la problématique de l'épistémologie est «naturalisée», c'est-à-dire elle est traitée avec les moyens de la connaissance scientifique, donc pas comme un problème *de jure*, mais comme une *de facto*, comme objet d'étude de la psychologie ou de la neuroscience. L'épistémologie cesse d'être une discipline purement théorique, conceptuelle, «analytique» pour devenir une science expérimentelle.

L'autre orientation a interprété l'échec du programme néo-positiviste comme l'expression d'une distinction qu'on peut opérer au niveau des types de connaissance, notamment celle qui est visée par ce que Gilbert Ryle nomme *knowing what* et *knowing how*, termes qu'on peut traduire comme connaissance explicite (ou discursive ou langagière) et connaissance tacite (ou pratique ou non-discursive). La connaissance philosophique, étant formulée dans le langage, appartient à la première forme de la connaissance mais, à la différence de la connaissance scientifique, elle est *reflexive*, c'est-à-dire elle est orientée vers elle-même, donc elle ne vise plus l'*objet* de la connaissance, mais la connaissance elle-même, comme forme de la pratique, en essayant à déterminer, par analyse, ses conditions les plus générales.

Nous avons, donc, trois orientations philosophiques qui nous proposent trois programmes philosophiques distinctes: le post-modernisme nous propose une réflexion philosophique comme étant une forme de la *praxis*, qui détermine sa propre identité seulement d'une manière effective, comme pratique, c'est-à-dire en *déconstruisant* (ou en éliminant) tout élément réflexif (discursif), donc comme *anti-philosophie*; la philosophie analytique cognitive nous propose une reprise de la problématique classique de la philosophie (par exemple, le problème esprit-corps, le problème de la conscience, le problème de la signification, celui de la vérité, etc) comme problématique de la psychologie cognitive, c'est-à-dire comme composante de certains

programmes scientifiques de recherche; et, enfin, la philosophie analytique épistémologique nous propose une reprise de la démarche reflexive ayant comme objet les conditions les plus générales de la connaissance.

J'ai fait cette présentation dans le but de mieux situer notre propre démarche: je pense que la dernière position est la plus proche par rapport à nos intérêts théoriques. Je veux montrer quelles sont les principales raisons pour lesquelles je la juge comme la plus réaliste et rationnelle attitude philosophique actuelle.

Les raisons pour lesquelles je suis assez méprisant envers le post-modernisme sont: le caractère essentiellement *négatif* de sa démarche, le déconstructivisme.

Une autre raison est la tendance de remplacer l'explication ou la compréhension avec la description.

Une autre raison est le fait que la vision post-moderne sur la science est trop faible. Elle nous propose une point de vue esthétique ou historique d'après lequel dans la science il s'agit plutôt de questions de goût que de la vérité. Le modèle du post-modernisme est si faible que toutes les distinctions qui définissent chaque pratique deviennent purement nominales. Une telle vision est, je crois, en contradiction avec le rôle capital que la science a joué dans l'histoire de notre espèce.

Une autre raison pour notre attitude envers le post-modernisme est représenté par sa tentative de remplacer la concept de rationalité avec celui de tradition.

La raison principale pour notre manque de confiance envers le programme de «naturalisation» de l'épistémologie, réside dans son idée, utopique d'après mon opinion, que la problématique et le domaine de la réflexion philosophique peuvent être «réduites» à la problématique et au domaine de la science. Une preuve à l'appui de mon opinion est le fait que les discussions actuelles concernant certains aspects «techniques» des sciences cognitives ont débouché rapidement dans le domaine strictement philosophique.

La raison principale pour laquelle j'ai adopté le point de vue de la troisième orientation, c'est le fait qu'elle suppose la rélevance épistémologique, cognitive, du démarche philosophique, ce qui signifie deux choses: le fait que le discours philosophique garde une signification gnoséologique, un rapport signifiant avec la vérité.

Ce rapport n'est pas réductible au rapport de la science (de la nature, notamment) avec la vérité.

Chapitre 1

Le but de ce chapitre est d'analyser l'orientation actuelle de la philosophie de la science qui conteste la relevance de la théorie de la connaissance en ce qui concerne le problème de la connaissance scientifique, notamment les thèses de Richard Rorty, exposées dans *L'Homme spéculaire*. En partant de l'hypothèse d'après laquelle la théorie de la connaissance a sa source, son origine, dans une certaine conception de l'esprit humain – comme «miroir" de la nature –, et qu'elle représente une tentative de produire une théorie générale de la représentation, Rorty pense que la possibilité de décrire le comportement humain sans utiliser une telle théorie – possibilité réalisée, partiellement, par M.Heidegger, L. Wittgenstein et J.Dewey – nous permet de renoncer à la problématique de la connaissance, sans aucun dommage pour la compréhension des caractères de la connaissance. Nous examinerons avec plus d'attention les principaux programmes qui ont déterminé la problématique dans le champ de la théorie de la connaissance - c'est -à-dire les programmes de Descartes, Kant et Husserl – pour voir si l'hypothèse énoncée par Rorty est confirmée. Ensuite, nous examinerons la vision de Wittgenstein sur le sujet de la connaissance, pour voir si elle représente réellement un renoncement au point de vue épistémologique. Enfin, nous analyserons l'idée kuhnienne du paradigme scientifique, parce que nous croyons que c'est elle qui est responsable d'une certaine lecture contemporaine des textes wittgensteiniens qui soutint «le scénario" rortyen.

1. Le programme cartésien. Dans l'élaboration de son programme, Descartes part, d'une certaine situation de la science moderne: d'une part, dans les mathématiques, la tendance d'unifier le domaine dans une seule théorie, d'autre part, dans les autres sciences, la tendance d'émiettement. La première tendance est celle qui, selon lui, correspond à l'essence de la connaissance, en étant la vraie connaissance, pendant que la seconde n'est que pseudo-connaissance. Le but de son modèle c'est de délimiter nettement ces deux sortes de connaissances. Cette délimitation est rendue possible par l'introduction d'un nouveau moyen de définir la vérité, c'est-à-dire la théorie de la vérité-cohérence. Descartes pense que cette théorie de la vérité-correspondance n'assure pas une vraie démarcation entre les vraies connaissances - c'est-à-dire celles qui sont vraies tout le temps, dans tous les cas possibles, et, par conséquent, leur contradictoires sont, elles aussi, fausses pour tous les cas –, et les pseudo- connaissances – celles qui sont vraies seulement dans des conditions déterminées, dans certaines situations, du reste, en étant fausses et, par voie de conséquence, leurs opposées sont vraies.

Le critère fournit par la théorie de la vérité-corrépondence est, donc, trop faible pour permettre l'élaboration d'un système *unique* des connaissances; au contraire, à mesure qu'on avance dans la connaissance des contextes réels, le nombre des systèmes s'accroît. Il faut, donc, remplacer ce critère par un autre, plus fort, qui permettrait de respecter la vraie tendance de la connaissance scientifique. La théorie de la vérité-cohérence, conformément à laquelle la valeur de vérité des propositions s'établit non pas par rapport à quelque chose qui n'appartient pas au système, mais par rapport à d'autres propositions du système dont la valeur de vérité a été déjà déterminée. Selon cette théorie, nous n'avons pas besoin de "sortir" du système de la connaissance et de faire appel aux contextes empiriques, qui sont toujours trop restrictifs – et qui posent toujours des problèmes ontologiques, liés à la difficulté de concevoir quelque chose qui, dans certains contextes existe (ou elle est vraie), mais, dans d'autres n'existe pas (ou elle est fausse). Nous pouvons, donc, établir un ensemble (un système) de propositions dont la vérité n'est pas dépendante d'un certain contexte empirique, mais de leur rapport de non-contradiction avec d'autres propositions qui sont absolument vraies. Ce système, la mathesis universalis, représente la totalité de la connaissance absolument certaine, la Science par excellence, les autres sciences n'étant que des conséquences empiriques de celle-là. Autrement dit, la diversité des sciences aurait un fondement unique, la science universelle, et cette unification ne concerne pas l'objet, mais la méthode, qui peut et doit être unique. Cette science, parce qu'elle n'a pas, à proprement parler, un objet naturel, son objet étant la Méthode, qui a un contenu déterminé et, donc, déterminable, c'est la seule science – la seule connaissance – finie, déterminable une fois pour toutes. Sa fonction principale est d'unifier toute la connaissance humaine. Son fonctionnement est normatif, parce qu'elle prescrit les règles (les critères) qui doivent être suivies par n'importe quelle science pour obtenir la vérité. Elle produit des critères qui sont internes à la connaissance, ils n'ont aucun rapport avec l'adéquation des sciences, des théories ou des connaissances à n'importe quelle réalité externe, objective. Descartes introduit quelques suppositions très importantes:

La Science (la vraie connaissance) est le produit exclusif du sujet connaissant, c'est l'expression de sa structure.

La structure («l'ordre") de la connaissance est différente par rapport à celle de la réalité.

La connaissance humaine est déterminée, limitée, tant du point de vue «matériel", mais aussi «formellement".

La Science universelle est composée d'un ensemble fini d'éléments, et un ensemble fini de règles qui, appliquées aux éléments, produisent les jugements.

En partant de ce modèle, nous pouvons maintenant tirer quelques conclusions en ce qui concerne le paradigme scientifique et la rationalité, chez Descartes : l'accord entre les scientifiques sur la vérité se réalise grâce à l'unité et l'uniformité de l'esprit: ce qui explique pourquoi il invoque «le bon sens" comme instance suprême dans la recherche de la vérité. Ce qui est conforme aux lois universelles de la pensée humaine est vrai. La vérité est, donc, la catégorie fondamentale. Mais l'erreur ? Pour Descartes, l'erreur – et, par voie de conséquence le désaccord entre les scientifiques, aussi – n'a aucun statut : l'erreur n'a pas de réalité «ontologique", elle «correspond" au Néant (l'ontologie cartésienne, si contestée, n'a pas, proprement dit, une signification «ontologique", mais logique, c'est une théorie de l'existence logique). Le désaccord, la diversité des théories sur un même sujet, n'a pas d'autre signification que l'égarement de certains scientifiques, ou de certaines théories par rapport à la «voie royale" de la vérité, le chemin «naturel" de la pensée. Il n'y en a pas, et il ne peut exister qu'un seule paradigme scientifique – et donc, qu'une seule rationalité – tous les autres ne sont que des accidents insignifiants pour le progrès de la connaissance. L'erreur et le désaccord ne jouent aucun rôle.

La vision de Descartes sur la connaissance suppose une sorte de solipsisme méthodologique qui produit beaucoup de problèmes: la connaissance vise les «lois universelles de l'esprit humain" qui ne seraient que les «lois" de mon esprit. Donc, le paradigme des scientifiques n'est pas constitué par leurs croyances sur le monde, mais par le fonctionnement même de leur esprit. En conséquence, leurs croyances ne jouent aucun rôle dans la connaissance !

2. La «réforme" kantienne du programme cartésien. La vision cartésienne a été attaquée très violemment par l'empirisme anglais qui a accusé les conséquences d'ordre dogmatique, impliquées par son modèle: si la structure de la connaissance est finie, indépendante du processus réel de la connaissance, alors, la connaissance comme processus réel n'est que l'expression de l'accumulation des «erreurs" : l'objet réel de la connaissance ne joue qu'un rôle négatif, il est la source de l'erreur, de la pseudo-connaissance. Nous ne pouvons pas connaître mieux qu'en nous éloignant plus de l'objet que nous devons connaître ! Emmanuel Kant essaie de reformuler le programme cartésien en tenant compte des objections de l'empirisme, sans renoncer à l'idée de la possibilité d'une connaissance purifiée de l'élément empirique, dans

laquelle le sujet joue le rôle primordial. Ce qui les sépare, pour l'essentiel, c'est le rôle donné à l'objet : pour Kant, l'objet («l'expérience») joue un rôle au moins aussi important que le sujet. Pour justifier ce traitement, il pense que la relation sujet-objet [comme «l'idée transcendentale»] est hiérarchiquement supérieure par rapport à l'objet et au sujet, pris séparément. Le rôle qui, chez Descartes, était accompli par un seul concept, celui de «sujet (unitaire)», est, chez Kant, réalisé par un réseau de trois concepts: l'idée de l'unité du sujet, l'idée de l'unité de l'objet et l'idée de l'unité du monde («l'idée de Dieu»), la dernière étant la synthèse rationnelle des premières.

Par conséquent, l'unité du sujet a un statut et un rôle différents: elle ne pose pas l'identité entre le sujet et la connaissance et donc, elle ne justifie pas l'unité de la connaissance, mais seulement celle du discours; le sujet n'est «qu'une idée», autrement dit, sa fondation sur l'unité réelle, effective du sujet n'est pas du tout nécessaire, donc un fondement ontologique dans le sujet cesse d'être une exigence. Kant pense que ce qui est important chez Descartes c'est justement la séparation de la théorie de la connaissance de l'ontologie et par conséquent, il va éliminer du modèle ce qu'il croit être une inconséquence par rapport à cette exigence, car fonder ontologiquement le sujet, même dans des cadres épistémologiques, signifie faire appel tacitement au critère de la correspondance comme élément décisif pour produire un concept. En revenant à l'importance accordée par Descartes à la règle, il considère que les concepts se justifient par leur opérationnalité, par leur capacité d'être appliqués soit sur les contenus de l'expérience, soit sur la totalité de celle-ci. Les Idées transcendentales sont seulement «hypothétiques»- c'est-à-dire elles gardent un rapport avec la vérité comme consistance logique, mais pas avec la vérité-corrépondance. Chez Kant, l'unité de la science est introduite du dehors, comme norme qui permet d'édifier une «architectonique» de la science. Quand il parle des Idées transcendentales, il se réfère à la raison pratique: les Idées ne justifient pas leur existence que grâce à leur action normative sur la science, leur introduction permettant l'organisation de la science dans un système de connaissances avec un pouvoir explicatif supérieur. Donc, elles ne sont ni produits de la connaissance, ni éléments du réseau conceptuel, mais des normes qui règlent l'activité du connaître, la connaissance comme processus: un concept est rationnel seulement s'il réalise sa fonction.

Quel statut a le sujet kantien ? Kant croit que le sujet est seulement l'un des éléments de la relation et il n'a que cette fonction. Donc, le sujet ne peut justifier que l'exigence de cohérence du discours scientifique et, pour cela, il n'est pas besoin d'aucune supposition ontologique. Cette attitude, profondément anti-cartésienne, s'était prolongée jusqu'à nos

jours, sous le nom de comportementisme, fonctionnalisme etc. Kant refuse de discuter du sujet de la connaissance, mais seulement, du rôle de l'idée de l'unité du sujet dans la connaissance. Du fait que le sujet et l'objet sont seulement dans et par leur relation, tous les attributs du sujet sont, au fait, des attributs de la relation sujet-objet. Pour cela, dans le système kantien, le sujet n'a besoin d'aucune représentation (contenu). La logique n'est plus la méthode subjective qui nous conduit à la certitude, mais une propriété relationnelle du sujet. Cette conception a permis d'éliminer le problème de la structure du sujet comme étant décisif pour la connaissance. C'est à cette raison qu'il parle du caractère idéal du sujet et met l'accent sur l'unité.

Le programme kantien vise l'accomplissement de l'unité de la connaissance en accord avec sa dynamique, seulement dans la mesure où cette unification est utile comme norme, elle contribue effectivement à la croissance de la connaissance. La discipline qui doit s'occuper de cette unification est la philosophie et non, comme chez Descartes, une Science. La philosophie, ou «la métaphysique», veut dire une théorie hypothétique, un produit de la Raison spéculative et non de l'Intellect. Cette Raison est «le tribunal suprême», expression leurrante, parce qu'elle a été, d'habitude, interprétée seulement dans un sens valorisant, mais, il y a une autre idée qui est passée inaperçue, celle de «instance dernière» qui n'intervient que dans les situations dans lesquelles les scientifiques n'ont pas réussi à s'accorder sur leurs problèmes avec les moyens de l'Intellect. Donc la philosophie, la Raison, n'intervient que dans les situations qui dépassent les marges du domaine de la science, du domaine dans lequel la science a suffisamment des moyens pour décider et, donc, pour obtenir l'accord nécessaire des scientifiques. La philosophie se prononce seulement sur ce qui représente le fonctionnement de la connaissance scientifique comme activité humaine, sur les normes d'après lesquelles se développe l'activité scientifique. Pour Kant, l'accord et, respectivement, le désaccord sont des problèmes réglés strictement par des moyens scientifiques, – c'est-à-dire en accord avec les rationalités spécifiques à chaque domaine –, la philosophie tranche seulement quand le problème concerne le paradigme, – c'est-à-dire la rationalité idéale – dans les querrelles autour de ce sujet. Si, par exemple, la communauté scientifique est divisée, à cause d'un conflit entre deux paradigmes concurrents, la philosophie est la seule possibilité d'une réconciliation, d'une décision. Cela ne veut pas dire que la philosophie peut effectivement assurer une réconciliation, mais qu'elle est la seule qui ait des raisons pour le tenter.

3. La «réhabilitation» husserlienne du programme cartésien. Sous l'influence de la vision kantienne, la philosophie de la science a évolué

vers l'élimination du sujet de la connaissance, tout étant transféré à la relation proprement dite, cela étant évidemment dans l'intérêt des sciences positives. A la fin du XIX^e siècle la crise des sciences exactes – notamment la crise des mathématiques et la crise de la physique – a provoqué une crise de confiance dans leur autorité, le déclin de leur monopole absolu sur la vérité.

Edmund Husserl va apprécier que la situation de crise de la connaissance – et aussi de la culture européenne – a été le résultat de la crise de confiance dans la valeur cognitive de la philosophie: «les philosophies de système" sont responsables de cette crise, parce qu'elles «ne visaient pas une unification [du champ de la philosophie et, aussi, de la connaissance], mais elles se sont remplacées les unes par les autres".

Husserl veut, donc, revenir à un programme de type cartésien, pour lequel la philosophie redevient une science, la Science, qui a comme tâche fondamentale l'unification de la connaissance humaine, grâce à la méthode – pour Husserl c'est la méthode phénoménologique : la philosophie «scientifique gouverne tout le temps toutes les sciences et leur tendance vers universalité"; les sciences particulières sont seulement des «composantes de l'universalité de la philosophie". Elle est un «développement de l'*a priori* universel «inné" de l'essence d'une subjectivité transcendantale". mais, en opposition avec Descartes et Kant, Husserl croit qu'elle est une Ontologie. C'est pour cela que le programme husserlien est plus éloigné du programme cartésien que celui de Kant. Il croit que l'erreur de Descartes c'était l'idée – sur laquelle se fonde toute l'autonomie et la justification de la théorie de la connaissance – d'une différence [une «transcendance" d'après l'expression de Husserl] essentielle entre l'objet de la connaissance et la chose réelle: par conséquent, la théorie de la connaissance devient une ontologie. Cette ontologie devra fonder non seulement la connaissance, mais, aussi, toute l'existence humaine. Pour cela, la structure de «la philosophie scientifique" est plus complexe: «l'égologie", la phénoménologie de l'intersubjectivité, la phénoménologie des sciences apodictiques, celle des sciences positives etc. Les processus subjectifs ne sont plus conçus, comme chez Descartes, comme purs cognitifs, mais comme intentionnels, l'intentionnalité étant un concept plus vaste que celui de «cognition".

Cette «réforme" husserlienne aura des conséquences importantes en ce qui concerne le destin de la théorie de la connaissance, notamment le fait que, avec Heidegger, disciple de Husserl, on renonce à cette problématique, pour revenir à un projet pur ontologique, en critiquant Husserl parce qu'il reste le prisonnier de «l'aveuglement de la

tradition philosophique", provoquée par l'auto-identification (auto-connaissance comme autodétermination), qui clôt toute possibilité d'aborder le monde comme milieu universel de la signification.

4. L'Unité du sujet et le concept kuhnien de «paradigme scientifique». Dans la deuxième moitié du XXe siècle on constate une disparition, du champ de la théorie de la connaissance, de la problématique du sujet. La discussion épistémologique a continué, mais la place du sujet a été prise par la rationalité. L'une des causes a été la critique du sujet cartésien faite par Ludwig Wittgenstein qui a été interprétée comme un rejet de toute importance du terme. Mais, je veux montrer que cette opinion est fautive. Dans tous ses travaux, Wittgenstein réserve une fonction importante au sujet : celle d'unifier le monde. En partant de cette perspective, il croit que le solipsisme garde un sens: le monde c'est toujours mon monde. J. Hintikka dit, à ce sujet, que «ce qu'il entend par solipsisme, c'est la vision d'après laquelle, logiquement parlant, 'le monde c'est mon monde', c'est-à-dire «les objets ne dépendent pas de moi, mais elles sont, en dernière instance, les objets de mon expérience»: «avoir ces objets" c'est l'unique rôle que le moi [le sujet] peut jouer dans la conception de Wittgenstein. Je ne partage pas l'idée de Hintikka que Wittgenstein est très proche de la vision de Husserl. Mon opinion c'est qu'il reste attaché à un programme kantien. L'analyse qu'il fait du pronom personnel «je" («I ") peut être appréciée comme étant une preuve dans ce sens. Le «je" peut avoir deux fonctions différentes, le «je-sujet" et le «je-objet". Seulement les propositions construites avec le «je-objet" sont référentielles et leur référence c'est le corps du sujet. Elles ont une valeur de vérité et sont vérifiables par l'observation. Mais, il y a d'autres propositions qui ne sont pas référentielles, elles ne peuvent pas être rapportées au corps, comme, par exemple, la proposition «J'ai mal aux dents". Selon Wittgenstein, telles propositions ne sont que des règles grammaticales, c'est-à-dire elles nous permettent d'apprendre correctement la façon dont nous devons utiliser l'expression «mal aux dents". Pour formuler des propositions du type «Il a mal aux dents", nous devons apprendre la règle «J'ai mal aux dents". Les règles grammaticales doivent avoir une certitude absolue, parce qu'elles sont celles qui fixent le sens des mots. L'absence de la certitude équivaut à la méconnaissance de la façon d'utiliser les mots. Donc l'absence du sens ne signifie pas le non-sens, l'absurde ou la contradiction logique, mais, seulement, le caractère non-référentiel de la règle. Le manque de sens, signifie, en plus, une certaine indépendance de la règle par rapport au contexte: si la règle a un sens, cela signifie qu'elle est déterminée par un contexte quelconque, le contexte dans lequel elle est appliquée: mais, si elle n'a

pas de sens, cela signifie qu'elle ne dépend pas de son application. Si, chez Wittgenstein, le sens d'un mot c'est son utilisation, les règles sont celles qui déterminent le sens des mots. Donc le sujet c'est l'ensemble des règles qui régissent les rapports entre le langage et la réalité. Nous pouvons remarquer le fait que le sujet garde un rôle strictement fonctionnel, il n'a pas, proprement dit, une «substance».

Arrivé à ce point, j'ai abordé le concept kuhnien de «paradigme scientifique», pour voir quelle est sa signification. Ce concept a produit beaucoup de confusions, à cause de son ambiguïté: on a identifié 14 sens dans l'utilisation kuhnien du concept et on a distingué trois principales: le sens métaphysique, le sens sociologique et le sens d'artefact du paradigme. Je suis intéressé par le premier, qui est très proche du sens wittgensteinien de la «forme de vie»: chaque «jeu de langage» correspond à une «forme de vie» qui le justifie, mais qui, à son tour, ne peut pas et ne doit pas être justifiée. Chez Kuhn, cette idée apparaît dans l'assertion selon laquelle le paradigme est antérieur par rapport aux règles, celles-ci pouvant être formulées seulement en partant de celui-là. Le fait qu'un groupe de scientifiques partage les mêmes règles ne signifie pas qu'ils appartiennent au même paradigme, parce que les règles ne sont que des interprétations ou des rationalisations du paradigme: on peut avoir des séries différentes des règles dans le même paradigme et, aussi, on peut avoir la même série des règles pour des paradigmes différents. Les paradigmes peuvent fonctionner même si aucune règle n'est pas encore formulée. Le paradigme tient de ce que Michael Polanyi nomme «la connaissance tacite», ce qui est inclus dans la *praxis* scientifique elle-même et qui s'apprend seulement dans et par la *praxis*. Le paradigme est ce qui donne l'unité de la connaissance scientifique, mais, à la différence des visions antérieures, il n'est pas indépendant du contexte, au contraire, il est le contexte même de l'activité de connaître. Le paradigme justifie l'accord et le désaccord des scientifiques. S'il s'agit des paradigmes différents, on ne peut pas avoir ni accord, ni désaccord, c'est bien la signification de la thèse de l'incommensurabilité des paradigmes. C'est ce qui nous permet d'apprécier que le paradigme kuhnien joue le même rôle que l'idée kantienne de l'unité du sujet, même si son contenu est différent. Le changement, par rapport à la vision kantienne, c'est que l'unité n'est plus réalisée d'en haut - en partant d'une idée - , mais d'en bas - en partant de la pratique scientifique elle-même.

Chapitre II

1. La définition de la rationalité. Les types de rationalité. Le terme «rationnel» est, d'habitude, utilisé dans des contextes assez différents. J'utilise le terme pour désigner certains traits des actions, des croyances et des décisions. L'histoire du concept de «rationalité» nous montre que les philosophes ont utilisé deux définitions:

Substantielle, qui voit la rationalité en partant d'une perspective ontologique, comme attribut essentiel de l'homme ("l'homme est animal rationnel")

Procédurale, introduite par la philosophie moderne (Descartes), qui part d'un point de vue gnoséologique et méthodologique, comme ensemble de norme qui dirige notre connaissance et action.

Dans ce qui suit, je vais m'occuper des définitions procédurales de la rationalité: la définition classique, envisagée par Descartes et les variantes proposées par des penseurs actuels :

l'universalité;
la nécessité;
la détermination par les règles.

Nous nous occuperons de chaque exigence pour voir que suppose-t-elle et pourquoi elle est mise, aujourd'hui, en question.

Par l'idée de l'universalité s'exprime le fait que tous les êtres qui pensent doivent arriver à la même conclusion, opinion etc. Si deux individus arrivent aux résultats différents, soit parce qu'il s'agit d'une différence d'information, soit parce que, au moins l'un d'eux, n'a pas procédé d'une manière complètement rationnelle. L'idée-clé c'est qu'il y a tant une solution déterminée qu'une procédure déterminée pour arriver à cette solution et que tous les gens qui suivent cette procédure doivent arriver au même résultat.

Les notions d'universalité et de rationalité vont main à main. La liaison a été contestée, dans le cas de la science, par certains philosophes, qui pensent que nous n'avons pas une base rationnelle pour évaluer les théories scientifiques. L'argument est construit en partant de l'histoire de la science et du constat de l'existence des «révolutions scientifiques», pendant lesquelles le corpus de la science consacrée est radicalement transformé. La physique a connu, dans le XX-e siècle, deux révolutions majeures avec l'introduction de la théorie de la relativité et la mécanique des quanta.

La dernière rejette la thèse classique après laquelle tout événement a une cause. Mais, jusqu'alors, le contenu de la science était déterminé

justement par l'adésion au principe de la causalité; les scientifiques pouvaient n'être pas d'accord sur les causes spécifiques des événements spécifiques, mais ils étaient obligés d'être d'accord sur le fait que tout événement a une cause. Si les scientifiques ne doivent pas adhérer au principe de la causalité, pourquoi auraient-ils besoin d'adhérer à un principe quelconque ?

Dans le cas de la science, nous pouvons avoir des principes pour évaluer les hypothèses contre l'évidence, et tous les individus rationnels qui ont la même évidence arriveront à la même évaluation pour toute assertion scientifique.

La deuxième exigence du modèle classique de la rationalité veut dire qu'une conclusion rationnellement acceptable doit découler nécessairement de l'information donnée.

Enfin, la dernière exigence du modèle nous dit que la rationalité d'une conclusion est déterminée par sa conformité avec certaines règles appropriées. Les règles de la méthode scientifique déterminent quels sont les tests pertinents et si un corpus de résultats empiriques est suffisant pour accepter ou refuser un propos. Une décision rationnelle est guidée par des règles appropriées, et quand nous arrivons à la décision sur la base de telles règles, nous comprenons ce que nous avons fait.

Pour cela, les règles sont dans le cœur du modèle classique de la rationalité: si nous avons des règles universellement applicables, alors tous les gens qui partent de la même information doivent arriver à la même conclusion, et sont les règles celles qui donnent la connexion nécessaire entre le point de départ et la conclusion.

L'un des problèmes les plus importants a été celui du type de règles. Quelles sont les règles qui assurent la rationalité ? La réponse a été: les algorithmes; ceux-ci sont des règles qui, une fois appliquées à un problème, garantissent une solution dans un nombre fini des pas. Ils présentent des avantages importants: quand une conclusion est connectée à un point de départ au moyen d'un algorithme, alors la relation exigée entre le point de départ et la conclusion doit être obtenue de fait; deuxièmement, quand nous suivons l'algorithme, nous apprenons ce que soutient cette relation. Mais, malheureusement, les algorithmes ont une applicabilité assez réduite dans les sciences de la nature. Celles-ci utilisent plutôt la méthode inductive qui ne suppose pas une démarche algorithmique.

2. La critique du modèle classique de la rationalité. L'une des principales objections apportées contre le modèle est la possibilité du régress à l'infini dans la justification de la rationalité: pour qu'une prémisses soit rationnellement acceptable, elle doit être formulée en

accord avec certaines règles, qui, à leur tour, supposent certaines prémisses, qui supposent certaines règles, etc. Une autre objection concerne la possibilité du regrès à l'infini qui affecte la justification des règles. Une autre objection est liée au fait que les sciences naturelles utilisent comme méthode principale l'induction et pas la démarche déductive supposée par le modèle classique de la rationalité.

Brown propose un modèle alternatif de la rationalité, qui comprend trois pas:

- la notion d'agent est fondamentale et la notion de "croyance rationnelle" est dérivée, elle est le résultat auquel arrive l'agent.
- le trait déterminant de l'agent rationnel est sa capacité de faire des jugements dans des situations dans lesquelles les règles manquent.
- il introduit un élément social, l'accord de la communauté d'experts.

Le modèle de Brown applique le prédicat «rationnel» seulement aux décisions et aux croyances individuelles, les propositions ou les communautés en étant exclues, même si une croyance pour devenir rationnelle doit être mise en discussion et critiquée par la communauté d'experts. Dans cette dernière situation il dit qu'une communauté peut être raisonnable. Mais, il est assez difficile à voir pourquoi nous avons besoin d'une telle distinction. La raison principale semble celle d'éviter la position de Th. Kuhn qui pense que seulement les communautés sont rationnelles. Cette dernière position a une conséquence assez grave, elle relativise le contenu du terme, parce c'est rationnel ce qui est jugé comme tel par la communauté. Dans le cas de Brown, la différence entre les deux termes consiste seulement dans le fait que l'agent a besoin que sa croyance soit confrontée avec les croyances acceptées par la communauté d'experts. En d'autres termes, les croyances sont rationnelles seulement parce qu'elles appartiennent aux individus.

L'oeuvre de Th. Kuhn a été interprétée comme un argument contre l'approche rationaliste et épistémologique de la science. Ainsi, Ian Hacking pense que la rationalité est un «moment mineur dans la science» et que la philosophie de la science peut l'ignorer parce que son objet est de répondre aux questions qui concernent la réalité et pas la rationalité. La crise de la rationalité dans la philosophie de la science a été provoquée par la vision de Kuhn, parce qu'elle s'oppose à la vision «momifiée», produite par les philosophes rationalistes. D'après Hacking, la vision de Kuhn a mis en évidence le fait qu'il y a deux solutions différentes, complètement autonomes pour répondre aux questions de la connaissance scientifique: la solution rationaliste et la solution réaliste.

Hacking pense que la vision de Kuhn a montré la nécessité que le rationalisme soit remplacé par le réalisme. Le rationalisme ne peut pas être justifié que à l'intérieur du réalisme. Cette vision est contredite par d'autres auteurs importants, comme W.H. Newton-Smith, qui est l'adepte d'un rationalisme modéré ou H. Putnam, qui adhère au réalisme interne, c'est-à-dire à un réalisme à l'intérieur du rationalisme.

Le problème posé par la crise du modèle classique de la rationalité et par la crise de l'explication de la connaissance scientifique est celle de la possibilité et de la nécessité d'une définition de la rationalité globale (ou idéale). Sa nécessité est justifiée par l'existence des autres rationalités, limitées, «locales»: nous avons besoin d'un point par rapport auquel nous situerons toutes ces rationalités, parce qu'il n'est pas suffisant de dire que quelqu'un est rationnel par rapport à tels standards (individuels ou communautaires), mais il faut ajouter dans quel mesure est-il rationnel. Pour cela, nous avons besoin d'un critère. Habermas nous propose un modèle qui part de l'idée que l'unité de la rationalité est donnée par la «raison communicative», c'est-à-dire par le consensus communicatif. Je pense que l'intelligibilité peut être considérée comme le critère (la condition) minimale pour déterminer la rationalité globale.

L'intelligibilité doit être pensée à trois niveaux: syntactique, sémantique et pragmatique, elle a un contenu formel, référentiel et performatif. Une fois que la rationalité exprime la possibilité des gens de compréhension dans l'acte de communication, il est évident que ce qui permet cette compréhension constitue le contenu de la rationalité. Ainsi, nous pouvons définir la rationalité scientifique par la domination du niveau syntactique de l'intelligibilité.

3. Le critère de la rationalité scientifique. La difficulté principale contre la formulation d'un critère rationnel de la croissance de la connaissance scientifique a été remarquée par Mary Hesse: le fait que , dans la physique moderne nous avons deux interprétations différentes et opposées qui peuvent être utilisées pour la même théorie dans des circonstances différentes. L'école de Copenhague a essayé à légitimer cette situation en formulant le principe de complémentarité, pendant que Einstein a rejeté ce principe au nom de la rationalité scientifique. Cette situation a déterminé l'idée que le développement de la science ne correspond pas avec les standards explicites ou implicites d'après lesquels agissent les scientifiques.

La cause principale d'une telle situation, soutient le réaltivisme culturel, est le fait que les événements et les résultats qui constituent les sciences n'ont pas une structure commune, qu'il n'y a pas d'éléments qui soient présents dans toute recherche scientifique et qui soient

absents dans toutes les autres. L'absence d'une structure commune fait impossible la production d'un critère applicable seulement pour la science. Mais, je crois que nous pouvons formuler un tel critère si nous faisons appel à une suggestion faite par Wittgenstein: il dit qu'une telle application d'un critère n'exclut pas une application différente.

Ainsi, nous pouvons faire une distinction entre le critère, qui est unique – le critère de la rationalité scientifique – et ses applications – qui prennent en considération des «symptômes» différentes. Ainsi, on explique les différences entre les formulations du critère de la rationalité scientifique faites par Carnap, Popper, Lakatos ou Newton-Smith. Il ne s'agit pas des critères différentes de la rationalité, mais d'applications différentes du même critère.

Une autre difficulté rencontrée par la démarche de formuler un critère de la rationalité est liée à la thèse de l'incommensurabilité des paradigmes, qui nous interdit d'appliquer un critère au dehors d'un tel paradigme, parce que les éléments des paradigmes différentes ne sont pas comparables, leur signification étant strictement locale. Le critère de la rationalité suppose la comparaison des théories appartenant aux paradigmes différents, donc il ignore le caractère incommensurable des paradigmes. La thèse est assez confuse, il y a plusieurs sens de l'incommensurabilité qui ont une force différente.

Je propose une lecture de l'incommensurabilité qui s'approche de la vision présentée par Gilbert Ryle sur l'erreur catégorielle. Le sens de cette erreur est assez proche de l'incommensurabilité. Je pense que Ryle introduit un détail assez important: il montre qu'il s'agit des termes qui appartiennent aux niveaux différents, c'est-à-dire l'incommensurabilité fonctionne seulement entre théories de niveau différent. Elle ne s'applique pas aux théories de même niveau. Un autre détail important est le critère même du niveau des théories: une théorie ne peut pas remplacer qu'une théorie de même niveau. Donc, si nous avons à faire avec deux théories en compétition, chacune visant à remplacer l'autre, il s'agit des théories de même niveau dans la mesure dans laquelle l'une d'entre elles réussit à remplacer l'autre. Donc, l'incommensurabilité peut justifier la co-existence des deux théories, mais pas le remplacement d'une théorie par une autre. Une telle lecture nous fournit, je crois, une vision plus intuitive et plus conforme à la situation de la science que celle proposée par Kuhn.

Une telle lecture fait possible la formulation et l'application d'un critère de la rationalité, parce qu'elle accepte l'idée que les théories en compétition sont comparables du point de vue de la rationalité. Le fait qu'une telle formulation ou application du critère valable a un certain

niveau n'est pas valable ou applicable a un niveau différent ne représente pas une menace pour le critere.

4. Le rôle des théories dans le progrès de la connaissance scientifique. Le plus grand défaut de la vision de Kuhn et Feyerabend sur la science est, je crois, le fait qu'elle nous donne une certaine description de la science comme étant la Description de la Réalité de la Science, la Science Réelle, sans nous donner toutefois les raisons de la description. Nous sommes obligés de l'accepter seulement parce que ses auteurs nous disent qu'elle est vraie, La vraie. Cette attitude, profonde anti-épistémologique, ontologique, est celle qui est discutable. En d'autres mots, d'après Lakatos, leur théorie sur la science manque d'un critere capable de présenter son histoire comme rationnelle, tant en ce qui concerne l'histoire de la science, mais aussi l'histoire de la philosophie de la science. Ni l'histoire de la science, ni l'histoire de la pensée sur la science ne sont pas plus compréhensibles d'après cette vision, car elle manque de présenter les raisons de l'une et de l'autre.

Ainsi, entre le changement théorique et le progrès de la rationalité scientifique il y a une solidarité qui donne le degré de maturité d'une histoire de la science: les révolutions scientifiques marquent un progrès de la théorie de la rationalité de la science parce qu'elles permettent la reconstruction de l'histoire de la science comme une croissance valoriquement imprégnée de la rationalité. Les théories scientifiques contribuent a la consolidation de la rationalité scientifique, en permettant le développement d'une vision toujours plus rationnelle sur elle-meme.

Chapitre 3

1. La théorie de la décision rationnelle. La théorie de la décision (ou du choix rationnel, ou de l'utilité subjective espérée) est apparue comme une tentative de construire un modèle mathématique pour faire des prédictions sur le comportement des agents humains. Ses racines sont dans la conception «utilitariste» suivant laquelle l'action rationnelle est celle qui procure la plus grande satisfaction possible, telle qu'éprouvée par un sujet conscient. Cette idée peut être trouvée très clairement exprimée par David Hume, John Locke et les philosophes des Lumières, les sensualistes français, ainsi que la doctrine de Bentham. Leur approche est assez proche du concept de rationalité individuelle qui apparaît chez les économistes classiques, même si, pour eux, il a la signification restreinte de «préférer le plus au moins». Ceux-ci ont été influencé par le fait que, d'habitude, quand on parle de «comportement rationnel», on pense au comportement supposé par un choix entre les

meilleurs *moyens* disponibles pour l'accomplissement d'un but *donné*. Cela suppose que la rationalité est un concept *normatif*: il est orienté vers ce que nous *devons* faire pour atteindre un but or objectif donné.

Pour l'économie classique, l'assomption qu'une personne donnée agit ou va agir rationnellement a évidemment un pouvoir explicative et prédictive considérable, parce qu'elle implique qu'on peut expliquer ou prédire un grand nombre de faits économiques possibles très compliqués sur son comportement économique en termes d'un petit nombre d'hypothèses plutôt simples sur ses buts. Sa simplicité et son efficacité ont été les principales qualités qui ont attiré les économistes vers cette théorie. Mais, en dépit de ces qualités, le modèle présentait certaines limites importantes. La plus importante était le fait qu'il s'agissait, toujours de choisir un *moyen* parmi plusieurs, sans avoir la même possibilité de choix en ce qui concerne les buts, parce que la théorie n'envisageait qu'un seul but. Alors, les situations assez fréquentes de changement du but pendant l'action restaient inexpliquées. La théorie de la rationalité moyens-but était, donc trop étroite, parce qu'elle n'avait pas la possibilité d'envisager le choix parmi *plusieurs* buts et de lui donner une expression mathématique. Cela a été possible seulement à la fin du XIX^{ème} siècle, par l'introduction du calcul des préférences et d'opportunités. C'est un changement important et, pour cela, je dois insister un peu sur ce point.

L'identification de la rationalité à l'adoption d'un comportement «maximisateur» tire une grande partie de son importance méthodologique de l'axiomatique de l'utilité estimée proposée dans la seconde édition de la *Théorie des jeux* de John von Neumann et Oskar Morgenstern. Leur travail était purement mathématique. Ils démontraient que si un choix d'un décideur suivent certaines règles («axiomes»), il est possible de dériver des *utilités* (ou opportunités) – des nombres réels représentant valeurs personnelles – tel qu'une alternative avec des conséquences probabilistiques est préférée à une autre si est seulement si son *utilité estimée* est plus grande que celle de l'autre alternative. Les utilités sont des entités purement mathématiques et leur existence est définie par les axiomes – exactement comme les lignes que nous étudions dans la géométrie euclidienne sont des entités mathématiques définies en termes des axiomes de ce système. Les utilités sont identifiées avec les «valeurs personnelles» du décideur. La rationalité est définie, en ce cas, comme l'accord des choix du décideur avec les données du système : un décideur rationnel sera, donc, celui qui préférera l'alternative X à l'alternative Y chaque fois que l'utilité estimée de X sera plus grande que l'utilité estimée de Y. Cette contribution majeure fut ensuite reformulée ou révisée, avec des

nuances importantes, par plusieurs philosophes, mathématiciens et économistes : Marschak, Hershman et Milnor, Suppes, Noiret, Davidson, Winet et Aumann. La théorie normative de la décision dérive, donc, de la théorie économique des jeux. Le principe de base de cette théorie est l'assomption que les gens choisissent d'une telle façon pour maximiser l'utilité attendue – autrement dit, pour maximiser les bénéfices et minimiser les coûts. Pour ces deux raisons, je crois, la théorie a été très favorablement accueillie par les scientifiques.

La théorie de la décision n'est pas, essentiellement, une description sommaire de l'action vécue concrètement. Elle *produit* des règles de décision et des exigences pratiques dont elle peut rendre manifeste la rationalité, de la même manière qu'une application technologique soit à la fois la clé de la production de certains objets, et le garant de la compréhension des propriétés et des normes de fonctionnement de ces objets. Si difficile à l'entendre que cela puisse d'abord sembler, nous devons admettre qu'elle *construit* une intuition du rationnel, en donnant un tour systématique aux conditions de cohérence pratique qui émergent des délibérations courantes.

Le modèle standard pour le choix individuel est présenté d'habitude sous la forme d'un système d'axiomes sur des entités non identifiées qui sont identifiées plus tard comme *options* – qui consistent en des conséquences probabilistiques («jeux») - et une relation non identifiée qui sera identifiée plus tard comme *préférence* et qui induit un ordre parmi les alternatives. L'*opération* de combinaison des alternatives peut être conceptualisée comme une «mélange de probabilités» des alternatives. Le résultat c'est qu'une préférence entre plusieurs alternatives peut être représentée comme une ordonnancement des leurs utilités estimées. Dans le système non interprété, les entités et les relations peuvent être n'importe quelle entité ou relation qui satisfait tous les axiomes.

La théorie économique classique avait une autre limite importante: elle s'était bornée à étudier seulement le comportement humain dans des conditions de *certitude*, c'est-à-dire dans des conditions quand le décideur peut prédire seulement le résultat de chaque action qu'il peut faire. Les situations qui comportaient le risque et l'incertitude étaient laissées au dehors, parce que dans une telle situation l'agent ne peut pas se borner à prédire seulement les résultats de son action. Dans le cas du risque, il doit connaître au moins les probabilités objectives associées à tout résultat possible, pendant que dans le cas de l'incertitude, même certaines des ces probabilités objectives seront inconnues par lui. Le modèle de la maximisation de l'utilité donnait une caractérisation satisfaisante du comportement rationnel dans des

conditions de certitude, mais elle échoua dans le cas du risque et de l'incertitude.

L'approche bayésien c'était orienté vers la recherche d'une solution à ce problème. La solution consistait dans un développement de la théorie classique: elle suppose que si le comportement du décideur satisfait certains axiomes de consistance et de continuité (une nombre plus grande que celui établi par la théorie classique), alors son comportement équivaudra avec la maximisation de l'utilité estimée. Dans le cas du risque, cette utilité estimée peut être définie en termes des probabilités objective relevantes (qui, par supposition, seront vues comme connues par le décideur). Dans le cas d'incertitude, cette utilité estimée doit être définie en termes des probabilités subjectives du décideur lui-même chaque fois que les probabilités objectives relevantes ne sont pas connues.

Eells donne du point de vue bayésien une caractérisation, en trois points :

la décision rationnelle et la préférence rationnelle ressortissent à l'espérance d'utilité subjective;

les probabilités subjectives et les représentations numériques des utilités subjectives sont des entités théoriques qui sous-tendent et expliquent les choix et les préférences qui, en retour, donnent de ces entités une interprétation empirique partielle;

l'apprentissage (par quoi il faut entendre l'assimilation des nouveaux éléments d'information) a lieu conformément à la formule des probabilités conditionnelles.

La probabilité subjective est conçue comme un degré dans le processus rationnel par lequel on ajoute la croyance aux propositions décrivant les différents états possibles du monde. C'est pour cela qu'on a affirmé que la théorie de Savage accomplissait une synthèse des travaux de Bruno de Finetti sur la conception subjectiviste des probabilités et la théorie développée par von Neumann et Morgenstern.

Le problème du choix rationnel est, dans ce cas de trouver lequel de ces résultats est le plus préférable. Pour cela, les préférences de l'agent envers ces résultats possibles des actions disponibles doivent être calculées. La désirabilité d'un résultat est très importante, parce qu'elle détermine l'*utilité* personnelle de chaque résultat pour l'agent en cause. Une échelle ordinale des résultats possibles est justement un ordonnancement de ces résultats dans l'ordre de leur préférence. Un tel ordonnancement n'indique pas la mesure ou le degré dans lequel un décideur préfère un résultat par rapport à un autre. Quand l'agent est certain sur les résultats de son action par rapport aux états possibles du

monde, un ordonnancement ordinal est adéquate. Étant donnée la certitude, le décideur n'a besoin que d'invoquer son ordonnancement habituel des résultats basé sur ses préférences personnelles; il doit seulement choisir l'action qui a la plus haute utilité dans son ordonnancement. Mais, les problèmes apparaissent quand le décideur n'a pas une telle certitude sur les résultats.

Un autre problème est si et dans quelle mesure affecte l'incertitude la rationalité du processus de décision ? Ou, autrement dit, il y a-t-il une ignorance rationnelle ? Le problème est assez important, parce que ceux qui soutiennent la thèse de l'irrationalité des décideurs peuvent invoquer à leur appui un conflit probable entre la décision rationnelle et l'ignorance supposée par l'incertitude.

Sylvain Bromberger donne à l'ignorant rationnel la définition suivante :

Une personne P est un *ignorant rationnel* au moment t par rapport à un ensemble fini des questions Q si et seulement si, au moment t, Q est un sous-ensemble accessible de l'ignorance de P, et P a une stratégie rationnelle de sélection de la question suivante de Q à éliminer de l'ignorance de P.

Ce qui est important dans ce modèle est le fait que ce qui définit l'ignorant comme rationnel c'est la façon dont il se rapporte à son ignorance, c'est-à-dire aux questions auxquelles il ne sait pas répondre : il doit *choisir* les questions qui *représentent*, pour lui, le *contenu* de son ignorance. Ainsi, en dernière instance, ce qui fait d'un ignorant un être rationnel est la façon dont il choisit le contenu de son ignorance. Il doit utiliser la théorie de la décision pour décider sur la modalité la plus rationnelle pour lui d'éliminer l'ignorance concernant les données nécessaires à un autre processus rationnel de décision.

2. La structure de la théorie de la décision. Il n'y a pas un accord en ce qui concerne le contenu et les buts de la théorie actuelle de la décision rationnelle. Harsanyi, par exemple, propose une définition d'une théorie générale du comportement rationnel, qui comprend les éléments suivantes :

Une théorie de l'utilité, qui est la théorie du comportement rationnel *individuel* dans des conditions de certitude, de risque, et d'incertitude. Son résultat principal est le fait que le comportement rationnel est défini comme maximisation de l'utilité estimée.

La théorie des jeux, qui est la théorie du comportement rationnel de *deux* ou *plusieurs* individus rationnels qui

interagissent, chacun étant déterminé à maximiser ses propres intérêts, qu'ils soient égoïstes ou non, d'après sa propre fonction d'utilité.

Éthique, qui est la théorie des jugements rationnels à valeur morale, c'est-à-dire les jugements rationnels de préférence basés sur des critères impartiaux et impersonnels. Les jugements moraux rationnels supposent *la maximisation du niveau de l'utilité moyenne* de tous les individus de la société.

On peut voir maintenant que ce qu'on nomme la théorie de la décision rationnelle est quelque chose assez complexe. Cette complexité est agrandie par le fait que, au cours de son histoire, la théorie a changé elle-même ses buts, telle que ils ont apparu plusieurs développements alternatifs, en fonction du but envisagé à la théorie » Ainsi, nous avons trois approches distinctes, dans le cadre de la même théorie :

Une approche descriptive, qui cherche à décrire d'une façon plus exacte la manière dont les agents réels prennent leurs décisions. Cette type d'approche se confronte avec la nécessité de développer une théorie sur l'erreur pour accommoder les données avec la théorie de la décision;

Une approche normative, qui cherche à construire des modèles plus compliqués de la décision, notamment pour justifier les changements pendant le processus de décision (le changement d'information, de préférence, de moyen, etc.)

Une approche prescriptive, qui veut développer des techniques efficaces pour l'apprentissage de manières décisionnelles de la théorie notamment par ceux pour lesquels est très important de prendre des décisions rapides et correctes, par exemple les médecins. Cette approche, le plus récent et assez important parce que sa raison d'être est justement la différence entre ce que la théorie indique et ce que l'agent fait effectivement.

3. La signification de la théorie de la décision. La théorie de la décision rationnelle a été vue, notamment par les positivistes, comme étant la possibilité de «naturaliser" l'épistémologie grâce à sa capacité de fournir une expression stricte quantitative du processus de décision. Carnap a été parmi les premiers. Cette lecture reste pour beaucoup l'une des principales raisons qui justifient un prolongement du programme du Cercle viennois.

Donald Davidson a proposé une modalité différente d'interpréter la signification de la théorie de la décision, modalité qui montre clairement pourquoi le projet de naturaliser l'épistémologie ne peut pas avoir de succès. La thèse de Davidson est que la théorie de la décision ne peut

pas être considérée comme étant une théorie *scientifique*, dans le sens fondamental du mot.

L'argument principal se réfère directement à la théorie de la décision, notamment à la contribution de Frank Ramsey. Il présente la théorie comme introduisant, par hypothèse, les croyances et les désirs – donc, des attitudes propositionnelles intensionnelles - comme étant les facteurs causals de l'action humaine.

La théorie ne peut pas produire une définition des concepts de croyance et de préférence en partant de notions non intensionnelles. Plutôt, elle utilise une définition intensionnelle, la préférence ordinale entre jeux ou entre résultats pour mettre en lumière les deux autres notions: le degré de croyance et la comparaison des différences de valeur. La conception de Ramsey montre comment est-il possible de donner un contenu utile à deux attitudes propositionnelles fondamentales sans qu'aucune d'entre elles soient comprise à l'avance. Cette stratégie ramsayenne est très importante parce qu'elle permettra à Davidson de fonder sa vision.

Il montre, premièrement, que la théorie de la décision est incomplète: notre capacité d'identifier et de distinguer entre les croyances de l'agent n'est pas séparable de la capacité de comprendre ce qu'il dit. Cela signifie que la théorie suppose une théorie de la signification, parce qu'elle est la seule qui nous donne la possibilité d'accéder aux attitudes propositionnelles du sujet. Il est besoin d'une théorie unifiée de la signification et de l'action pour avoir une théorie de la décision cohérente.

Une telle théorie de la signification ne peut pas s'approcher de celle de Quine, parce que cela signifiera la réduction de notions intensionnelles aux notions extensionnelles. Une approche de tous ces concepts doit partir au delà d'eux ou d'un point situé à distance égale par rapport à chacun d'entre eux. Ce point est le concept de «vérité».

Davidson propose de considérer comme étant fondamentale l'attitude suivante: l'agent préfère plutôt un énoncé vrai qu'un énoncé faux. Ce que l'interprète doit faire, alors, est de découvrir quels événements du monde déterminent un agent d'apprécier comme étant vrai plutôt un énoncé qu'un autre. L'interprète peut savoir cela sans savoir la signification de l'énoncé, quel état d'affaires est évalué par celui-ci ou qu'est-ce qu'il croit. Mais, la préférence de l'agent pour les énoncés vrais est aussi en fonction de ce qu'il considère comme étant la signification de ses énoncés, de la valeur qu'il attribue aux différents états du monde possible ou actuel et de la probabilité qu'il attribue aux états contingentes en partant de la vérité des énoncés relevantes. Pour cela, il n'est pas illogique de croire que toutes les trois attitudes sont

dérivables de la préférence pour les énoncés vrais. Cela détermine Davidson d'apprécier qu'il faut introduire, *a priori*, un principe de rationalité. L'existence de ce principe est celle qui marque la différence entre l'explication des sciences de la nature et celle des sciences humaines: nous n'avons pas la possibilité d'expliquer (de comprendre) aucune comportement humain si nous ne supposons pas que l'agent qui étale ce comportement n'est pas un être rationnel.

Nous avons ici un principe d'interprétation du comportement de l'agent. On ne dit pas que l'agent *est* rationnel, on dit seulement que, pour le comprendre, nous devons supposer, obligatoirement, qu'il est rationnel. La rationalité est, donc, une condition de possibilité pour penser tout rapport causal en ce qui concerne le comportement humain. Le contenu du concept est déterminé, contextuellement, par la *fonction* interprétative qu'il doit jouer. Enfin, ce concept permet une approche objective d'un processus strictement subjectif sans impliquer une vision solipsiste. L'exigence de la rationalité tient plutôt de la nature du langage que de celle des individus humains. La position de l'interprète n'est pas celle du sujet cartésien, mais celle d'une personne publique.

Cela n'a pas la signification d'une renonciation au sujet. Il y a, d'après Davidson, une asymétrie entre la position du sujet et celle de l'interprète qui se fonde sur l'autorité *sémantique* du sujet, l'interprète doit toujours chercher l'interprétation la plus proche possible de la signification attribuée par l'agent lui-même. Le principe de rationalité ne doit pas se limiter à supposer la rationalité de l'agent seulement parce que l'interprète ne peut autrement le comprendre, mais aussi parce que l'agent lui-même ne peut pas comprendre sa propre action que d'une manière rationnelle. Ainsi, nous devons supposer que l'agent a un système de croyances, que ses croyances sont consistantes, que ses désirs sont constantes pendant le processus de décision, etc.

Un avantage de sa conception sale est de garder un lien solide avec la réalité que l'accent sur le principe de rationalité pourra le mettre en danger: la consistance supposée par le *holisme* des croyances ne réfère pas à la vérité des croyances, mais seulement à leur *rationalité*. La vérité est compris exclusivement du point de vue de Tarski. On peut distinguer, ainsi, deux niveaux: le niveau théorique, fondamental, où s'applique le concept de vérité et le niveau métathéorique, interprétatif, où s'applique le concept de rationalité. Le premier niveau est la condition du deuxième.

Ainsi, on peut remarquer que le «sujet» et la «rationalité» sont termes métathéoriques, c'est-à-dire pas épistémiques ou cognitifs, mais plutôt *épistémologiques*. Même si la «vérité» est le terme épistémique fondamental, lui seul ne peut pas constituer la connaissance. C'est la

signification du liaison puissante entre la vérité et l'interprétation. On ne peut pas affirmer qu'on sait quelque chose, tant qu'on ne sait pas le fait qu'on sait, pourquoi on sait etc. L'épistémologie représente le niveau métathéorique des sciences, de la connaissance.

Cela suppose de clarifier les rapports de ces concepts avec d'autres pratiques linguistique, notamment avec la littérature.

Chapitre 4

1. Conclusion. Nous avons conclu que, pour Kant la raison suffisante du sujet n'est pas d'ordre ontologique, mais *fonctionnel*. Il nous propose un approche du sujet en partant *de sa fonction*. Il ne s'agit pas de savoir *qu'est-ce* que le Sujet, mais quelle fonction remplit-il dans l'économie de notre esprit. La signification que peut avoir aujourd'hui cette assertion sera le but principal de ce chapitre. Puis, les confusions produites par le point de vue narratif sur le sujet.

Dans un ouvrage récente, Daniel Dennett appelle le sujet «le centre de Gravitation Narrative" parce que, comme tout centre de gravitation, le sujet est une abstraction, autour duquel nous pouvons organiser une théorie, «un attracteur de propriétés" qui occupe une position centrale.

Donc, nous pouvons parler du sujet sans supposer, pour cela qu'il s'agit d'un entité dans le sens traditionnel du mot, c'est-à-dire sans impliquer des suppositions ontologiques.

Mais, pourquoi «narrative"? Ici, nous devons insister sur l'aspect narratif de l'activité de la pensée. Principalement, parce que notre activité de pensée est organisée comme production des récits. Au dehors de son cerveau, l'homme tisse une toile des paroles et actions. Notre environnement ne contient pas seulement de la nourriture, mais aussi des paroles. Ces paroles sont des éléments puissants de notre environnement que nous avons incorporés rapidement, et, puis, en les sécrétant et en les tissant comme les trames des araignées dans une réseau de narration auto protectrice.

«Notre stratégie fondamentale de protection, de contrôle et de définition de soi, dit Dennett, n'est pas de tisser des réseaux ou de construire des nids, mais de raconter des histoires, et plus particulier, de produire et de contrôler le récit que nous racontons à nos semblables – et à nous mêmes – sur qui sommes-nous.(...) Nos récits nous tissent. Notre conscience humaine et notre identité narrative sont leur produit, et non leur source".

Je crois que Dennett a surpris assez correctement la fonction narrative du sujet, même s'il semble partager certaines presupposées

ontologiques, concernant les racines biologiques (le «soi" de l'immunologie) et culturelles (les «mèmes" de Dawkins), que je juge comme problématiques.

Donc, le sujet joue le *même* rôle fonctionnel dans l'économie de notre activité cognitive et dans notre théorie explicative de cette économie. Et cela, parce que la théorie n'est pas séparée ou séparable (autrement que dans la pensée) de notre activité cognitive, mais la constitue, en étant sa forme.

Ce que nous pouvons faire, au sujet du problème de l'existence du sujet épistémique, est de choisir entre plusieurs positions narratives: l'une nous propose d'éliminer complètement le sujet de notre stratégie explicative parce qu'il *n'existe* pas; une autre nous propose de le garder et de lui donner une place centrale dans notre stratégie narrative, justement parce qu'il *existe*; enfin, la dernière nous demande de l'utiliser sans aucune presupposée concernant son statut ontologique, sa seule justification étant épistémologique (narrative). Évidemment, la dernière est la plus avantageuse, parce qu'elle nous permet d'utiliser les récits épistémologiques organisées autour du concept, sans pour cela supposer qu'il y a une entité correspondante différente de l'individu humain.

2. Narration, théorie et fiction. La tournante narrative a permis ce changement d'attitude envers les problèmes classiques, mais tout en produisant, certaines fois, des confusions regrettables.

Une telle confusion est celle liée à la signification même de cette tournante. Elle a été interprétée comme un changement de paradigme, le passage d'un paradigme épistémique à un paradigme esthétique, ce qui a comme conséquence la renonciation au concept de vérité ou, dans le meilleur cas, le changement de la signification de ce concept. Le but étant d'éliminer les frontières anciennes entre la théorie et la littérature. Je me propose d'examiner deux telles tentatives et d'expliquer leur échec.

La philosophie postmoderne est arrivée à la conclusion que tout texte, théorique ou littéraire, peut être analysé critique sur la base des structures grammaticales et linguistiques de la construction du texte et nous propose de renoncer au concept de vérité parce qu'il ne joue plus aucune rôle dans cette analyse. Derrida, notamment, réduit le discours théorique à des interprétations fictionnelles. Habermas a attaqué et critiqué cette vision en montrant l'impossibilité d'une telle renonciation. D'après lui, Derrida ignore le fait capital que la fiction n'implique pas la même force linguistique que la pratique quotidienne. Personne n'est pas obligé d'agir quand le contexte est représenté par une fiction littéraire.

Les actes de parole sont acceptées inter subjectivement sur la base du contexte. L'usage d'un acte de parole sera justifié sur la base de la perception immédiate du contexte. Mais, les assertions de validité, les propositions théoriques déterminent les sujets parlants de dépasser le contexte pour trouver assez d'évidence pour légitimer le contenu des actes de parole. Pour cela, les assertions de validité et leur argumentation d'un part, et le discours, d'autre part, ne sont pas identiques pour des actes de parole qui sont valides grâce à leur contexte. La théorie détermine le fait que les assertions de validité dépassent l'activité elle-même et prennent place dans la pratique quotidienne, pendant que la littérature, au contraire, limite les assertions de validité au contexte du monde fictionnelle crée pendant l'activité et lui ne permet pas de sortir de ce domaine restreint. Donc, la vérité objective supposée par toute théorie est celle qui marque la frontière qui sépare celle-ci de la fiction. Dans le cas du sujet ou de la rationalité, il ne s'agit pas simplement des concepts fictifs, sans d'autre vérité que celle fournie par la narration en cause, mais des concepts qui soutiennent toute l'activité de compréhension de nous-même comme êtres actifs et connaissants.

Italo Calvino, nous propose, d'autre part, une quatrième relation au monde : entre l'écrivain et le texte. Sa discussion est axée sur l'énoncé «J'écris que Homère dit qu'Ulysse dit: «J'ai écouté le chant des sirènes». Les trois niveaux évidentes ici sont: "J'écris", "que Homère dit", «qu'Ulysse dit". Calvino soutint que le statut du «Je" peut avoir interprétations différentes. À première vue, il semble appartenir à l'auteur. Mais, à une investigation plus profonde, on peut voir que «Je" a le statut de personnage fictionnel. Le quatrième niveau est, donc, représenté par la composante réflexive de l'énoncé. Si quelqu'un a des connaissances mythologiques, alors il peut affirmer que dans l'Odyssée il s'agit du chant des sirènes. Cela pose la réalité à un niveau extérieur à la fiction, parce qu'on parle de la fiction comme telle. En d'autres mots, il y a une vérité fictionnelle qui dépasse les cadres de la fiction proprement dite.

L'essai de Calvino de transformer le langage dans un quatrième niveau de la réalité échoue parce que le langage n'a qu'une fonction syntactique ou sémantique, il ne peut pas avoir la force des autres trois niveaux dans la coordination de l'action. Une oeuvre de fiction reste, toujours, seulement une oeuvre de fiction. La théorie peut entrer dans le domaine de la réalité, en dépassant ainsi les limites, mais il n'y a pas une prétention de validité de la fiction comme telle. Une fois que la fiction ne peut pas développer une stratégie argumentative, le dialogue et la décision rationnelle sont impossibles et aussi, l'accord intersubjectif

sur la vérité, une fois qu'il n'y a qu'un seul sujet, le lecteur réel. Il n'est pas suffisant de transporter ce lecteur dans le monde de la fiction, il faut de transporter celle-ci dans le monde réel du lecteur. Pour cela, une fois que la dernière n'est pas possible (la validité qui dépasse le monde de la fiction n'est pas repérable à l'intérieur de celle-ci), nous n'avons aucune raison de croire que la fiction peut réaliser une telle prétention de vérité. Ici, nous pouvons remarquer mieux la différence entre les concepts fictionnels, par exemple ceux utilisés dans les écrits de S.F. ou dans les para sciences (parapsychologie, astrologie, etc.) qui sont bornés au monde fictionnel auquel ils appartiennent, et les concepts de «sujet» et "rationalité", qui dirige toute compréhension de nous-mêmes comme étant des humains.

Nous pouvons conclure que l'essai d'éliminer la frontière qui sépare la théorie de la fiction peut affecter non seulement le concept de «vérité», mais aussi les concepts de «sujet» et «rationalité» qui sont étroitement liés à celui-là. Le «sujet» n'est pas simplement un attracteur narratif, mais il fonctionne dans un certain type de narrations, celles qui visent un but épistémique, qui entretiennent un certain rapport avec la vérité, c'est-à-dire qui appartiennent au domaine de la théorie. Il ne peut pas et il ne doit pas d'être confondu ni à l'auteur d'une fiction, ni au personnage de celle-ci. La raison fondamentale est justement ce rapport différent à la vérité.

Sommaire

Introduction
Chapitre I
Chapitre II
Chapitre III
Chapitre IV
Bibliographie

Bibliographie

- Anscombe, G.E.M (1975), *Mind and Language*, Clarendon Press, Oxford.
Audi, R. (1983), 'Foundationalism, epistemic dependence, and defeasibility', *Synthese*, vol. 55, p. 119-39.
Ayer A. J. (1974), "Truth verification and verisimilitude", in P. Schilpp (ed.) *The Philosophy of Karl Popper*, La Salle, Open Court, p. 684-92.
Barnes, B. (1982), *T. S. Kuhn and Social Science*, New York, Columbia University Press.

- M. Hollis and S. Lukes (eds.), *Rationality and Relativism*, Cambridge, MIT Press.
- Bartels, A. (1989), "Why Theoretical Terms Are Commensurable", in *Philosophy of the Natural Sciences*, HPT, Vienna.
- Bennett J. (1964), *Rationality*, London, Routledge & Kegan Paul.
- Berger, P. and Luckmann, T. (1967), *The Social Construction of Reality*, New York, Anchor Books.
- Bloor, D. (1976), *Knowledge and Social Imagery*, London, Routledge & Kegan Paul.
- BonJour, L. (1985), *The Structure of Empirical Knowledge*, Cambridge, Harvard University Press.
- Brown, H. (1990), *Rationality*, Routledge.
- Calvino, I. (1981), *If On a Winter's Night a Traveler*, New York: Harcourt Brace Jovanovich.
- Davies, P. (1979), *The Forces of Nature*, Cambridge, Cambridge University Press.
- Davidson, D. (1980), *Essays on Events and Actions*, Oxford University Press.
- Davidson, D. (1982), "Rational Animals", in *Dialectica*, 36.
- Davidson, D. (1984), "First Person Authority", in *Dialectica*, 38.
- Davidson, D. (1991), "Epistemology Externalized", in *Dialectica*, 45.
- Davidson, D. (1996), "The Folly of Trying to Define Truth", in *Journal of Philosophy*, vol. XCIII, 6.
- Dennett, D. C., Hofstadter, D. R (1981), *Mind's I. Fantasies and Reflections on Soul*, Bantham Books.
- Dennett, D. C. (1991), *Consciousness Explained*, Penguin Books.
- Derrida, J. (1988), *Limited, Inc.*, Evanston: Northwestern University Press.
- Eco, U. (1994), *Six Walks in the Fictional Woods*, Cambridge: Harvard University Press.
- Feyerabend, P. (1989), *Adieu la Raison*, Seuil, Paris.
- Gallacher, H.P. (1978), "The Author of 'On Certainty' and Franco-American Conventionalism", in *Wittgenstein and his impact on contemporary thought*, HPS, Wien.
- Greene, J. (1980), "The Kuhnian paradigm and the Darwinian revolution in natural history", in G. Gutting (ed.), *Paradigms and Revolutions*, Notre Dame, University of Notre Dame Press, p. 297-320.
- Gutting, G. (1980), "Introduction", in *Paradigms and Revolutions*, G. Gutting (ed.), Notre Dame, University of Notre Dame Press, p. 1-21.
- Habermas, J. (1992), *The Philosophical Discourse of Modernity*, Cambridge, Mass: The MIT Press.
- Habermas, J. (1992), *Postmetaphysical Thinking*, Cambridge, Mass: The MIT Press.
- Hacking, I. (1983), *Representing and Intervening*, Cambridge University Press, Cambridge.
- Haack, S. (1983), "Theories of knowledge: an analytic framework", *Proceedings of the Aristotelian Society*, vol.113, p. 143-57.

- Harsanyi, John C. (1990), "Advances in understanding rational behavior", in Paul K. Moser (ed.), *Rationality in Action. Contemporary Approaches*, Cambridge University Press.
- Hesse, M. (1974), *The Structure of Scientific Inference*, Berkeley, University of California Press.
- Hooker, C. (1974), 'Systematic realism', *Synthese*, vol. 26, p. 409-97.
- Hintikka, J. (1990), "Wittgenstein and the Problem of Phenomenology", in *Acta Philosophica Fennica*, vol.49, Helsinki
- Jammer, M. (1974), *The Philosophy of Quantum Mechanics*, New York, Wiley.
- Jarvie, I. (1984), *Rationality and Relativism*, London, Routledge & Kegan Paul.
- Kahneman, D., Slovic, P., Tversky, A. (eds.), (1982), *Judgment under uncertainty : Heuristics and biases*, Cambridge University Press,
- Kant, Immanuel. (1783), «L'unique fondement possible d'une démonstration de l'existence de Dieu», (1763), dans *Pensées successives sur la théodicée et la religion*, Paris, Librairie philosophique J.Vrin.
- Kuipers, Th. A.F., "How to explain the success of the natural sciences", in *Philosophy of the Natural Sciences*.
- Kusch, Th.(1990), "Heidegger on 'Why Is There Something Rather Than Nothing'", in *Acta Philosophica Fennica*, vol.49, Helsinki.
- Lakatos, I. (1978), *Philosophical Papers*, I, II, Cambridge University Press.
- Laudan, L. (1984), *Science and Values*, Berkeley, University of California Press.
- Lugg, A. (1985), "The process of discovery", in *Philosophy of Science*, vol. 52, p. 207-20.
- Malcolm, N., (1967), "Wittgenstein's Philosophical Investigations", in *Wittgenstein & the Problem of Other Minds*, McGraw-Hill.
- Malcolm, N. (1979), "Whether 'I' Is A Referring Expression", in *Intention & Intentionality*, Harvester Press.
- Moore, G.E., From "Wittgenstein's Lectures in 1930-1933", in *Wittgenstein and the Problem of Other Minds*.
- von Morstein, P. (1979), "Concepts & Forms of Life; Criteria & Perception", in *Wittgenstein, Vienna Circle & Critical Rationalism*, HPT, Vienna.
- von Neumann, J. , Morgenstern, O.(1947), *Theory of Games and Economic Behavior*, Princeton U.P.
- Newton-Smith, W. (1981), *The Rationality of Science*, Routledge & Kegan Paul, Boston.
- Pastin, M. (1975), "Modest foundationalism and self-warrant", in N. Rescher (ed.), *Studies in Epistemology*, Oxford, Oxford University Press, p. 141-9.
- Picavet, Emm., (1996), *Choix rationnel et vie publique*, Paris, PUF.
- Polanyi, M. (1958), *Personal Knowledge*, New York, Harper & Row.
- Polanyi, M. (1967), *The Tacit Dimension*, Garden City, Anchor Books.
- Pollock, J. (1979), "A plethora of epistemological theories", in G. Pappas (ed.), *Justification and Knowledge*, Dordrecht, D. Reidel, p. 93-113.
- Popper, K. (1972), *Objective Knowledge*, Oxford, Oxford University Press.

- Putnam, H. (1981), *Reason, Truth and History*, Cambridge University Press.
- Putnam, H. (1983), *Realism and Reason*, Cambridge University Press.
- Quine, W.V.O. (1960), *Word and Object*, Cambridge: Mass, MIT Press.
- Quine, W.V.O. (1969), *Ontological Relativity and Other Essays*, New York: Columbia University Press.
- Quine, W.V.O. (1981), *Theories and Things*, Cambridge: Mass, Harvard University Press.
- Quine, W.V.O. (1992), *The Pursuit of Truth*, Cambridge: Mass, Harvard University Press.
- Rudner, R. (1966), *Philosophy of Social Science*, Englewood Cliffs, Prentice-Hall.
- Pears, D. (1991), "Wittgenstein's Account of Rule-Following", in *Synthese*, Kluwer Academic Publishers, vol.87, nr.2.
- Steinvosth, V., "Lakatos 's Theory of Rationality", in *Wittgenstein, Vienna Circle...*
- Strawson, P.F., "Persons", in *Wittgenstein & the Problem of Other Minds*
- Schagrin, M. (1973), "On being unreasonable", in *Philosophy of Science*, vol. 40, p. 1-9.
- Schagrin, M. (1982), "The failure to be rational", in *Philosophy of Science*, vol. 49, p. 120-124.
- Sellars, W. (1974), "Conceptual change", in *Essays in Philosophy and its History*, Dordrecht, D. Reidel, p. 172-188.
- Sellars, W. (1975), "The structure of knowledge", in *Action, Knowledge and Reality*, H. Castañeda (ed.), Indianapolis, Bobbs-Merrill, p. 295-347.
- Shapere, D. (1984), *Reason and the Search for Knowledge*, Dordrecht, D. Reidel.
- Siegel, H. (1985), "What is the question concerning the rationality of science?", *Philosophy of Science*, vol. 52, p. 517-37.
- Simon, H. (1983). *Reason in Human Affairs*, Stanford, Stanford University Press.
- Smith, E. and Medin, D. (1981), *Categories and Concepts*, Cambridge, Harvard University Press.
- Suppes, P. (1981), *La logique du probable*, Paris, Flammarion.
- Vickers G. (1965), *The Art of Judgement*, New York, Basic Books.
- Wartofsky, M. (1980), "Scientific judgement, creativity and discovery in scientific thought", in T. Nickles (ed.), *Scientific Discovery: Case Studies*, Dordrecht, D. Reidel, p. 1-20.
- Weingartner, P., "Scientific Understanding of a Text", in *Wittgenstein, Vienna Circle...*
- Winch, P. (1958), *The Idea of a Social Science*, London, Routledge & Kegan Paul.
- Wittgenstein, L. (1976), *De la certitude*, Gallimard, Paris.
- Wittgenstein, L. (1953), *Philosophical Investigations*, G. Anscombe, (trans.), New York, Macmillan.
- Wittgenstein, L. (1988), *Le cahier bleu et Le cahier brun*, Gallimard, Paris.

MANIFESTATIONS SCIENTIFIQUES

**Session de communications – *Condamné à la Renaissance?* –
organisé par *Le Cercle scientifique Ludwig Wittgenstein*, dédiée à
la comémoration de 50 ans depuis la mort du philosophe L.
Wittgenstein (1889-1951), Timișoara 22 mai 2001**

En 22 mai 2001, *Le Cercle scientifique Ludwig Wittgenstein* a organisé une session de communications dédiée à la comémoration de 50 ans depuis la mort du philosophe L. Wittgenstein (1889-1951), ayant le thème: *Condamné à la Renaissance?*

À cette session ont participé avec des communications et des interventions: des membres du Département de Philosophie (Octavian Balintfi – le coordonnateur du cercle, Ilona Bîrzescu, Gheorghe Clitan, Ioan Biriș, Alexandru Petrescu, Florentina-Olimpia Mușiu, Claudiu Mesaroș, Florin Lobonț, Ionel Narița, Iancu Lucica, Paul Kun), des membres du Département de Politologie (Adrian Atanasescu, Ionuț Crudu, Lucian Vesalon) et des étudiants de la spécialisation Philosophie (Adina Ștefănescu, Dan Zeman, Lorena Armulescu). Les travaux présentés à cette occasion ont été publiés dans les *Cahiers du Cercle Wittgenstein*, sous la coordination de M. Octavian Balintfi, maître de conférences.

**Colloque intitulé *L'histoire et la philosophie de la science*,
organisé par l'Académie Roumaine – la filiale de Timisoara et
'Université de l'Ouest de Timisoara dans le cadre de *Les Journées
Académique du département de Timis*, Timișoara, 25-26 mai 2001**

Entre 25-26 mai 2001, l'Académie Roumaine – la filiale de Timisoara et l'Université de l'Ouest de Timisoara ont organisé *Les*

Journées Académique du département de Timis. A cette manifestation scientifique, le Département de Philosophie a coordonné le colloque intitulé *L'histoire et la philosophie de la science*. A ce colloque ont participé avec des communications extrêmement intéressantes: des membres du Département de Philosophie (Constantin Grecu, Viorel Colțescu, Ioan Biriș, Ionel Narița, Ilona Bîrzescu, Gheorghe Clitan, Alexandru Petrescu, Octavian Balintfi, Florin Lobonț, Florentina-Olimpia Muțiu, Claudiu Mesaroș), des membres du Département de Politologie (Gabriela Colțescu, Adrian Atanasescu, Adrian Basarabă, Lucian Vesalon), mathématiciens, physiciens, médecins (A. C. Albu, A. Zolog, D. C. Jianu, C. Ursoniu, M. Lăzărescu), et d'autres professeurs préoccupés par la problématique en discussion (I. Murariu, F. Lucaci). Les travaux communiqués ont été réunis dans le volume *Aspects de l'histoire et de la philosophie de la science*, coordonné par M. le professeur Constantin Grecu, docteur en philosophie, et publié aux Editions de l'Ouest de Timisoara.

La première édition de *L'École d'été en philosophie de Moneasa*, organisé par l'Université de l'Ouest de Timisoara – le Cercle *d'histoire de la philosophie* –, en collaboration avec l'Université «Vasile Goldis» d'Arad, Moneasa-Arad, 4-10 juillet 2001

L'Université de l'Ouest de Timisoara (le *Cercle d'histoire de la philosophie* – en collaboration avec l'Université "Vasile Goldis" d'Arad, a organisé, entre 4 et 10 juillet 2001, la première édition de *L'École d'été en philosophie de Moneasa*.

Les communications y présentées ont abordé le thème: *Philosophie et Postmodernité*. Ont présenté des travaux: Claudiu Mesaroș, Gheorghe Clitan, Florentina Muțiu, Lorena Armulescu, Simona Vucu, Adina Ștefănescu, Tudor Heredea, Ioan Timiș.

FORMS, LAWS AND ACTIVE PRINCIPLES: WHAT HAPPENED
WITH THE LAWS OF NATURE IN THE SCIENTIFIC
REVOLUTION?

Dana JALOBEANU
West University "Vasile Goldiș", Arad

1. The quest for a "new philosophy"

The beginning of the 17th century has been characterized by a continuous quest for a "new philosophy"¹ and a struggle to harmonize several of the traditional difficulties of the Aristotelian metaphysics with the constraints imposed by theology². The rediscovery of several ancient alternatives to Aristotelianism provided a fertile reservoir of ideas to be incorporated in the sincretic construct of Renaissance philosophies. Atomism, neoplatonism, hermetic philosophy, together with some other powerful influences such as skepticism and the revival of natural magic have been considered both as alternatives and as possible ingredients of a new "Aristotelian" synthesis³.

¹ Stephen Menn, (1998), p. 34, Copenhaver, Schmidt, (1992), p. 303-328. In most of the seventeenth century works on natural philosophy, metaphysics or even theology there is an increasing emphasis on the "new" as opposed to an "old" philosophy. The meaning of this "new" and "old" is not always straightforward: "new" philosophy does not mean usually more than "different" from traditional Aristotelianism. In this way hermeticism, neoplatonism and all brands of *prisca theologia* can be connected with the "new philosophy" as in Bacon, More, Newton. See for example Gaukroger (1991), Yates (1964).

² See, for example, Jolley, (1989), p. 363, Cunningham (1991), Osler, (1995), Osler (1994).

³ It was the purpose of Marsilio Ficino and the Florentine Academy, but also the declared purpose of Kepler's *Epitome of Copernican astronomy* (presented as a continuation of *De Caelo*). Similar attempts can be found in the

In natural philosophy, two issues had to be changed: the hylemorphic doctrine of natural bodies and the borders of the natural world. For centuries, the Aristotelian natural philosophy claimed that a substance is a composite of “form” and “prime matter”. Both „form” and matter are metaphysical principles, directing the becoming. All natural world is a composite of forms impressed upon matter. We can talk about bodies and substances only because their intelligible form has been impressed upon “matter”. Generation is the very process of “informing” matter. The disappearance of a substance/body means the disappearance of its form. Any change of state in a given substance (modifications of its dimensions, colour, temperature, place etc) constitutes *motion* and can be described in terms of a variation of forms in the same matter. In any given body there are many forms. One of them is the substantial form; without it the body will not be the same body anymore. Others are mere “accidents”. The modification of accidents accounts for “motion”. A tree can be big or small or can be just the seed of the future tree. In all cases, the substantial form is the same the “tree-ness”. In the case of man, his substantial form is the rational soul. Man is, in the last instance, a rational soul impressed upon prime matter and endowed with some other “accidents” (secondary forms).

This is, in short, the doctrine of hylemorphism which shaped natural philosophy up into the seventeenth century. Some of its shortcomings are obvious. One is the endless multiplication of substantial forms. Another is the possibility of distinguishing between the various forms of an unknown substance (as the magnet, or the result of an alchemical experiment) its substantial form. There is a large class of problems concerning the intension and remission of forms. What happens when a white body becomes whiter, for example, how can we describe that motion?

Of course, the most striking difficulties involve Aristotle’s explicit emphasis upon the inseparability of forms and matter. If the substantial form cannot have an independent existence, how can we explain the immortality of the soul? What is the soul, if not the “form” of the body? And if it is the form of the body, how can it be immortal? Is the human soul itself impressed on matter after the death of the body? Moreover, the “non-existence” of matter as such is no less problematic than that of forms⁴.

works of the representatives of Padovan school etc. Traces of rewriting Aristotle are obvious even in Descartes’s *Principles of Philosophy*.

⁴ Ariew, Gabbey, (1998), esp. p. 429-432, Osler, (1994), first chapter.

In the attempt to solve the previous problems, natural philosophers turned to ancient philosophical traditions different from Aristotelianism. The considerable success of Atomism may be explained as an answer to some of the previous difficulties. Atomism offered an entirely different structure of explanation founded upon the existence of ultimate material particles in motion and their coexistence with the “void” (a complementary principle and one of Atomism’s big flaws)⁵. Now a substance or a body is an aggregate of atoms with certain properties. It is not at all clear how many of the usual properties of bodies should be transferred to the microscopic realm of atoms. Generally speaking, a body is an aggregate of material particles and its properties should be reduced to similar or entirely different properties of its parts. Despite its appeal as a general description, the explanatory power of ancient Atomism is very limited⁶. First, it gives rise to various questions as: What keeps the atoms together? What are the properties of individual atoms? What is the explanation for the emergence of different properties of the aggregate of atoms⁷? Why many atoms put together have different properties than the single atom? Secondly, ancient Atomism is unable to explain the classes of phenomena previously described as “changes” in forms: the variation of the states of a substance, the variations in colours, temperature etc. In its ancient form, then, Atomism merely translates many of the traditional problems at the microscopic level.

It is relevant to stress how many new brands of Atomism appeared in the 17th century in an attempt to correct the previous mistakes⁸. There are “Aristotelian Atomists”⁹, Atomists who advocated the non-existence of void¹⁰, “mathematical Atomists”¹¹, “Neoplatonic atomists”¹² and “mechanical philosophers”. Therefore, Atomism is less a “new

⁵ See Descartes’ critique of the void in the second part of the *Principles of Philosophy* for a standard account of the 17th century “fear” of void. For the conceptual problems linked with the acceptance of the void see also Garber, Henry, Joy, Garber (1998), Sorabji, (1988) etc.

⁶ See M.B. Hall, (1963), p. 345-346.

⁷ J. Henry, (1986), M. B. Hall, (1963) etc.

⁸ See Garber, Henry, Joy, Gabbey, (1998).

⁹ Daniel Sennert, Jacoppo Zabarella etc. See Garber, Henry, Joy, Gabbey, (1998).

¹⁰ The most famous being Descartes which postulates the existence of three kinds of physical particles, insisting on the same time upon the indefinite divisibility of matter. See *Principles of Philosophy*, part II and III.

¹¹ As, for example Galileo. See Bechler, (1991), Garber et. Al (1998).

¹² Cambridge Platonists, Warner, Harriot, Hill. See Henry, (1982), Garber et.al (1998).

philosophy” than a label used for a large group of reformers of the Aristotelian philosophy in the direction of “materialism”. What most “Atomists” advocated was the independent existence of matter and its “uniformity”, homogeneity”, and divisibility. This “matter” is the “stuff” which actually constitutes the world. The number of atoms and their density is what counts as difference between substances and bodies, at least in principle. Unfortunately, most part of Atomistic theories which reject the forms and formal causality as well, were led into obvious difficulties concerning: the constitution of physical bodies, the problem of individuation of a physical body/substance, the intelligibility of the world (previously given by forms), and the preservation of the “essence” of a body through time¹³. As a result of these difficulties, new concepts of “matter” and bodies have been forged during the seventeenth century, with most of the “new philosophies” rejecting the hylemorphic vocabulary and especially the concept of “form”.

The second difficulty raised by the passage from the traditional philosophy to one of the new philosophies was the change in the meaning and borders of the natural world. Once the distinction between the celestial and the sublunary had been rejected, the whole object of natural philosophy changed. Now, the realm of nature and of the laws of nature extended to the celestial spheres and beyond, at questions concerning the relation between the Creator and its creation.

2. The “laws of nature” before the 17th century

The belief that God imposes laws on nature was by no means new at the beginning of the seventeenth century. Even the term “law of nature” can be traced back, at least to the twelfth century¹⁴. However, although being a part of the medieval disputations around God’s relations with the Creation, the laws of nature did not play any significant role in the explanation of the phenomena or in the “descriptions” of the world”.

Although there was a considerable consensus between the historians of “laws” in the past decades as to the origin and development of the concept before its appropriation by natural philosophy as the core

¹³ Jalobeanu, Brading, “All alone in the Universe: Descartes, Newton and the isolated individuals”, *PhilSci Archive*, 2002.

¹⁴ The origin and the evolution of the term “laws of nature” from late Middle Ages to 17th century was the subject of my MA dissertation, University Babes Bolyai, 1996.

of the scientific explanation, recent and more contextualized analyses tend to draw a very different picture of the importance and meaning of the “laws of nature”. The “classical” picture of Zilsel and Needham¹⁵ which insisted upon the political and legal origins of the term was strongly amended by several authors as Oakley (1961, 1998, 1999), Funkenstein (1986) and Osler (1994), pointing in the direction of theology and the reopening of several traditional theological debates concerning God’s omnipotence and wisdom.

As a matter of fact, the “laws of nature” were at the very core of one of the “intrinsic contradictions” of the medieval view of the world. As several authors pointed out¹⁶ the mediaeval synthesis contained two different conceptions of order and laws. The Greek conception of order emphasizes the interdependence of things and the isomorphism between the essences and the relations. As a counterpart, this conception accommodates a “natural law” immanent in the structure of reality¹⁷. The other conception of order, ascribed usually to the Semitic roots¹⁸ of the Christianity, stressed upon the imposed order, with the laws given by God “from outside” of the creation. Consequently, the later was consistent with a metaphysical theory of external relations. The laws of nature – God’s commandments – decided for – or were reduced at – imposed patterns of behavior at the level of individual bodies. As a consequence, the laws are more or less contingent and do not have a direct relation to the “essences” of things.

Roughly speaking, the seventeenth century marked the victory of the second view upon the first. At almost any level of intellectual elaboration, seventeenth century thinking emphasized the voluntaristic theological aspect of the laws of nature, and this was the meaning appropriated by natural philosophy. This is, by all means, a very peculiar thing, one that has not been sufficiently explained, so far. None of the contemporary explanations have been successful, to my knowledge, in explaining the paradox of a lawful universe subject to periodical or continuous, but purely contingent Divine interventions.

Is the “new” conception of the laws of nature as divine commandments imposed from outside on the material world particularly

¹⁵ Zilsel (1942), Needham (1956), vol II, p. 518-583.

¹⁶ See Whitehead (1937), (1993), Crombie (1996), Oakley (1961) etc.

¹⁷ Whitehead, (1937), p. 142, “Some partial identity of pattern in the various characters of natural things issues in some partial identity of pattern in the mutual relations of these things”. The “laws of nature” would be, then, the explicit formulation of these identities of pattern.

¹⁸ Oakley, 1961, p. 436-437, Funkenstein, 1986, Crombie, 1996.

compatible with mechanical philosophy? Can we say that mechanical philosophers had to consider a voluntaristic theology as a favorable context of their own ideas?

In an interesting analysis, Keith Hutchison¹⁹ shows how the program of mechanical philosophy involved a supernaturalistic ontology of action. Not only that mechanical philosophy was an ideal soil for a voluntaristic theology, but also, the intrinsic features of the mechanicism, as the emphasis upon the inertness of matter and the elimination of mediators, deprived the natural world of any source of “natural” activity. Indeed, for most of the seventeenth century natural philosophers, God is not only the guarantor of laws and order, but the only source of activity and power²⁰, as well as the Sovereign which actually and efficiently rules the Universe²¹. This attitude went hand in hand with the destruction of Aristotelian forms²² and with the radical transformation of the concept of matter.

Meanwhile, as the time went by, the concept of the laws of nature became more and more important. If it is still marginal in Bacon and of moderate importance in Boyle, the “laws of nature” are essential for Newton’s system. However, as I will show in this paper, not for the reasons commonly quoted. For both Descartes and Newton the main feature of the laws of nature is the fact that they are grounded in God’s ways of action into the world. It is probably the only striking similarity between the two. There are many more differences: the laws of nature are laws of conservation for Descartes and are grounded in Divine immutability. For Newton, the laws are local, mathematical and universal. No global conservation is imposed on the system of the world. However, in what follows I will try to investigate some of these differences in an attempt to show that there are other common presupposition behind the two main accounts on the laws of nature of the seventeenth century. Common presuppositions which involve a very peculiar and extremely non-modern way of conceiving the physical reality.

¹⁹ Hutchison, (1983), p. 297-334.

²⁰ See Hutchison, (1983), p. 299. “So, if the mechanical philosophy is righth in stripping matter of its Aristotelian qualities, and leaving motion as the sole remaining principle of corporeal activity, God must be intimately involved with every event in the material universe”.

²¹ Newton, *General Scholium*, Boyle, *An Inquiry*, Descartes’ king metaphor often used in his writings, as in the famous letters to Mersenne from 1630 etc.

²² See, for example, Van Ruler, (1996), Garber (1992), Garber (1987), Nadler (1993).

3. Descartes. Who is the subject of the laws of nature?

There are several very different interpretation with respect to the meaning and purpose of Descartes' laws of nature in his *The World* and in the *Principles of Philosophy*. At first sight, Descartes is the first to use the term with its modern meaning, speaking about "rules" or "laws" indistinctively. It seems also quite clear that the laws of nature are laws of conservation²³, connected with a global principle of conservation grounded in God's immutability²⁴. The claim is that they *follow* from God's immutability, having, at the same time, the same status as the created "eternal truths"²⁵. God could have chosen to create the world otherwise in its particulars, but Descartes claim that in all these possible worlds the laws of nature will be true²⁶. However, it is not at all clear in what way do they follow from God's immutability, nor on what basis is their character of conservation laws stand. Moreover, it is not clear what is the place of the "laws" in the general program. As Descartes said many times, the explanation of natural phenomena can be made in many ways according to the same set of laws. Special explanatory devices, hypotheses, are necessary in order to decide, from many possible ways in which things could be, the way in which things actually behave.

Therefore the laws of nature do not describe the real motions of the individual objects²⁷. First of all because between the phenomenal realm and the realms of laws, mathematical truths and intelligible principles there is an unbridgeable gap. Secondly, because in a plenum there are no material objects moving along straight lines or preserving their state of rest (there is no rest at all)²⁸. Thirdly, because in Descartes' universe

²³ See Wolhouse, (1993), (1994), McLaughlin (1993).

²⁴ See Descartes (1991), II, 37, p. 59. "Furthermore, from this same immutability of God, we can obtain knowledge of the rules or laws of nature"..., II, 39, p.60. "This rule, like the preceeding one, results from the immutability and simplicity of the operation by which God maintains movement in matter..." etc.

²⁵ See Osler, (1985), Osler, (1994), p. 137-138.

²⁶ *Discourse*, AT 6, p. 43. He doesn't say, though, that the laws will function in the same way in any possible world.

²⁷ Most of the commentators agree on this point, although they offer different account about what are the laws actually doing. See Allan (1995), Slowick, (1996), Garber (1993), Nadler (1990), Osler, (1985) etc.

²⁸ See Descartes (1991), II, 33, p. 56. "... no body cand move except in a [complete] circle [of matter or ring of bodies which all move at the same time]; in

the very existence of individual objects is problematic. What exists as such is an indefinite, homogeneous matter, without any other quality than extension. There is no “space” outside matter²⁹, and no void “inside”³⁰ it, and there is no clearly formulated “principle of individuation”³¹. Matter is, at least in principle, indefinitely divisible, so there are no atoms or ultimate particles³².

This brief sketch of the Cartesian Universe shows how different are his conceptions about “matter in motion” in comparison with ours or, as a matter of fact, with most of his contemporaries. No external space and no ultimate particles, but matter and motion and laws. Who is, then, the subject of these laws ?

3.1. *Laws describing the evolution of the Universe?*

At first sight, Descartes' purpose in introducing the rules or laws of nature in his early *The World* seems to be connected with a cosmological theory. Both the context and the structure of the treatise support such interpretation. The laws are part of the imaginary construction of a “new world”³³. Moreover, Descartes himself stressed that the laws are laws created by God in the beginning and that, through their action, the world evolved towards a state similar with the present one.

such a way that it drives another body out of place which it enters, and that other takes the place of still another, and so on until the last, which enters the place left by the first one at the moment at which the first one leaves it ...”.

²⁹ Woolhouse (1994).

³⁰ Descartes (1991), II, 16, 17, 18, p. 46-48

³¹ Garber (1992) for an extended demonstration on how Descartes fails to provide a principle of individuation. I've discussed the matter further in Jalobeanu, Brading (forthcoming). The subject and some interesting interpretations to it were analysed in a panel discussion organised by **The Research Group for the seventeenth century thought** and **NEC** on 23 April, 1999. I am grateful to all the members of the group for the seminars organised on the topic and for their valuable help. In what follows I will not enter the details of those analysis who were questioning the strong statements of Garber concerning the non-existence of a principle of individuation in Descartes.

³² Descartes (1991), II, 20, p. 48-49 etc.

³³ Descartes, AT XI, p. 32, Descartes (1985), vol I, p. 90.

“... for God established these laws in such a marvellous way that even if we suppose he creates nothing beyond what I have mentioned, and sets up no order or proportion within it but composes from it a chaos as confused and muddled as any the poets could describe, the laws of nature are sufficient to cause the parts of this chaos to disentangle themselves and arrange themselves in such a good order that they will have the form of a quite perfect world – a world in which we shall be able to see not only light but also the other things general as well as particular, which appear in the real world”³⁴.

The same kind of claim can be found later in the *Discourse*³⁵. Yet, the subsequent development of the argument in *The World* does not plainly support this view. In what way can the laws of nature “disentangle” parts of matter out of the initial chaos in order to create a structure? Descartes’ world is very close to a chaotical one even in the “last” stage of the alleged process of “disentanglement”. We still have a hollistic picture of the world, still no individual bodies but only geometrical shapes of variable dimensions. Moreover, the definition of motion is confusing. There is nothing in his model that can account for a dynamic picture of the world³⁶, and is debatable if we have a kinematics either³⁷. As a matter of fact, it has been pointed out that there are in Descartes *two* conceptions about motion: motion as inherent in bodies (in *The World*), and motion as a purely relational quantity. The only connection between them is that of inherent instantaneous tendency to

³⁴ AT XI, 34-35, Descartes (1985) vol 1, p. 90-91.

³⁵ Descartes, (1931), p. 106-109.

³⁶ Woolhouse, (1993) argues that the presence of two distinct definitions of motion in *The World* and *Principles of Philosophy* may account for the existence of a kinematical and a dynamical definition. The difference between the two passages he quotes (p. 87) consists in the presence of the “place” as a referential of movement in the so-called “dynamical definition” which states that the movement is a sort of action by which bodies pass from one place to another accupying in between all the intermediary positions. In fact, the only action involved here is a infinite number of collisions (some of them macroscopic, the other microscopic) in a fluid-type model (theoretically without pressure). See also Shea (1981), p. 33-34: “Cartesian motion is neither dynamic (involving consideration of force) nor kinematic (involving consideration of space and time) but merely diagrammatic (involving only considerations of space)”.

³⁷ The passages with the two definitions of motion are: in *The World*, chap.7, AT XI, 37-46, in *Principles of Philosophy* the main passage is II 25 with an obviously circular definition.

move in a straight line. In this way, the motion in a straight line acquires a special status. However, in the “real” holistic world there are no straight lines³⁸. Moreover, there can be hardly say to exist things like individual interactions and no individual motions³⁹. Each part of matter is always is always moved by the surrounded parts and imparts motion to all other “parts” of the world. However, each body has its own tendency to move in an instant, on a straight line. Why is so?

One reason is that there is something very special in the very essence of the motion in a straight line: the fact that it can be grasped in an instant⁴⁰. This means that Descartes’ understanding of motion is very peculiar. The motion is characterized by a *number*, the speed at a given instant and a *direction*, its tendency to move in a straight line. The first law talks about the conservation of that number⁴¹, and the third (second law in the *Principles of philosophy*), about the tendency to move in a straight line⁴². For a special class of motions, the motions in a straight line, those two laws are only one, our (or rather Newton’s) modern formulation of the law of inertia. But there are no motions in the straight line in the Descartes’ universe since

“no motion ever take place which is not circular” (AT XI; p.20).

³⁸ AT XI, 18, Descartes (1985) vol 1, p. 86.

³⁹ See Jalobeanu, Brading, *Op. cit.*, and also Daniel Garber 1993, 1987.

⁴⁰ AT XI, 41.

⁴¹ Descartes, (1991), II, 37, p.59. “The first law of nature: that each thing, as far as is in its power, always remains in the same state; and that consequently, when it is once moved, it always continues to move.” It has to be said, however, that the conservation of “state” comprises some other “elements” as the size, the shape and even the “force”. See *The World*, where the first law reads: “... each individual part of matter continues always to be in the same state so long as collision with others does not compel to change that state. That is to say, is the part has some size, it will never become smaller unless others divide it; if it is round or square, it will never leave that place unless others drive it out; and if it has once began to move, it will always continue with an equal force until others stop or retard it”.

⁴² II, 39 “The second law of nature: that all movement is, of itself, along straight lines; and consequently, bodies which are moving in circle always tend to move away from the center of the circle which they are describing”. There is a different formulation in *The World*: “when a body is moving, even though its motion for the most part takes place along a curved path ... yet each of its individual parts tend to continue its motion in a straight line. And so their action, that is the inclination they have to move, is different from their motion”.

Why talking about straight lines, then, at what is the significance of the “law of inertia”?

Another reason why “the motion in an instant” is important is from the perspective of the laws of nature as laws of conservation. The conservation of the total quantity of motion in the universe, granted in God’s immutability (II.36) has a striking feature. God’s continuous action of preservation is an instantaneous action:

“... this rule ... depends solely on God preserving each thing by a continuous action, and consequently and his preserving is not as it may have been some time earlier but precisely as it is at the very instant that he preserves it”⁴³.

Therefore, what God is preserving is the tendency to move in a straight line and, moreover, he creates only linear movement. Every curved motion is due to the imperfect quality of matter. However, in the light of its relational definition of motion in the *Principles of Philosophy*, the previous passage loses entirely its meaning. What remains, however, is a strange definition of an instantaneous tendency to move which will not represent the actual motion, but which has in itself all the elements of a definition of motion: speed and direction. Meantime, the “real” motions are almost entirely relational. There is no intrinsic speed (but there is an intrinsic tendency to move, and moreover, there is still the conservation of the total quantity of motions in the world).

Therefore, the laws of nature do not describe the dynamics of this Universe or its parts, nor its “global evolution” from an “initial” to an “actual” state.

3.2. ***Can there be laws of “matter”?***

In *The World*, as in the *Principles of Philosophy*, Descartes suggested that “the nature”, subject to the laws is, properly speaking, matter. But in addition to this we find a rather peculiar specification:

“Note, in the first place, that by ‘nature’ here I do not mean some goddess or any sort of imaginary power. Rather, I am using this word to signify matter itself, in so far I am considering it taken together with all qualities I have attributed to it, and under the condition that God continues to preserve it in the same way that he created it. For it follows of necessity, from the mere fact that he continues thus to preserve it, that there must be many changes in

⁴³ Descartes AT XI, 41.

its parts which cannot, it seems to me, properly be attributed to the action of God (because that action never changes), and which therefore I attributed to nature. The rules by which these changes take place I call the 'laws of nature'⁴⁴.

I have quoted this paragraph at length because it displays some of the most striking features of Descartes' construction. First of all, the meaning of matter here is quite awkward:

"all the qualities attributed to it"

means here extension; in addition, the condition that God continue to preserve matter in the same way that he created it is a very strong claim that imposes not only direct and continuous divine creation, but seems also to imply that this creation is a new creation of the Universe in any instant⁴⁵.

And now we touch upon main problems raised by this model. The first one concerns the material "stuff" submitted to the laws: with such a definition, the laws of nature do not act directly upon the world, or the extended substance, or the individual bodies. The very definition of matter (see also Pp. P.II) as extension has as a consequence the impossibility of defining any particular body. What we have in the Cartesian world are only geometrical boundaries and a geometrical movement.

The second problem put forward by the previous quotation concerns the relation between the action by which God preserves the same amount of matter in motion in the world and the claims that there are changes in the world's "parts" that cannot be attributed directly to God. It is important to stress that the general picture of the laws of nature is centered upon the fact that they are imposed from outside on the extended and completely passive matter. They do not act, however, on the actual configuration on matter, on the actual shapes and forms. However, *any* of the possible part of matter – geometrical shape – if left by itself would be a potential subject of the laws (or, at least, of the second law of *Principles*). And, if we look at the world in an instant, there is something about the laws which gives us the intelligibility of the present state.

3.3. *Is God the only subject of the laws of nature?*

⁴⁴ *The World*, chap. 7 AT XI, 37, Cottingham, I, 93

⁴⁵ See *Principles*, II, 36, 39, 40, I, 26 and the argument from the *Third Meditation* in the next paragraph.

One of the most quoted excerpts of the *Third Meditation* reads:

“All of my life can be divided into innumerable parts, each of which is entirely independent of each others, so that from the fact that it existed a short time ago, it does not follow that I ought to exist now, unless some cause as it were creates me again in this moment, that is, conserves me”.⁴⁶

There are two important aspects here. First of all, one can argue that this is a strong argument of the non-existence of any source of causality in the physical world. As a consequence, one can adopt the occasionalist position in interpreting Descartes' ideas on the issue⁴⁷. Secondly and more importantly at this stage of our analysis, the quoted passage is a powerful expression of the equivalence between creation and conservation. The very same passage continues with a clear statement of the said equivalence:

“It is as a matter of fact perfectly clear and evident to all those who consider with attention the nature of time, that, in order to be conserved in each moment in which it endures, a substance has need of the same power and action as would be necessary to produce and create it anew, supposing it did not exist; so that the light of nature shows us clearly that the distinction between creation and conservation is solely a distinction of the reason.”

The same position can be found in *The World and the Principles of Philosophy* (II.36). As consequences, thinking substance and extended substance are in fact both excepted from the real action of the laws of nature, being the subject of the direct and permanent divine action. Moreover, these do not represent a dynamical evolution but an instantaneous preservation of a tendency of movement⁴⁸. Accordingly, what is really determined is the inertial rectilinear motion, the only one that needs only an instant to be “fully grasped”. As a result, what we have is in the end a sort of a dualistic picture of the Universe in which the connection between the two separated substances is given by God's

⁴⁶ AT VII, op.49.

⁴⁷ There are numerous occasionalist interpretations of Descartes. The most recent ones are Garber, 1992, 1993, Nadler, 1994.

⁴⁸ AT IXB, 62. “For HE always preserves the motion in the precise form in which is occurring at the very moment when he preserves it, without taking any account of the motion which was occurring a little earlier ...”.

instantaneous re-creations of the whole universe in an instant (including my mind).

I think it is extremely difficult to find a coherent explanation for this contradiction. On one side, we have matter in motion in an evolving Universe set in motion at the beginning and governed by the laws of nature – the picture which clearly appeared in the beginning of *The World* and *Principles*. On the other side, we have the successive instantaneous creation of the world.

I suggest that a possible way to look at this contradiction be through the purposes, not the achievements of the theory.

The infinite multiplicity of God's creation may be seen as representing an infinite number of possible worlds, organized upon the same basic rules (conditions of possibility). In the same time, each of these worlds, left to itself, has a tendency to evolve in the evolutionary way determined by the particular model presented in *The World*. The divine action of conservation represents, then, not a change in one of them, but a creation of a new world in the very moment in which the previous one start to deteriorate, because of the imperfect quality of its matter.

In other words, what God is preserving through the limitation of his own power is not the phenomenal realm but the very intelligibility of the world. The laws of nature represent the preconditions for the world to *be* intelligible (and not to *look* intelligible). All the other aspects of the reality are contingent in the sense in which there are many possible worlds exhibiting very different phenomena. The laws of nature, although contingent on the will of God as the mathematical truths (or other "eternal truths) are nevertheless the only possible laws of nature for an intelligible world. In this respect, then, the laws of nature completely replaced the Aristotelian forms as the preconditions of an intelligible world and then, as preconditions of any possible physical theory.

There is, I think, however more in Descartes' laws of nature than this. In order to understand it, though, we need to ask why does he need a cosmological story to begin with in order to introduce the laws of nature?

3.4. *The meaning of Descartes' cosmology: is there a place for the laws of nature in the physical universe?*

As we saw already, both in *The World* and in the *Principles of Philosophy*, Descartes' introduction of his laws of nature occurs in the context of a theory concerning the structure of the physical world. He claims that his laws of nature follow from his global conservation

principle, grounded in God's immutability⁴⁹. Several commentators have said that there is no logical route from the global conservation principle to the laws of nature seen as laws (of motion) for parts of matter⁵⁰. The issue of the connections between God's immutability, the global conservation law and the conservation laws applying to the parts of matter is considered to be problematic⁵¹ indeed, because, for example, from the fact that God is conserving the global state of the universe it does not follow that the laws are conservation laws. However, I think that there is a way in which we can consider that the laws of nature "follow" from a global conservation principle and also they are laws of conservation and this is *by analogy*.

In order to explain the fact, I suggest to start from considering that the question of individuation as a possible key to the interpretation of Descartes' conservation principles. I have argued elsewhere⁵² that Descartes attempts to individuate bodies over time by a conservation principle applying to the state of the body. What the first law states is that, due to God's immutability and veracity we are living in a Universe in which "the state" of each part of matter is "naturally" preserved through time. The state of a body is characterized by its shape and its motion, and hence individuation of a given part of matter is achieved by appeal to conservation principles for extension and motion. The second law of nature is that at a given instant each part of matter, *of itself* (from its own nature) tends to move on a straight line. Therefore, the instantaneous direction of motion, Descartes' *determinatio*, might be seen as an

⁴⁹ "For it follows of necessity, from the mere fact that he continues thus to preserve it, that there must be many changes in its parts which cannot, it seems to me, properly be attributed to the action of God (because that action never changes), and which therefore I attribute to nature. The rules by which these changes take place I call the 'laws of nature'".

⁵⁰ The first problem is that no specific claim about any individual part of the universe follows deductively from a global conservation law. This problem has been widely discussed. See for example Barbour, (1990), *Op cit.*; Stephen Gaukroger (1995), Zev Bechler (1991), Garber (1992), *Op cit.*

⁵¹ Another connected problem is the status and the object of the laws of nature. What is the subject of Descartes' laws of nature? Bodies? They don't exist. Arbitrarily delimited parts of matter? The universe as a whole? God imposing rules for the intelligibility of the world? On the status of Descartes' laws of nature see McLaughlin, (1993), Daniel Garber, (1993), 105-133, Edward Slowick, (1996), p. 187-205.

⁵² Jalobeanu, Brading, *Op.cit.*

attempt to characterize a given individual feature of a “body”. It is obvious that this determination is not unique, but nevertheless, the conjunction between the previous two laws might be seen as an attempt to state what a body really is in this peculiar Universe. Now, the interesting fact is that the same account may be applied to the universe as a whole. What is preserved for the individual parts of the world – extension⁵³ and quantity of motion – is the same as what is preserved for the universe as a whole. In this case, the total quantity of motion is the quantity of motion that God put into the universe at the beginning⁵⁴. The conservation of the indefinite extension and the total quantity of motion over time are grounded in the immutability of divine *action*⁵⁵. This is the way in which God guarantees that the universe at any given instant is the same universe as at the previous instant. Thus the universe as an object of our knowledge is given by the global conservation principle which allows us to move from the intelligibility of matter in motion to a world existing through time. This claim is supported by the fact that Descartes introduces his conservation principles at the point in his argument where he needs to provide the object of his physics: the universe.

The global conservation principle gives the conditions for the universe to be an object of Descartes' knowledge; the conservation laws for the parts of matter similarly give the conditions for these parts of matter to be physical bodies. The route from the global conservation principle to the conservation laws for the parts of matter is not intended to be deductive; it is an analogy based on God's immutability and the intelligibility of the world. Although the relation of analogy is logically symmetric, the global conservation principle has ontological priority, and it is in this sense that by means of the

⁵³ The problem of what shape is and its relation to extension according to Descartes is problematic. He discusses this in his account of rarefaction and condensation which is found in *Principles of Philosophy* II, 6-7. He associated a measure (that is, extension) to shape in *Principles of Philosophy* II, 8, and he equated it with quantity in *Principles of Philosophy* II, 9.

⁵⁴ In *The World* Descartes seems to leave open the possibility of multiple worlds, and on this account if God puts a different total quantity of motion into the world this would suffice to make it a distinct world. In the *Principles of Philosophy* (II.39) he insists that God preserves the quantity of motion as it is at that very instant.

⁵⁵ I will not discuss the problem of having a well-defined quantity of motion for the universe as a whole when that universe is indefinitely extended.

analogy the conservation laws for the parts depend on the global conservation principle.

4. Newton's cosmology, laws of nature and God's way of acting into the world

The general opinion of those who saw in Newton the "father figure" of the modern science agreed upon the fact that he "discovered" the laws of nature. In what follows I am interested in a very specific problem, but one of the problems which bear the mark of an ongoing debate. What laws of nature did Newton discover, why didn't he call them "laws of nature" and in which contexts he did use the phrase?

The usual interpretation is that Newton's three laws of motion from its *Mathematical Principles of Natural Philosophy* are his "laws of nature". It is a common enough inference even between Newton's followers, especially by comparison with Descartes' laws. However, there are several important difficulties in the way of this interpretation. Newton never called the laws of the *Principia* "laws of nature"⁵⁶. Moreover, he explicitly stated several time their passivity in opposition with the activity or the capacity of creation of the active principles⁵⁷. In addition, the laws of motion of the *Principia* are not the only possible laws of motion. Other types of physical interactions might have a different set of the laws of motion⁵⁸.

Another serious candidate to the status of the law of nature is the law of universal attraction. Again, there is no mention of "laws of nature"

⁵⁶ In the first edition of the *Principia* they are labelled hypotheses.

⁵⁷ See for example *Letters to Bentley, Letter IV*, Cohen, p. 310, draft for Query 23, UCL Add 3970 fol 619r, cited by MCGuire (1968), p. 171. "Whence it seems to have been an ancient opinion that matter depends upon a Deity for its (laws of) motion as well as for its existence. The Cartesians make God the author of all motion & its as reasonable to make him the author of the laws of motion. Matter is a passive principle & cannot move itself. It continues in its state of moving or resisting unless disturbed. It receives motion proportional to the force impressing it, and resist as much as it is resisted. These are passive laws & to affirm that there are no other is to speak against experience. For we find in ourselves a power of moving our bodies by our thought. Life and will (thinking) are active Principles by which we move our bodies & thence arise other laws of motion unknown to us".

⁵⁸ See especially the *Queries of Opticks* (23, 31) and the projected "Conclusion" of the *Principia* for Newton's program.

in *Principia* in connection with gravitation, despite the opinion of the most part of Newton's disciples and followers.

And finally, when Newton did use the term "laws of nature" was for designating the special sources of activity in the world, at variance with the very principles of the mechanical philosophy.

In short, the problem is the following: Newton's followers understood by Newton's "laws of nature", mainly his law of universal attraction. The meaning of the "laws of nature" was, as we shall see "God's commandments for the world". In the meantime, Newton never called his theorems concerning gravitation from the *Principia* laws of nature or referred to them in this way. The following generations of Newtonians tend to attribute the status of "laws of nature" rather to the laws of motion⁵⁹, explaining their importance and unifying powers. As the scientific conception prevails and the science evolved, the concept of "laws of nature" lost its old meaning, connected with God's power and ways of intervention into the world. But this was the meaning when Newton has been working on his theory⁶⁰.

4.1. *Is universal attraction a law of nature?*

It is striking that Newton's main discovery, the result for which he was universally praised do not appear as a law of nature at all. In the third part of *Principia*, the universal attraction between celestial bodies is the subject of some Theorems. There is no mention to such thing as a law in connection with gravitation. There are numerous attempts to explain this peculiarity. Some of them claim that Newton's avoidance of the term is connected with his polemical intentions against the Cartesians⁶¹. According to others, Newton wants to prevent the

⁵⁹ Maybe in some connection with the fact that Descartes' laws of nature were similar. But of course, Descartes was wrong. His law of inertia is one of the few valid things that Newton knew to pick up and develop. In this respect, as others, Newton was right; although, afraid of a comparison with Descartes' metaphysics and trying to keep out of philosophical grounds, he avoided the term in *Principia*. All along this line are several influential interpretation of Cohen and Koyre.

⁶⁰ See a longer version of this in Dana Jalobeanu, "The place of the laws of nature in the conceptual structure of the Scientific Revolution", in *New Europe College Yearbook*, 2001.

⁶¹ Koyre's Newtonian Studies, Koyre, « La gravitation universelle de Kepler a Newton », *Archives internationales d'histoire des sciences*, 4/1951, p. 638-652.

interpretation of his force of attraction as an occult quality⁶². Knowing that he couldn't provide a mechanical explanation, he is trying to smuggle in the third book the physical theory of universal attraction as a series of propositions and theorems⁶³. However, none of these explains the fact that there are places in which Newton speaks of the laws of nature. And there are interesting passages in which even the avoidance of the term might tell us something about Newton's meaning of the term.

Let us start first with the relevant passages from the *Principia*. Proposition VI in Book III reads:

That all bodies gravitate towards every planet; and that the weights of bodies towards any one planet, at equal distances from the center of the planet, are proportional to the quantities of the matter which they severally contain.

This is, of course, the result of a constructional strategy which starts from two-bodies interaction (Earth-physical body, Earth-the moon) and generalizes the result⁶⁴. Until so far we have nothing more than the replacement of the centripetal force from the first part with "attraction"/gravitation. The next step is the problematic one, because it ascribes a property, "gravitation" to any body whatsoever (regardless of the configurations in which they exist, their size etc)⁶⁵.

Proposition 7, Theorem 7:

That there is a power of gravity pertaining to all bodies, proportional to the several quantities of matter which they contain.

That all the planets gravitate one towards another, we have proved before; as well as that the force of gravity towards every one of them, considered apart, is inversely as the square of the distance of places from the center of the planet. And thence, (by Prop. 69

⁶² I.B.Cohen, 1997, p. 571-595.

⁶³ De Gandt, (1993).

⁶⁴ Jalobeanu, Brading, *Op.cit.*, Jalobeanu, "The place of the laws of nature...", *New College Yearbook*, 2001.

⁶⁵ As a matter of fact there are more than one problematic step. As it was pointed out by Bechler (1991), p. 355-356, Newton's use of the Law III (for example in Proposition V) is possible only if gravitation is a direct action. If attraction is transmitted to some mechanical ether, the central body does not act directly on its satellites and, therefore, does not gravitate towards them. Bechler also emphasizes the fact that the continental critics of Newton were directed along these lines.

Book 1 and its Corollaries) it follows that the gravity tending towards all the planets is proportional to the matter which they contain.

Moreover, since all the parts of any planet *A* gravitate towards any other planet *B*; and the gravity of every part is to the gravity of the whole as the matter of the part to the matter of the whole; and (by Law III) to every action corresponds an equal reaction; therefore the planet *B* will, on the other hand, gravitate towards all the parts of the planet *A*; and its gravity towards any one part will be to gravity towards the whole as the matter of the part to the matter of the whole".

There are a lot of ambiguities in these passages. First, gravity is described as "power" pertaining to all bodies; it is a force which reside only in matter and has a universal character. But what is gravity, if not an essential property of matter? We can see that the quoted passage opens several questions at once: What is gravitation? Does gravitation inhere in bodies? What is the cause of gravitation (attraction)? Why is the "law of universal attraction" presented as a simple proposition?

I am not attempting to solve any of these problems in the present paper; they have been extensively discussed by almost all the scholars in the field. What I am suggesting is that their existence might be the cause which prevents Newton to use the term "law of nature" in connection with gravitation in Principia. His famous passages concerning hypotheses might be seen in a different perspective if they are paralleled by examples of a suppressed association between universal gravitation and the term "laws of nature". I found one such example in a draft for the General Scholium⁶⁶, which reads:

"From the phenomena it is very certain that the gravity is given and acts on all bodies according to the laws described above in the proportion to the distances, and suffices for the motions of Planets and Comets and thus it is a law of nature although it has not been possible to understand the cause of this law from the phenomena. For I avoid hypotheses, whether metaphysical or physical or mechanical or of occult qualities".

I consider that the omission of this equivalence between gravity and "law of nature" in the published General Scholium is highly significant for Newton's idea about what a law of nature should be. Far from ascribing the character of law to gravity, Principia and the General Scholium insist

⁶⁶ Hall and Hall, p. 353, Draft A, MS Add 3965 fols 357-358.

on its mathematical character⁶⁷. This might suggest the form and the purpose of the concept for Newton: the laws of nature must have a causal status and must refer to one of the "first" or "general" causes responsible for the existent frame of the world. The law of universal attraction is not a law of nature because we don't know the cause of gravitation. This might suggest us that once we discovered it, that causal statement would be a law of nature. Therefore, Newton's various imaginative devices to explain/find the cause of gravity might be seen as a quest for the laws of nature.

4.2. **Gravitation and activity**

At various stages in his life, Newton proposed different devices for explaining the cause of gravitation. As several authors already pointed out, although the most enduring mechanism in Newton's attempts to explain gravitation was ether, there are several meanings Newton used for ether during his life⁶⁸. Some other hypotheses were connected with alchemy. What all these have in common is a "source of activity" separated from the passive matter. The ultimate source of this activity is God, acting in the world through some mediators. I think it is relevant that although all these explanations are dependent on God's creation and "maintenance", none of them postulate the direct divine intervention in the Descartes' way, for example. Newton's God is always manifesting his actions through mediators, and as we shall see, this is one of Newton's "principles of philosophy" (and theology, as a matter of fact).

Some of the key passages concerning active principles and the laws of nature are to be found in Newton's *Opticks*: laws of nature are active principles or results of active principles.

⁶⁷ See especially Book I Section IX, Book one, "Definitions", Definition VIII: I likewise call attraction and impulses, in the same sense, accelerative and motive; and use the words attraction, impulse or propensity of any sort toward a center promiscuously, and indifferently, one for another; considering those forces not physically, but mathematically... See also, *The System of the World*, In *Principia*, *Op.cit.*, p. 559.

⁶⁸ See especially A. R. Hall, (1993), L. Rosenfeld, (1969), p. 29-37. L. Rosenfeld strongly emphasize the difference: "This superficial resemblance should not mislead us to any facile conclusion, for the ether of Newton's later years, such as he describes it in the *Queries*, is radically different from the medium bearing the same name, to which, in his youthful speculations, he assigned such a prominent role in the economy of the universe." (p. 30).

It seems to me, further, that these particles have not only a *vis inertiae*, accompanied with such passive laws of motion as naturally result from that force, but also that they are moved by certain active principles, such as is that of gravity, and that which causes fermentation, and the cohesion of bodies. These principles I consider, not as occult qualities, supposed to result from the specific forms of things, but as general *laws of nature*, by which the things themselves are formed; their truth appearing to us by phenomena, though their causes be not yet discovered.⁶⁹

I consider this definition and its place in the context highly meaningful. If the laws of nature are active principles, they are beyond mechanical explanation (or beyond the mechanical explanation Newton was able to offer). They are active and creative and they are obviously connected with the microscopic realm. If the law of universal attraction has something to do with the laws of nature (active principle) this could be only at the microscopic level of some intermediary device which is responsible for its production. I would suggest that we have here a possible delimitation between two separate realms of being: the macroscopic and mechanical world of the celestial mechanics in which the existence of gravitation is enough for us to make sense of the order and design of the Universe, and the microscopic world of continuous creation and active principles, an alchemical laboratory of Nature. Although the very meaning of “active principles” for Newton is still highly problematic and can vary from one period to another, there are some common characteristics of the concepts which prove to be useful in this context⁷⁰. Active principles are the causes of motion and sometimes are required to conserve the motion.⁷¹

“For we meet with very little motion in the world besides what is owing to these active principles & therefore we ought to enquire diligently into the general Rules or Laws observed by nature in the preservation or production of motion by these principles as the Laws of motion on which the frame of Nature depends & the genuine principles of the Mechanical Philosophy.”

⁶⁹ Query 31, *Opticks*.

⁷⁰ For a more detailed discussion and a genealogy of the term see Jalobeanu, *Op.cit.*

⁷¹ Drafts of Query 31 and Query 31

Moreover, active principles are causal agents and constitute the basis of an explanation⁷². As such they are linked with the cause of gravitation⁷³ and held to be responsible for the cohesion and formation of bodies.

There are therefore agents in Nature able to make the particles of bodies stick together by very strong attractions. And it is the business of experimental philosophy to find them out⁷⁴.

Moreover, in his attempt to explain the formation of physical bodies Newton states beyond any doubt the very possibility of the action at a distance in the microscopic realm. What is striking indeed in the following passage is that there is no restriction for action at a distance. Newton's claim is that "it is well known" that bodies act one upon another at a distance in the case of gravitational attraction, electricity and magnetism. By virtue of analogy, there might be attractive powers at any level. As a conclusion, then, the task of the natural philosopher is to find the attractive forces which act in nature and the subsequent laws of motions.

"Have not the small particles of bodies certain powers, virtue or forces, by which they act at a distance, not only upon the rays of light for reflecting, refracting and inflecting them, but also upon one another for producing a great part of the of the phaenomena of Nature? For it is well known that bodies act upon one another by the attractions of gravity, magnetism and electricity; and these instances show the tenor and course of Nature, and make it not improbable but that there may be more attractive powers than these. For Nature is very consonant and conformable to herself"⁷⁵.

Another interesting feature of active principles is the way in which they are involved in mediating Divine interventions into the world. In his third letter to Bentley⁷⁶ Newton says:

It is inconceivable that inanimate brute Matter should, without the Mediation of something else, which is not material, operate upon,

⁷² As in its famous letters to Bentley, "Gravity must be caused by an agent acting constantly according to certain laws: but whether this agent be material or immaterial", I have left to the consideration of my readers.

⁷³ *Query 28*.

⁷⁴ *Opticks*, 1717, p. 369.

⁷⁵ *Opticks*, *Query 31*, p...

⁷⁶ *Letter III*, p. 301, p. 303.

and affect other Matter without mutual Contact, as it must be, if Gravitation in the sense of Epicurus, be essential and inherent in it.⁷⁷

The mediation is done by “an Agent acting according to certain Laws” and through this mediation distant bodies act upon each other⁷⁸.

Now, putting together passages from the letters to Bentley and later optical Queries, the picture becomes complete. An active principle is the cause of gravity; therefore active principles must be “material or immaterial” agents of mediation. They act according to “certain laws” imposed by God in the beginning and as such they are the laws of nature. It is not clear if there is one active principle which is causing gravity or there are many active principles acting undifferentiating as divine Agents through the Creation. What we can say, though, is that for Newton there are active principles concerning vegetation, fermentation, life i.e., the “continuous creation of matter”⁷⁹, the cohesion of bodies and so on. I think this is still an open question if the active principle concerning gravity is of the same kind or not. A further exploration of these issues will involve the *potentia absoluta* / *potentia ordinata* discussion, but it might prove itself extremely valuable for coming to terms with Newton’s cosmological picture.

To conclude for the moment, we have seen that the laws of nature are active principles and the active principles are God’s Agents into the world. This suggests that we shall look in Newton for a hierarchy of laws of which the laws of nature constitutes only one level, but one that is still active and causal, as opposed to the passive level represented by the laws of motion.

There are, however, several important questions that need to concern us here. What is the connection between the laws of nature and the laws of motion? Can we discover the laws of nature? And, most important of all for the understanding of Newton’s Principia, what is gravitation?

In an unfinished but extremely interesting manuscript⁸⁰, Newton draws the whole hierarchy of phenomena, experiments, principles and laws. We can find here that Newton is listing gravity among the

⁷⁷ and the continuation of the passage!

⁷⁸ *Letter III*, p. 301. Newton’s definition for attraction is: “any force by which distant Bodies endeavour to come together without mechanical Impulse”. See also John Henry (1994).

⁷⁹ *Query 31* etc. Nature might be alive ...

⁸⁰ J.E McGuire, (1970), Newton’s “Principles of Philosophy”: An intended Preface for the 1704 *Opticks* and a Related Dreaft Fragment, *BJHS*, 5, 178-186

Principles of his natural philosophy⁸¹, together with God, the impenetrability of bodies and the existence of atoms. This might be an interesting hint, and if we reconstruct the previous analysis from an epistemological point of view, we will get a very different picture.

Newton's methodological approach in the principles of philosophy is coherent with his Rules of reasoning in Principia. We should proceed from experiments to theoretical conclusions, which, in turn, should be amended by further experiments. In this way, our domain of study is extended. But eventually we have to stop. We will do this only when we will be able to delimitate a complete domain of phenomena.

“And there is no other way of doing any thing with certainty than by drawing conclusions from experiments & phaenomena until you come at (such) general Principles (as are) & then from those Principles giving an account of Nature. Whatever is certain in Philosophy is owing to this method & nothing can be done without it⁸²”.

We can recognize here Newton's general research program. We can also understand in what way is gravitation a principle. The principles are neither laws of nature, nor laws of motion, but epistemological devices, which allow an end point for our quest. They might have unknown causes, and they cannot be tested directly, but they are considered by virtue of their unifying power. Our search which starts from “phenomena” has as its purpose the unification of the visible appearances in a theoretical structure of a special hierarchy. The way to go is from phenomena to forces. Newton's forces have ontological reality – on a higher degree than phenomena – and the search for the most fundamental forces in nature is the beginning of natural philosophy. Each force is responsible of a definite range of phenomena and has an associate set of laws of motion. Subsequently, he laws of motion are the least general unifying rules for the visible phenomena. There is an ontological difference between the laws of nature and the laws of motion.

In other words, in Newton's general scheme God is always acting in the world through active principles, but what we experience are only forces and the phenomena they are producing. The mathematical

⁸¹ A third principle is that all (the great) bodies in the Universe have a tendency towards one another proportional to the quantity of matter contained in them & that this tendency in receding from the body decreases & is reciprocally proportional to the square of the distance from the body...

⁸² *Op. cit.*

relations between the forces and the produced phenomena are the laws of motion. The laws of nature are, presumably, the relations between the active principles and what we perceive as forces. The domain of our certain knowledge is limited. We don't know the laws of nature and we cannot see the active principles. God's actions in the world are invisible and unknowable. What we can see and discover are forces of different kind and, through Newton's method, we can delimitate with accuracy their actions and the corresponding laws. What we would call today the main interactions are "principles": they define and delimitate a special domain of activity. As a matter of fact, gravity is the only discovered "principle". Newton's schema provides a place for other principles also, as the last paragraph of the General Scholium is showing.

With this, the hierarchy of laws is completed. Instead of the old "laws for nature" and replacing the Cartesian laws of conservation, what we can find in Newton's program is a complex ladder of law-like statements. Only a part of them are properly speaking laws of nature, namely God's commandments concerning the constitution of the world. Ironically enough, this core-meaning, of utmost importance for Newton's scheme is swept away by the subsequent transformations of the Scientific Revolution. The law-like universe of modern science is born from a peculiar movement of throwing away its very basis: the early modern laws of nature, grounded in God's immutability and mediating God's own interventions into the world.

Bibliography:

Roger Ariew and Allan Gabbey (1998), "The Scholastic Background", in Daniel Garber and Michael Ayers, eds., *The Cambridge History of seventeenth century philosophy*, Cambridge University Press, p. 425-453.

Zev Bechler, (1991) *Newton's Physics and the Conceptual Structure of the Scientific Revolution*, BSPS, Kluwer.

I. B.Cohen (1997), "Newton's Third Law and Universal Gravity", *JHI* 48, p. 571-595.

Descartes, (1991) *Principles of Philosophy*, translated by Valentine Roger Moller and Reese P.Miller, Kluwer.

Descartes (1964-74), *Oeuvres de Descartes*, ed. Charles Adam and Paul Tannery, New edition, 11 vol, Paris, CNRS/Vrin (Original edition, Paris, CERF, 1897-1913).

Descartes (1984-91) *The Philosophical Writings of Descartes*, ed. and trans. John Cottingham, Robert Stoothoff, Dugald Murdoch, Anthony Kenny, 3 vols., Cambridge, Cambridge University Press.

B. J. T. Dobbs (1991) *The Janus Face of Genius: The role of Alchemy in Newton's Thought*, Cambridge University Press

B.J.T. Dobbs (1982), "Newton's alchemy and his theory of matter", *ISIS* 73, p. 511-528.

B. J. T. Dobbs (1988), "Newton's Alchemy and his 'active principle' of gravitation", in P. B. Scheuer, G. Debrock, *Newton's Scientific and Philosophical Legacy*, International Archives in the History of Ideas, 123, Dordrecht, p. 55-80.

F. De Gandt, (1993), *Force and Geometry in Newton's Principia*, Cambridge Mass.

Daniel Garber, Michael Ayers, eds. (1998), *The Cambridge History of the Seventeenth Century Philosophy*, Cambridge University Press, vol 1-2.

Daniel Garber, John Henry, Lynn Joy and Allan Gabbey, "New doctrines of motion", in Garber and Ayers eds., (1998), p. 553-623.

Daniel Garber, (1992), *Descartes' Metaphysical Physics*, Chicago, University of Chicago Press.

Daniel Garber (1993), "Mind, Body and the Laws of Nature in Descartes and Leibniz", *Midwest Studies in Philosophy*, 8, p. 105-133.

Daniel Garber, (1987), "How God Causes Motion: Descartes, Divine Sustenance and Occasionalism", *Journal of Philosophy*, 84, p. 567-580.

Daniel Garber, (1993), "Descartes and Occasionalism", in S. Nadler, ed. *Causation in Early Modern Philosophy*. University Park, Pa: Pennsylvania State University Press, p. 9-26.

John Henry, (1982), "Atomism and Eschatology: Catholicism and Natural Philosophy in the Interregnum", *BJHS*, 15, p. 211-239.

John Henry (1986), "Occult Qualities and the Experimental Philosophy: Active Principles in pre-newtonian matter theory", *History of Science*, 24, p. 335-373.

John Henry, (1994), "Pray do not Ascribe this Notion to me: God and Newton's Gravity", in J.E. Force and R.S. Popkin, *The Books of Nature and Scripture: Recent Essays on Natural Philosophy, Theology and Biblical Criticism in The Netherlands of Spinoza's Time and the British Isles of Newton's Time*, Kluwer, p. 123-147.

Keith Hutchinson (1983), "Supernaturalism and mechanical philosophy", in *History of Science*, 21, p. 297-334.

Peter McLaughlin, (1993), "Descartes on Mind-Body Interaction and the Conservation of Motion", *Philosophical Review*, 102, p. 155-82.

J. E. McGuire, (1968), "Force, Active Principles and Newton's Invisible Realm", *AMBIX*, 15, p. 154-209.

J. E. McGuire, (1970), "Atoms and the 'Analogy of Nature': Newton's Third Rule of Philosophizing", *Stud. Hist. Phil. Sci*, 1, p. 3-58.

J. E. McGuire, (1982), "Space, Infinity and Indivisibility: Newton on the creation of matter", in Zev Bechler, ed. *Contemporary Newtonian Research*, p. 145-190.

J. E. McGuire, (1968), "The origins of Newton's doctrine of Essential Qualities", *Centaurus*, 12.

J. E. McGuire, (1967), "Transmutation and immutability: Newton's doctrine of physical qualities", *AMBIX*, 14, p. 69-95.

J. E. McGuire, (1970), Newton's "Principles of Philosophy": An intended Preface for the 1704 Opticks and a Related Draft Fragment, *BJHS*, 5, 178-186

Steven Nadler, (1990), "Deduction, Confirmation and the Laws of Nature in Descartes' *Principia Philosophiae*", *Journal of the History of Philosophy*, 28, p. 359-83.

Steven Nadler, (1994), "Descartes and the Occasional Causation", *British Journal for the History of Philosophy*, 2, p. 35-54.

Isaac Newton, (1934), *Sir Isaac Newton's Mathematical Principles of Natural Philosophy and his System of the World*, translated by Andrew Motte in 1729 and revised by Florian Cajori, Univ. of California Press.

Isaac Newton, (1962), "*De Gravitatione et aequipondio Fluidorum*", in Hall & Hall, (1962), *Unpublished Scientific Papers of Isaac Newton's Philosophy*.

Isaac Newton, (1704), *Opticks*, CD-rom, Octave.

Isaac Newton, (1962), "The Elements of Mechanics", MS Add 4005, fols 23-35, Hall and Hall (1962).

Isaac Newton, (1962), "*Conclusio*", Ms Add. 4005, fols 25-8, 30-7, in Hall & Hall, (1962), p. 320-347.

Isaac Newton, (1962), "Scholium Generale", Hall & Hall, (1962), p. 348-364.

Isaac Newton, (1958), "Isaac Newton's letters to Bentley", in I. B. Cohen, (1958), *Isaac Newton's papers and letters on natural philosophy and related documents*, Cambridge Univ. Press.

Frances Oakley (1961), "Christian theology and Newtonian Science: The Rise of the Concept of the Laws of Nature", *Church History*, 30, p. 433-457.

Francis Oakley (1998), "The absolute and ordained power of God", in *Sixteenth and Seventeenth Century Theology*, *JHI*, 59, p. 437-461.

Francis Oakley, (1998), "The absolute and ordained power of God and King", in the *Sixteenth and Seventeenth Centuries: Philosophy, Science, Politics and Law*, *JHI*, 59, p. 669-690.

Margaret Osler, (1985), "Eternal Truths and the Laws of nature: The Theological Foundations of Descartes' Philosophy of Nature", *JHI*, 46, p. 349-363.

Margaret Osler, (1994), *Divine Will and Mechanical Philosophy. Gassendi and Descartes on contingency and necessity in created world*, Cambridge University Press.

Edward Slowick, (1996), "Perfect Solidity: Natural Laws and the Problem of Matter in Descartes' Universe", *History of Philosophy Quarterly*, 2, p. 187-205.

F. Steinle, (1995), "The amalgamation of a concept – Laws of nature in the new sciences, in Friedel Weinert, ed, 1995, p. 316-318.

Udo Thiel (1998), "Individuation", in M. Ayers and D. Garber, eds. (1998), pp. 212-262.

Friedel Weinert (1995), *Laws of Nature: Essays on the philosophical, Scientific and Historical Dimensions*, Duckworth.

Woolhouse, (1994), "Descartes and the Nature of Body", *BJPS*, 2, p. 35-54.

Ziisel, (1942), "The Genesis of the Concept of Physical Law", *The Philosophical Review*, LI, p. 245-79.

HEGEL'S THESIS OF THE IDENTITY OF CAUSE AND EFFECT
IN THE *SCIENCE OF LOGIC*

Cristina IONESCU
University of Guelph

Hegel sets at the basis of his doctrine of Causality developed in the *Science of Logic* the thesis affirming the identity of cause and effect¹. At first sight this thesis appears paradoxical. Asserting that a tautology is what characterizes the relationship between cause and effect seems to run against a series of expectations that we have with regards to a properly understood relation of Causality. The linear and tautological model that seems to be thereby proposed rules out the possibility of having a plurality of causes generating one single effect, as well as the possibility that one single cause can be productive of a plurality of effects. On such an understanding we seem to end up with a view unable to account for a plurality of things bound together into a system with simultaneous series of effects generated at different levels and allowing for shifts between different causal lines. It is on the grounds of such difficulties that McTaggart concludes the section he dedicates to the analysis of Hegel's categories of Absolute Relation by declaring the "erroneous" character of the treatment given to Causality². The supposed errors that Hegel is charged with are believed to arise from the thesis asserting the identity of Cause and Effect. Furthermore, on McTaggart's interpretation, Hegel also falls prey to the more general objection, that his treatment of Causality does not differ substantially from that of Necessity and thereby sets forth a rather artificial and arbitrary proliferation of categories³. Throughout this paper I attempt to provide a close reading of Hegel's treatment of Causality on the basis of which I intend to reject McTaggart's criticisms showing them to rest on some misunderstandings. The main questions that my paper will address concern the following issues: How does Necessity differ from

Causality?, Why is Absolute Necessity a necessary preliminary stage for Causality?, Why is Substantiality a step required for the deduction of Causality?, How can Hegel consistently maintain the identity of Cause and Effect not only at the level of the merely Formal but also at that of Determined Causality?, How does the treatment of Reciprocity differ from that of Absolute Necessity? In addressing these questions I hope to reveal that the determining factor of McTaggart's position resides in the failure to realize the real achievement obtained through the category of Substantiality. I will divide my paper into two sections, the first one dealing with some Hegelian preliminaries to the treatment of Causality – explaining the context in which this treatment occurs and justifying the need for treating Substance after Necessity and before Causality, and the second one providing direct refutations of McTaggart's reading of the thesis asserting the identity of cause and effect.

Part I

The categories of the Absolute Relation follow those of modality (Actuality, Possibility, Necessity). According to the methodological norms of development engaged throughout the *Logic*, this means that the relational categories are more concrete than their predecessors, in so far as the later categories are meant to show how or in what sense whatever has already been achieved before is indeed relevant to our world as world of *things with properties*, indeed, of *diverse, distinct, concrete, individual things* set forth in mutual relations. In an essential sense then, all the categories of Absolute Relation are instantiations of Necessity, since they all are the concrete modes of the manifestation of Absolute Actuality. All of them are necessary in so far as they are constitutive for, or built up into, the reality of the concrete world that we experience. However, following the methodological development of Hegel's *Logic*, relational categories are expressions of necessity precisely in so far as necessity itself is implicitly relation. When talking about Necessity, Hegel does not, of course, talk about a specific necessary being (endowed, presumably, with supreme reality). Instead, what Hegel takes Necessity to be is the modality pertaining to the movement, in the course of which the Absolute *expresses*, manifests, continually *re-enacts*, and re-actualizes itself. Absolute Necessity is Absolute Relation, for it is not merely being as such, but being *because it is*. This means that Necessity is being *as absolute self-mediation, self-relation or self-reflection*; it has itself as its own Ground to which it permanently relates itself, generating and edifying itself on this account.

So understood, Necessity is the expression of *totality*. Necessity is, however, *its own* totality, as opposed to a simply externally determined Whole composed indifferently of Parts, that is, Necessity is a totality, that specifies itself into *its* parts, continually re-assessing and re-asserting its contingencies, from the interrelations of which it builds itself up. The previously analyzed category of Whole and Parts (designating two distinct forms, under either of which reality could be seen, as opposed to two indispensable characteristics of the only form which reality necessary takes) has already been sublated. Similarly, the Absolute as Attribute has been superseded, since the Absolute was not self-subsisting as Attribute. In contradistinction to these previous moments, the moment of Necessity introduces the notion of a totality that self-reflectively specifies its *sides as self-subsisting totalities*, rather than simple Parts provided with subsistence from a Whole that remains external to them. The same four main features of Necessity – relation, re-enactment, expression and totality – make up the essence of the relational categories (Substantiality, Causality, Reciprocity) as well, and yet in these latter manifestations they characterize a more determinate or concrete mode of being, since in Relation they name features characterizing *self-subsistent things*.

The emergence of Substance as the first category in the triad of relation constitutes a necessary aspect for Hegel's understanding of the identity of cause and effect at the level of Determinate Causality. To substantiate this view we can at this preliminary stage make only some more general remarks regarding the meaning of Substance as such and the advance implied thereby in relation to the modal categories, following that these remarks will be taken up further and employed in the close reading of Causality itself. Substantiality preserves in things their individuality and uniqueness, protecting them from the threatening dissolution in the diverse Matters that they share with other things. Without securing self-subsistence and individuality for things, Causality itself could never be a determinate relation uniting distinct individual terms. For in Causality, each of the terms is supposed to manifest itself in turn as cause and as effect. This is, however, possible only in so far as, besides being a certain cause or a certain effect, a thing is always also *something more than just a cause or an effect* (i.e. each thing is substantially determined by something else besides its causal aspect). Negatively, this means: each individual thing is not merely what others have caused it to be; it is not simply the product of the agency of another. Positively it attests to the fact that each thing, in so far as it is the object of any determination from another is at the same time itself exerting a certain agency determining the kinds of causes that can act

upon it and the manner in which such causal determination can occur. This “something more”, *the contingent accessory (zufällige Beiwesen)*, that each *thing* is, besides its being a cause or an effect, cannot have any meaning in the absence of a previous determination of things as substances. We will return to this point later on.

In our attempt to circumscribe the general meaning of Substantiality we now proceed to outline how the four features identified in Necessity – relation, re-enactment, expression and totality – make being present, at a more determinate stage. *Substance is, essentially and explicitly, Absolute Relation*. Substance’s absolute character lies in its *actuality*; its relational character lies in its being essentially self-expression through *Accidents*. For Hegel, Substance is not only a Whole composed of Parts, but is the *actual, self-activating* reflection or effectiveness through its own accidents. Substance is self-subsisting because it is Absolute Necessity; it is *because it is*, in the sense that Substance continuously re-enacts itself, constantly finding its own ground or reason within itself. As such, it is no longer a simple Substrate lying behind its Appearance, but the *actual* substrate that shines forth and in its shining it expresses itself and not some other. Nevertheless, this self-positing, this shining forth, through which Substance reveals itself, is a function of its Accidents. Accidents are, on the one hand, different from Substance, in so far as they are dependent upon it, and, on the other, they are one and the same being as Substance itself, and in this sense Substance is a totality:

Substance, as this identity of the reflective movement, is the totality of the whole and embraces accidentality within it, and accidentality is the whole substance itself⁴.

It might however appear initially strange that Hegel calls the Accidentality of Substance *illusory being*⁵. However, the illusory being of accidents does not mean that accidents are non-real. Accidents just are as real as Substance is. The reason for maintaining this designation for accidents resides, I believe, in the fact that their being is expressed in terms of *actuality, contingency, possibility and necessity*. Accidents constitute the realm of endless and restless *coming-to-be* and *ceasing-to-be* of a manifold of determinations. Their continuous conversion and change is the interplay of their possibility and actuality. However, when considered from the point of view of the substance to which they belong, the possibility and actuality of accidents are always *determined* by the very necessity of the substance that they thereby constitute, i.e. by the fact that the accidents’ continual *swing over* or ‘fluctuation’ from the

possible to the actual and *vice versa* is not indifferent to, but rather an inner expression of, their corresponding substance, enduring and preserving its self-identity through all these (accidental) changes. Such changes are, therefore, "illusory" not in themselves, but rather only for, or in relation to, that which is permanent, i.e. Substance. The possible and the actual that characterize the changes in accidents are not the merely logical (formal) modal categories. On the contrary, since Accidents themselves manifest certain contents, their Actuality and Possibility are *real*. When viewed as *real*, the modal categories reflect modes of being pertaining to *things* (as opposed to mere aspects belonging to indeterminate states). According to Hegel, however, accidents are actual or possible only in so far as they are themselves "existing things of manifold properties, or wholes consisting of parts, self-subsisting parts, forces, which require solicitation from one another and have one another for condition"⁶. In other words, the negation of Substance expressed in Accidentality is not absolute negation, pure unreality, or sheer nothingness, but rather only the negation characterizing the relation of otherness. Hegel thereby secures a certain positive mode of being even for accidents; and he does so by searching for their ground in the "power" that institutes them as such. Hegel brings yet another justification for designating accidents as "illusory being", saying that "in so far as such an accidental seems to exercise power over another, it is the power of substance which embraces both within itself."⁷ Hegel distinguishes "force" from "power". Force by itself is not self-activating, self-actualizing; it is rather power that gives to force its impulses (i.e. the basic possibility of being solicited by another force). This means that the 'flux of accidents' is not itself an arbitrary one; rather it is determined by that underlying support whose expression it is (i.e. by Substance). The presently considered distinction between force and power should have already made McTaggart aware of the inappropriate character of the accusation he brought against Hegel, namely that Substance does not say anything more than the Inner/Outer pair did, and that, therefore, the transition from the latter to Substance needs no mediation provided by the modal categories⁸. Contrary to McTaggart, I believe that Hegel legitimately argues that, since power can be explained only on the basis of Actuality, Substantiality makes explicit what remained only implicit with the earlier Inner/Outer category. According to Hegel, the Inner/Outer is only a manifestation of force (not yet of power); Substance, on the other hand, is power in its full expression. Furthermore, Substance is properly characterized as power only on the basis of the already analyzed category of Actuality, since to be power means to act. Substance however is not identical to Actuality

as such, but is rather a specific kind of actuality, namely *actuality that has contingency as an intrinsic part of itself*. The coming-to-be and ceasing-to-be of the accidents, the changes that Substance endures are the concrete expressions of *necessary contingency*. The fact that Substance actualizes itself in certain accidents and not in others is by itself already an expression of Necessity. Accidents then, in so far as they pertain to a Substance, are to be understood as *substantial accidents*⁹. In other words, as power, Substance cannot be indifferent to its accidents (its own expression); nor can the accidents be indifferent to their Substance, that is, to the ground, which makes them what they are (for they are mere forces dependent for their being upon power). Each and every accident is an expression of Substance; therefore, accidents are substantial. To sum up, Hegel's elaborate treatment of substance in the continuation of the modal categories ensures the individuality and stability of things preparing thus the stage for the emergence of causal relations between individual complex terms that preserve their distinctiveness: *things are what they are not only relatively to one another and to the properties of the others* (as they were still supposed to be at the stage of the modal categories), *but also what they are in themselves* (as individual Substances).

Part II

McTaggart argues that, by maintaining the thesis of the identity of Cause and Effect, Hegel failed to explain and account for some major differences that distinguish Determinate from merely Formal Causality¹⁰. The major distinguishing features are as follows: (1) Unlike Formal Causality, which does not represent the connection holding between two *things*, but rather merely between what Hegel calls Substrate and Surface, Determined Causality characterizes relations in which determinate, substantial things stand relatively to one another. (2) Unlike the case of Formal Causality, where each effect (Surface) needs to have only one cause (the Substratum), with Determined Causality one is supposed understand the possibility of an effect having a plurality of causes. (3) Determined Causality expresses the connection of a plurality of things into a system, while Formal Causality expresses a merely tautological relation holding between two items, i.e. a relation in which the second (Surface) is a mere reduplication of the first (Substratum). (4) It is only in the case of Determinate Causality that one can understand that and why each Cause can and must be also an Effect, whereas in the case of Formal Causality such a possibility is ruled out as contradictory, since it would make the Substratum be at the same time

both itself (Substratum) and its opposite (Surface), and *vice versa*, each Surface would then be both itself (Surface) and its opposite (Substratum). In what follows I attempt to show contrary to McTaggart that and how it is precisely by virtue of maintaining the thesis of the identity of Cause and Effect throughout the entire treatment of Causality that Hegel can and indeed does account for all the four distinguishing features of Determinate Causality. I will proceed by following Hegel's text step-by-step and examining each of these four points in their respective contexts.

The *Formal relation of Causality*, generally defined as the relation of Cause and Effect, is already implicitly contained in the relation of Substantiality. Substantiality as such is self-determining relation, since Substance in a sense causes itself out of itself to be whatever it is. Substance in relation to its accidents exhibits the formal relation of cause and effect. In Formal Causality, however, contents of Cause and of Effect are determined only relatively to one another. That is, they cannot be determined each in itself, but only in their mutual relation. Consequently, even if the accidents of a Substance were to be conceived as a plurality, it is of no importance for Hegel to consider at this merely formal stage of Causality the possibility of there being a plurality of effects pertaining to just one cause, or, inversely, a plurality of causes for one single effect. Formally considered, accidents stand to Substance (regardless as to whether there is just one Substance, or a plurality of them) in the same relation as effects to their cause. Hegel is, therefore, fully justified to discuss Causality at this first stage in terms of a relationship between a *determinant* and its *determined* in general and, consequently, to determine their relation as *actuality* of Substance.

The thesis of *the identity of content in cause and effect* is introduced in the second moment of Formal Causality. This thesis constitutes indeed the central peculiarity of Hegel's account on Causality and is maintained and developed throughout the entire section. In what follows I hope to show that the introduction of this doctrine is possible only on the basis of the modal categories and its acceptance at the level of Determinate Causality cannot occur independently of Hegel's concept of Substantiality.

The doctrine of the identity of Cause and Effect follows naturally from the conditions of necessity and self-sufficiency (self-en-acting totality) characterizing Substantiality itself. The emergence of this doctrine is intimately connected with the understanding of Substance as a function of the contingency of its Attributes (Accidents), that is, as a function of what it itself (as Substance) is not. It is this self-sufficiency of Substance that is expressed through the category of Causality, insofar

as Cause and Effect are necessary and sufficient conditions for each other. Hegel introduces this doctrine by arguing that, the Actuality of Substance implicitly means that Substance is actualized as a kind of Cause¹¹. Two major reasons can be invoked in support for this thesis: first, the definition of actuality as capability to act, and secondly, the former elucidation of Substance as power, whereby Substance was characterized in relation to its Accidents as Cause in relation to its Effects. But Substance is thus determined as Cause only because it has some Effect. In Hegel's words, "the actuality which substance has as cause, it has *only in its effect*"¹². The actualization of a cause makes its effect necessary. Correspondingly, the cause itself is made necessary as cause only by the actualization of its effect. From this Hegel concludes that the content of the cause and that of the effect are the same, i.e. that there is nothing in the cause that is not to be found in its effect, and *vice versa*. Formally considered, the cause is nothing but its determination of having some effect, while being an effect is nothing but having a cause. The difficulty thus reached at the level of this purely formal consideration resides in the impossibility of distinguishing between the two – cause and effect. At the stage of a purely formal analysis, choosing either of the terms to be the cause or the effect is only an arbitrary matter. However, when coming to speak of concrete realities, the two must be somehow distinguished.

The identity of Cause and Effect is sublated – as we reach the third moment of Formal Causality – in their *mutual extinction*: the cause is extinguished in its effect, and, equally, the effect is extinguished in its cause. We thus arrive at the paradoxical result that, as cause, a cause is no longer just a cause (for it is equally effect), while an effect as such is no longer just an effect (for it is equally cause). The proper resolution of this situation will come about as we move from Formal to Determinate Causality.

The second stage of Causality, *Determined Causality*, will reveal the category in its *reality* and *finitude*. Causality is now no longer considered merely formally, in full abstraction from all the real, concrete content of its terms. Instead, it is considered now as the *relation that takes place between two determinate, substantially determined things*. Concrete content is being given to the terms. However, Hegel maintains that the contents of a cause and its corresponding effect coincide even at this more concrete level. How is it possible to maintain that the content of the cause is the same with that of the effect while at the same time recognize that terms, which enter causal relations, are distinct, individual things? McTaggart thinks that, even if Hegel were right to assert this identity when considering the merely Formal Causality, he is, however,

mistaken in re-asserting it when discussing Determinate Causality. It will be our task to show that Hegel is fully consistent in maintaining both individuality of things and identity of content in determined causal relationships. We will approach this task by considering in turn each of the four respects, enlisted above, with regards to which Determined Causality registers a further development in relation to Formal Causality while still maintaining the identity of cause and effect.

(1) How can Hegel preserve the doctrine asserting the identity of Cause and Effect, when talking about Determined Causality, since this identity seems to collapse any real distinction between things that are causally connected?

In order to illustrate his doctrine of Cause and Effect identity at this level, Hegel gives several examples. The first asserts the identity of content present in the rain as cause and in the wetness as its effect ("the same water which is rain is wetness"). McTaggart reacts to this thesis with pointed criticism:

"[R]ain is not identical with the wetness of a roof [...] The rain is detached drops of water falling through the air, the other may be a thin sheet of moisture. They are from a scientific point of view, different forms of the same matter. But the form is part of the nature of the thing, and, if two things differ in form, they are not identical¹³.

As justified as it is in noticing that things different with regards to their form cannot be said to be identical, McTaggart's remark does not really capture Hegel's point. It would seem, indeed, nonsensical for Hegel too, to assert real identity of two distinct things as *things* causally connected. But this is, however, not what is meant by his illustration. Hegel certainly knows that the rain and the wetness it produces are two substantially distinct complex things. What Hegel's illustration actually says is only that, as *cause of the wetness*, rain (i.e. the complex thing that rain is) actualizes only those accidents of its content that are *relevant* in this particular circumstance of producing the wetness of the roof as effect. However, as *cause for some other effect*, for instance, for my gesture of taking the umbrella when I go outside, (the same) *rain actualizes other accidents pertaining substantially to its complex content*, as they are *relevant* for rain's causality in relation to this other effect (my reaction of taking the umbrella). If we are correct in offering this reading to Hegel's illustration, we can see that there is plenty of room left for the possibility that the same thing might produce through its

different actualizations different effects, while nonetheless as cause of a certain effect, the cause finds an identical content in its effect. One and the same complex, substantially determined thing could count as an indefinite number of causes, each determined in different respects, since each has its own, peculiar effect(s), and, conversely, a thing can be considered as a bundle of multiple effects, stemming from diverse causes (whether they come from substantially distinct things or else from the actualization of various aspects of one and the same complex thing). To sum up, Hegel admits that, *as substantial things, wetness and rain are distinct, differing through their peculiar qualities (or better, accidents); however, as cause and effect they have the same content, they are the same: as cause of wetness, rain is nothing but the wetness, while as effect of rain, wetness is nothing but the rain.* In other words, each accident has its correlate effect(s) in the accidents of another substance; and, moreover, each accident as cause is identical with its effects. What is ultimately responsible for rejecting the doctrine of cause and effect identity as unacceptable is the mistaken impression that things extinguish themselves in being causes and effects.

McTaggart seems however aware that Hegel does not actually reduce a thing to its being a certain cause, in so far as the *Logic* admits that the thing might contain something more besides the fact of being a cause. Hegel calls this additional element, intrinsic to the substantiality of the thing, a contingent or accidental accessory (*“zufälliges Beiwesen”*). The designation of this ‘something more’ present in each and every thing as “a contingent accessory” might be misleading. Hegel does *not* intend to designate through it something that is *in itself inessential*, or something *inessential in relation to the thing’s substantiality*; instead, he means through this expression to point out that each thing might carry among its properties something *inessential or irrelevant in relation to the specific aspect of a thing’s being a certain cause/effect*. This aspect will receive in our next lines some further explanations. McTaggart’s present (miss)understanding of Hegel’s doctrine is reflected in the following two sentences:

Hegel does, indeed, admit (G.L.II 228) that the Cause has a content which is not in the Effect, but he says that this content is a *“zufälliges Beiwesen”*. *But, in fact, much of the content of the Cause which is not in the Effect is by no means contingent and unessential, but is an essential part of the Cause, without which it would not produce the Effect*¹⁴.

In order to substantiate his view McTaggart appeals to the following illustration: the cause of the roof’s being wet is not merely the rain, but

also the action of the wind, and, also, that of the builder that built the house whose the roof is wet. The builder and the wind are, McTaggart seems to imply, essential parts of the content of the cause and yet they do not belong to the content of the effect:

The roof would not be wet except for the action of the wind and the builder, but neither the wind nor the builder is a part of the wetness of the roof¹⁵.

The criticism thereby expressed, does not, however, undermine Hegel's position. In reply to McTaggart's objection, Hegel would most probably say something along the following lines: the wind's blowing and the action performed by the builder are certainly causes of the roof's wetness, but they are its causes *in other respects* than that in which rain is its cause; it is true that neither the wind nor the builder are *parts of* the wetness of the roof in the respect in which rain is the cause of its wetness; and it is, however, equally true that nor are they the content of the rain *as cause of wetness*; rather they are the contents of some other causes, producing different effects or actualizing different respects of the roof's wetness, different from those which constitute the content of this wetness as the effect of the rain. In other words, for Hegel, the wetness of the roof is identical with the rain only *in so far as* the first is the effect of the latter. However, the wetness of the roof is in a different respect equally identical with the action of the builder *in so far as* it is the effect of this other cause. As a structural complex of some peculiar effects, the wetness is identical with all its causes, but as substantial thing, it is, however expressing more than that. In other words, things are not extinguished in being each a specific cause or an effect.

(2) How can Hegel consistently maintain his thesis of the identity of Cause and Effect and yet show that at the stage of Determined Causality a thing can be the effect of a plurality of causes?

McTaggart approves of Hegel's conception of Causality for the case of *remote causes*, since he takes Hegel to be thereby saying that, when considering the remote causes of a certain effect, the doctrine of the identity of content in the cause and the effect is suspended or denied. He reads Hegel's appeal to the notion of 'remote' as distinct from 'proximate' cause as meant to express the possibility of having a plurality of 'remote' causes for an effect, but not also a multiplicity of immediate or 'proximate' causes of a certain effect. However, I believe that this is not what Hegel actually means. What Hegel literally says is

only that, in the case of a remote cause of an effect, the tautology characteristic to the causal relation “*does not seem to be contained*”, and not that it is in fact as such absent. The cause-effect identity is, indeed, *concealed* by the change of form suffered by the cause in its passage through a number of intermediate terms, but it does *not* for this reason *vanish* or *disappear* altogether. The identity of cause and effect is still preserved, though in a less evident manner. It is just that, in the case of what is usually, commonly called a ‘remote’ cause, the proper cause itself consists of the multiple complex content made up by all those particular aspects of things, which necessarily produce a certain effect. *Hegel is thereby pointing out for us the inadequacy characterizing our way of talking about remote as distinct from proximate causes of one and the same effect.* We commonly distinguish between the two by assuming that it is only in the case of remote causes that we can account for a plurality of causes generating a certain effect, with some of these causes being temporally prior to others. But according to Hegel, no such distinction between two sorts of causal relations is legitimate. For him, a certain effect has always just one cause (however complex), identical in content with it. This is how I read Hegel’s saying that “the complete effect is contained, not in the first term which was pronounced [improperly]¹⁶ to be the cause, but only in these several causes together”¹⁷. When taken by itself, not even one of these several ‘causes’ is, properly speaking the cause of “the complete effect”. They are, when separately considered, only discrete “moments” belonging to (or constituting) *the circumstances of possibilities*, from which, when they are all taken together, the complete effect emerges. The assumption that I believe undermines McTaggart’s present comments is that the effect (each effect) should be equated with a substantial thing. For Hegel, however, the two are not identical. While he admits that each effect has just one determining cause, nothing prevents Hegel to also maintain that as a complex substantial entity, each thing is the *locus* of a plurality of effects generated by a plurality of causes. In other words, saying that *an effect* has just one cause (whether one calls it proximate or remote cause) does not entail that *a thing* as thing has just *one* cause. Hegel can thus consistently maintain the Cause-Effect identity and yet not imply that each *thing* is the product of just one cause. In other words, he can distinctively account for the fact that each thing is the result of a plurality of causes.

Hegel proceeds further to talk about “*the inadmissible application of the relation of Causality to relations of physico-organic and spiritual life*”¹⁸. On McTaggart’s reading Hegel is taken to be saying now that Causality as such does by no means apply to the domains of the organic

and spiritual life. My suggestion is that, on the contrary, Hegel's present statement intends *to deny only a certain misunderstanding and misapplication of this relation to the organic and spiritual realities* and not to dismiss entirely the application of Causality to entities of this sort. If we follow the *Logic's* text literally we clearly find Hegel talking here about a *certain inadmissible application of Causality* rather than about *the inadmissibility of any application of this category*. For Hegel, to admit that Causality as such does not apply to these (organic and spiritual) realities, would mean to give rise to an unsurpassable difficulty, namely that Causality as such would no longer be properly qualified as a category, since categories do by definition apply to all reality, i.e. they are in charge with all there is¹⁹. We are then left with the following dilemma: either Causality applies to *all* reality (including the organic and spiritual life), or it only applies to the material, inorganic realities. On McTaggart's reading this dilemma has no positive solution whatsoever, since the first alternative is supposedly ruled out explicitly in Hegel's text, whereas the second, as noted above, is untenable due to the definition of a category as such. If McTaggart's reading of the first horn of the dilemma were correct we would be compelled to ally ourselves to his conclusions and thereby reject the doctrine of Causality as developed in the *Science of Logic*. But as things are, McTaggart's dilemma is, in fact, a *false dilemma* when considered within the horizon of Hegel's assumptions and intentions. As already anticipated, my suggestion is that Hegel considers the category of Causality as applicable to all reality (organic as well as inorganic, physical as well as spiritual), while at the same time rejects a certain "inadmissible application of Causality to relations of physico-organic and spiritual life". The specific kind of application that Hegel rejects is that whereby *the content of something were merely passively received in something else of an organic or spiritual nature*. To this inadmissible understanding of Causality Hegel opposes his view that, whatever acts on a living being is "independently determined, changed or transmuted by it". Thus, when Hegel says that "what is *called* cause certainly reveals itself as having a different content from the effect"²⁰, we are supposed to read him as saying only that what is improperly *called* cause reveals itself to have such a different content from its effect, and not that what actually counts as cause reveals itself as differing from its effect. What is thus meant is simply the fact that what are called causes in the illustrated cases – the food as 'cause' for the blood, the ionic climate as 'cause' for Homer's works, Caesar's ambition as 'cause' for the downfall of the republican constitution of Rome – are not properly called so. But this is of course something quite different from saying, as McTaggart interprets Hegel to be saying, that

Homer's works or the downfall of the republican constitution of Rome had no causes whatsoever. In the illustrations just mentioned, the food, the ionic climate, Caesar's ambition – while none being properly called "causes" of the correspondingly mentioned effects, are all to be considered only as *moments, occasions, external stimuli, contingent circumstances*, none of which could have produced by themselves the so-called corresponding 'effects'. These stimuli or moments do nonetheless enter into the content of what would be correctly designated as a 'cause', and would be as such found, although *transmuted*, in the occurring effect. In these cases, what would properly be named 'cause' are the specific circumstances of possibilities actualized in a specific manner due to the *substantial* character of the receiving thing. Hegel thereby anticipates the resolution of Causality in Reciprocity. According to him,

[I]t is rather the nature of spirit, in a much higher sense than it is the character of the living thing in general, not to receive into itself another *original* entity, or not to let a cause continue itself into it, but to break off and transmute it²¹.

This breaking off of the causal chain, this not letting the cause come to its effect unaffected by the substantiality of the thing on which it exerts efficacy will become fully explicit only in the last stage of Causality, Action and Reaction, and even more emphatically so, in the treatment of the next category, Reciprocity. However, its occurrence at this stage with regard to the organic and spiritual realities is substantiated by Hegel's illustrations, which clearly show that Causality applies to all realities (organic and spiritual included) and that it applies in all cases on the basis of the same relation of identity of content holding between cause and effect:

The cause of an act is the inner disposition in an active subject, and this is the same content and worth as the outer existence which it acquires through the deed²².
If, for example, a man developed his talent in circumstances arising from the loss of his father who was hit by a bullet in battle, then this shot (or still further back, the war or a cause of the war, and so on to infinity) could be assigned as the cause of the man's skill. But it is clear that the shot, for example, is not by itself this cause, but only the combination of it with other effective determinations. Or rather, it is not cause at all, but only a single *moment* which belonged to the circumstances of the possibility²³.

(3) *How can Hegel consistently maintain the Cause-Effect identity and yet not reduce Determined Causality to the simply linear and tautological relational model characteristic to Formal Causality? How does the Cause-Effect identity help Hegel conceive Determined Causality as expressing the connection of things into a complex system and not simply reduce their interconnection to a merely linear sequence as Formal Causality seemed to imply?*

The cause-effect identity leads inevitably to a result that needs to be overcome within the *Logic*: the development of the causal relation into a *Bad Infinite Regress from Cause to Cause* or into an equally *Bad Infinite Progress from Effect to Effect*. This happens since, by maintaining their identity, we arrive at an infinite linear series in which each term is the effect of its preceding cause and is also itself the cause for its following term²⁴. Each cause, in so far as it is a *finite* reality (since as cause it is in a certain sense limited by having an effect, and, by virtue of the identity of content with the latter, it is again limited by being itself the effect) needs to be grounded in another. Earlier on in the *Logic*, Hegel discussed the Bad Infinity as the category into which, simple, finite qualities were condemned to elapse²⁵. The present situation is similar. In the preceding case, the spurious infinite was arrived at because the members of the series of finite beings in general were each said to find their *nature* in their preceding terms respectively. Now, with Causality, each member of the causal chain seems to find its nature in its corresponding predecessor, by virtue of their identity of content. With Causality, however, the need for a proper resolution of this situation becomes all the more acute, since we now know that, as already determined substantial things, these finite instances must each maintain their own individuality and not lose their natures in those of other members. If, contrary to the interpretation that we have proposed above, one were to maintain that Causality as such does not, however, apply to the realm of the spiritual and organic life, then the problem of their vanishing into the Bad Infinity would not emerge. For in that case, organic and spiritual realities could be said without any contradiction to constitute the uncaused or self-caused causes conditioning all the material and inorganic realities. But this, as we have seen, is not the case. The Causality discussed by Hegel at this point is the category applying to all concrete, finite, *substantial* things, whether organic or inorganic; causes are said to be *substantial* causes; therefore, each member of the causal chain must have its own substantial being or nature justified in and for itself. But if each cause loses its causal virtue in its effect, while each effect loses its quality of being an effect by

being identical with its cause, then the substantial nature of things is completely lost. This is then how the contradiction emerges in its full²⁶. The resolution of the present situation in True Infinity will have to come on the lines of Hegel's way of understanding Substantiality in things. While it is only through our approach of the final problem to be discussed in this essay that a sufficiently elaborate explanation of Hegel's resolution will emerge, we can nevertheless at this stage outline in some general terms the main direction that his resolution will take.

To sublimate (*aufheben*) the Bad Infinity encountered in Causality means to transcend the simply linear model of causal influence that was suggested by the purely Formal moment of Causality. Hegel's solution comes through the articulation of Causality as *determined* relation holding between *things*, i.e. substantially determined things. A thing is always the result of a plurality of causes and, at the same time, because it is itself the locus of a plurality of effects, each thing in turn is the complex structure expressing the source (actual or potential) of a plurality of causes. The picture that transpires in this way is that of a complex world of *things*, mutually interacting substantial individualities, each thing originating causal relations at different levels, in different respects – each thing being the moment of a 'nodal line', that operates as a relative whole originating a plurality of causal lines, and justifying (by virtue of its substantiality) shifts between different causal lines - in such a way that an event can work simultaneously as cause at several levels. It is this picture that expresses the transition from of simple linear world-model to that of a complex systematic whole. As *things*, realities are saved from vanishing into a bad infinity; even if causal aspects extinguish themselves in their mutual determinations, things remain stable and are free from dispersion.

(4) *How can Hegel consistently maintain the Cause-Effect identity and yet show that in Determined Causality the Cause is also an Effect and the Effect in turn also a Cause, while at the same time still preserving their substantial difference as things brought together by mutual causal relations?*

According to Hegel, the terms of a causal chain are causal *substances*. As a result, each individual thing exhibits a double nature: that of being immediate, *in itself*, in its abstract self-identity, as *Passive Substance* on which Causality is exerted, as well as that of being *for another* as *Active Substance*, that is, as actualized cause. With the third moment, of Action and Reaction, Hegel shows that, in the very fact of being acted upon (i.e. being causally determined by another) a thing has

always already re-acted. This is what I take Hegel to mean when saying that the Passive Substance is itself converted into a Cause by the very fact of being acted upon. The situation is explained by appeal to the principle that each substance has to determine from out of itself what is the right, appropriate Active Substance that can possibly act on it and also what is the proper manner in which this could take place. In other words, there is no such a thing as complete, absolute passivity at the level of Substance. The passivity of a Substance is rather an *active passivity*. It is part of the essence of a Passive Substance that it has to be acted upon by another in a certain way. This is how Hegel reaches the concept of *re-action*, as expression of a Substance's manifestation in relation to whatever is to exert an act of power (violence) against it. For our present concern, this aspect is relevant in so far as it shows once again that Hegel does not (nor, indeed, does he need to) abandon his doctrine of Cause-Effect identity in order to account for a complex system of causal lines. The cause-effect identity becomes in the present context the basis upon which it is asserted that the content which the Active Substance produces in the Passive one is the same as that produced by the latter (now as cause) in the first (which has thus become its effect), so that they are identical. The point is made clear through Hegel's discussion of *Conditioned Causality*, according to which, *the cause is self-related in the effect*, in so far as the latter is the necessary presupposition of the first, while, equally, *the effect is self-related in the cause*, in so far as cause is now equally presupposed by its effect.

Considering the arguments developed above, it is, however, not difficult to reject McTaggart's thesis that the resolution of the Bad Infinity of causal relations in Reciprocity does not differ from the resolution obtained through the concept of the Absolute Necessity²⁷. At the stage of Absolute Necessity abstraction was made of the substantial individuality and concreteness of things standing under such a determination. On the other hand, Hegel's treatment of Substantiality before Causality becomes the real ground on which it is for the first time possible to conceive of *things* as acting and re-acting one upon another while still preserving their individuality and real self-identity. Absolute Necessity was qualified as being 'blind' – that is, blind or indifferent to the concrete content actualized by a thing in another. Consequently, the only conclusion reached at that earlier stage was the assertion of the Absolute Necessity of Contingency in general (governing any being whatsoever). With the categories of Absolute Relation, however, the situation is slightly different. The question now becomes: How can we still maintain the absolute necessity of contingency *when* talking about

real, concrete, substantial things, whose individuality needs to be preserved, and no longer vanishing in the relations binding indeterminate beings together, no longer dissolved in the Matter compounding indefinite aggregates? *Reciprocity* or Reciprocal Causality sets on the scene further specifications regarding a more concrete meaning of Absolute Necessity. Through Reciprocity things become specified not merely as indifferent aggregates acting upon one another, but as substantial things engaged in relations of mutual determinations. In other words, when Reciprocity emerges, it is no longer indifferent what properties one term determines in the other. These properties must rather now be specified in terms of the *accidentality* that is intrinsic to anything substantial. Contingency is, indeed, necessarily present; but it is always determined in its content by the substantial nature of the contingent things. Contingency is now determined as *accidental* contingency. The necessity of contingency grounds the deduction of Causality; the two are, however, not the same. As the argument developed above shows, Determinate Causality requires us to distinguish two component moments pertaining to a thing's substantiality: the thing's being a cause or an effect in a certain respect, and the thing's being substantially something more than just the cause of a particular effect. Regarding the latter aspect, Hegel offers us the possibility of conceiving of this surplus of the thing's substantiality by appeal to the notion a contingent or accidental accessory (*zufällige Beiwesen*). The accidental accessory (*zufällige Beiwesen*) of things does *not* mean that there is something of an *inessential nature* pertaining to things (i.e. something inessential to a thing's substantiality). Instead, it only means that there is something in all things that remains inessential or irrelevant in the specific respect of a thing's being a certain cause of some particular effect. 'Accidental accessory' is not simply just another name for contingency as such in so far as the latter was introduced to characterize a mode of being less determined than that of a thing. As a contingency that has traversed the stage at which the beings in which it inheres define themselves as substances with accidents, *das zufällige Beiwesen* is the contingency inherent in each thing, considered as *substantial* thing; it therefore is each time *substantial contingency*. Each substance has its contingency built into it, always its own, determinate, particular contingency (not merely arbitrarily, externally, indifferent to the substance's concrete accidental content). With the deduction of Causality, Hegel reaches the idea that necessary contingency is to be always understood not merely abstractly or generally, but in connection with the real things – as substances, each of them generating from within their own contingency.

In the end, a brief comment is appropriate, I believe, with regards to one other essential aspect of Hegel's *Logic* that receives its resolution through the doctrine of cause-effect identity, namely, the problem of freedom. The concept of freedom, as it occurs towards the end of the treatment dedicated to Reciprocity, is the expression of a world, in which each Substance uses its own relatedness to others in order precisely to bring out, starting from itself (i.e. freely), its own peculiar, individual nature. Hegel's understanding of freedom is thus grounded upon the thesis of the identity of cause and effect. For, in so far as to Hegel, being free means being self-bounded (as opposed to being subjected to any external, indifferent determinations), freedom is the expression of the substantial identity of the Active and Passive in a thing. However, it should be clear by now that, without the mediation of the categories of Absolute Relation, that is, if he were to proceed directly from the final stage of the modal categories to the assertion of freedom, Hegel could not have justified adequately his understanding of self-boundedness and self-determination.

Bibliographical Notes:

¹ Hegel, *Science of Logic*, ed. by H.D. Lewis, translated by A.V. Miller, Humanity Books, 1999. All references and quotations from Hegel's text present throughout this paper are made with reference to this edition.

² John McTaggart & Ellis McTaggart, *A Commentary to Hegel's Logic*, New York, Russell & Russell Inc., 1964.

³ "Hegel's obscurity here seems to me to be due to the fact that the ideas of this triad [of Modality or Actuality] are not really as he supposes them to be, categories distinct from, and leading up to, the categories of Substantiality, Causality and Reciprocity. The idea of Necessity as used by Hegel here is really the same as his category of Causality. The difficulty that the Relatively Necessary is Contingent, because of the immediacy of this determinant, is really the same difficulty as that which produces the infinite series of Causes of Causes and Effects of Effects. [...] But he does not see that the difficulty is the same in the two places" (McTaggart, *Ibid.*, p. 167).

⁴ Hegel, *Science of Logic*, p. 556.

⁵ Hegel, *Op. cit.*, p. 555.

⁶ Hegel, *Op. cit.*, p.556.

⁷ Hegel, *Op. cit.*, p. 556-557.

⁸ *According to McTaggart, Substantiality "can be reached from Inner and Outer. For it is simply the restatement of that category, as a new Thesis should be of the previous Synthesis. All that we have said of Substance and Accident is equally true of Inner and Outer (cf. The last Chapter, Section 151). Now, if it can be reached from Inner and Outer, Hegel must be wrong in inserting two triads between them [...]. And, secondly, if the transition by which Hegel does reach Substance from Absolute Necessity is intrinsically invalid. For, as I said above, the conception of Necessity is really that of Causality" (McTaggart, Op. cit., p. 169).*

⁹ Hegel, *Op. cit.*, p. 557.

¹⁰ See McTaggart, *Op. cit.*, p. 175-176.

¹¹ Hegel, *Op. cit.*, p. 559.

¹² Hegel, *Ibid.*

¹³ McTaggart, *Op. cit.*, p. 177.

¹⁴ McTaggart, *Op. cit.*, p. 178-179.

¹⁵ McTaggart, *Op. cit.*, p. 178.

¹⁶ Addition in brackets is mine.

¹⁷ Hegel, *Op. cit.*, p. 561.

¹⁸ Hegel, *Op. cit.*, p. 562 (Emphases are mine).

¹⁹ McTaggart himself is aware of this difficulty when he writes: "if this category is not applicable to the whole of reality, how can it be derived from earlier categories and lead on to the latter categories which certainly apply to the whole of reality?" (McTaggart, *Op. cit.*, p. 178).

²⁰ Hegel, *Ibid.* (Emphasis is mine).

²¹ Hegel, *Ibid.*

²² Hegel, *Op. cit.*, p. 561.

²³ Hegel, *Op. cit.*, p. 561-562.

²⁴ "The substance which is acted upon also in turn becomes cause, thus acting against the positing in it of an effect. But it did not react against that cause, but posited its effect again in another substance, giving raise to the progress to infinity of effects" (Hegel, *Op. cit.*, p. 569).

²⁵ See Hegel, *Op. cit.*, p. 138-143.

²⁶ McTaggart actually believes that there is no real contradiction involved with this endless causal chain. (See McTaggart, *Op. cit.*, p. 180-181).

²⁷ McTaggart, *Op. cit.*, p. 167.

LE SILENCE DES VALEURS CHEZ WITTGENSTEIN

Iloana BÂRZESCU

L'Université de l'Ouest de Timișoara

*« Wolken kann man nicht bauen. Und
darum wird die erträumte Zukunft nie war. »
Wittgenstein*

Les silences de l'esprit dissimulent d'habitude les difficultés réelles ou imaginaires de la réflexion toutes les fois qu'elle persévère dans l'expérimentation des propres limites et critères. C'est le moment des provocations vitales lorsque le discours n'a pas à sa disposition les mots adéquats mais la mémoire (ou la tradition) devient en quelque sorte superflue. Toutefois, dans les interstices du silence, le caractère expressif augmente ainsi que dans la pantomime (en l'absence du mot), le geste dit tout.

Comme perplexité de l'esprit, le silence est le reflet d'une déchirure existentielle ayant ou non la conscience du désespoir du propre soi. Hanté par l'exigence de l'authenticité, Wittgenstein a vécu sans cesse les abîmes de la recherche de l'identité de sa propre vie et de sa propre pensée. De plus, pour lui-même, la philosophie représente un problème de tempérament et de caractère, signifiant en permanence l'exploration, la provocation de la pensée et du vécu. À partir d'ici les sinuosités inhérentes du discours wittgensteinien, son appel insistent au silence, au non-dire.

Mais le silence n'est qu'un moment temporaire, nécessaire à la seule finalité de clarifier les profondeurs du dit, un stratagème, considère Gadamer¹ aussi, d'établir un rapprochement de quelque chose par la découverte de nouveaux mots. Une pareille approche fertile, par les nouvelles pensées et expressions, c'est propre, par exemple, à

Kierkegaard, Nietzsche ou Heidegger et aussi à Wittgenstein, qui s'associe à ces esprits inauguraux, avec une conviction exemplaire: personne ne peut penser pour moi-même! Le divorce des philosophes, dans le cas de Wittgenstein, n'implique pas le passage au-delà de la philosophie, mais la prétention d'une autre manière de penser l'acte et la finalité de celui-ci, au-delà des stratégies traditionnelles épuisées de leurs efforts de répondre à l'aspiration du transcendant et aussi condamnées à une irrépressible tristesse métaphysique (*Weltschmerz*). À la différence de ces tentatives si discréditées, Wittgenstein propose d'exercer la surveillance du langage par une action cathartique, pour dévoiler les trappes et les erreurs de celui-ci². Dans ces circonstances, sa conception ne vise pas un nouveau mouvement de la pensée, mais les analogies, pour lesquelles sont essentielles l'activité de clarification développée avec courage et la passion extrême.

Le projet de la philosophie comme thérapie du langage symbolise une activité primordiale engageant les plus profondes structures de l'esprit et de la vie, mais aussi une grammaire profonde conforme à celles-ci³. La perspective wittgensteinienne réclame, d'une part, l'abandon des explications et des interprétations philosophiques, surtout au sujet du rôle protecteur de la rationalité ou du rôle de juge de la culture, mais, d'autre part, la stimulation de la capacité thérapeutique de la philosophie par «la modification de sa position», respectivement l'animation de ses origines qui unissent à l'élan conceptuel la compréhension et la sagesse. C'est un paradigme de la philosophie retournée à elle-même dans une manière thérapeutique, au dire de Habermas⁴, la philosophie est effectivement la maladie qui a besoin de guérir.

Commentant sa propre pensée, Wittgenstein précise qu'elle réside, dès le début, dans une partie écrite, la logique, et une autre partie, non écrite, qui est cependant la plus importante. Dans ce contexte, l'impossibilité des énoncés éthiques (cf. *Tractatus*)⁵ est justifiée par leur référence à quelque chose plus haut, à quelque chose qui ne peut pas être dit, vu que ceux-ci dépassent les limites du langage des faits et implicitement des énoncés à sens. Forcer les limites signifie seulement amplifier les énigmes et les incompréhensions, entretenant en même temps les désordres des mots et du monde. Justement pour éviter les recherches illusives — qui reprennent les mêmes problèmes et les même insuccès — Wittgenstein accepte *le silence* des valeurs et la séparation des faits et des valeurs, de sorte que chaque transfert des propositions (des explications ou des descriptions) devient illégitime, interdit. Les valeurs existent au-delà des limites du monde et, de plus, elles modifient ces limites. La frontière du langage consigne précisément

l'incapacité d'écrire le fait conformément à une proposition sans la répétition tout simplement de cette proposition⁶.

La séparation radicale des faits et des valeurs correspond, chez Wittgenstein, à la séparation de dire et de montrer, respectivement à l'opposition entre les faits et quelque chose «plus haut», finalement à l'opposition des sciences de la nature et de la culture. Dans cette conjoncture, les distinctions invoquées (selon Grayling, par exemple) ne sont qu'une manière de protéger le domaine des valeurs de l'immixtion de la science et du contingent, puisque ce domaine concerne le monde tout entier, et non pas les états de choses propres à celui-ci.

La prétention de respecter les limites du langage c'est tout d'abord une provocation pour Wittgenstein qui constate sans cesse les difficultés de voir et de décrire ces limites, mais aussi pour chaque commentateur qui éprouve un «inconfort intellectuel» à propos de chaque interprétation. Russell, par exemple, dans l'*Introduction* de la première édition du *Tractatus*, reconnaît cet état à propos de Wittgenstein, puisque celui-ci réussit, paradoxalement, à parler assez bien et beaucoup au sujet du territoire «prohibé» des valeurs.

En vérité, Wittgenstein (à l'encontre des adeptes du scientisme) attire l'attention sur l'échec inhérent des opérations de rationaliser et de calculer les valeurs, mais, en même temps, il réplique au spéculativisme axiologique affirmant principalement l'action pratique des valeurs, la contribution possible et nécessaire des celles-ci dans une époque de la dictature des moyens, des solutions technologiques. En opposition avec le positivisme à la mode, pour Wittgenstein l'inexprimable appartient à quelque chose digne de respect et, en plus, c'est le fondement de l'exprimable et du sens. Toutefois, tout comme le positivisme logique (Ayer, par exemple), il reconnaît seulement le sens relatif de la valeur et du jugement de valeur qui se traduit par les énoncés factuels, descriptifs. Ainsi, la soutenance de l'absolu de la valeur n'est pas qu'une source des non-sens (ou des faux-sens), comme suite de l'utilisation erronée du langage représentant une tentative désespérée de passer au-delà des limites du langage, «au-delà des murailles de notre prison», comme dit-il, dans la *Conférence sur l'éthique* (1930). Plus encore, l'absolu de la valeur suppose le pouvoir coercitif d'un juge absolu, en désaccord avec l'expérience et les faits. Une telle utilisation erronée du langage est spécifique surtout pour les expressions éthiques, esthétiques, religieuses, parce qu'elles utilisent fréquemment les comparaisons sans le soutien des faits, arrivant au paradoxe (l'expérience au fait reçoit ainsi «une valeur surnaturelle»).

Le dépassement de cette situation paradoxale coïncide avec la disparition du miraculeux, implicitement avec la sanction des

expressions éthiques, esthétiques, etc., parce qu'elles réclament justement le passage au-delà du monde et du langage à sens. Dans ces conditions, les disciplines de la culture utilisant les expressions sans sens sont non-scientifiques mais elles sont toutefois les témoignages d'une tendance légitime de l'esprit exigeant le respect et la considération.

Dans sa dernière (et posthume) oeuvre, Wittgenstein estime la culture comme règle d'ordination et les valeurs comme fondement de l'articulation et de la fonction de la totalité culturelle en rapport avec les situations différentes. C'est à savoir, la manifestation des valeurs est fréquemment dénaturée par l'excès de l'esprit propre à la civilisation technique, qui ne tient pas compte des dimensions profondes (multiples) du développement de l'humain. Toutefois, les perturbations ou les conflits de l'organisation culturelle ne représentent qu'un épisode temporaire, associé, après tout, à la prolifération des non-sens du langage utilisé. Pour Wittgenstein, par exemple, subsiste néanmoins l'espoir du devenir culturel par l'engagement responsable symbolisant l'apport créatif du vouloir et de la pensée vécue (pour lui, comme pour Kierkegaard, la profondeur du langage implique le vécu, la conscience de son propre soi).

La cohérence fonctionnelle des valeurs comme l'occultation de celle-ci révendique un vocabulaire axiologique avec les termes adéquats, pour assurer la transparence du langage et, en plus, l'efficacité du propre discours. Dans cette perspective, la thérapie philosophique de Wittgenstein préconise l'analyse du genre de mots (le beau, le bien etc.) par la recherche des motifs, engageant toujours essentiellement l'accord de la personne. Par conséquent, la discussion des valeurs n'est pas l'une générale, spéculative, mais elle concerne la manière dans laquelle nous apprenons et nous faisons usage de ces mots, de sorte que les diverses compréhensions des valeurs (ou des idéales) dépendent des formes de l'activité, et plus précisément, des «jeux de langage» différents. Les appréciations et les jugements de valeur contiennent dans ce cas les descriptions des formes de vie, de geste ou d'action. En fin de compte, le rapport adéquat aux valeurs implique en permanence l'apprentissage des règles et, en plus, un sens des règles par lesquelles nos jugements deviennent valables.

Dans une expression pragmatique des règles de l'univers axiologique, la faculté du goût a exclusivement le rôle de régler et non pas de créer, contribuant à l'élévation du sens, faisant ainsi les choses plus acceptables. L'appréciation «c'est une chose belle», par exemple, est comme un geste en liaison avec les autres gestes ou actions⁷. La description de la capacité d'appréciation suppose ainsi la

description de l'ambiance culturelle, finalement, la reconnaissance d'une diversité de types d'appréciations par rapport à certaines époques de la culture. Dans ces conditions, la description c'est une entreprise très difficile, mais possible par l'identification «des ressemblances de famille» et par l'invention «des nouvelles analogies». Cette opération renferme beaucoup de risques, comme l'exagération d'une ressemblance ou d'une analogie, constituant le support des dogmatismes philosophiques ou des discussions stériles.

Sentir la valeur, selon Wittgenstein, c'est un caractère strictement privé de l'homme, impliquant un genre de plaisir (approbation ou désapprobation) inexprimable par l'entremise des dire, des exclamations ou des modifications de la face humaine. Par conséquent, les situations appréciatives n'appartiennent pas, évidemment, à la causalité, mais elles dépendent de la motivation, de la question «pour quoi?» et, à la fin, de la production d'un *clic*⁸. Dans ce contexte, l'appel aux causes philosophiques, à l'expérience ou à la statistique ne provoque que des incompréhensions, parce que nous ne pouvons pas communiquer les impressions par les mots, mais seulement par le geste ou par l'action.

Ainsi comprise, la pragmatique du langage — révélée dans les *Leçons* de Wittgenstein (après 1930) et ultérieurement dans les *Recherches*, détermine le sens comme utilisation pratique, en justifiant implicitement un grand nombre de langages divers en tant qu'expressions et parties du comportement humain. En accord avec les formes de vie et d'activité différentes, Wittgenstein renonce ainsi à la délimitation (initiale) des faits exprimables et des valeurs inexprimables, affirmant maintenant la diversité culturelle et anthropologique du langage. Cette nouvelle position de Wittgenstein influencera profondément les adeptes du postmodernisme, comme Rorty, qui l'a considéré un inspirateur des tendances actuelles postmétaphysiques, pluralistes et relativistes.

Au-delà de la reconnaissance des contributions originelles de Wittgenstein, subsiste pourtant les propres doutes, la propre angoisse au sujet des limites du langage et des possibilités de leur dépassement. L'invention des nouvelles utilisations des mots, selon propre aveu, ne peut pas nous protéger des analogies fausses, mais il faut aller plus loin, comme le dit toujours Kierkegaard, un esprit tutélaire de Wittgenstein. En fin de compte, l'action cathartique du langage n'est pas qu'un travail sur son propre soi, ainsi que le but de Wittgenstein, la clarté et la transparence des expressions ne peuvent pas éviter les valeurs puisque celles-ci nous modèlent l'esprit et la vie, transformant la compréhension dans la compréhension du soi. D'ici commence au fond

toute transformation authentique du monde et de l'homme et aussi l'exigence de l'authenticité de la pensée et du vécu soutenue avec obstination et désespoir par Wittgenstein dans toute son oeuvre et sa vie, ainsi qu'il dit dans les *Notes* (1948): «Beim Philosophieren muß man in's alte Chaos hinabsteigen, und sich dort wohlfühlen».

Notes bibliographiques:

¹ Hans-Georg Gadamer, *L'actualité du beau*, Polirom, București, 2000, p. 189.

² Ludwig Wittgenstein, *Vermischte Bemerkungen – Culture and Value* (Herausgegeben von G. H. von Wright, unter Mitarbeit von Heikki Nyman; translated Peter Winch), Basil Blackwell Oxford, 1989, p. 18. Comme dit Wittgenstein, dans *Notes posthumes*: "Die Sprache hat für Alle die gleichen Fallen bereit; das ungeheure Netz gut gangbarer Irrwege...".

³ *Idem*, *Philosophical Investigations*, Basil Blackwell Oxford, 1968, § 111, p. 47.

⁴ Jürgen Habermas, *La conscience morale et l'action communicative*, All, București, 2000, p. 17.

⁵ Ludwig Wittgenstein, *Tractatus logico-philosophicus*, Humanitas, București, 2001, p. 157.

⁶ *Idem*, *Vermischte Bemerkungen*, ed. cit., p. 10. Conformément à Wittgenstein: "Die Grenze der Sprache zeigt sich in der Unmöglichkeit, die Tatsache zu beschreiben, die einem Satz entspricht (seine Übersetzung ist) ohne eben den Satz zu wiederholen".

⁷ *Idem*, *Leçons et conversations sur l'esthétique, la psychologie et la foi religieuse*, Humanitas, București, 1993, p. 32.

⁸ *Ibidem*, p. 48.

LIBERTÉ ET FACTICITÉ CHEZ SARTRE

Adriana NEACȘU
University of Bucharest

Mots clés: autonomie du choix, situation, ma place, mon passé, mes entours, ma mort, limites externes de la liberté.

Une thèse fondamentale soutenue par Sartre c'est l'absolue liberté de l'homme pour faire et se faire, même qu'il est conscient que cette thèse vient en conflit avec l'opinion commune, qui, en tenant compte que nous ne pouvons pas modifier notre situation à notre gré, conclut que l'homme est subordonné au déterminisme, étant fait par toutes les circonstances de sa vie. Mais pour Sartre l'existence du déterminisme ne peut pas être un argument contre notre liberté; tout au contraire, c'est une condition pour cette liberté; parce que libre c'est l'être qui peut réaliser ses projets, et pour réaliser il doit utiliser des moyens, respecter des règles, tenir compte de la manière d'être des choses, de leur coefficient d'adversité, de leur résistance qu'il doit vaincre. Donc, pour être libre et pour arriver à mes fins il faut que je me subordonne au déterminisme. C'est seulement comme ça qu'on peut dire que je suis dans un monde réel. Autrement, si était suffisant de concevoir quelque chose pour la réaliser, j'étais placé dans un monde ressemblant celui du rêve, où le possible n'est plus détaché du réel. Et si les objets surgissaient le moment où ils étaient concevoir, ils n'étaient plus choisis par moi, et ma liberté, qui est par excellence choix, disparaissait.

Il faut maintenant faire distinction entre la liberté, ainsi qu'elle est conçue par le sens commun et le concept sartrien de la liberté. Pour un homme quelconque, être libre c'est obtenir ce qu'on veut, et la liberté est identifiée avec la capacité d'obtenir les buts choisis. Mais le concept technique et philosophique de liberté, le seul que Sartre accepte dans

ses œuvres, signifie seulement autonomie de choix; être libre, dans la vision de Sartre, c'est donc te déterminer vouloir par toi-même, choisir toi-même. Ce concept «technique et philosophique» a mécontenté, d'ailleurs, certains commentateurs, qui ont accusé Sartre d'une conception trop abstract de la liberté.

«Pour que la liberté de l'homme s'articule avec la dialectique de l'histoire, il importe que l'on ne s'en tienne pas à la conception cartésienne, reprise par Sartre, selon laquelle la liberté est simple affirmation de <<l'autonomie du choix>> et non pas pouvoir effectif d'atteindre le but poursuivi. Tant que l'on s'en tient à la première définition, l'on n'engrène pas sur l'histoire, et les luttes des hommes ne seront jamais que l'allégorie ou la parabole d'une drame métaphysique»¹.

Mais, pour Sartre, le choix c'est toujours la mise, par l'individu, d'un but transcendant, qui n'est pas encore et de quoi il est séparé par une totalité des existants réels. Toujours le but vient après ces existants, qui sont donc une condition pour la manifestation de la liberté.

«Mais s'il en est ainsi, l'ordre même des existants est indispensable à la liberté elle-même. C'est par eux qu'elle est séparée et rejointe par rapport à la fin qu'elle poursuit et qui lui annonce ce qu'elle est. En sorte que les résistances que la liberté dévoile dans l'existant, loin d'être un danger pour la liberté, ne font que lui permettre de surgir comme liberté. Il ne peut y avoir de pour-soi libre que comme engagé dans un monde résistant. En dehors de cet engagement, les notions de liberté, de déterminisme, de nécessité perdent jusqu'à leur sens»².

D'ailleurs, le monde révèle ses résistances seulement dans la lumière d'un but établi dans le cadre d'une liberté. Par exemple, un rocher immense m'oppose une résistance profonde à moins que je veux le déplacer. Si, au contraire, je veux l'escalader pour contempler le paysage, il devient une aide précieuse pour moi. En outre, pour un passant qui ne veut que faire une promenade contemplative le rocher n'est ni adversaire ni allié mais seulement beau ou laid. Donc le rocher est en lui-même neutre et attend être éclairé par une fin de quelqu'un pour être d'une manière ou d'autre. C'est ma liberté qui englobe le rocher dans une situation quelconque, situation qui fait le rocher être pour moi d'une façon ou d'autre. Ainsi il n'y a de liberté qu'en situation et

¹ Roger Garaudy, *Perspectives de l'homme*, P.U.F., Paris, 1969, p. 110.

² J.P. Sartre, *L'être et le néant*, Gallimard, Paris, 1943, p. 563.

il n'y a de situation que par la liberté – ça c'est le paradoxe de la liberté. C'est à dire que l'homme trouve partout des résistances et des obstacles qu'il n'a pas créés mais qu'ils n'ont pas de sens que dans et par le libre choix qui est la réalité humaine. Pour comprendre mieux cette chose on doit chercher de près les différentes structures de la situation ou de ma position. La situation c'est la facticité de la liberté ou sa contingence, le donné qui appartient à l'en-soi mais qui ne paraît jamais comme un datum pur ou comme un en-soi pur mais toujours comme déjà éclairé par la fin choisie par un pour-soi, donc par la liberté. Les structures principales de la situation sont: ma place, mon corps, mon passé, mes entours, ma relation fondamentale à autrui et, enfin, ma mort. Mais aucune de ces structures n'est pas donnée seule, elle doit être comprise seulement sur le fond de toutes les autres et, en outre, leur analyse démontrera que

«ma place, mes entours, mon corps, ma situation au milieu du monde en un mot, s'expliquent tous par mon projet, ils sont saisissables seulement à la lumière de ce projet qui fait mon être-au-monde. La liberté est la seule origine, le seul fondement»³.

Ma place c'est le lieu que j'habite: mon pays avec toutes ses particularités, mais, en même temps, c'est

«la disposition et l'ordre des objets qui présentement m'apparaissent (une table, de l'autre côté de la table une fenêtre, à gauche de la fenêtre un bahut, à droite une chaise et, derrière la fenêtre, la rue et la mer), et qui m'indique comme la raison même de leur ordre.»⁴

Ça c'est possible parce que l'espace géométrique c'est un pur néant et c'est moi qui est le centre absolu en fonction de quoi se déploient les distances entre les choses et de quoi chaque chose reçoit sa place. Par ailleurs, cette place où je suis, je l'existe; moi, je suis ma place; bien entendu, pas dans la forme pure, de l'en-soi mais sous le mode du pour-soi, qui vise en même temps l'être et le non-être. Ainsi, cette place que je suis est un rapport entre quelque chose que je suis et autre chose que je ne suis pas. Être dans une place c'est être premièrement loin de... ou près de... – c'est à dire que le lieu a un sens seulement par rapport à un être non-existant que nous voulons atteindre. L'accessibilité

³ Jean Hyppolite, *Figures de la pensée philosophique*, Tome II, Paris, P.U.F., 1971, p. 771.

⁴ J.P. Sartre, *L'être et le néant*, Gallimard, Paris, 1943, p. 570.

ou l'inaccessibilité de cette fin est ce qui définit ma place. Donc ma place peut être comprise uniquement par la lumière du non-être et de l'avenir, uniquement par la perspective d'un but que nous nous proposons. Je ne peux jamais être simplement là, sans aucune autre signification. Par exemple, être-là pour un colonial français c'est être à vingt jours de France; pour un soldat être-là c'est être à cent jours de sa libération et, pour un fuyard qui a échappé à ses poursuivants, être-là c'est être à l'abri. Donc ma place peut être saisie comme un exil ou comme une place naturelle, favorable, en fonction de mes buts et, finalement, en fonction de mon projet originel de moi, qui configure mon-être-dans-le-monde.

Par conséquent, la facticité de ma place se révèle à moi seulement par mon libre choix de ma fin. La liberté est essentielle à la découverte de ma facticité.

«Je l'apprends, cette facticité, de tous les points du futur que je projette, c'est à partir de ce futur choisi qu'elle m'apparaît avec ses caractères d'impuissance, de contingence, de faiblesse, d'absurdité. C'est par rapport à mon rêve de voir New-York, qu'il est absurde et douloureux que je vive à Mont-de-Marsan. Mais réciproquement, la facticité est la seule réalité que la liberté peut découvrir, la seule qu'elle puisse néantiser par la position d'une fin, la seule à partir de laquelle cela ait un sens de poser une fin»⁵.

Et seulement dans la mesure que cette facticité est découverte et néantisée, c'est à dire dépassée vers une fin non-existant, est-elle saisie comme place et, en cette qualité, peut-elle paraître comme un obstacle ou comme une place favorable pour nos désirs. Si par rapport à mon projet de vivre à New-York, ma situation de petit fonctionnaire qui vit à Mont-de-Marsan – qui définit ma place et m'exprime la facticité – est un obstacle, pour un tout autre projet de moi: cel de devenir petit commerçant dans ma ville, cette situation ne sera plus un obstacle, tout au contraire. En conclusion, notre liberté est celle qui crée des obstacles dont nous souffrons, c'est elle-même qui fait de la facticité sa propre restriction. Mais ça c'est une nécessité, parce-que la liberté ne peut pas exister que restreinte puisqu'elle est choix par excellence et le choix ne peut pas être que choix de la finitude, donc suppose élimination et sélection. De ce fait, dans tout le moment, je me saisis comme engagé dans le monde, dans ma place contingente. Mais c'est précisément cet engagement qui donne son sens à ma place contingente et qui est ma liberté. Bien sûr que'au moment de ma

⁵ *Ibidem*, p. 575.

naissance je ne peut choisir ma place mais je prends ou je reçois une place dans le monde, au milieu des choses, place contingente, sur quoi je ne suis pas maître, dont je ne suis le fondement. Mais cette place je l'assume entièrement et je suis totalement responsable d'elle – par conséquent je la choisis donc je manifeste ma liberté par rapport à lui; et en partant d'elle j'établis des fins, c'est à dire: je m'exerce de suite ma propre liberté. Ainsi, dans la situation on voit clairement la liaison inébranlable entre liberté et facticité; sans facticité la liberté n'aurait pas de quoi anéantir donc elle ne pourrait pas exister comme liberté: comme pouvoir d'anéantir et de choisir; en même temps, sans liberté la facticité ne pourrait pas être découverte et n'aurait pas aucun sens.

En ce qui concerne les rapports de la liberté avec mon passé, une autre structure de la situation, nous rencontrons ici un nouveau paradoxe: d'une part, je ne peux me concevoir sans un passé, parce que être c'est avoir été; mais, d'autre part, c'est moi l'être par quoi le passé vient à moi et au monde. Mais le paradoxe peut être résolu comme ça: si la liberté est choix d'une fin en fonction de passé, en échange, le passé est ce qu'il est seulement par rapport à la fin choisie. Bien sûr, il y a dans le passé un élément immuable, qu'on ne peut pas changer (j'ai eu une crise mystique à quinze ans) mais aussi un élément variable par excellence: la signification du fait brut par rapport à la totalité de mon être – signification qui pénètre tant le fait de sorte que, finalement, n'est plus possible à détacher d'elle l'existence brute, immuable. La signification du passé est dépendante de mon projet présent que je choisis librement, donc elle dépend de ma liberté.

«Cela ne signifie nullement que je puis faire varier au gré de mes caprices le sens de mes actes antérieurs; mais, bien au contraire, que le projet fondamental que je suis décide absolument de la signification que peut avoir pour moi et pour les autres le passé que j'ai à être. Moi-seul en effet peut décider à chaque moment de la portée du passé: non pas en discutant, en délibérant et en appréciant en chaque cas l'importance de tel ou tel événement antérieur, mais en me projetant vers mes buts, je sauve le passé avec moi et je décide par l'action de sa signification»⁶.

Par exemple, si je me convertis à vingt ans ou à trente ans, je décide que ma vieille crise mystique a été une prémonition de mon destin; mais si cette conversion ne sera jamais faite c'est que cette crise a été un pur accident de puberté. C'est moi aussi qui décidera, par mes actes futures, si le séjour en prison a été une expérience salutaire ou un

⁶ *Ibidem*, p. 579.

glissement plus profond vers le vice. Pareillement, je déciderai la signification d'un voyage, d'un engagement, d'une intention, de tous mes actes passés seulement en fonction de mon présente et de mes fin actuelles, qui expriment mon projet fondamental de moi. Mais je peux toujours changer cet projet; le changement modifie mes fin, mes intentions présentes et, en consequent, la signification de mon passé est changée aussi. Le futur donc décide si pour moi le passé est encore vivant ou est mort. S'il est vivant il est là, pressant, il a une force de contrainte sur moi, s'il est mort je le nie, le dépasse, il ne me dicte plus mes actions actuelles. Mais c'est toujours moi qui décide pour chaque cas par mon projet si le passé est mort, vivant ou même mort et vivant à la fois: demi-mort donc plein d'ambiguïtés et d'antinomies. Toutefois, en tenant compte que la liberté humaine est un libre projet rongé sans cesse par une liberté imprévisible, on ne peut pas décider une fois pour toutes qui est la partie morte du passé et qui est sa partie vivante. C'est pour ça que le passé est toujours en attente, parce que la réalité humaine est aussi en attente, étant un projet de soi qui se peut changer en permanence à cause de sa liberté et qui peut donner une autre signification et une autre valeur à son passé. Cependant, le passé est le point de départ pour chaque projet futur, même pour celui qui vise le détruire en se dressant contre lui, parce que sans un passé il ne peut pas être aucun futur. En conclusion, le passé, comme la place, fait partie de la situation, étant le point de départ de mon libre projet, à la lumière de quoi il reçoit sa signification.

Une autre structure de la situation ce sont mes entours, c'est à dire

«les choses-ustensiles qui m'entourent, avec leurs coefficients propres d'adversité et d'ustensilité»⁷.

Ces coefficients dépendent dans quelque mesure de ma place mais dans une plus grande mesure de la potentialité propre des ustensiles.

«Ainsi suis-je jeté dès lors que j'existe au milieu d'existences différentes de moi, qui développent autour de moi, pour et contre moi, leurs potentialités»⁸.

Par exemple si je veux arriver sur ma bicyclette à la ville voisine pour voir Pierre et je suis déjà en route, les entours de la situation sont tous les phénomènes que je n'avais pas prévus et qui peuvent entraîner la modification ou même l'abandon de mon projet: le soleil ardent, la

⁷ *Ibidem*, p. 585.

⁸ *Ibidem*, p. 586.

force du vent, un pneu brusquement crêvé. En ce cas, ma liberté est vraiment limitée mais c'est la liberté d'obtenir, pas du tout la liberté de choisir, qui est la liberté réelle et absolue. En outre, si les entours peuvent me faire abandonner mon projet d'arriver à la ville, ils ne peuvent entraîner l'abandon de mon projet principal, qui est un projet de mon être tout entier, à la lumière de quoi ils peuvent être saisis, à un moment donné, comme motifs d'abandonner le projet concret d'arriver à cette ville. Donc, si j'abandonne ma route lorsque mon pneu a crêvé c'est parce que ma relation avec Pierre a une certaine valeur, une place précise dans l'ensemble des relations que j'ai avec le monde. En tout cas, ce n'est pas le changement des entours ce qui peut déterminer, provoqué l'abandon d'un projet quelconque, même un projet partiel; la décision revient toujours à moi et elle est libre, parce que consiste à prendre une résolution vis-à-vis de moi dans les nouvelles conditions.

D'ailleurs, la présence du donné, de la facticité, des entours en nos cas, qui sont partie composante de la situation, loin d'être un obstacle à notre liberté, est demandée par son existence même. La liberté suppose une négation de l'en-soi, donc sans cet en-soi qu'elle nie la liberté s'anéantirait et, avec elle, moi-même puisque je suis ma propre liberté. Être libre c'est être libre pour changer. La liberté implique donc l'existence des entours pour être changés: obstacles à franchir, outils à utiliser – des entours qui ont une existence indépendante de moi et opposent une résistance à mon action, autrement l'action perdrait son sens et la liberté, synonyme avec faire, s'effondrerait elle-même.

«Ainsi, le projet même d'une liberté en général est un choix qui implique la prévision et l'acceptation de résistances par ailleurs quelconques. Non seulement, c'est la liberté qui constitue le cadre où des en-soi par ailleurs indifférents se révéleront comme des résistances, mais encore son projet même, en général, est projet de *faire* dans un monde résistant, par victoire sur ses résistances. Tout projet libre prévoit, en se pro-jectant, la marge d'imprévisibilité due à l'indépendance des choses, précisément parce que cette indépendance est ce à partir de quoi une liberté se constitue»⁹.

De ce fait tout projet de la liberté est projet ouvert, qui renferme en soi la possibilité de ses changements ultérieurs. Mais ces changements sont décidés seulement par le pour-soi, qui exerce ainsi sa totale liberté. Le caractère imprévisible et l'adversité des entours relèvent la facticité, donc la contingence de ma liberté dans la situation; mais, en même

⁹ *Ibidem*, p. 588.

temps, je ne peux pas être libre, absolument libre que dans la situation, dont je suis absolument responsable.

Mais la situation concrète où je me trouve n'est pas du tout constituée seulement par des rapports entre moi et les choses. Moi, celui par qui les significations viennent aux choses, je suis engagé dans un monde déjà signifié par l'autre que moi. Les rues, les maisons, les bruits, les oeuvres d'art, etc., ne sont pas des existences brutes mais ils ont de significations objectives, qui se donnent à moi en me suggérant la conduite, que je dois apprendre parce que le moment où je ne respecte leurs indications mes actions échoueront. En ces conditions, il s'ensuit que ma liberté est limitée? Vraiment, l'homme surgit dans un monde qui se donne comme déjà vue, exploré, dont le sens est aliéné puisque ne vient de lui. Elle ne se révèle à lui que par des techniques collectives préexistantes qui l'attachent aux divers groupes humains et tout cela représente le donné, la facticité du pour-soi, qui ne dépend de lui; mais il n'y a de ce fait une limitation de la liberté – seulement la nécessité pour le pour-soi de choisir en partant de ce donné, en tenant compte de ces circonstances extérieures inévitables. Parce que être libre ce n'est pas choisir en sens d'instituer le monde historique où on doit surgir – cette chose n'a pas aucune raison – mais de choisir dans le monde, quel qu'il soit, en partant de ce monde. Le pour-soi ne pourrait pas choisir ses fins qu'il est sans être homme, membre d'une collectivité nationale, d'une classe, d'une famille, etc., qui sont constituées avant lui, où il s'intègre en respectant leurs règles et leurs techniques spécifiques. Mais ces règles et techniques sont des structures abstraites que le pour-soi dépasse par son projet, en se définissant de l'autre côté, à l'horizon de ses déterminations. Chaque projet de soi de l'homme se réalise comme dépassement, vers son concret, de ses moments abstraits.

«Pourtant, l'existence de l'Autre apporte une limite de fait à ma liberté. C'est qu'en effet, par le surgissement de l'Autre apparaissent certaines déterminations que je *suis* sans les avoir choisies. Me voici, en effet, Juif ou Aryen, beau ou laid, manchot, etc. Tout cela, je suis *pour l'autre*, sans espoir d'appréhender ce sens que j'ai *dehors* ni à plus forte raison de le modifier. (...) Cette limite à ma liberté est, on le voit, posée par la pure et simple existence d'autrui, c'est à dire par *le fait* que ma transcendance existe pour une transcendance»¹⁰.

Donc, comme sur le simple plan d'existence du pour-soi la seule limite de ma liberté est aussi ma liberté, de même sur le plan des

¹⁰ *Ibidem*, p. 606, 608.

rapports avec l'autre la seule limite de ma liberté est la liberté d'autrui. Il résulte que la liberté ne peut être limitée que par la liberté. En outre, les limites imposées par l'autre à ma liberté sont des limites extérieures, que je perçois seulement si j'assume mon être-pour-autrui en reconnaissant l'existence d'autrui comme subjectivité. Si je ne veux pas la reconnaître mon être-pour-autrui disparaîtra et ma liberté se retrouvera intacte. Par exemple, seulement au moment où je reconnais l'existence des antisémites et leur liberté mon être juif surgira comme limite externe de ma liberté mais si je vois tout cela comme simples objets mon être juif s'évanouira et n'existera plus aucune limite pour ma liberté. Plus encore, même dans la situation où j'assume mon être-pour-autrui, parce que cette assumption se fait librement, en quelque sorte ma liberté récupère ses propres limites. En conclusion, les limites extérieures de la liberté,

«précisément parce qu'elles sont extérieures et qu'elles ne s'intériorisent que comme irréalisables, ne seront jamais un obstacle *réel* pour elle, ni une limite subie. La liberté est totale et infinie, ce qui ne veut dire qu'elle n'*ait pas* des limites mais qu'elle *ne les rencontre* jamais. Les seules limites que la liberté heurte à chaque instant, ce sont celles qu'elle s'impose à elle-même et dont nous avons parlé, à propos du passé, des entours et des techniques»¹¹.

Une autre limite externe et de fait pour ma subjectivité c'est la mort. Elle n'est pas une structure ontologique de mon être en tant que pour-soi; c'est l'autre qui est mortel dans son être. Le pour-soi ne peut pas ni attendre la mort ni l'accomplir ni se projeter vers lui parce que la possibilité de la mort donc le projet pour la mort c'est la destruction de tous les projets. En réalité la mort est la limite permanente de mes projets parce qu'elle exprime la nécessité d'exister par ailleurs, à l'extérieur de moi, comme un dehors et comme un en-soi. C'est pourquoi elle est saisie comme situation-limite qui me hante dans le cœur de tous mes projets comme leur implacable revers parce qu'elle n'est pas du tout ma possibilité mais la possibilité que je n'ai plus des possibilités. En conséquence elle ne m'affecte directement, ne m'atteint pas. La mort n'est jamais rencontrée par le pour-soi et de ce fait sa liberté reste totale et infinie; non pas parce que la mort ne la limite pas mais parce que la liberté ne trouve jamais cette limite; donc la mort n'est pas un obstacle pour mes projets, elle n'est qu'un destin au-delà de ces projets. Ainsi je ne suis pas libre à mourir mais je suis seulement un

¹¹ *Ibidem*, p. 614-615.

mortel libre; et «mortel» exprime l'être présent que je suis pour l'autre, pas mon être, qui s'affirme non contre mais indépendamment de la mort. Pour moi la mort est un aspect de la facticité et de mon être-pour-autrui, donc rien d'autre que le donné, qu'il ne peut pas être justifié; en conclusion il est absurde que nous mourions, comme il est absurde que nous soyions nés et que nous vivrions. La naissance, la vie, la mort sont absurdes parce'elles sont contingentes, n'expriment aucune nécessité et ne dépendent pas de nous-même puisque nous ne sommes pas leur fondement.

Toutes ces structures de la situation expriment ma facticité, qui, nous avons vu, ne s'oppose pas mais c'est une condition de ma liberté.

«Le pour-soi n'est libre qu'en situation, c'est à dire dans le rapport de sa liberté à sa condition. Et celle-ci procède de divers facteurs – tels que la place qu'il occupe, son passé, les potentialités des choses autour de lui (c'est-à-dire, si l'on veut, le degré de maniabilité de ce complexe d'ustensiles que représente pour lui le monde environnant). Sartre montre qu'aucun de ces facteurs ne saurait limiter du dehors la liberté (...) il est clair qu'il s'agit toujours, en dernière analyse, des limites choisies par ma liberté»¹².

Elles sont le donné objectif d'où elle part et qu'elle dépasse en le transformant. Mais la situation n'embrasse pas seulement de telles structures objectives, parce qu'elle renferme aussi le pour-soi, avec sa liberté absolue. Donc la situation n'est ni objective ni subjective puisqu'elle est, en même temps, le sujet entier et l'objet entier. En conclusion, la facticité et la liberté ne peuvent pas exister qu'ensemble et elles sont contenues en ce qui Sartre appelle *situation*, qui représente ma position dans le monde, définie par mes rapports avec ma propre facticité, rapports établis dans la lumière d'une fin posée librement par moi.

¹² Francis Jeanson, *Le problème moral et la pensée de Sartre*, Éditions du Seuil, Paris, 1965, p. 243.

Bibliographie:

J.P. Sartre, *L'être et le néant*, Gallimard, Paris, 1943.

Roger Garaudy, *Perspectives de l'homme*, P.U.F., Paris, 1969.

Jean Hyppolite, *Figures de la pensée philosophique*, Tome II, Paris, P.U.F., 1971.

Francis Jeanson, *Le problème moral et la pensée de Sartre*, Éditions du Seuil, Paris, 1965.

RATIONALITÉ ET RAISONNABILITÉ

Florentina-Olimpia MUȚIU

L'Université de l'Ouest de Timișoara

Il est important à retenir le fait que habituellement le terme «raisonnable» signifie ce qui possède de la raison. Aujourd'hui, dans un sens strictement moral, le terme implique la conformité avec le sens commun ou avec le devoir, étant distinct du terme «rationnel».

L'idée de vérité est étroitement liée de celle de raison. Le scepticisme, autrement dit la négation *a priori* de toute possibilité de la vérité, doit être repoussé, justement parce que la pensée est capable de raisonner. Lorsque les scolastiques affirmaient que «l'homme est un animal raisonnable», ils entendaient par cela que le trait caractéristique de l'homme est celui qu'il a de la raison. Nous observons que, si pour les scolastiques le terme «raisonnable» a le premier sens mentionné plus haut, pour nous il a un sens particulier, plus restreint, surtout moral qu'intellectuel: une pensée raisonnable c'est une pensée sage et prudente; un acte raisonnable c'est un acte juste, moralement justifié, et non seulement un acte intelligible, explicable par la raison. De cette perspective la distinction (qui ne se fait pas toujours avec suffisante attention) entre la pensée rationnelle et la pensée raisonnable, entre la rationalité et la raisonnabilité est justifiée. La rationalité exprime une liaison logique, formalement correcte des propositions énoncées, elle étant celle qui nous permet d'opérer correctement une déduction partant de l'axiomes initiaux ou une induction partant de faits concrets. La raisonnabilité se situe surtout au niveau du choix des axiomes, par exemple du choix des principes qui guideront une vie ou qui oriente l'homme de science dans le développement de la recherche. Nous sommes ici au niveau des valeurs et beaucoup au-delà de la raison.

La pensée raisonnable suppose donc autre chose que la pensée rationnelle. Elle implique l'intuition des valeurs, leur sélection. Un homme raisonnable n'est pas seulement un homme qui lie correctement

des propositions en vertu de sa rationalité, mais il est un homme qui prouve du jugement et qui, grâce à son sens moral, à son expérience de vie, choisit de manière judicieuse ses axiomes initiaux.

La confusion entre le rationnel et le raisonnable n'a pas toujours été évitée. De ce point de vue c'est significatif le rationalisme de Hegel qui déclare que: «Tout ce qui est rationnel est réel, tout ce qui est réel est rationnel». Si cette affirmation signifie seulement que tout ce qui est réel est rationnel, c'est-à-dire intelligible, explicable par l'intermédiaire de la raison, alors il s'agit d'une définition importante du rationalisme. Au début du XIX^e siècle Hegel dénonçait le rationalisme trop borné des philosophes de XVIII^e siècle, philosophes des «lumières». Hegel dit qu'un véritable rationaliste doit s'efforcer de comprendre tout, même ce qui paraît opposé à la raison, comme c'est le cas de la religion, et qui n'est pas, peut-être, qu'une manifestation symbolique de la raison. Le vrai rationaliste n'est pas celui qui critique, mais celui qui essaie de comprendre. Mais Hegel passe illicitement de cette idée significative que toute l'histoire doit être intelligible, compréhensible par la raison, à l'idée dangereuse et fautive conformément à laquelle tout est raisonnable, tout ce qui se passe et tout ce qui s'est passé est non seulement intelligible mais aussi justifié.

Il faut préférer, à ce raisonnement hégélien, le rationalisme de type scientifique, qui est soutenu, parmi les autres, par Spinoza, si nous avons en vue qu'il considère que tout ce que la raison proclame comme «mal» n'est pas mal relativement à l'ordre et aux lois de la nature, mais relativement aux lois de notre nature; ce qui n'est pas raisonnable (c'est-à-dire, contraire à la sagesse humaine, mal pour l'homme) peut être rationnel, c'est-à-dire explicable du point de vue scientifique: expliquer le mal ne signifie pas du tout le justifier, mais permettre des techniques qui, une fois le mal compris, puissent le vaincre (Vergez, A., Huisman, D, 1995, p. 247-249).

Nous remarquons le fait que l'efficacité peut ne pas supposer de la moralité; ce qui est rationnel peut ne pas être raisonnable. Le rationnel nous indique les meilleurs moyens pour atteindre notre but, mais il ne nous dit pas si ce but est bon. Ce qui est logique et conforme à une bonne méthode ou à l'adaptation des moyens à un but d'ordre technique, autrement dit, ce qui est rationnel n'est pas obligatoirement raisonnable (Graf, A., Le Bihan, C., 2000, p. 92-93). M. Weber fait la distinction entre «la rationalité instrumentale», qui consiste seulement dans la mise en application des moyens nécessaires pour obtenir un but et la «rationalité morale», qui propose et comprend les buts avant d'être visés. Toute réflexion qui vise les éléments de l'action humaine consciente est liée de deux catégories: «but» et «moyen». Toujours,

considère Weber, nous voulons réaliser quelque chose *in concreto*, soit «pour l'amour de la valeur intrinsèque», soit comme moyen au service du fait voulu en dernière instance. Ce qui est en premier lieu accessible à la recherche scientifique c'est le problème de la conformité des moyens lorsque les buts sont donnés. Puisque nous pouvons évaluer les chances d'atteindre un but avec les moyens qui sont à notre disposition et, implicitement, apprécier (chaque fois dans les limites des connaissances dont nous disposons) — indirectement — aussi le but comme étant pratiquement réalisable, dans les conditions historiques données, ou comme étant manqué de sens. Puis, si le but proposé paraît être réalisable, nous pouvons établir, dans les limites des connaissances que nous détenons au moment respectif, les conséquences que l'application de ces moyens pourraient déclencher, étant donnée la connexion universelle de tout ce qui se passe. On offre donc à celui qui est impliqué la possibilité de mettre en balance les conséquences non-intentionnées, qui s'opposent aux résultats intentionnés de son action. Aucun homme, conscient de ses responsabilités, ne peut pas se soustraire à cette mise en balance du but et de ses conséquences. Ce qu'on peut lui offrir de plus à l'appui de sa décision, c'est la connaissance de la signification du but suivi; il peut être aidé à connaître mieux quelle est, dans un certain contexte, la signification du but, l'enchaînement et l'ampleur des objectifs qu'il se propose et entre lesquels il choisit, commençant par identifier et dévoiler l'évolution logique des idées qui se situent ou peuvent se situer à la base du but concret (Weber, M., 2001, pp. 13-14).

F. Peters, essayant de rendre la signification du terme de «raisonnabilité», met en évidence le fait que depuis toujours il y a eu la conviction que dans la vertu se trouve une sorte de contrôle intellectuel. Celui-ci remarque le fait que chez Platon, dans *Republica* (VI, 505a et les suivants), le terme *phronesis* commence à perdre son colorit pratique et éthique, arrivant finalement à signifier la contemplation intellectuelle des *eides*, et dans *Philebos* on l'utilise couramment comme synonyme pour *nous* dans son acception de type suprême de connaissance, utilisation assez répandue aux présocratiques dans leurs discussions concernant les ressemblances et les différences entre la connaissance sensorielle et la pensée. Une fois avec *l'Éthique Nichomachique* (VI, 1140a-b) d'Aristote, la signification du *phronesis* est de nouveau restreinte à la sphère morale, pendant que la partie de la *theoria* du *phronesis* platonicien est séparée comme la sagesse théorétique — *sophia* (Peters, F. E., 1997, p. 224).

La distinction faite par Aristote entre la *praxis*, ayant comme vertu le soit-disant *phronesis* (la sagesse pratique) et la *poesis*, ayant comme

vertu le soit-disant *technè* (l'habileté) est considérée par I. Stengers comme étant fondamentale. La responsabilité de la décision morale consiste à trouver ce qui est juste, à discerner concrètement et à saisir dans une situation concrète ce qui est juste. Il faut saisir l'occasion et choisir les moyens adéquats. L'analyse aristotélicienne du *phronesis* met en évidence le fait que nous devons toujours posséder et appliquer la connaissance morale.

Aristote a développé la philosophie pratique qui inclut la politique aussi, dans la dispute explicite avec l'idéal de la théorie et de la philosophie théorique. Il a élevé la pratique humaine au rang d'objet autonome d'un domaine de la connaissance. Par la pratique (*praxis*) on entend la totalité des choses pratiques, donc tout le comportement humain et la manière dont les hommes organisent leur vie, en entendant par cela, non pas dernièrement, la politique, et dans le cadre de celle-ci, la législation. Aristote mentionne une division de la philosophie en trois domaines: la philosophie théorique, la philosophie pratique et la poétique. Entre les points extrêmes «savoir» et «faire» se trouve la *praxis*, l'objet de la philosophie pratique. Sa base proprement-dite est constituée par la position intermédiaire de l'homme et sa caractéristique essentielle, la capacité de mener sa vie de manière raisonnable. La vertu fondamentale qui résulte de l'essence de l'homme est donc la rationalité qui lui conduit «la pratique».

Il faut donc nous demander de nouveau: qu'est-ce que c'est, que signifie-t-il *praxis*? En partant d'Aristote nous comprenons que, non pas par opposition à la *theoria*, mais par opposition à «l'esprit artistique» de la production, on forme la notion de *praxis*. La distinction aristotélicienne entre *technè* — la science qui dirige une capacité de faire — et *phronesis* — les connaissances qui conduisent la *praxis* ne représentent pas une séparation, mais une mise en ordre, c'est-à-dire l'ordonnation et la subordination de cette *technè*-là et de sa capacité à son *phronesis* et à sa *praxis*. L'action est, évidemment, l'activité introduite à la base d'une décision morale, d'une *phroharesis*, c'est une composante de la *praxis*. La philosophie pratique ne signifie pas l'application de la théorie à la pratique, comme nous procédons constamment, biensûr, dans le domaine de tout acte pratique, mais elle s'élève de l'expérience de la *praxis* même, grâce à la raison et à la rationalité mise en elle.

Dans la description de l'élément rationnel impliqué dans la prise de la décision dans l'action humaine, Aristote a tenu, évidemment, compte — dans la notion de *phronesis* — de tous les deux aspects, dans leur unité inséparable: d'une part, la rationalité qui consiste à trouver les moyens en concordance avec le but donné, d'autre part, la préméditation et le maintien du but même, respectivement la rationalité

dans le choisissement non seulement des moyens mais aussi du but. Les pratiques scientifiques impliquent le *phronesis*, une sagesse pratique, ayant en vue la pluralité et la diversité de leurs intérêts, d'un genre nouveau. C'est pourquoi, on peut faire de la notion d'intérêt qu'on doit réveiller, un impératif scientifique, sans léser un sentiment «enraciné», qui désigne le «consensus désintéressé» des hommes de science comme garant de leurs propositions. L'intérêt est, ici, redéfini par la liaison qui fait que *poesis* et *praxis*, *technè* et *phronesis*, fait et histoire se réinventent ensemble. L'intérêt dérive de l'*inter-esse*: «la situation entre». Ceux qui se laissent intéressés d'un énoncé expérimentale acceptent l'hypothèse d'une liaison engageante, et la liaison respective est définie par une prétention très précise, qui prescrit un devoir et confère un droit. Ceux qui l'accepte doivent pouvoir soutenir qu'ils l'on fait seulement parce que la liaison respective ne les liaient pas d'un auteur «comme tous les autres», parce qu'elle ne signifiait pas une dépendance de certains intérêts, convictions et ambitions qui constitueraient des ingrédients clandestins de propositions à l'auteur respectif. Ce qui signifie, aussi, que ceux qui acceptent s'engager, ceux qui admettent dans leur laboratoire le dispositif expérimental par lequel on légitime la respective énoncé ont le droit de garder leur position de rivaux indépendents, n'étant pas obligés à devenir des disciples soumis à l'unanimité d'une idée. Ils ne reconnaissent que le fait que le dispositif a permis au phénomène «d'imposer son autorité», de montrer la manière dont il doit être décrit (Stengers, I., 2001, p. 96-99).

Ce qui compte dans la société humaine, c'est la manière dont elle définit ses buts ou, plus précisément, comment obtient-elle l'accord et comment trouve-t-on les moyens pour que tous acceptent les buts confirmés. Dans le problème du désir de connaissance théorique, tout comme dans le domaine de la pratique humaine, d'une importance décisive est toujours la supposition que tous sont dédiés à un idéal de la rationalité, défini par son contenu. Cet idéal de la philosophie pratique est valable pour les sciences de l'esprit, peut-être aussi pour nos sciences sociales dans l'acception large du terme, et pour les sciences de la nature. Car l'universalité pratique du concept de rationalité nous comprend tous, dans la totalité. C'est pourquoi elle réussit à représenter une autre instance, supérieure, de la responsabilité, et pour le désir de connaissance théorique, qui ne connaît aucune sorte de limites. La raison demande l'application juste des connaissances et des facultés, et cette application est toujours en même temps subordination envers des buts collectifs, valables pour tous. Si les choses se présentent ainsi, alors l'herméneutique représente un devoir central de la philosophie. Elle n'est pas demandée seulement pour servir d'intermédiaire entre la

connaissance théorique et celle pratique, mais aussi pour mesurer les objectifs de nos facultés par rapport aux buts communs, qui soutiennent la culture. Par cela, l'herméneutique a soin de toute la dimension de la compréhension de soi et non pas seulement de celle présente dans la science (Gadamer, H. G., 1999, p. 56-61, 186, 199-200).

Th. Nagel considère que quelque raisonnable qu'il soit de mettre en doute la validité de certaines actions qu'on fait sous la commande de la raison, ces doutes ne peuvent pas éviter d'employer eux-mêmes certains types de raisonnement, et les priorités que nous avons mentionnées font l'apparition lorsque nous essayons de nous détacher d'un nombre d'idées de plus en plus grand. Certains types de pensée ne peuvent pas être mis en doute intelligiblement, parce qu'ils imposent leur présence dans tout essai de penser en général. Toute hypothèse c'est une hypothèse sur la manière d'être des choses, et la logique en est contenue dès le commencement. La même observation est valable pour tout doute ou contre-hypothèse. L'élimination d'une conviction impose la présence d'un raisonnement, et celui-ci doit démontrer qu'une alternative incompatible avec la première est au moins aussi plausible. La raison joue un rôle fondamental dans la logique, les mathématiques et les sciences empiriques, mais tous les exemples ostensifs de raison pratique peuvent être mieux compris comme manifestations des dispositions psychologiques spécifiques. Ici, les conclusions certes dépendent d'une recherche substantielle sur la question si la recherche de l'universel a du sens dans chaque domaine et si la réponse est oui, s'il est *raisonnable* de croire que nos faibles efforts concrets dans cette direction reflètent une chose qui pourrait être perfectionnée par la suite (Nagel, Th., 1998, p. 73-74, 93-94).

Dans la vision de Perelman, l'argumentation a la fonction de régler les conflits qui surviennent dans le domaine de l'action et qui sont générés par les systèmes de valeurs incompatibles des divers agents. De cette idée fondatrice dérive le repoussement des définitions restreintes de la raison, qui assimilent *le raisonnable* au démontrable; cela parce que la réduction du premier au deuxième ferait impossible toute logique des valeurs, poussant donc tous les discours sociaux dans le domaine de l'irrationnel, ne voyant pas dans la réalité d'ensemble que poésie et mathématiques. L'argumentation propose des modèles de rationalité pour une «logique de la décision pratique» dont les procédures définissent la méthodologie. Selon les observations de Plantin, Perelman n'a pas été préoccupé par la réalisation d'une synthèse entre la vérité théorique et la vérité pratique. En particulier, il n'a pas dit grand-chose sur la raison expérimentale, qu'il inclut dans la même place avec la raison hypothétique-déductive, traitant de la même

manière l'intuition rationnelle et l'intuition sensible. Au contraire, il a utilisé la notion de «raison démonstrative» comme un repoussement, permettant d'être mieux saisie. Perelman n'a pas examiné la possibilité de la construction de modèles logiques «flexibles», qui couvriraient la distance entre la raison pratique et la raison analytique: «il n'a aucun sens de parler d'une délibération ou d'une argumentation correcte formellement». La division irréductible de la raison en théorique et pratique se reflète dans les deux manières de définir les arguments, d'après leurs structures formelles et d'après leur degré d'efficacité pratique. Concilier les deux formes de raison n'est pas plus simple que réunir les deux manières de définition. Puisque la théorie ne facilite aucun accès vers la vérité n'importe quelle serait l'argumentation qui l'accompagne, Ch. Perelman soutient que nous devons identifier la thèse raisonnable et l'argument raisonnable: une thèse non-raisonnable est une thèse soutenue par des arguments non-raisonnables, selon Ch. Perelman. Or, selon Plantin, on prouve habituellement qu'une thèse raisonnable peut être défendue avec des arguments non-raisonnables. La question qui se pose est si, inversement, il serait absurde de dire qu'une thèse non-raisonnable peut être soutenue avec des arguments raisonnables. (Plantin, C., 1990, p. 17-22).

Dans la perspective de la rationalité intrinsèque du discours, rationalité qui n'exclut pas la dimension figurale, l'argumentation enrichit la signification-même de la liberté humaine. Perelman apprécie que seulement l'existence d'une argumentation qui ne soit ni contraignante ni arbitraire accorde un sens à la liberté humaine, condition pour exercer un choix raisonnable. Pour rétablir cet équilibre et fonder la rhétorique et l'argumentation comme sciences critiques, on devra abandonner une série de préjugés comme la rupture affectivité/argumentation ou la superposition affectivité/irrationalité (Rovența-Frumușani, D., 2000, p. 15). En fait, ce changement de paradigme a été déjà amorcé par le nouveau rôle de la subjectivité dans la science, et par la prédominance du métaphysique dans tous les types de discours, y compris celui quotidien et scientifique.

Le vrai contraire du «rationnel» n'est pas donc «le non-raisonnable», mais «l'irrationnel». Qu'est-ce qu'on doit comprendre par ce mot? Premièrement, le terme d'«irrationnel» peut être appliqué à toute philosophie, à toute manière de penser qui méprise la raison, à toute affirmation qui prétend se fonder sur autre chose que la raison. Mais l'irrationnel doit-il qualifier seulement une méthode d'appréciation de la réalité? Les choses-mêmes ne sont-elles aussi souvent irrationnelles, c'est-à-dire résistantes à toute intelligibilité? À cette question, le philosophe rationaliste le plus convaincu est obligé à

répondre qu'il y a au moins un fait irrationnel: le fait même de l'existence, le fait qu'il existe quelque chose plutôt que rien. Selon les dires de Wittgenstein, l'élément mystique réside non pas dans la manière dont le monde est construit, mais dans le fait qu'il existe. Le fait de l'existence n'est pas déductible par la raison, mais *le comment* de l'existence, c'est-à-dire l'enchaînement des phénomènes, est rationnel, c'est-à-dire il est soumis à des lois intelligibles.

Même si, comme T. Cățineanu remarque à juste titre, D. D. Roșca ne définit nulle part rigoureusement et systématiquement les termes de «rationnel» et «irrationnel», les significations de ceux-ci peuvent être déduits des textes de ses ouvrages. Pour cela il est nécessaire de tenir compte en essence au moins des précisions suivantes de l'auteur de *l'Existence tragique*. Le philosophe roumain considère que l'homme ne peut pas se rapporter au monde et qu'il ne doit pas faire des appréciations sur celui-ci que sur la base de l'expérience. Or, «l'existence, dans la mesure que nous avons pu la connaître par l'analyse appuie sur l'expérience, est en partie rationnelle, en partie irrationnelle; elle est raisonnable et absurde à la fois» (Roșca, D. D., 1968, p. 77; Biriș, I., 1995, p. 28).

Dans son expression développée et élucidée, la formule de pensée et d'attitude qui se trouve à la base de *l'Existence tragique* contient une tension intérieure extraordinaire, et pourtant elle est d'une éblouissante cohérence. Dans le plan cognitif et avec référence ontologique, l'ouvrage contient à la base deux énoncés fondamentaux: l'énoncé de relief, qui nous dit que «l'existence est rationnelle et irrationnelle à la fois» et l'énoncé de fond qui nous dit que «l'existence est d'une complexité inextricable» et que, donc, la relation entre la rationalité et l'irrationalité est elle aussi inextricable. L'énoncé de relief marche sur la délimitation et le besoin de délimitation entre le rationnel et l'irrationnel, et l'énoncé de fond marche sur la pensée secondaire de l'impossibilité de délimiter jusqu'à la fin la sphère de la rationalité de la sphère de l'irrationalité de l'existence. La tension entre les deux énoncés réflexifs peut être définie aussi de la manière suivante: l'énoncé de relief est périclité par l'énoncé de fond, qui postule le caractère inextricable de la relation rationalité-irrationalité, ces déterminations s'impliquant réciproquement à l'infini. Inversément, l'énoncé de fond est périclité par la mise en jeu de l'énoncé de relief, jeu actif par lequel on délimite effectivement le rationnel de l'irrationnel, dans l'effort de faire augmenter la rationalité du monde, l'indifférence contemplatrice étant ici remplacée par l'effort positif de la rationalisation (Cățineanu, T., 1985, vol. II, p. 13).

Les deux déterminations (rationnel-irrationnel) sont opposées et corrélatives. C'est-à-dire elles se supposent et s'impliquent réciproquement

(pour que le rationnel ait du sens et qu'il existe, il est nécessaire que l'irrationnel existe lui aussi). Puis, nous attire l'attention D. D. Roşca, la frontière entre ce qui est rationnel et ce qui est irrationnel est d'une «mobilité déconcertante», en se déplaçant d'une direction à l'autre. Il est vrai, l'expérience de jusqu'à présent semble nous montrer que la sphère de l'irrationnel et de l'absolu est pourtant plus étendue que celle du rationnel et du raisonnable. Donc, le couple catégoriel rationnel-irrationnel vise, dans la conception de D. D. Roşca, plusieurs plans: de celui ontologique à celui épistémologique, axiologique et métaphysique (Biriş, I, 1995, p. 28-29). Car, au-delà des déterminations rationnelles et irrationnelles de l'existence (couplées, biensûr, par l'expérience avec le sujet humain), le rapport mentionné doit répondre aux besoins de la conscience philosophique de connaissance, d'attitude évaluée et de recherche d'un sens ultime de l'existence.

M. Florian, dans son ouvrage *La récessivité comme structure du monde*, soutient que l'irrationnel n'est pas un facteur dominant, mais un facteur subordonné, récessif et c'est pourquoi il suppose le rationnel comme fonction dominante (Florian, M., 1983, vol. I, p. 269-284). L'irrationnel n'existe pas par soi, mais par le rationnel; l'irrationnel est né de l'explication avec soi-même du rationnel, du désir de la raison de connaître ses pouvoirs et les limites de ceux-ci, de l'obligation de la raison de ne pas interrompre le contact avec la réalité, de l'«exprimer» ou l'«explicitier», ce qui est la fonction fondamentale de la raison et de la connaissance en général. L'irrationnel est un contrôle permanent du rationnel, tout irrationnel conditionne une métamorphose du rationnel; l'irrationnel est le ferment nécessaire à la vie rationnelle.

La recherche du processus si complexe de la création artistique a permis au philosophe roumain T. Vianu de mettre en évidence le spécifique du rationnel et de l'irrationnel. La création artistique, comme activité humaine spécifique, se situe dans un horizon axiologique, qui la particularise; elle se trouve sous le signe de la valorisation, de l'évaluation de la part de l'artiste, des données existentielles, cognitives, affectives, sensorielles qui le détermine d'opter et de créer en vertu de cette option, mais aussi sous le signe de la nouvelle valeur qu'il produit, valeur incarnée dans l'oeuvre d'art, en lui conférant les attributs d'unicité, d'inimitabilité, d'irrépétabilité. La perspective d'une discussion liée de la possibilité ou de l'impossibilité de connaître l'acte créateur s'ouvre en partant de cette affirmation. Les précisions de T. Vianu sont pertinentes pour la mise en évidence de la complexité de cet acte, qui ne peut être envisagée par une schématisation théorique, simplificatrice. Soutenant l'idée de l'unicité valorique de l'acte esthétique créateur, T. Vianu considère que les normes, les règles individuelles de

développement de l'acte créateur sont difficile à surprendre, l'artiste n'ayant pas la possibilité de formuler sur la voie intellectuelle des règles qui ont dirigé sa création. Mais cela ne signifie pas que le processus de la création est impossible à connaître. Significatif dans ce sens est l'effort de T. Vianu de présenter et d'expliquer les étapes du processus de création artistique, dans laquelle s'entremêlent les éléments rationnels avec ceux irrationnels.

Pour une recherche rigoureuse du processus de la création artistique il est nécessaire de délimiter les sens et d'évidencier le spécifique des aspects appartenant aux deux éléments impliqués dans la démarche de T. Vianu: le rationnel et l'irrationnel. Rationnel, dans la vision de T. Vianu, signifie tout ce qui se trouve sous le signe de la raison et qui peut être expliqué par l'intermédiaire des principes logiques et des formes logiques de la pensée. Partant de l'idée qu'il y a un fond de rationalité profonde dans toute création de la beauté et de l'art, le philosophe roumain apprécie que, dans son essence, la création artistique se situe avec prépondérance sous le signe de la raison.

Le rationnel s'envisage comme relationnalité, ce qui signifie que toute structure artistique représente un système de relations entre les divers éléments d'une oeuvre, relève de son schéma rationnel. Mais cela est insuffisant pour exprimer intégralement l'oeuvre, étant nécessaire la mise en évidence des nuances, des valences que seulement l'irrationnel peut donner. Mais le rôle primordial revient à la raison, son existence ayant la qualité de «corriger» l'irrationalité de la spontanéité.

Comme on peut observer, le philosophe roumain confère à l'irrationnel une note particulière, ne se limitant pas seulement à la compréhension de l'irrationnel dans son sens psychologique — d'affectif, purement subjectif ou d'imagination qui fait référence aux apparences et aux faits qui se désintéressent de leur réalité. Toutes ces spécifications concernant l'irrationnel sont nécessaires pour comprendre mieux que les éléments rationnels et irrationnels coexistent dans le processus de la création, ils s'entremêlent, mais leur pourcentage diffère d'un type de création à l'autre, d'un créateur à l'autre (Seel, M., 1985, p. 317-319). C'est seulement grâce à leur interaction, à leur prépondérance différente, que l'unité de l'oeuvre d'art peut prendre contour. Mais l'irrationnel est compris comme une nécessité dans le cadre du processus de la création, parce que seulement par son intermédiaire, du «chaos de l'âme résulte le consensus de l'oeuvre et la frénésie affective, la jubilation de l'inspiration est le salut avec lequel l'artiste répond au lever de ce monde de beauté» (Vianu, T., 1976, p. 293).

L'irrationnel se manifeste surtout dans la deuxième étape du processus de la création artistique, celle de l'inspiration — comprise comme une disponibilité créatrice qu'on doit suivre pour accomplir la création, l'essence en étant surprise. Spécifique pour cette étape c'est l'état de spontanéité, le rôle de l'inspiration apparaissant comme de rien, mais avec une force à laquelle l'artiste ne peut pas se soustraire (Vianu, T., 1976, p. 291). Dans cette étape la fantaisie créatrice et l'affectivité sont évidentes. T. Vianu remarque un aspect significatif: dans le feu de l'inspiration, sous la pression d'un grand soulagement sentimental l'unité future de l'oeuvre s'affermi. Mais le développement ultérieur du projet mental montrera dans quelle mesure la chose artistique modifie la vision globale de l'inspiration en ajoutant des inspirations nouvelles, dans le cadre de l'invention, soit par le développement de l'idée initiale, soit par des déviations et des transformations successives, soit en la déviant par l'oeuvre consciente de l'exécution.

Le problème c'est d'établir le lieu et le poids des facteurs irrationnels dans le cadre du processus de la création artistique et non pas celui de nier leur existence et leur intervention. L'essai de T. Vianu d'analyser les étapes de la création, mettant en évidence les éléments rationnels et irrationnels y présents a quelques inconvénients saisis même par le philosophe roumain (souvent ces étapes coexistent, d'autres fois leur ordre se modifie, ou l'une d'entre elles manque). L'analyse peut paraître simpliste à la première vue, mais les délimitations faites par T. Vianu sont considérées nécessaires pour la compréhension plus claire de la manière de déroulement du processus de la création artistique. Nous pouvons dire que cette démarche analytique et explicative de T. Vianu est le premier essai dans l'histoire de l'esthétique roumaine de pénétrer dans l'intimité du processus créateur, en surprénant avec finesse de nombreux aspects.

Latour considère que dans une démarche explicative nous devons renoncer à la démarcation entre la rationalité et l'irrationalité, qui a constitué le devoir principal des épistémologues traditionnels, car elle mène à des déformations de l'image de la science (Latour, B., 1989, p. 300). De cette perspective, on peut prendre en discussion les arguments groupés par Gellner en trois catégories. La première catégorie est représentée par l'argument dû à Popper, mené à l'extrême par P. Feyerabend, qui soutient que, s'il n'y a pas aucune modalité d'évaluation du mérite des conceptions rivales, lorsqu'elles sont compatibles avec les dates valables à ce moment-là (dans la version extrême: il n'y a pas aucune modalité d'hiérarchiser de n'importe quelle manière les théories), aucune sorte de rationalité ne peut pas être attribuée aux convictions ou au comportement. Feyerabend considère que, la science étant

donnée, le rationnel ne peut pas être universel et l'irrationnel ne peut pas être exclu. Ce caractère particulier du développement de la science est un argument très puissant en faveur d'une épistémologie anarchiste (Feyerabend, P., 1979, p. 196). La deuxième catégorie comprend l'argument Collingwood-Kuhn, qui relève du fait que, si la science peut fonctionner seulement sous la directive des «suppositions absolues» ou des «paradigmes» qui ne peuvent pas être analysés ou comparés, alors la science est irrationnelle. Si les suppositions absolues ou les paradigmes sont incomensurables, n'existant pas un langage commun, alors il n'y a pas un sens dans le cadre duquel un tel choix soit considéré «rationnel». La troisième catégorie comprend l'argument dû à Wittgenstein, qui met en évidence que le vieux modèle de la rationalité instrumentale ou de la constance dans le comportement a supposé l'existence d'un seul univers de discours, dans l'intérieur duquel l'efficacité et la constance étaient possibles. Pourtant, si notre sensibilité envers le monde est invariablement entremise par tout une série de «jeux de langage» autonomes, chacun avec ses propres règles autonomes, alors il n'y a pas un tel territoire unique (Gellner, E., 2001, p. 186-188). L'important dans ce que Wittgenstein nomme «jeux de langage» c'est qu'ils sont des sous-systèmes autonomes du langage, gouvernés par ses propres critères, sans se soumettre à n'importe quel principe général partagé.

La représentation du chercheur sur la rationalité scientifique n'est pas, par conséquent, l'une élaborée, mais l'une moins articulée et, en grande partie, implicite. C'est une représentation qui s'appuie en premier lieu sur des exemples, sur des antécédents, sur des expériences réciproquement partagées, et non pas sur des critères ou des normes de rationalité. Le chercheur avec expérience sait distinguer entre ce qui est rationnel ou non-rationnel dans son domaine d'activité et il en fait des affirmations fermes, appuyées sur le consensus des spécialistes en matière, mais il ne sera pas, habituellement, prêt à formuler des énoncés sur ce qui est la rationalité scientifique en général, et des critères ou des normes de rationalité. Dans ce sens, sa représentation sur la rationalité scientifique ne sera pas l'une philosophique.

Dans la science, tout comme dans d'autres sphères de l'activité pratique, le mot «rationnel» est utilisé par beaucoup d'hommes qui ne peuvent offrir aucune explication satisfaisante du sens de ce mot. Ils qualifient comme rationnel ce qu'ils ont appris à apprécier comme tel des plus qualifiés représentants du domaine, ce que le consensus de la communauté des spécialistes établit comme étant rationnel. Dans cet horizon, ce qui est basé sur des raisons (des motifs) qui peuvent être comprises et acceptées par tous ceux compétents apparaît comme

rationnel. Sans doute, les praticiens de la recherche, tout aussi comme d'autres praticiens, seront d'accord avec la proposition de qualifier comme rationnelle une action ou une décision si elle assure l'accomplissement dans les meilleures conditions des buts que nous nous proposons dans un certain domaine d'activité (Flonta, M., 1994, p. 18-19).

Bibliographie:

- Biriș, I., "Raționalizare și apriorism în viziunea lui D. D. Roșca", en *D.D. Roșca – 100 de ani de la naștere*, Tipografia Universității de Vest din Timișoara, Timișoara, 1995.
- Cătineanu, T., *Structura unei sinteze filosofice II. Perspectiva extrinsecă*, Editura Dacia, Cluj – Napoca, 1985.
- Feyerabend, P., *Contre la méthode. Esquisse d'une théorie anarchiste de la connaissance*, Editions du Seuil, Paris, 1979.
- Flonta, M., *Imagini ale științei*, Editura Academiei Române, București, 1994.
- Florian, M., *Recesivitatea ca structură a lumii*, vol.I, Editura Eminescu, București, 1983.
- Gadamer, H.G., *Elogiul teoriei. Moștenirea Europei*, Editura Polirom, Iași, 1999.
- Gellner, E., *Rațiune și cultură*, Institutul European, Iași, 2001.
- Graf, A., Le Bihan, C., *Lexic de filosofie*, Institutul European, Iași, 2000.
- Latour, B., *La science en action*, Editions La Decouverte, Paris, 1989.
- Nagel, Th., *Ultimul cuvânt*, Editura ALL Educational, București, 1998.
- Peters, F.E., *Termenii filosofiei grecești*, Editura Humanitas, București, 1997.
- Plantin, C., *Essais sur l'argumentation*, Editions Kimé, Paris, 1990.
- Roșca, D.D., *Existența tragică*, Editura Științifică, București, 1968.
- Rovența – Frumușani, D., *Argumentarea. Modele și strategii*, Editura ALL, București, 2000.
- Seel, M., *Die Kunst der Entzweiung. Zum Begriff der asthetischen Rationalität*, Suhrkamp, Frankfurt am Main, 1985.
- Stengers, I., *Inventarea științelor moderne*, Editura Polirom, Iași, 2001.
- Vergez, A., Huisman, D., *Curs de filosofie*, Editura Humanitas, București, 1995.
- Vianu, T., *Opere 6. Studii de estetică*, Editura Minerva, București, 1976.
- Weber, M., *Teorie și metodă în științele culturii*, Editura Polirom, Iași, 2001.

THE CULTURAL-STYLISTIC APPROACH OF SCIENCE IN
LUCIAN BLAGA'S PHILOSOPHY

Alexandru PETRESCU
West University of Timișoara

The attempt of the present study concerns Lucian Blaga's contribution to the investigation of the cognitive dimensions of science in ontological, cultural and historical context, through the interdisciplinary integration of the philosophy of science and gnoseology in the philosophy of culture. Blaga's stylistic, cultural approach of the scientific phenomenon, his theory of the categorial doublets, his conception the supra-method and minus-knowledge, his view of the differences and interferences between philosophy and science, placed in a context marked out mainly by the debates between the supporters of neopositivism and those of phenomenology, are here interpreted as original ideas, yet without adopting an apologetic attitude. These ideas are presently explored in their capacity to have a fruitful encounter with the current direction pursued by the scientific theories of the "presuppositional", as well as with the view of the disciplinary matrixes and the anthropology of gnoseological mentalities.

One of the fundamental insights that has been constantly and powerfully leading Lucian Blaga's thought is the idea of *the unity of the forms of culture*. Throughout Blaga's work, starting as early as with the period of his first publications (1916-1919), all the modalities in which humans attempt to relate themselves cognitively to existence are brought together and set around the problematic field of unity. Blaga has been thereby preparing the perspective promoting his later wider, more flexible, plural, non-exclusionary, and non-reductive concept of knowledge. However, it was not until his *Philosophy of Style (Filosofia stilului)* (1924), that the philosopher has reached the articulation of a

sketch of what was later to become his theory of style, a sketch based on the conjunction of two themes: the theme of the unity of the forms of culture and the theme of the factors determining it. Various cultural creations of a historical epoch, like the works of theoretical science, works of art, metaphysical systems, etc., are –according to Blaga – bear the stamp of a “formative tendency” (i.e., a *nisus formativus*, that is, spirit’s tendency to confer forms to all things encountered by it, a tendency which varies in the manner of its modulations from one epoch to another). Thus the hypothesis of a cultural determination of the theoretical structures of exact science is also put forth; exact science is thereby also conceived as subordinated to the principle of the unity of the forms of culture. However, this aspect had already been suggested by Blaga in his Doctoral dissertation, *Culture and Knowledge (Cultură și cunoștință)*. In that work he considered the historical, cultural determination of the “anticipated idea”, of the researchers’ ideal of explanation. This initial step was meant to lead him to the elaborated analysis of the theory of scientific knowledge and of the history of the great scientific theories as indispensable articulations of a philosophy of culture. However, in the *Philosophy of Style (Filosofia Stilului)* this suggestion is first advanced as work-hypothesis. And it is here that we find Blaga for the first time using his concept of a “cultural style” and encounter the concrete application of his “theory of style” (though merely in the phase of a sketch at this point) to the analysis of particular forms of culture. The manner in which Blaga constructs his own philosophical discourse points by itself to the idea of the methodological unity between “historical” and “cultural analysis”.

In his *Horizon and Style (Orizont și stil)* (1932), considering that the “formative tendency” (*nisus formativus*) is not, however, the only category determining the unity of the forms of culture, Lucian Blaga advances the “theory of the unconscious spirit”. According to it, what determines the style of a culture is always the unconscious spirit, “a dynamic reality with its own structures and initiatives, with its specific modes of reaction, and its specific sources of information”. Later on, in *The Genesis of Metaphor and the Meaning of Culture (Geneza metaforei și sensul culturii)*, the “stylistic factors of unconsciousness” are elevated to the dignifying rank of categories, thereby Blaga providing also a “metaphysical grounding” to the unity of the forms of culture: any creation is also considered as “a compromise that the virtual conflict between human existence and the *Grand Anonymous* requires”. Although influenced by Nietzsche, Spengler, and Frobenius, Blaga succeeds, through his theory of the cultural style, to distinguish himself, by not reducing culture to the “unity of artistic style” (as Nietzsche did)

and by not correlating the “style” with the merely “spatial horizon of consciousness” (as in Spengler’s case). In relation to his predecessors, Blaga’s innovative contribution resides not only in the fact that he finds the determinant factors of cultural creation at the level of the categories belonging to the unconscious spirit, but also in that, that he argues that any creation presupposes the unity of style and metaphor.

Style represents the matrix, the form in which any creation is being realized, whereas the metaphor becomes the manner in which a style gets expressed. Metaphor plays the role of the matter receiving the form, where the bestowal-of-form refers to the “content of a spiritual creation” (language for the case of poetry, the colour and lines for the case of painting etc.). Moreover, Blaga considers both the categories of the unconsciousness and the metaphor from a metaphysical perspective as well: if the so-called abyssal categories are also considered as “*transcendent breaks*“, then “metaphysically speaking, the content of any cultural act remains ‘metaphorical’, since through it the mysteries are not revealed as through a mirror”.

The stylistic matrix is understood as a “bundle of stylistic categories” representing the “cosmogenetic-functional dwelling place of the cultural creation and the abyssal functions that compound a style”. It is therefore also considered to be a necessary condition for the possibility for any type of cultural creation. Whenever Blaga intends to emphasize not only the categorical structure of unconsciousness, but also its dynamic and formative nature, i.e. its modeling function, he speaks about the “stylistic field”. This is the case with his works approaching creation in the fields of science and history: *Science and Creation (Știință și creație)*, *The Experiment and the Mathematical Spirit (Experimentul și spiritul matematic)*, and *The Historical Being (Ființa istorică)*.

For Blaga the determination of the specificity and role played by the stylistic categories in cultural creation has to do with the distinction he draws between “the given world” and “the created world”. The former represents the phenomenal world just like for Kant, i.e. the world just the way it appears to us in our cognitive attempts, whereas the “worlds created on the basis of an intention to reveal” are numberless and constituted according to a different stylistic matrix. This “difference” is being accounted for on the basis of a certain characteristic feature of the categories: their *alternation*. It is on the basis of alternation that it becomes possible to speak of a plurality of stylistic matrixes, the “relativity emerging in grouping the stylistic categories in stylistic matrixes”, the “duration of stylistic factors”, or the “stylistic interference”, which as a result of a modification of stylistic matrix can “explain” the relationship among various styles, epochs, and generations. Besides

alternation and *variability*, the categories of unconsciousness also exhibit as their characteristics, such as: a *subjective nature*, the a priori belonging to a subject, discontinuity of content, irreducibility and plurality. These various characteristics have a joint function, they work together towards obtaining a cultural product, a product that ultimately appears as a “cosmic entity”, i.e. a “separate world of meanings”. Some other of the characteristics pertaining to the stylistic categories can be elucidated by comparing the nature, functions and usefulness of these categories with the nature and functions of the categories of consciousness:

- the categories of consciousness are intrinsically characterized by receptivity, whereas the categories of the unconscious are intrinsically characterized by spontaneity;
- the categories of consciousness determine the world given as object of knowledge, whereas those of the unconscious determine the world of cultural creations as creations;
- the “cognitive” categories keep themselves in a structural constancy, although they can increase in number; by contrast, the abyssal categories exhaust themselves in so far as they get actualized in cultural creation; they can nevertheless combine thereby generating new different styles.
- the cognitive categories are universal, whereas the stylistic ones can vary.
- the cognitive categories can be either a priori or empirical, whereas the abyssal ones can only be a priori;
- the cognitive categories pertain to our existential destiny, whereas those of the unconscious pertain to the our creative destiny.

It is to be added, however, that the so-called cognitive categories of the understanding, when used in scientific and/or philosophical creation, enter the region of the stylistic matrix and bear its stamp.

Blaga treats the unity of the forms of culture also from the perspective of what he calls the “metaphysical foundations of culture”. Thus, the conditions for the existence of culture, as well as the meaning of it, are deduced from the conditions of specifically human existence. Culture is the result of “ontological mutation”, one reached by human beings through a new horizon, i.e. the horizon of mystery, which exalts them above the level of simple animal nature. The horizon of mystery calls for a specific sort of finality, i.e. revelation of the mystery, achievable through cultural works of all kinds, works in which style (form)

and metaphor (matter) work hand in hand. The metaphysical meaning of culture has to do with precisely this creative destiny of man. Cultural creation emerges as a sort of compromise, brought about in the virtual conflict between the *Grand Anonymous* and humans, and the stylistic categories represent the decisive moment in the constitution/constituting this compromise. This metaphysical meaning ascribed to a cultural style confers sense and import upon all relativity intrinsic to the products in so far as they are human creations. Style cannot be absolute; rather it can only be regarded as "interrupted tendency towards absolute revelation". Furthermore, "upon considering the styles, one cannot properly speak either of a categorical superiority of one over another, or of a link along a single ascending line binding them. Metaphysically speaking, styles are equivalent to one another".

In the case of science, the stylistic factors make manifest their presence in its constructive dimension. As "power-lines" of a stylistic field, they will model/shape and guide "intentionally" the theoretical creations as well as the results of "guided observation". In his *Science and Creation (Știință și creație)* and *The Experiment and the Mathematical Spirit (Experimentul și spiritul matematic)*, Blaga shows that this "stylistic field" has a determinant role to play in the positive sciences. He does so by means of a historical-comparative analysis of Antic and Galileo-Newtonian science, considering also the transition from the former to the latter. The philosopher will say (and argue) that the stylistic dominants of the Greek spirit are as follows: the priority given to rest, as opposed to motion, the tendency to take nature as constituted by receptacles and richness (which gets expressed in the geometrical approach characteristic to Greek culture), and the privilege ascribed to the finite. By contrast, in the case of modern science the "predispositions" characterizing the stylistic field favour movement as indestructible state, space as infinite, and the mathematical in its quantitative aspect.

Blaga proposes this stylistic approach to science, from the perspective of the unity of forms of culture, also as a reply to the neopositivist perspective on science. He criticizes the latter mainly for "hypostasising a certain methodology and for the scientific dogmatism this is leading to". To this perspective Blaga opposes one that emphasizes the central role of the stylistic a priori, and talks about a "stylistic influence that actualizes itself in the implicit promotion of certain values in the field of science, values that can be subsequently revealed only by the history of science".

The problem of the existence of a stylistic a priori ensuring the possibility of both knowledge and creation lead me also towards a

reading of Blaga's work from the perspective of the current epistemological discourse, that appeals to the idea of *presupposition*. Although Blaga himself does not explicitly consider this idea, an idea that however has not been given due attention until recently, I thought one can identify throughout his works dedicated to the theory of knowledge some presuppositions, that differ from what one might call the "predispositions of the unconscious spirit" (as manifest throughout one culture, an epoch). In order to proceed this way I have been following the systematization provided by Professor Grecu, according to whom, the philosophical presuppositions of science are mainly of ontological, epistemological, logical, and methodological nature. The ontological and epistemological presuppositions are identifiable in that what Blaga calls "the philosophical and metaphysical coordinates" of science and creation, or the "specific conditions of any creation": the horizon of mystery and the human subject as "being into the horizon of mystery and for the sake of revelation", the existence and role of thinking (the intellect with its forms, operations and logical laws, as well as the possibility of intellectual ec-stasis) in the receiving and scientific understanding of empirical data. Furthermore, Blaga speaks also about the "methodological function" of some valuable philosophical ideas (for instance, the "anticipated ideas" having "imperative function" that he deals with in *Culture and Knowledge (Cultură și cunoștință)*) able to support the dynamics of science, to secure the progression of knowledge. They determine not only the form in which knowledge is being organized, but also possible modes of solving different problems. The "metaphysical coordinates" of knowledge and creation presuppose the presence of both the "principle of the preservation of mystery" (since knowledge and creation are censured with regards to transcendence) as well as the "convertibility of transcendence" (since humans, having a tendency towards truth absolutely inseminated in their very being, are capable of transforming the limits into positive values). In so far as creation is concerned, these "presuppositions" fall under the influence of the "predispositions" of the unconscious spirit, any creative piece bearing the stamp of these abyssal predispositions.

Blaga's *methodological perspective* on science presupposes mainly appeal to the "cultural method" and "historical analysis", since history ("historicity") represents the fundamental dimension of the fully-realized *luciferic* human being, the basic mode in which human existence is unfolding in space and time", and culture is the "expression of fulfilling human destiny through creative acts", among which theoretical constructions enjoy a special place. The methodological approach of science represents for Blaga a very important segment in the philosophy

of science. He attempted to address its concerns especially in his later writings: *Science and Creation* (*Știință și creație*) and *The Experiment and The Mathematical Spirit* (*Experimentul și spiritul matematic*). However, as early as his Doctoral dissertation Blaga had already proposed a short but nonetheless revealing analysis of the scientific problem by means of the “cultural method”, an analysis comprising the seeds of a real program of historical investigation. In his *Culture and Knowledge* (*Cultură și cunoștință*), however, the philosopher speaks about the functional variability of “ideas – as cultural units” along history. According to him, such ideas can acquire – in a certain field and at a certain historical moment - an “imperative function”. These are the “anticipated ideas” that guide the researcher in the field of positive sciences in solving scientific problems, by determining the content of the resolutions, having a constitutive function as creative factor. The anticipated idea cannot be derived from empirical observations, since it pertains to “one of the possible attitudes of humans before existence” and as such determines, as an imperative or norm, the outline and structure of a theoretical explanation. Therefore, it manifests itself as ideal of explanation for the researcher. But in so far as we are willing to accept that these ideas are “cultural realities historically determined”, it follows that the theory of scientific knowledge and the history of the great theories of science must be treated as segments of the philosophy of culture. This is, in fact, the conclusion Blaga reached in his Doctoral dissertation and later on developed by means of his theory of the stylistic determinations.

Through such a conclusion, of course, Blaga separates himself from the view supported by the philosophers of logical orientation. According to the latter, the basic structures of theoretical science and the modifications they would suffer during a period of time can presumably be grasped and essentially expressed exclusively by means of logic and mathematics. Furthermore, this is an attitude (criticized as such by Blaga) that devalues the importance of research in the field of the history of science (especially in those cases, in which these researches do not lend their support to the “cumulative approach”) and manifests an attitude that is sceptical, to say the least, towards the project of a cultural analysis of positive knowledge. This however comes from these researches’ presupposition that any scientific explanation must be understood as a relationship between facts and a theoretical construction “bound to be” – Blaga is saying – as well adjusted to these facts as possible.

I want to underline also in regards to Blaga’s separation from the *traditional* philosophy of science, having admittedly historical sources

and grounds. The theoretician starts off, in this case, from a more or less a priori representation about the method of scientific knowledge, that he then tries to ground by reference to historical episodes, that have in fact been “built” in the light of this representation. This happens in order to discern certain universal features and characteristics of scientific knowledge and of its historical development. Blaga insists upon the need of showing understanding to the complexities and diversity of situations of scientific knowledge. In his later writings, he will relate these to the “relativity of the groupings achieved by the stylistic categories in stylistic matrixes”.

In his late works, *Science and Creation (Știință și creație)* and *The Experiment and the Mathematical Spirit (Experimentul și spiritul matematic)*, the open intention of the philosopher has been that of using the “historical method” in order to throw a new light upon the nature and methodology pertaining to positive science. In fact, in *Science and Creation (Știință și creație)*, Blaga attempted a systematic dialogue between his philosophical intuition regarding the “unity of the forms of culture” and data provided by the history of science. Blaga developed this attempt in his posthumous work, a work that witnesses the philosopher’s progress towards a “realist” understanding of positive science. Thus, Blaga gets to determine the differences between “Antic” and “modern, Galileo-Newtonian” science. Antic science is mainly characterized by the following features: a static perspective, a conception of space as finite, the use of generic concepts, the treatment of movement exclusively as change, a way of situating the basis of knowledge on the sensorial level and a completion of observation with the “incidental experiment”, the use of the method of analogy, finding the transition from induction to deduction as a way of achieving knowledge, the engagement in theoretical speculations, a widely comprehensive cosmological view etc.

By contrast, in the case of modern science “space and time un-limit themselves”, movement becomes a fundamental attribute of being, the view on nature gets fragmented, in order for it to be experimentally tested. Moreover, the Galileo-Newtonian science presupposes the following methodological features: a) space and time are being “adjusted” so as to become mathematically determinable, b) empirical observation becomes “observation guided by an idea” and is as such used in conjunction with mathematics, c) experiments are carried out mathematically, qualitiveness being reduced to something quantifiable, d) the laws and “relational concepts” obtain a mathematical aspect regardless of the manner in which they can be obtained, i.e. whether by induction or by theoretical processes, theorizing is pursued by appeal to

“image-concepts” – some of which being real antinomies transfigured on a trans-empirical level – that are susceptible of a mathematical approach themselves; e) finally, the development and progress in knowledge are also realized in a mathematical spirit.

Blaga takes the cultural, historical analysis approach also when he is referring to the “modern scientific revolution”, accomplished from the perspective of a new *methodological ideal*. This ideal presupposes essentially the unity of three “moments”: mathematics-experiment-hypothesis. But, according to the philosopher, this new methodological ideal is the expression of a more profound intellectual revolution, that affects the defining features of the general spirit of a culture. Thereby Blaga takes position with regards to those historians of science that have been subscribing to the conviction that the mathematical science of nature of the XVII-th century has been a direct consequence of the evolution registered by the art of measurement and experiment, as well as of the development concerning the mathematical tools for the representation of movement. (Consider, for instance, Pierre Duhem’s model of “continual historiography!”).

With regards to the role of *mathematics* in the field of modern science of nature, I try to come to terms with Blaga’s position from the perspective opened up by two problems (seen as such, of course, in their correlated union): a) the “nature of the mathematical project”, i.e. the specificity of mathematical judgments, and b) the place and role enjoyed by mathematics in Galeleo-Newtonian science. With regards to the first, I am concern on Blaga’s view dealing with the problematic character of mathematical judgments, a view that gets expressed through his criticism against the Kantian approach of the specificity of these judgments. Although, unlike other approaches (for instance, the neopositivist one), Kant’s approach emphasizes the problematic character of mathematical judgments (as synthetic a priori vs. analytic) and thereby goes beyond the “logic of identity”, Kant’s own approach can be brought to critical trial – according to Blaga – for the fact that, in analysing these judgments, he restricted himself to the investigation of the logical possibilities of the concepts they presuppose, i.e., to their logical “conceptual” aspect, at the expense of their quantitative, objective contents; that is, in other words, Kant had presumably neglected the possibility of transcending the logical dimension. However, according to Blaga, “it is impossible to think the concretely real merely logically”, since logic does not enjoy supreme authority in matters of knowledge. Moreover, Blaga says: “We believe that the mathematical judgments are neither analytic, nor synthetic, and that they do not in fact allow for a comparison with purely logical judgments”.

Lucian Blaga does surely know that, for Kant, what is being expressed in judgments is exactly the logical function of the understanding, and he is also aware of the Kantian distinction between “general” and “transcendental” logic (the former abstracting from any particular cognitive content, the latter dealing with the so-called “transcendental content” and thereby with a transcendental dimension of judgments as well). Yet, according to Blaga, these are not enough for a full determination of mathematical knowledge, which presupposes a creative aspect as well. Hence he will try to separate himself from what Kant understood to be the “constructivism” proper to mathematics, that is, the view that mathematical knowledge is knowledge acquired by reason through the construction of concepts (this “construction” being equated for Kant with the “transition from a general concept to an intuition representing the concept”, provided that this transition be realized without appeal to experience). Blaga attempts to go beyond the understanding of this “constructivism” from the perspective of the transcendental Kantian philosophy (that is, the philosophy of the a priori) by making mathematical knowledge necessarily dependent upon experience. Thus, for him, this experience presupposes antinomies, latent contradictions, and the irrational as such. Mathematical knowledge, as different from logic, takes into account the quantitative, objective contents of the numerical concepts present in judgments, understood as contents that presuppose always something irrational. For this reason, numerical concepts must be considered both in their “conceptual” character (as for Kant), as well as quantitatively, i.e. in abstraction from this conceptuality (what Blaga calls a “licence”).

The analysis Blaga carries thus out is related to his perspective on rationality and rationalization in science. Thus, since he believed that what is proper to mathematics and the particular sciences to which it applies (Galileo-Newtonian sciences) is the kind of rationality adjusted to the paradigm of numerical equality, Blaga was saying – in his criticism against Kant – that what provides the proper constructive character to mathematics is not the logical law of identity, but rather the principle of quantitative equality.

With regards to the second problem, the place and role of mathematics in the modern science of nature, I underline first with Blaga’s criticism against the pan-mathematic approach argued for by Brunschwig, Poincaré and Mincowski. However, this criticism addresses Kant as well, in so far as, according to the German philosopher, “in any special doctrine of nature, there is just as much science as much mathematics is therein”. Not recognizing mathematics to be the ultimate standard or “criterion of science”, Blaga is still interested in delineating

its role in the methodological development brought about in Galileo-Newtonian science: "Galileo-Newtonian science incorporates as much as possible from all cognitive methods -practiced or just possible-, but it incorporates constructively only those that are susceptible for a combination with mathematics, producing thus a series of methodological couples, having each time mathematics as one of the two constructive factors". Coupling the other methods with mathematics "occasions" their supreme performance, but is not meant to lead to their replacement by mathematics.

Regarding this problem, I propose a succinct comparative analysis between the perspectives of Blaga and Heidegger respectively. On the one hand, in the case of Martin Heidegger we are dealing with a metaphysical perspective, according to which mathematics is just one of the particular determinations of the mathematical (understood as attitude towards things that presupposes their approach from the perspective of an [ontological] a priori"), and incorporating specifically the feature that has become most dominant especially in the modern science: calculability. On the other hand, the methodological perspective provided by Blaga is rooted in the philosophical theory of the cultural style, and therefore mathematics is regarded as method engaged in "methodological couples" guided by a supra-method. Furthermore, the mathematical theories are regarded by Blaga as creations that are stylistically determined, instead of merely being simple expressions of a metaphysical attitude towards things.

The second term presupposed by the "modern methodological ideal" is the *experiment*, a method especially important for the consciousness of the modern scientific researcher. Blaga deals with this factor through a historical analysis at the end of which he concludes that: it was because of a certain stylistic world – that Antiquity did not articulate theoretically the importance of the experiment, a world-view that emphasized the importance of geometry, situated in the "rational-theoretic" horizon, oriented as such towards widely comprehensive constructions. Given these stylistic coordinates, the method of the mathematical experiment will obtain its clear outline only with Galilei and Newton. Within the framework of modern science experiment is being increasingly more defined as method of observation brought about in order to test tentative ideas, i.e. hypotheses. Furthermore, situating itself over against the simple "*empiria*", experiment comes to have, to an increasing degree, a theoretical function as well. In fact, for modern research, experiment and theory determine one another, theory coming to be engaged also in identifying experimental data. The blending of theory with experiment takes place in various manners, and this explains

the diversity of branches of science, that manifesting different degrees of theorization. It is only through this blending that modern researcher gets to express the laws of nature in mathematical formulae. Once mathematized, experiment replaces the customary "*empiria*", encouraging cognitive progress on a trans-empirical path, and ultimately reaches formulae having the appearance of laws". Moreover, Blaga specifies that the theoretical identity of modern experiment does not merely presuppose the analysis and interpretation of the experimental phenomenon within a theoretical framework, but also enters regions that are inaccessible for the simple "*empiria*", and does so by virtue not only of its intrinsic excellences but also by its collaboration with other methods.

Hypothesis is also an important element in the realm of scientific research: it structures, provides meaning to, secures the systematic and designed character of experimental work and guides the choice of aspects for the researcher to focus on. In his thematic writings, Blaga is concerned to provide (by means of the same methods) arguments regarding two important distinctions: "hypothesis" vs. "theory", and the "abstract" vs. "imaginary" mode of theorizing.

The *hypothesis* is a problematic mode of interpreting the unknown that is "outlined" within the horizon of the known. It is a "complex structure of ideas", a "cultural unit", that can change its functions from one culture to another. Theorizing is the process taking place through the employment of hypotheses, and leading to the solution of a problem. According to Blaga, modern science is essentially characterized by the "imaginary mode of theorizing" that presupposes a "hypothetical" approach at the trans-empirical level by means of "image-concepts". This trans-empirical level represents a more profound dimension of existence, at which, in normal conditions at least, no direct access is allowed, either exclusively on the bases of the senses, or by means of concepts obtained through an abstraction from the data empirically given. Theorizing takes place at this level by reducing the empirical material given as multiple and diverse to unifying, more simple "image-concepts". Such "image-concepts" are usually constructed similarly to empirical images but, unlike those, are used in order to explain some deeper aspects of empirical phenomena by means of the hypotheses. This approach of the hypotheses through image-concepts also supports Blaga's perspective about antinomies. At certain levels of knowledge, he argues, image-concepts receive paradoxical formulations. This is the case for instance with the antinomic conceptual formulae such as "particle-wave" or "energy particles", concepts that, in spite of their antinomic formulae, are highly operative in physics.

Unlike modern science, Antic Greek science prefers the “abstract mode of theorizing”, this being the theoretical enterprise through which the concepts of science and philosophy have been attained. Aristotle, for instance, started from customary empirical observations in order to establish generic concepts on the basis of which it is possible to formulate laws, showing thus the manner in which entities determined by generic concepts naturally manifest themselves in experience.

Scientific theorizing aims at the construction of scientific theories. For Blaga, theory is a systematic, coherent structure, supported by logical arguments. A theory is therefore always a constructive interpretation of some given data, and as such requires its test in accordance to both “inherent criteria” (regarding the logical coherence of the developed arguments) as well as “external” ones (the empirical or concrete realization of the theory). The first kind of criteria provides the theory merely with logical validity, whereas only the second provides it a warrant for its truth. Blaga calls the extent to which a theory can be concretely tested “the empirical potential of that theory”. However, he says, “a theory’s verisimilitude does not necessarily imply a great empirical potential”. This amounts to a strongly divergent conclusion (like many other conclusions reached by Blaga) from the convictions supported and defended by the neopositivists. Another consequence following from the historical analysis pursued by Blaga can be stated as follows: whereas in Antiquity, the formulation of a theory was the main purpose of knowledge, the scientific attitude displayed in the modern paradigm focuses foremost on testing ideas, theories, and hypotheses both on the bases of experience as well as through experiment.

One of the original ideas that Blaga advances from his methodological perspective on the foundations and the nature of modern science is the idea of a *supra-method*. *Supra-method* is essentially trans-mathematical and its main function is to coordinate the relationships between diverse methods and mathematics. Under the guidance of *supra-method*, modern physics has a conceptual approach to existence that differs essentially from that of Aristotelian physics, in that it redefines the meanings of “law”, “explanation” and “scientific prediction” and introduces a new manner of theorizing, comporting new elements and constitutive functions, new manner of validation and test, and thereby in general developing a new approach to experience. Blaga’s appeal to the “*supra-method*” meant to facilitate the determination of the conditions for the possibility of modern physics is not, however, an appeal to a specific existent method, but rather to a new “methodological consciousness”, a new epistemic strategy. The new “methodological consciousness” appeals to a trans-empirical level

and offers a new modality for organizing methods on the principle of the mathematical. Furthermore, it plays a fundamental role in constituting a “research program” and a disciplinary community. In fact, it manifests the stylistically determined attitude that the Galileo-Newtonian science (including not only the classical mechanics, but also the theory of relativity) manifested towards its own methods.

With regards to the “methodological progression” and with his constantly expressed idea that knowledge stands, in general, under the determinacy of some antinomic syntheses and the influence of metaphor, Blaga advances the “method of transfigured antinomy” through which he argues for the necessity to rethink contradiction through a reconsideration of the resources of reason. Blaga attempted to detach himself from both the Kantian understanding of the “dogma” (for according to Blaga, Kant had not recognized the antinomy presupposed by experience as such) as well as from the theological meaning of it, and to “rehabilitate the dogmatic” - as a specific mode of thinking, i.e. as type of ideation, or manner of rationalizing existence. Thus, for Blaga, a “dogma” becomes an intellectual formula attempting to capture the irrational in an antinomic expression and as such reachable only through an act transcending the logical. According to Blaga, knowledge presupposes antinomy, and this even more emphatically so, since the real upon which it exercises itself also includes phenomena paradoxically characterized by mutually exclusive qualities, that do not thereby yet cease to coexist. In this context, Blaga warns us that he does not thereby speak about a new kind of knowledge, but rather about the same kind (“*luciferic* knowledge”), which he considers now as encountering a new kind of phenomena. This “other kind of phenomena” concerns the “paradoxes of experience” that can as such not be captured (at least at a given moment) by the logical structures of the understanding. When the empirically given data cannot be completely assimilated by these logical structures, the understanding “goes out from itself” (ec-stasis), places itself outside of itself, in order to return thereafter to itself again: “Ec-stasis is implied by the exhaustion the understanding’s en-stasis”. As a consequence of this intellectual exercise the conceptual antinomies of existence, that we encounter in experience, get their proper formulation: “light is at once particle and wave”, “sound is vibration”, etc. According to Blaga, the transfigured antinomy is present, as method, at the level of “minus-knowledge” and is as such used only after the possibilities of positive knowledge have been used up.

This kind of thoughtful approach that Blaga calls “ec-static intellectualism”, stemming from the expansion of the rational resources

makes one aware that the joining between rationality and non-contradiction is not as strong as logic would want us believe: knowledge cannot constitute itself in a whole that is consistent in its entirety. However, some other Romanian thinkers have also expressed this view. Mircea Florian (in his “theory of recession”), D.D. Roșca (in his treatment of the relationship between rationality and irrationality), Ștefan Lupășcu (in formulating the “principle of contradictory dynamism”) are just a few of those who believed that rationality cannot maintain inflexible borders, without running the risk of falling in the logic of identity, that is *noocentrism*.

The current excellent studies dedicated to it by both Romanian as well as foreign authors like T. Dima, Calvin O. Schrag, R.T. Allen, or, more recently Jöel Figari witness the fact that Blaga’s proposal had awaken in his readers not only curiosity and doubts, but also much admiration.

Blaga’s methodological perspective also deals with the scientific problem, since the relationship holding among “problem-explanation-theory” also gets articulated through the cultural method and the historical analysis. The philosopher has been mainly interested to explore the “knowledge of the second kind, i.e. luciferic knowledge”, a kind of knowledge characterized by having the problematical as its object and heuristic construction as its method, and thus he is concerned to show that this knowledge always gets its start from problems, that any found solution is a merely provisional, and that, in short, research is always based on problems.

As early as the time he was writing his Doctoral dissertation, Blaga is engaged by a question and works on expressing a view on the inner structure of the “scientific problem”. Thus he was insisting upon distinguishing three articulations of it: 1) the phenomena in need for explanation, 2) the general (“anticipated”) idea, and 3) the creative construction (i.e. the theory meant to join the other two articulations). The important role that the “anticipated idea” plays in determining the structure of theoretical thinking – as revealed in setting up and solving problems – is unequivocally asserted especially in a time when the influence exercised by positivism and empiricism in the history and philosophy of science is at its highest. Furthermore, Blaga accepts not only the role played by the “general idea” in articulating problems, but its historical or, more generally, cultural determination as well. Thereby, I believe, Blaga engages himself in a pioneering enterprise in the field of cultural approaches of the “scientific problem”. I am, however, also aware that in the framework provided by Blaga’s philosophical system, his later works pursue further the proposals put forth in his *Culture and*

Knowledge (Cultură și cunoștință) but do nevertheless bring in some new elements as well. Thus, for instance, are the following distinct articulations, all of which belong to the structure of a problem: “internal horizon”, “internal tension”, “theoretical idea”, and “region of a problem” (in *The Luciferic Knowledge/ Cunoașterea Luciferică*).

It will only be in his *About the Philosophical Consciousness (Despre conștiința filosofică)* that Blaga will also talk about some kind of “logic of a problem” as a possible discipline, that would have as its object of investigation the inner articulation of a problem. There he distinguishes between the terms in which a problem is being advanced, on the one hand, and the terms of solving a problem, on the other, as well as between a “scientific” vs. a “philosophical” problem.

With regards to “explanation” and “theory”, nevertheless keeping in his original approach distinct from both neopositivism or phenomenology, Blaga raises issues like: a) the relationship between “description” and “explanation” (the former being characteristic to *paradisiac* knowledge, whereas the latter being characteristic to *luciferic* knowledge), b) the treatment of “causality” and of the “reduction to the general” simply as moments of explanation, yet not as fully exhausting the nature of explanation as such. For explanation is essentially defined a “manner of qualitative variation of an open mystery”, etc. “Scientific theory” also presupposes a predictive function, i.e. the more a theory “makes possible higher degrees of certainty in the predictions” it makes (or could possibly make), the more valuable that theory is.

The problem of *scientific rationality* enjoys a central position in the concerns displayed in contemporary philosophical literature. I believe that Blaga’s reflections about this issue can be circumscribed in the methodological sphere, since scientific rationality gets expressed as rationalization of the diversity encountered in the realm of mystery in the forms of theoretical explanations, descriptions, classifications, and open orderings that proceed in accordance with what Blaga calls the “modes of rational thinking”, and it gets so expressed mainly in the field of the method of scientific knowledge.

Blaga’s discourse regarding the issue of rationality and the modes of rationalization (as developed in his *Experiment and the Mathematical Spirit*) is based on his earlier views concerning the “rational and the irrational”, “en-static and ec-static rationalism”, and the “place of reason in the ontology of censorship”. Blaga starts off from the view that the rational does not belong among the objects of knowledge, being only an object of logic (dealing with the modes of rational thinking) that can as such be found in the field of epistemology only in the form of the “reducible nature of the irrational in general”. From here Blaga will get to

place “rationality” under the mark of the principle of the “unconvertible nature of the irrational”. The philosopher is careful nevertheless to point out that the “irrational” is here had in view only as an epistemological factor.

Sometimes taken to mean simply the “alogic”, some other times as that which is not yet rationalized, the irrational can manifest itself in different forms that vary also according to whether it is seen in relation to one or the other of the two main kinds of knowledge: paradisiac or luciferic knowledge. Thus, in relation to paradisiac knowledge, we can speak of the irrational characterizing the immediacy existence, the irrational of dialectical concepts, the irrational of open concepts (i.e. concepts that assert the end of unending, infinite processes) and, in general, the irrational genetically inherent to any concept whatsoever. In relation to luciferic knowledge we can speak of the irrational inherent to any open mystery, the permanently irrational, and the “radicalized” irrational. The irrational can be rationalized both in the sense that it can be reduced to something more abstract (paradisiac knowledge) as well as in the sense of a “qualitative variation” (luciferic knowledge), yet any attempt to achieve a full conversion of the irrational into the rational is in principle meant to fail. We understand from here that even in so far as in our cognitive attempts pursued from the perspective of the modes of rational thinking (i.e., the principle of identity, for instance) whereby we approach the contents of intellectual knowledge, yet irrational contents are present nonetheless, and this very approach of the irrational contents is by itself our mode of rationalizing them.

With regards to rationality, Blaga endorses the following distinction:

- Rationality – as functional articulation imprinted on individuate knowledge (that can be reached, generally speaking, by a quantitative and qualitative reduction of mysteries);
- Rationality – as postulate under which stands the pride inherent to the luciferic attempt of “substituting absolutely logical positions to existential mysteries”;
- Rationality – as manifestation of the outcomes of some determinate cognitive acts.

In *The Experiment and the Mathematical Spirit*, Blaga also identifies through a historical analysis, the following modalities of rationalisation:

- The “pure”, exclusive rationalisation - founded upon the principle of identity and endorsed by the Eleatics and the modern logicians;

The rationalisation in the sense of “attenuated identity” – as practiced by Aristotle;
The rationalisation based on the “principle of mathematical equivalence”;
The rationalisation of “contrary identity” – as in Hegelian dialectic.

All of the above mentioned modalities belong to the mode of “en-static rationalisation”. To this Blaga will add the mode of “ec-static rationalisation”, the outcome of which being just an antinomic formula with a postulated solution.

As expected, Blaga applies the cultural method in this case as well. He argues that the specific modalities of rationalisation enjoy different combinations amongst them “according to the perspective from which they are being judged”. Thus, certain epochs have emphasized some specific modalities of rationality: some, the conservatory rationality (that is, the predominance of the first type mentioned above), some others, dynamical rationality (that is, the predominance of the rationality based on attenuated identity, or on numerical identity, or on both), some others yet, revolutionary rationality (that is, the predominance of dialectical rationality). I attempt to lay bare the current importance of some of Blaga’s considerations regarding science. I have worked thus out an approach guided by issues like: a) the philosophical infrastructure of scientific theories (understood as fundamental dimension of the historical perspective on scientific thinking, b) the cultural approach of knowledge and creation, c) “problem and rationality in science”, d) the realism vs. antirealism debate, e) current Romanian views regarding science and its evolution.

a) The discourse about the *philosophical infrastructure of scientific theories* deals mainly with those philosophical suppositions of research that set up certain framework-conditions for the specific scientific hypotheses, and guide the process of research throughout. These suppositions are not always explicitly formulated and are not subject to empirical test. However the discovery of such suppositions represents a fundamental dimension of the historical perspective upon scientific thinking. Blaga has, admittedly, a significant share of this perspective.

Some of the most remarkable figures, that have taken a historical approach to science in the second half of the XX-th century are: Alexandre Koyre, Thomas Kuhn, Paul Feyerabend, Stephen Toulmin, etc.

Like Blaga, Alexandre Koyre has been led in his historical studies by the idea of the “unity of thought”, especially in so far as the highest forms

of thinking – that is, scientific and philosophical thinking – are concerned. Separating himself from the positivist historiography (just like Blaga did), Koyre argues that it is not the scientific revolution that has overturned and gradually dismissed the old (Aristotelian) philosophy of nature, but rather the evolution that took place in philosophy itself. Thus, the cause of the significant changes in philosophy lies mainly in the natural change of the old philosophical ideas about nature and the science of nature, a change in the metaphysical attitude. Koyre works out systematically, with the help of the specialized tools possessed by the professional historian, some of the themes that Blaga had already been dealing with: the “philosophical coordinates of the natural science”, the role of mathematics in Galileo-Newtonian science, the role of experiment in the “turn from contemplation to the instrumentalization of science” etc. Of course there are also some noteworthy differences between the two philosophers. Thus, for instance, according to Blaga, the historical analysis is at once also a cultural analysis of it. The historical transformation of some general philosophical, “anticipated” ideas is stylistically determined. This is why, on the basis of the stylistic distinctions he draws between Ancient and modern science, Blaga could not have gotten to speak the way Koyre does about the “reemergence of the Platonic metaphysical framework” through the mathematization of the study of mechanics by Galileo. Moreover, in talking of the so-called “doctrinal resurrection of Platonism” during the XVI-th and XVII-th centuries, Koyre follows an internalist direction, that excludes from the field of interest, preoccupying the historian of science, all the non-cognitive, extra-doctrinarian contents belonging to the wider context of influences active at that time. By contrast, as already shown above, Blaga talks about the “unity of the forms of culture”. Furthermore, according to Koyre, the strong unity between philosophy and science, expressed also in the profound transformations presupposed by the Galileo-Newtonian physics, does presumably lead also to an “overturn of the traditional conditions regarding the ontological priority of being and the precedence of values and perfection”. By contrast, Blaga’s considerations by no means lead to such a conclusion.

With regards to science, Blaga exposes a view similar to the modern theory of paradigms in science, as put forth by the well-known school of the “New Philosophy of Science” (Kuhn, Toulmin, Feyerabend, etc.). According to Blaga, this view touches upon the essential problems of contemporary philosophy: the relationship between description and explanation, that between cumulative and non-cumulative development of scientific knowledge, the relation between the normal (cumulative) and revolutionary (non-cumulative, non-ordinary) science, the difference

between the problems and anomalies characterizing the normal evolution of science and those characterizing the crisis resulting in the destruction of scientific paradigms, etc.” (A. Botez). It becomes evident through the quoted text the connection in which Blaga situated himself to Kuhn’s philosophical perspective.

The simple opening towards this comparative analysis of Blaga and Kuhn that I have attempted in my present work addresses mainly two issues: a) the relativist-cultural perspective on science, and b) the idea of a progress in science. Having considered (on the basis of a distinction proposed by M. Flonta) that one cannot properly speaking talk about a pure relativism (often associated to irrationalism) either in Kuhn’s, or in Blaga’s view of science, I tried to argue that in both cases one can properly speak about the historical character of the infrastructure of science, about the “relativity of the standards of scientific rationality in diverse forms of scientific life”, and as it is especially in Blaga’s case, about the cultural grounding of scientific knowledge. All these could designate a “weak relativism”.

Both thinkers have been focusing on the idea of “scientific change”. But whereas Blaga approached it without neglecting the traditional problem regarding the grounding of knowledge (on the basis of the metaphysical realism intrinsic to his philosophic system), Kuhn, by contrast, opposed the idea of “scientific change” to the traditional theme of grounding, and thus insisted on the “unstable nature of scientific concepts”, the “incommensurability among languages” (in the sense that the language of one paradigm is not even partially translatable in the language of a different paradigm), and ultimately, the “incommensurability among paradigms”.

It has become widely admitted that Kuhn’s *Structure of the Scientific Revolutions* leaves us with the tension between the incommensurability thesis and the idea that the development of science constitutes progress. I have endorsed in this work the view (Jack Meiland’s view) that, according to T. Kuhn, science is able of real progress, understood as achievement of a more detailed and profounder comprehension of nature, by means of increasing the problem-solving abilities of scientific research. Similarly, in Blaga’s case, the criterion of progress in science resides in the “ability to dominate nature through knowledge” and the increase of knowledge presupposes the transition from one problem to another as process of deepening into the mystery. Also, just as it is the case with Kuhn, when speaking of normal science, according to Blaga, we speak of progress mainly with regards to the paradisiac knowledge.

There are also both similarities as well as differences between some of Blaga’s ideas and Feyerabend’s views regarding the philosophical

(and even cultural) infrastructure of scientific theories, the “role of the anticipated ideas for observation”, the “points of contact” between myth and science, the (clearly neopositivist) attitude of rejecting the idea of the positive knowledge’s autonomy and neutrality with regards to values. Against neopositivism and the aprioristic methodologies, Feyerabend proposes the appeal to history, which he regards as necessary for the “theoretical and methodological pluralism of the metaphysical views on science”. Yet, Feyerabend’s appeal to history is meant to support relativism and the opposition to any version of systematic philosophy. And this is, of course, something that Blaga could not have accepted.

b) Blaga’s conception of the stylistic field is constituted within the horizon opened up by the points of interaction of both the philosophy of culture and the philosophy of science with other disciplines, like psychology, anthropology, axiology, semiotics. As such, Blaga’s view corresponds to the current orientations opposing empiricism and supporting the existence of a subconscious matrix, seen as a complex of priori structures genetically transmitted and orienting, through their influence, the various manifestations of spirit. Such are: Noam Chomsky’s theory of the “generative grammar”, Gilbert Durand’s view regarding the “profound structures of the imaginary”, or Gaston Bachelard’s ideas regarding the “dynamic archetypes of imagination”, as well as one of the sense of G. Holton’s “*themata*” as “imaginary scheme characteristic to a certain culture”.

Just like Blaga’s stylistic matrix, the “universal grammar”, that Chomsky talks about has an a priori nature. The “universals” of Chomsky’s theory are necessary conditions for the possibility of particular grammars, just like a substrate for the rules that guide the way different grammars function, and playing also the methodological role of a “framework” for the creations obtained in these particular grammars (i.e. just like Blaga’s stylistic categories are for artistic creation). Furthermore, just like the matrix-like “cosmos” (proposed by Blaga), that not only generates culture, but also integrates within culture what belongs to it, analogously, Chomsky’s linguistic pattern also fulfils an integrative function.

Gilbert Durand had lately proposed something similar by supporting the idea of some “formative or informative constants, absolutely heterogeneous, irreducible, forever recurrent in diverse historical or existential moments” that stand behind our various explanatory directions. This originary matrix proposed by Durand that stamps any creation reminds us of some of the views defended in Blaga’s *Trilogy of Culture (Trilogia culturii)*. The difference between them lies however in

that that Blaga considers also the possible transformations at the level of the stylistic matrix itself. Moreover, G. Durand attributes great importance to the symbolic imagination, that he understands analogously to the manner in which Blaga conceived the “revealing metaphor” to be the “epiphany of a mystery”. But here, again, whereas Blaga confesses his detachment from the theological, or religious thought, G. Durand, on the other hand, includes his discourse about symbol and the fundamental structures of the imaginary in an openly recognized Gnostic view. One of the consequences following from here is the idea of a necessary hierarchy in the realm of cultural creation, a hierarchy that subordinates science and metaphysics to mythology and religion. From the very beginning, however, Blaga separated himself from this kind of approach.

I also mention M. Polanyi’s doctrine regarding “implicit knowledge” in the context in which I tried to show that both Blaga as well as Polanyi were interested in the deep structures of human mind and knowledge; also they both opposed empiricism and positivism, and both confessed a sharp sensitivity for the historical, evolutionary character of our cognitive attitude towards the world. Furthermore, they both recognized that reality transcends our finite cognitive capacities and that it cannot be captured by any particular formula. Analogously to Blaga’s categories (in their aspect as “*transcendent breaks*”), Polanyi’s “implicit knowledge” (pointing to the fact that “we always know more than we can tell”) is also inherent part of consciousness and plays the role of a “methodological framework”, that enjoins the cognitive and creative acts displayed in science. Of course, there are some noteworthy differences between the two philosophers as well. I will restrict myself here at simply saying that whereas according to Polanyi “implicit knowledge” belongs to the “general structure of perception”, according to Blaga the stylistic factors belong to the unconscious.

I am also concerned with G. Holton’s notion of “themata” designating a “deep imaginary scheme” (G. Durand and Vasile Tonoiu also refer to it) that characterizes a certain aspect of the imagination proper to one or another cultural moment and the main function of which is that of impregnating vast regions of knowledge in various temporal and spatial locations. Moreover, the “themata” also represent the “third dimension of science” (besides the analytical and empirical dimensions); as such it functions as a complex of cultural suppositions that support knowledge and creation. Like Blaga, Holton does not address the origin of the “themata”, but merely their function and this especially in science.

c) Contemporary philosophy is increasingly interested in discussing the “presuppositions of scientific problems”, or the “function of philosophical concepts in solving scientific problems”. This clearly reminds us of Blaga’s “philosophical attempts” regarding the “structure of a scientific problem” and the distinction drawn between a “philosophical” vs. a “scientific” problem. I focus my present investigation on some of the views put forth by J. Agassi (regarding the importance of metaphysical views in formulating, classifying, and solving scientific problems) and, even more emphatically, on M.Meyer’s considerations regarding the “logic of a problem” at the general level of a “discourse about problem in general” and the “logic of the inference pertaining to problems in general”. The “logic of the inferences pertaining to problems in general” is understood by Meyer as a “logic of meaning” (just like Blaga suggested in his treatment of the “logic of a problem”). This inference pertaining to problems in general has as its essential mode of being the mode of metaphor, understood as “transfer [of meaning] from what is ‘already acquired’ towards the ‘unknown’”, a transfer made possible as such by the responses to problems in general, in so far as these point to new interrogations.

It has become more and more widely accepted nowadays that rationality is an essential feature of scientific knowledge that needs to be related to the idea of a “style of scientific thought”. Although Blaga connects “style” to a categorical structure pertaining to unconsciousness, a view not widely endorsed at present, I believe nevertheless that some of his considerations regarding the “correlation in which rationality and the modes of rationalization stand to the specific perspectives from which they are evaluated” can still be met with in the present-day’s attempts to redefine contextually the standards of scientific rationality and in the current willingness to assert that rationality follows from the style of scientific thinking and that the criteria of rationality undergo essential change over time. I focuss therefore on Stephen Toulmin’s view regarding the necessity of a historical rethinking of scientific methodology and, implicitly, of scientific rationality, as well as on some of Calvin O. Schrag’s considerations regarding the “transversal rationality” and the necessity of its correlation to the “power of discernment as it operates in the diversity of our practical activities”. I have not neglect, of course the American philosopher’s special admiration for Blaga’s idea of the “resources of an extended reason”. Also, since Blaga had approached the modes of rationalization in science according to the meanings he assigned to the relationship between the “rational” and the “irrational”, I am also considering a more recent approach of this problem. The approach I mean belongs to Gilles

Gaston, an author that, reflecting from the perspective of an “open and dynamic rationalism” argues, just like Blaga, for the “recognition and determination of the irrational’s presence in scientific knowledge”.

d) The defining feature of Blaga’s philosophic system is its *metaphysica realism*. Starting off from the postulate of a “central anonymous reserve”, Blaga deduces the entire existence step by step, on the basis of coherent explanations, supported and tested by experience, that is, without conflicting with experience, but rather integrating and accepting it as ultimate guide. I raised the question as to whether one can properly speak of a scientific realism present in Blaga’s discourse on creation in positive science, and if so, then to what extent can it be considered a viable approach for current directions of metaphysical realism. I tried throughout my work to offer some arguments favouring an affirmative answer to these questions and to reply to some possible objections that might be adduced.

Following the considerations of some philosophers such as Ernan McMullin and Richard Boyd, regarding the necessary presuppositions of scientific realism, as well as Putnam’s distinction between “metaphysical realism” and “scientific realism”, I argued that in Blaga’s case we can properly speak of a realist epistemology for the following reasons: a) Blaga advances a thesis regarding science from the perspective of metaphysical realism that characterizes his entire philosophical enterprise; b) Blaga is engaged in a realist epistemology, according to which the subject is oriented towards an object outside itself, the object being that which solicits the subject even to the point where it places the subject in the situation of an intellectual crisis; c) Blaga supports the idea of the possibility of knowing phenomena independently of theories, even in cases where the relevant phenomena are not “observable” (see Blaga’s entire discourse regarding the “trans-empiric” and the principles and methodology pertaining to Galileo-Newtonian science).

Any realist view has to face, of course, the objections brought forth by the supporters of antirealism whether it comes from science (Newtonian and especially quantum mechanics), the New Historiography of Science, or philosophy (especially in the form of empiricism). I try to show that Blaga’s theory can indeed provide a reply to these objections. I argue for this point by appeal to E. McMullin’s suggestions regarding the implications of the Newtonian notions of “force” and “gravitation”, some recent discussions regarding the standard interpretation of quantum mechanics (according to the antirealists quantum mechanics implies that the new postulated theoretical entities are not objects of any existential predication whatsoever), as well as

debates regarding the status of “elementary particles” as “un-observable”. I found in Blaga’s texts several mentions of these problems as well as a “realist” interpretation that is very similar to the one provided by McMullin.

Among the objections against realism that have been brought forth by the defenders of the New Philosophy of Science, I focuss mainly on T. Kuhn’s thesis regarding the discontinuity characterizing the revolutionary changes in the history of science: “In the systems of Aristotle, Newton and Einstein I cannot see a coherent direction of evolution for the ontology of science!” In fact, Kuhn attributes a cumulative character to the empirical laws of science, which he understands as “laws of inferior status” , but denies any cumulative character to theories: rather, he says, theories come and pass away, leaving to little behind. The so-called “incommensurability” between Antic and modern theories, as far as Blaga is concerned, does not lead to the idea that each theory builds up its own sphere of reality, such that the realities could be infinitely multiplied, so as to become the objects of various theories. Blaga does not reach such paradoxical conclusions following from the “non-cumulative” character presupposed by the theories’ dependency on diverse cultural contexts, and he is able to avoid them only by virtue of the metaphysical realism that guides his view of theoretical constructions.

Some final *conclusions*. As a consequence my present investigation, I came to the following findings:

- Lucian Blaga has entered in a constructive manner the philosophical dialogue and debates of his time by virtue, mainly, of his intuition about the “unity of the forms of culture”. He confronted his initial intuition with several data registered by the history of science, and then came to work it out towards obtaining a real program of historical and cultural investigation of science.
- By employing historical analysis and the cultural method, Blaga succeeds to identify (prior to other philosophers like Koyre, M. Clevelin, etc.) some differences between Antic and modern science, and correlates these differences with “transformations of stylistic nature”.
- The cultural-methodological approach of the foundations and specificity of modern science have led Lucian Blaga to the original conception of the “supra-method”. The supra-method has been understood as revealing for modern physics a new methodological consciousness and a new methodological ideal

in relation to the old Aristotelian physics. As such the new model asserts the unity among mathematics, experiment and hypotheses, a new epistemic strategy and a new manner of organizing methods on the principle asserting the dominance of mathematics.

- Blaga's reconsideration of the resources of theoretical reason, made possible for him a "rehabilitation of dogmatism" (where "dogma" is meant as intellectual formula expressing the antinomic character of experience) as well as a new approach to "rationalization" and "scientific rationality", making possible, on the one hand, an account of the irrational present in scientific knowledge, and, on the other hand, the correlation of scientific rationality with the "style" of scientific thinking.
- The proposal of a "logic pertaining to the scientific problem in general" (in the methodological, not formal sense) has led Blaga to realize the special place occupied by the "scientific problem" in the field of scientific research.

In my attempt to test the current import of some considerations regarding the constructive dimension of scientific knowledge, I came to the conclusion that Blaga's discourse anticipated indeed some of the ideas and directions currently employed in the philosophy of science. Such are: the "historical philosophy of science" (investigating the philosophical, cultural infrastructure of scientific theories), the view regarding a "discourse about problem in general" in the philosophy of science (best represented today by the Bruxelles School), the current orientations supporting the idea of some subconscious matrixes that determine cultural creation, the current direction followed by the theories approaching the role of the "preliminary" in the dynamics of science, as well as some contemporary versions of "scientific realism".

Nonetheless, my comparative analysis of Blaga's views with some of the current "images of science" has also revealed some of the limitations pertaining to Blaga's doctrine (as they become apparent from such a confrontation): the speculative cosmology, that "establishes" the initial data of the metaphysical realism through which Blaga supports his view of science, is hardly acceptable today; the historical analysis of science that the Romanian philosopher had practiced does not have always available the specialized tools of the professional historian; Blaga's discourse on the 'logic of the problem' does not reach /falls short of the technical or logical systematic character presupposed by the analyses of some contemporary authors, such as Joseph Agassi or M. Meyer. These limitations do not, however, fundamentally affect, what we

could properly call the “European dimension” of this Romanian view of knowledge and creation in science.

Bibliography:

- Blaga, Lucian, (1922), *Cultură și cunoștință*, Editura Institutul de Arte grafice <Ardealul>, Cluj.
- Blaga, Lucian, (1983), *Trilogia cunoașterii*, Editura Minerva, București.
- Blaga, Lucian, (1985), *Trilogia culturii*, Editura Minerva, București.
- Blaga, Lucian, (1988), *Trilogia cosmologică*, Editura Minerva, București.
- Blaga, Lucian, (1996), *Trilogia valorilor*, I, *Știință și creație*, Editura Humanitas, București.
- Boyd, Richard, (1996), "Realism, Approximate Truth and Philosophical Method", în *The Philosophy of Science*, editat de David Papineau, Oxford University Press.
- Durand, Gilbert, (1998), *Structurile antropologice ale imaginarului*, Univers enciclopedic, București.
- Feyerabend, Paul, (1979), *Contre la méthode. Esquisse d'une théorie anarchiste de la connaissance*, Edition du Seuil, Paris.
- Granger, Gilles-Gaston, (1998), *L'Irrationnel*, Edition Odile Jacob, Paris.
- Heidegger, Martin, (1967), *What is a thing?*, Henry Regnery Company, Chicago, Illinois, translated by W.B. Barton and Vera Deutch.
- Holton, Gerald, (1982), *L'invention scientifique. Thémata et interprétation*, Presses Universitaires de France, Paris, p. 11-66; 415-456.
- Kant, Immanuel, (1969), *Critica rațiunii pure*, Editura IRI, București.
- Koyré, Alexandre, (1971), *Études d'histoire de la pensée philosophique*, Gallimard, Paris.
- Kuhn, Thomas, (1976), *Structura revoluțiilor științifice*, Editura științifică și enciclopedică, București.
- Laudan, Larry, (1996), "Progress or rationality? The Prospects for Normative Naturalism", în *The Philosophy of science*, ed. By David Papineau, Oxford University Press.
- McMullin, Ernan, (1984), "A Case for Scientific Realism", în J. Leplin (ed.), *Scientific Realism*, Berkeley University of California Press.
- Petrescu Alexandru, (1997), "A Propedeutics to a new Rationalism in Lucian Blaga's Philosophy", în *Analele Universității de Vest din Timișoara*, vol. IX.
- Polanyi, Michael, (1969), *Knowing and Being*, University of Chicago Press.
- Putnam, Hilary, (1977), "What is Realism?", în *Scientific Realism*, editat de H. Putnam, Cambridge University Press.
- Schrag, Calvin. O., (1999), *Resursele raționalității*, Editura științifică, București.

ROMANIAN'S MENTAL UNIVERSE TOWARDS THE EUROPEAN
ONE

Laura GHEORGHIU
West University of Timișoara

Romanians have lived for centuries with the myth of a country situated at different crossroads: of populations, of cultures or of ideological patterns. Therefore, the most common feeling was that of a permanent danger, of harassing, of an impossible settlement (which they use to call *neasezare*). They did not feel to belong to their proper history but very short periods, followed by wars, fires and devastation. As a consequence, they obtained crisis skills like opportunism, distrust, and a preference for immediate projects ignoring some long term ones. There is sort of an internal migration between a chance and a risk, among kings' vices and caprices, among foreign systems of law, organization or thinking. "Poor man is always under time's will" / *E bietul om sub vremuri* – sounds an old Romanian proverb. It stays for the local conviction that common, ordinary man has nothing to do with politics, with history, with changes in the public sphere, because he *can not do anything*. This is why, political culture has remained a useless desire, and civil society implication lagged at market stage while all the important decisions ... "lay under time's will".

The first thing that we have to take care is that *Romanian mentality* means that of most Romanians living in the Southeastern part of the country, namely the way of thinking that is proper to the so-called "old Kingdom". The Western part, known as *Transylvania* was included in the Austro-Hungarian Empire and borrowed a lot of features from the Central European attitude: a certain sense of responsibility, of duty, of respect and dignity. But Romanian capital – Bucharest – is in the Southern part, where a good deal of Balkan influence is to be noticed. Further more, it is quite hard to determine another kind of decision in

Bucharest as long as you come from a different political culture. Therefore, I will speak about *Romanians*, mostly meaning people from other parts of country than Transylvania, while for these ones, a good deal of *Romanian way* that dominates everyday attitude is somehow strange.

Romanian people – a possible cultural portrait

“The special manner of Turkish government has allowed each spirituality to exist as a status quo. It didn’t oppress nations, nor did it try to form a proper one. Thus, those different people from Turkish districts (raials) went on leaving separately, with no unity for several centuries, in an original particularism, that we can’t find any longer but among wild tribes...”¹

Here is where Count Keyserling finds out most of possible explanations of present-day behaviour of Balkan peoples and here is too, where we can catch up historical details to argue for Romanian’s way of thinking.

Let us start with the juridical point of view. Romanians had been one way or another dependant to Ottoman Empire. As a consequence, feudal era ended very late, in the 19th century. The country was lead by local noblemen following old customs but also their own imagination in order to escape from Turkish tribute and improve in the same time personal property. As soon as most of population was illiterate, any written law would have been useless. Therefore, society got gradually a pyramidal organization, the only really recognized law being the one that most improved life conditions. What I mean is that ordinary people preserved and developed a local, traditional system of rules, based on religion and customs, most important being “what people say”. So, no punishment could be harder than community’s disapproval or worse. Here we can find proverbs, grandparent’s notes, pagan and Christian habits. Turks were not interested to change them, so the vast majority of population considered them to be the most valuable inheritance. They were ‘sacred objects’ in Durkheimian sense. All relations between the nobles and the community were also regulated by these traditions. As long as they were mostly agricultural relations, there was no sense of contracts, neither between peasants and nobles, between peasants at all nor between people and state institution(s). Broadly speaking, the Lord – who was for a long period sort of a local king – he was the supreme judge on the earth, but only for major troubles. All the others were solved inside the community, taking into consideration the tradition

and the popular morality. The supreme law was “the fear of God”, while the Real judge is to happen in front of Him. Subsequently, during all the centuries while Romanians lived in the mountains or migrated between mountains and plains, they needed and used a simple legislation, patriarchal, easy to be memorized and applied, in spite of hard living conditions. Instead of written contracts, they shook hands or simply communicated to everyone what had been decided. Therefore, Romanians got used with a very flexible judicial system, that they call “our law”. On a more profound level, a Romanian philosopher – C. Noica – noticed that there is to be remarked a certain distinction between several meanings of law: *lex*, *nomos* and *measure of things*. Romanian language has a single term for all these senses – namely *lege* – , but only one of them is functional. *Lex* is not only a Latin word reminding for the Roman rule, but also the law of a foreign power, a written law, hard to be read and understood. It was a regulation of something that did not exist, thus, a useless object. Besides, it stipulated punishments, constraints established by a foreign lawyer who was not presumed to understand “our law”, meaning, and our manner to interpret world. Each person has his own law, meaning own feelings and destiny and inner rhythm or senses. When Romanians say: “let him in his own law” they mean: leave him with his own troubles and thoughts. In the same manner, a community has its own law, so there are as many “laws” as communities are. While each community has its very proper past, ancestors and customs, none is enabled to disturb this “law”. It might be understood as a defiance of its identity, of old people will and efforts. So, *lex* belongs to others, to some different people, a frame that provides a desired behaviour and certain conditions that do not interest us at all. It is *their* law, so as we have *our one*. Thus, *lex* imposes, brings obscure rules together with a foreign rule. Local communities were not found of taking, of following others prescriptions, because they do not sustain their inner law, their inner *Weltanschauung*. Much more, in an absolute field, ordinary people are not supposed to have a law, but they get it from God or from nature, as I will further explain. They say that man is not explaining the world, but the world explains itself in front of us, in all these different ways in which we manage to understand it. Nature is the one that expresses its own laws, while we have to catch them and to follow. Every community’s law is the way in which it manages to do it, so, it is a cultural code. So, the fact of rejecting a foreign law is not nationalistic in its very essence, but somehow gnoseological, metaphysical. The only possible active law is the one that comes as a conclusion to our vision, to our manner of interpreting world, because it follows a natural structure and thus, it completes our being. And this is

how *nomos* has to be understood, as an inner law, that constraints starting from inside and being judged by own conscience. There may be two levels of judgement; a first one carried out by the community and the second, expected to take place in our proper soul. All the other kinds of law are incomplete because they presume other starting points and, perhaps, other criteria and goals.

In the 19th century, modernization process started somehow forced by external facts, and, as I hope one can understand, it was not assumed as a natural, necessary, well-come event. On the contrary, it generated a whole debate opposing the good, health rural life and a decadent urban one. It was imported and imposed, so it never took place in its whole and never produced natural, complete results. To remain first, in the legal field, during the 19th there started the efforts to formulate a Constitution and some organic laws, but most of them were just translations and adaptations from European law, especially from French and Belgian public law. On one hand, it was a domain where Romanians did not have a legislative tradition, public sphere being an exclusive preoccupation of the feudals, while the others were only interested in private one. External affairs had been Turks problem or Lords' ones while national administration was not a common concern. So, as starting laws, they were hard to be applied, full of foreign terms and strange realities to refer on. As a consequence, all this legislative work was felt to be somehow uncommon, an attempt to subordinate "our law" to some foreign ones, that no-one needed and no-one understood why to respect.

On the other hand, this new system was not the job of everyone, but the concern of some kind of elite that studied in Europe and was trying to change, to insert very new institutions. A prominent leader of the Conservative Party of that time – Titu Maiorescu – was warning the political class that Romania became a country of forms with no content. He referred to all sorts of institutions that were artificially created in a desperate effort to adapt Romania with what they saw in France or Germany. But a single law for everyone, a written and hard to understand one was not what Romanians expected to get. As a consequence, those laws were seldom respected but changed very frequently, aiming to a better adaptation and integration in local "law". All those change completions or interpretations created a legislative anarchy that encouraged corruption as well as disregard for any kind of public law. Inside of political class, dominated by lawyers, there was a wonderful feeling of liberty and power. For the first time in Romanian history, intellectuals could decide and influence public life. There was such a huge difference between those who understood legal system and

the others that the first group started to use law in its own interest. These lawyers or politicians took the place of old feudal and created a new class of powers' handles. Here we can agree with Juan Linz and Alfred Stepan when they speak² about *sultanistic regimes* in countries like Romania. These regimes are built around a small power man who can influence economic and political decisions in that region and, therefore, he acts like a small dictator, neglecting central laws or peoples' will. Here is where a lack of trust in laws and lawyers comes from.

On the other hand, common people felt it much too complicated to learn and apply all those laws, and thus, Latin rule *nemo censetur ignorare legem* (none is allowed not to know what the law prescripts) had no chance to be applied. On the contrary, legislation field started to be felt as an elitist one that did not concern the majority of population. This one went on guiding after morality and common sense. Much more, the intellectuals educated in Europe returned with the ideal of reinforcing Latin, i.e. European feeling in Romania. But as soon as it meant a change of habits and values, European – Latin origin remained to be felt as elitist, too and, after some time, even complete different from our "profound identity"³. Soon, all "Europeans" started to be considered traitors who want to sell their country. They were accused to have an un-patriotic attitude so, they were not worth to be listened or followed.

Another deep problem of this portrait is Romanian's attitude towards religion. While Christianity in orthodox variant is mostly spread, common people declare to be religious in a complete confusion of terms. So, they identify *faith* with *religion* and with *church*, ignoring the content difference beyond these terms. It may be understood somehow as a consequence of the first aspect. So, the idea of an institution has no substance, as long-time life was out of them. There is no respect for the idea of institution because they feel it to be unnatural, the instrument of a foreign power. Here is no longer a political problem, as it was in Turkish time, but a problem of alienation towards this public sphere ruled by other kinds of principles. For any common Romanian, the institution of church means nothing; he uses the term *church* in a very sacred sense, without knowing it. Thus, he means a sacred place, a sacred building, full of pictures and portraits of saints. Here is no moral evaluation, no everyday life element, but something rather mystic. Besides, the term *religion* is neological, recently entered in use, so they mostly identify it with *faith* that is much common. But *faith* is a personal problem, might one add. For old Romanians, *personal* meant *belonging, concerning the whole community*. So, it is a combination between private and public, as soon as they couldn't perceive other kind of public than the local one.

So, *faith* and *church* are aspects of everyday life *in the community*. Tradition says that none can be saved but through a communitarian life, living and thinking *in* and *for* the community he or she belongs. There was no individualism in Romanian culture at all, on the contrary. Individuals had to think to their lives only *inside* a group. For instance, there is no personal cultural creation, but folklore, collective and anonymous. Here is no happening, but a deep belief that all are equal in front of God Who is the only Creator. All the rest are attempts, modest and imperfect. The idea of signing one's creation was mystically interpreted as a sign of haughtiness, a terrifying competition with God. So, among main virtues one can enumerate modesty, lack of interest for personal creation. On the opposite, among sins we can find search for independence from groups' visions, rules and customs, individualism, the need to be better than the others. This is why in the interwar times, all major Romanian thinkers noticed that all what best was created was popular culture, folklore, and not major, auctorial works. C. Noica, a Romanian philosopher wandered

“how to be possible for big personalities to appear in a world where anonymity is the rule?”

Then, he adds:

“how can a person appear in a world where the category of *personality* is missing? One can be sure that in such a world, the creator will be subordinated to the individuals in great cultures... he will lie in their shadow. So, the inner tension of Romanian culture comes to be the following: should one lose himself in an anonymous creation that does not prepare a major culture? Or should one strive for personal creation that will be in the shadow of some big cultures outside?”⁴

Here might be recognized the consequences of the late appearance of a generalized medium education as well as a lateness of University setting. The preoccupation with research was rather strange. It meant that the one was going to get ahead of its neighbours, to look somehow smarter, that is denying a traditional hierarchy, where the only criteria for getting some more importance were age and work experience. And here came also the orthodox idea of *trust through lack of doubt*. All possible questions starting with “why?” got as answer “because so we use to do/ say/ think”. The problem of “who did something?” was solved in an invariable “us, the community”.

Returning to *faith* topic, we may say that Romanians preserved their ancient belief with pagan rites and songs, adapting Christian orthodoxy,

although there are very few persons that know it. But this sort of acculturation was the reason for people not to be very fond of Christian doctrine. Those who had studied Romanian's mentality observed that there was no mystical sense in people's gestures or decisions. It is to note a religious feeling performing the rites as if it were the only need for their life. Rites itself was expected to be efficient, all the formulas and priest's discourses being recited or listened for their sake, not for their meaning.⁵ So, the point was to obtain the effect, with no understanding or feeling the words that were to be said. Much more, there was very frequent some lack of trust in the priest himself, as Romanians used to say: "do what he tells you to do, not what he does". It seems that priest's way of living was not very dogmatically correct. There are a lot of stories and jokes that people say about their priests and monks. But in the meantime they learnt that a small sin is possible to be forgiven; that priests "are common people, too, with sins and virtues", secularizing this relation much before the communist period. The *church* institution had no argument to call for obedience as soon as priests were not models, spiritual masters for their people.

On the other hand, here is the starting point for a religious tolerance among Romanian people. There is to be identified some relativization of religious values, so any other cult might be accepted under the condition of not interfering or, not imposing anything to Romanians. The so-called hospitality is also starting from here. The problem is that they do not encounter the visitor as a friend, but as a stranger, as someone coming from another world, i.e. from other rules. He has to be welcome in order to be able to speak nice about us. We can notice here the old command of "what people say about" that is a problem of image acting long before recent media theories. So, people was dressing nice for celebrations because "it is used so, and the others will see you". They use to show a certain face of their family taking into account "what the others say". Rites, too, are often preserved "as we use to, otherwise, people will laugh about you". So, here in this public image is the spring of morality and religious behaviour. Therefore, many researchers speak about a surface Christianity working here, on a strong, profound pagan ground.

Politically speaking, when the institution of *church* started to sustain the power, nobody cared, because together with the institution of state they where not felt as concerning everyday life, but a complete different realm. This entire behaviour might seem strange, but very often priests had been seen only as functionaries or passage intermediaries between a sacred world and people. All that mattered was for the rites to be performed, in order to guarantee a quiet, good life for the community. Therefore, when the lands of churches had been nationalized in order to

be given to peasants, no-one felt it to be a sin, but a logical, natural justice. No-one felt sorry about what happened sometimes with some clergies or buildings, as this entire network was rather out of general interest. As a consequence, the orthodox hierarchy needed to support the political power in spite of any of its decisions, in order to assure its own survival. So, a big distance grew up between a religious population and a somehow "secularized" clergy. People have faith in God, but is almost indifferent to the institution of church. Of course, in any time there were to be meet some exceptions, but their worked on their own and got people's recognition as well. But, at national level, the Orthodox Church had no reason, so no power to build a civil society, thus a political opposition to dictatorial rules. Therefore, some Romanian thinkers use to say that this people have saved himself not through the church, but over it. In the interwar times, they tried to reinforce the popular, peasant's belief as an alternative, but their attempt failed once with the communist regime setting up and were impossible to be continued afterwards.

With such an indifference towards public institutions and with such a lack of communication between society and institutions, anyone may observe that common people had no means to take part to the political life, to the process of decision making or to anything that means an active citizenship. It seems very easy to analyze it from a contemporary point of view, but the real reason is more profound. Most part of their history, Romanians saw how everything was falling down, even several times during a generation lifetime. So, their problem was the one of a reason to build something. They understood and lived with the belief that everything is dying, changing, disappearing, so there is no real means to value this world. C. Noica observed that Romanians

"had the feeling that there is a plan towards which all the historical concern means wastes and losses."⁶

They understood this life as a preparation for the coming one or, in more recent times, as something unimportant. It is no joke here, but since the only real "individuality" is that of the community, of the group, any living individual is nothing more than a single piece of community. So, he has no identity but *inside* the group, he does not have any importance but as a link of a chain. It is important for the chain to be unbroken, to go on, to preserve its being as well as its tradition, but the individual is nothing more than its servant. So, one's own life was nothing but in connection to this chain that is / has to be eternal. Only his family members need him, only they will remember him. As time passes by, one's name is forgotten, and so are even the events of his life. The

only important thing remains the fact that he was a link among the other ancestors that had preserved the chain. So, the plan Noica spoke about is this realm of eternity, where none of us has any name or memories, but a sociological role. Everyone lives *for* this role and not for himself as an individual with proper needs and desires.

Romanians kept for long time some kind of *cosmically feeling*, meaning that they felt themselves as parts of Cosmos. All the traditions, all the rules where connected to season's alternation, with the agricultural programme, with vegetation and meteorology. Natural elements, animals, landscapes, the sky were parts not only of their fairy tales, but of their life, too. They influenced it, talked with people, even substitute some of missing persons in the community. There is to be noticed some kind of natural determinism in all what people think or do. They are not afraid, nor implied in everyday life's requests. Instead of hurrying or being concerned, they use to say: "this thing will also pass over". Or, "that what is to happen, will happen" Thus, all what is to happen is already prescribed as it is part of cosmic harmony. All what you do, is meant to happen, otherwise no-one can fulfill nothing. Therefore, all what people do is worth to be done and resist if it belongs to this eternal plan, or just *because it belongs to this plan*. All the other cases are not working because they were not destined to be successful. Who takes/took the decisions? Who choose what events to take place and what buildings to fall? Here we remark an acculturation process between pagan and Christian beliefs as soon as one person may answer either: *nature did* or *God did*, with no distinction. It is almost the same significance, and so, we come again to the idea of a surface Christianity added over an ancient, pagan belief.

Why must this aspect be so important? Because it explains why Romanians seem to live in a total provisional state, why everything seems to be done just for a single use, for a single day. Historians tell us that for some centuries, there was a continuous migration from plain to mountains and return, depending on Turks attacks. It was the time when this people understood that all what is created on earth might be easily destroyed, while all the spiritual constructions, those inside one's heart, are immortal. Nobody can say why a certain village had to be fired during a war and the other one had no damage. Therefore, they used to say that only God knows, he decides, so the survival, the existence of this world doesn't have to concern us. All the architecture of houses or public buildings – excepting the churches – were built from weak materials, meant to survive very little, i.e. until the next attack. Churches were small, not to call enemy's attention and were mostly raised in hidden spaces.

We can remark a continuous fear, a tragic dynamic of these lives that learnt to escape, to use survival skills to protect their lives and their chain. These skills made many western travelers to agree with Tzar Nicholas 2nd of Russia saying, "Romania is not a country, but a profession". It is the ability of passing over many unfortunate events, with the conviction that they have to remain, they are meant to survive. Sometimes, this 'profession' gave them also some feeling of a great nation, of a big destiny that was not understood by the others who came here to take some part of the country or so impose a foreign rule. This is why a certain superiority accompanies all Romanians gestures or options. It is the feeling of someone who succeeded in spite of others, in spite of time or of own weakness. The fact that those skills helped so much is an argument not to give them up, but to keep them and use them as frequent as possible. As any means is good, is worth if one's conscious agrees with, and this is possible when the aim is a survival one.

The worse part of this portrait is the fact that for fifty years there comes here a communist regime. As a public problem, nobody seemed to be interested in its ascension, until it was somehow late. Ordinary people did not understand anything from politics, most of them had voted for the first time during this regime, while the local aristocracy was sure that it was a simple trend to pass quickly, as all the others. They waited it to fall even when they were imprisoned and ill. On the other hand, those survival skills were activated with no concern for everyday compromises, but with the aim of being alive, having food and job. Here is where a certain disregard for politics was emphasized and become a general attitude. But communists destroyed the rural communities forcing people to move to towns and factories. As a consequence, some old traditions were interdicted, others were reinterpreted, so that today, this people try to recover some identity features. But the survivals are old and have forgotten a lot, while media and global change of cultural paradigms makes it somehow strange to turn back. The problem is that young generations have nowhere to turn, they were born in towns or in already destroyed rural communities, and they lack the feeling of belonging to something ancient and profound. They simply do not feel what *belonging* means. So that, a national or European or local identity might be the same expression for a hard to fulfill request. The idea of nation is strange for them because it was so much used by the propaganda that it lacks content, somehow. Or, it has a pejorative one that we can not accept to be representative. People had lost solidarity, while no other formula of social organization proved to be efficient. So, any disappointment, any failure is presented, is felt as catastrophic as

soon as there is no other support for most of people. This is why they react disproportionately. For many Romanians, a promise has to be fulfilled in order to help them escape from everyday difficulties. Any refuse seems to bring all the possible misfortunes in the world. So, this lack of measure is the sign of alienation and disintegration of some old, safe structures. Nothing was settled instead, no institution seems to deserve people's trust. On a surface level, this social atomization turns into distrust, indifference, and passivity. With the exception of those extremely desperate, Romanians start to express their feelings in some kind of self-critical images or even ironical ones. One might hear formulas like "here is worse than everywhere", "we, the poor ordinary people are hardly able to live from one day to another". Or, ethical evaluations that might say that our "virtues" are: the absence of action as a sign of deep wisdom that knows that nothing is to be provoked, things will be accomplished only if they are meant to, with or without our contribution. Or, neglecting laws because they are changing very fast and it is hard to know what they require; briefly speaking – abilities to avoid obligations. Any outside observer might think that they really believe all these. It is just a surface, an image trough that they try to find for themselves means of psychical survival, to self - encourage and search for power to go on. So, all these jokes belong to some kind of black humor that no-one is looking for but many people use to help themselves.

EU – a possible brief portrait

Europe was for many years a myth for all those people living in communist camp, standing for peace, wealth and chance. It was a success story to be opposed to their everyday lives. The problem raised during the last decade is whether it may be a real chance for East Europeans, too, or, they have to resume to a second hand lifestyle? In order to open this topic, we shall pass a little trough European building process, to find out how can EU be defined and thus, if there exists any common language to be spoken? The point is that a negative answer might improve Easterners' feeling of being excluded as soon as it will ask for a great effort to discover some new means of communication and make them familiar.

United Europe has been a nice dream of many writers or philosophers during history, but all might have remained only a fairy tale

without the “help” of the Second World War. I mean that it managed to threaten Europeans, by showing their black possibilities and thus, making them understand they have to search for something more important than the differences between them, meaning they have to find out a linking principle and common hopes. The particular history of Europe was determined by a larger number of centrifugal forces than any other continent. So, while all the others had consolidated their identity, gaining more attributes and a deeper specificity, divisions, delimitation or separations preoccupied Europeans. Metaphorically, we can say that, when leaving Asia and ancient cultures, Europeans started to behave like a run-away son who has thrown little by little some of his memories, duties, relationships from his birthplace. He replaced stability with even greater mobility as well as some sense of eternity with time, acceleration and speed. Much more, each stage of this running marked in different colours the local mentality, drafting a diverse, even strange puzzle of European cultures. Any run-away son is found of anything that might seem to be new and unexpected, so this continent would have become a growing diversity, an explosive one if left alone. But all the others started to unite and threaten and so, our run-away son had to choose whether to remain spread between various faces or to unite them into a stronger, re-born one.

It was clear enough that this alternative meant making an option between life and gradually disappearance, so it was quite easy for a while to make a decision. From the beginning till the sixties, European leaders defined this continent using a dualistic logic. As Coudenhove taught us, there was first, Greece vs. barbarians, Rome vs. uncivilized people, Latin world vs. all the others, Christianity vs. Islam, democracy vs. communism. After the war, there were six countries that signed some given treaties vs. the rest of continent. These six countries had also some common historical events, some common fears and values. Broadly speaking, they represent the former space of the Holy Roman Empire of German Nation, having some common heroes but especially, a common time and rhythm of modernization. What does this mean? It means that they are able to understand each other's possibilities, deadlines or even limits. Somehow, they do have a common cultural code. It is not so important nowadays how many times Germany and France fought one against the other, but the fact that they both have been great powers and still are, they encountered the same type of war in the same time, they were neighbours and have common neighbours. So, the essential points are somehow familiar and they can sustain a real integration. Besides, having comparable living standards and civilized requirements, the dissolution of their administrative boundaries

could not raise any conflict, any frustration, and any sense of lacking identity. On the contrary, a certain habit of travelling and getting informed was thus helped to improve, so people could find out quite quickly some concrete benefits of Rome's Treaty. If we add the fact that present day elements of EU law have been achieved during a long period, it becomes clear that population in the center of the continent got gradually adapted to it. So, we can conclude that the six countries have been able to create a Union and a law system that best corresponded to their customs and interests as well.

Once the extension started up, this nucleus had to face some different perspectives, expectations or interests. The first group, including UK, Ireland, Denmark and Sweden there come countries from the first meantime zone⁷, i.e. some proud people, will a high economic standard that argued for their sense of freedom and cooperation. Thus, EU got stronger, although some aspects of the agreement's firmness were turned into more tolerant clauses. The second group brought some elements that never portrayed the founding states: medieval Islamic cultural influence, Christian Orthodoxy, a Central/European style more valued than scientific rigour, a larger diversity of population as well as a history that meant a lot of contacts with foreign points of view. Each of these countries required somehow a re-evaluation of Europeans in the field of adapting their vision to a broader meaning, to include – as Romans did with foreign Gods – new attitudes and even to modify their perspectives in this respect. The equality among members imposes, somehow, a gradual adaptation of each one's position towards a common, composite one. The coming "wave" seems to complete Europe with its third meantime zone, so it has to be just a problem of enlargement.

Romania and European Union

So far, EU may be defined through a cultural code, including some kind of aristocratic sense of language, of gestures and, too, of justice. It proves to have an active censorship from the civil society as well as a certain behaviour specific to great powers' population, meaning capacity of making decisions and trust in one's own chances. What about Romania related to this image?

First, a lack of public interest for political matters, as a consequence of a history that ignored them and passed over their interests. It may be also noticed a general ignorance of laws because they change very quickly, and it is needed a solid juridical culture to understand them.

Therefore, European laws seem to be something that comes to make all very complicate, but, as usually, all is meant to concern only the specialists. All the others are much more interested by everyday aspects of life.

There is also a general disinformation in spite of a great number of media means, because information supposes capacity of selection and evaluation. That seems to be too much, especially for some piece of information that everyone understands to be quickly outdated. There is also a missing consciousness of europenity on the ground of devalorisation of any solidarity consciousness. It follows that they prove inaptness for change and adaptation other than at surface level, so as they always did. Europe means an exigent cultural, axiologic club while Romanians still wonder whether to do such an effort or not. Nobody asks them, nobody cares whether people are prepared to change, to pass this exam, as in no time Romanians were ever asked. They were supposed to accept. People use to say: "everything has its proper time to be done". Nobody knows when this time comes. For the moment, Romanian political class is afraid to open this chapter, as they don't know if the time has come or not. Is Europe prepared to motivate and help Romanians get out of their traditional paradigm? Will Europe show them the clock?

Bibliographical Notes:

¹ Herman Keyserling, *The Spectral Analysis of Europe*, chapter about Balkans, 1993, European Institute, Iasi – initially published in 1923.

² Juan J. Linz, Alfred Stepan, *Democratic Transition and Consolidation*, The Johns Hopkins University Press, Baltimore and London, 1996.

³ This identity was considered to be rather Greek, then Slavic, even Russian meaning Soviet in complete dependence to the political needs.

⁴ C. Noica, *Pages about Romanian Soul*, Humanitas Printing House, Bucharest, 1991, page 8, published in Romanian only;

⁵ Here there was another inconvenient acting, the one of rites official language that was Slavonic. People did not understand it, at least not in the last three – four hundred years. So, the liturgical text was not accessible to common people while the whole Europe was already translating the Bible. This aspect was felt as a distance creation between the text and people, the later having nothing to do but to perform the exterior form, with no preoccupation for the words of the priest.

⁶ C. Noica, *Idem*, page 10.

⁷ One may consult, Ernest Gellner, *Liberty Conditions*, Polirom Publishing House, Iasi, 1998, where he divides Europe in four meantime zones, on the criteria given by the relationship between culture, state building and nationalism.

THE MORAL SHAPPENING OF THE YOUTH

Constantin STRUNGĂ
West University of Timișoara

The social phenomenon, especially, the moral owns, due to their complexity cannot be scientifically studied and pedagogically adapted but using an intersubjected context. The civic education of a youngster, especially that of the secondary school pupil implies two aspects tightly connected to each other: the axiological conscience of the moral project, on one hand, and the psychoaffective aspects, the very ones of the pupils, on the other hand.

As it is known, the morals are defined as "a social-collective and individual phenomenon" that contents as well the norms (principles) that supply the human connections and our types of activities and all the manifestation (subjective and objective ones) which are achieved, in different grades and modalities, under the sign of these norms or commandments, manifestations placed under collective and individual appreciation"¹.

The moral norms come from psilosophical principles or social-political commandments. It was tried to be deduced the moral norms ones from others, to be found moral tips having values as axioms (categorically imperative) or, at least, to be described, classified and to be deleteaded the ambiguous norms, unfitted, these nearing the logical analysis of the moral language, as abstract pozitivism, that despite of the good intentions, are getting us for from the direct aspects of the moral education.

For the theory and application of moral formation of the teenager, the best operational potential is hold by the valuable concepts and system of values. Somehow simplifying, wishing to get better the grades of educational adaptability we shall understand through value the difference between what is good and what less good or between bad

and less bad. The educational fact must be made functional for values and tends as well require the stabilization of a system a hierarchy or chart, unfortunately most of the times unapplicable because of the complexity and polarity of the given manifestation.

The system of the moral values is drained by the ideal the image of perfection, and the latter is correlated with a religious faith or at least, a certain philosophical conception as well as a political one or even abstract hints as the categorical imperative belonging to Kant would be ("behave yourself in such a manner that behavior might be accepted as a universal norm of behaving simpler don't do to others those things you don't like") display the social nature or, at least, interpersonal, the fact that the moral norms shows in the exterior, is compulsory and relentless.

The dynamics of the human soul imposes a confrontation everlasting between conscience and thought main instances and other elements of emotional conformation, as well as sensorial and emotional that start some disturbances.

The opringnen of the psychologycal manifestations is at its peak in the case of the youths that are extremely morally vulnerable hance a lot of educational and psychotherapeutical demands result.

The changes in philosophy in the teenage years state the possibility of some psychomotrics and psychoaffective restlessness. Teachers complain that the teenagers don't sit quiet in their places, their interests ate various etc. We meet sui-generis instability a startling change, frequent and unmotivated form an affective stage to another: from joy and exuberance to sadness and vice-versa. The psychoaffective pending might be somentimes more spectacular: one can notice manifestations of introversion: the teenager retires inside his soul and even collopses into his or her conscience when he or hers understands the sense of life and death the, of love and sacrifice. After the coming back of the equilibrium it may be quickly passing to the other end: exuberance and restlessness up to sacrifice. We also notice features of the teenage: suscepibility (a lesser stand up to suggestions and ironies). Teenagers are extremely sensitive as regarding their body and face. Not rarely even when comes to general sexual hints, the young ones react foolishly, though they cam down quickly.

The negative point of view and the spirit of opposition is still compensated a lot by the cognitive thirst, buy need of finding an ideal, to be devoted to some principles and conceptions. An incompetent educator or overfulfilled would say that there is an unsolvable contradiction between the relative rigidness of laws and moral norms and the teenager's exuberant psychology. Others would try to impose moral and didactic norms regardless psychological peculiarities the

youth, education become in this case an interrupted of interdictions. The Modern days education must stand on the psychosociological and a affective relation, to start from the knowledge of the teenagers peculiarities in their behavior and to methodically follow the moral objectives, having in view the way in which the young ones react, stepping in, of course, in the case of obvious deviations.

The moral education may be carried out, and unfortunately it goes in some schools empirically, based on common sense, it is spread the idea, opinion that to educate means to give counsels and as any person can give counsels (good or bad, proper or not) we can reach the conclusion that any person can be an educator and hence the convenient idea, but risky that it's not any need of a special training or an effort of knowledge and investigation to make, inclusively moral education.

The moral formation may be more efficient if it is used metaphors, ironies, allusions. It is well not to forget that centuries is row that in the common education, of peasants, a main part had the proverbs that synthesize, never the less, a huge moral experience. Here, for example, a group of proverbs that hints at diligence, the wish to work, to be active and usefull:

"The diligent man cries not for poorness, but for health, as for a change";
 "Nobody asks for the house of handsome one, but for that of the diligent one";
 "Man is to work, death wouldn't find him sitting for nothing";
 "Ploughing and sweating hurts but in the end it's fun";
 "Beat the iron still it's hot, because it gets cold, you work for nothing";
 "Slower with words and faster with your hand"²..

Without neglecting or subappreciating the power of education carried on to an empirical, popular, traditional, level through proverbs (which could be enriched if it is integrated in an educational programme which is coherent) we shall see nevertheless that the requirements of the nowadays moral education calls for a methodological environment higher placed the choice, characterization and even defining of some more adeqvated techniques.

Considering that, we too, value generally speaking is a coordinate of the educational action offering "motivations", and "projects" for action and that "is the same time values imply the lines of education, i.e. the power to discern the pedagogical in the choice in the pedagogical means, as a function of the purpose and the educational point of view

facing the educational process as an act filled with responsibility for its consequences"³ we shall add that the formation of the moral profile, we have to consider not only the target value, but also the spontaneous reactions of the youth, the methodological advices of the experts and also the traditions and way of life.

The moral education may be achieved more efficiently. The most efficient procedure may be the study of case in the analysis of problematical situations or even stepping over the moral norms. The cases are searched for are those in which the authors pupils in the class, even if the requirement of respecting the confidentiality has to have priority anyway to find such a case you need a special effort, plenty of time abilities of fitting the case with the theme established, preparing the actors etc.

There are not few issues of forming morally the pupils that assume the deepening of the psychological analysis, e.g. the dissociation of the emotional components from the rational ones to understand mechanism responsible for a certain behaviour. The experts in moral education like Tiberiu Rudica uses for such problems literary characters⁴:

Hagi Tudose: exaggerating the greediness, tendency to gather money;

Achilles: a greek hero going for glory;

Othello: a man standing for jealousy;

Ștefan Gheorghidiu: an intellectual tortured by doubts.

A relatively simple technique which can be used too in the scholar environments is that of the philosophical and cultural commentary. Speaking about the philosophical school/experience organized by Constantin Noica, Emilia Guliciuc rightly notices that "the salvation through culture has in reality, a much greater sphere than that offered by by the philosopher". Noica said that from all the cultural forms only philosophy is that one can to salvation". Fine objectives followed in such a try are achieved through a wise attitude of tendering the wishes, standing sceptical and christian at the same time⁵.

Narcisa Srala during an educational programme having as target happiness proposes a more evident check both brainly and emotional, so reaching the mitigation of the emotional thing responsible for the stress through the modification of negative tendencies or through putting aside the tension excessive and prolonged of the muscles and avoiding the excess of hormones started by the repetition of emotions⁶.

As we showed in other works⁷ the psychological methods might be used not only as procedures in investigations, but also as educational technics in scholar environments more complex as the moral education

is. In order to surpass the difficulties that show up anyway in the moral formation of the young ones, it is imposed often to alternate procedures, checking psychologically, moving some intersubject and intersocial structures (at the same time educational, psychological, cultural and artistic) knitting evaluation, soft cautiousnen and proper internenience.

Bibliografical Notes:

¹ Tudor Catineanu: *Elemente de etică*, vol. I, Ed. Dacia, Cluj Napoca, 1982, p.11.

² Stanciu Stoian, Petra Alexandru, *Pedagogie și folclor*, EDP, Bucharest, 1978, p. 35.

³ Marin C. Călin, *Datoria morală și procesul de educație*, EDP, Bucharest, 1978, p. 103.

⁴ Tiberiu Rudică, *The Growing Up of Personality*, Ed. Juniunea, Iași, 1990, p8-27 and 41-46.

⁵ Emilia Galiciuc, *Aporiile gândirii nicasiene*, EDP, Bucharest, 1999, p. 19-114.

⁶ Constantin Strungă, *Metodele psihosociologice ca procedee pedagogice în educația permanentă*, ISEP Timișoara, 1983.

⁷ Narcisa Srala, *Controlul cerebral și emoțional*, Ed. Panlan, Foundation, St. Paul/s Daughter's, Bucharest, 2003.

PROBLÈMES CONCERNANT L'ANCIENNETÉ DU
CHRISTIANISME AU BAS DANUBE. LES SOURCES
LITTÉRAIRES

Eutimiu Ștefan LIFA
L'Université de l'Ouest de Timișoara

Notre étude comprend dans la plus grande partie des aspects concernant la genèse et l'évolution de la manière de vivre de la population daco-romaine et roumaine dans le premier millénaire. Celle-ci correspond directement au spécifique spirituel de la population dont nous parlons, idée à laquelle nous avons essayé de nous rapporter en permanence.

Sur les dieux des mystères, George Ory affirmait: «ils n'étaient pas des dieux créateurs et ils ne se présentaient pas comme des maîtres de l'univers: ils se limitaient à assurer le salut, la rédemption; ils existaient à côté d'autres dieux, sans être incompatibles avec ceux-ci»¹. C'est comme représentant de cette idéologie que le christianisme a pénétré dans l'espace du nord du Bas Danube.

Pour le début, nous savons que le travail de missionnarisme dans la Péninsule Balkanique: la Macédonie, la Grèce, l'Illyricum, parmi d'autres régions, est dû au Saint Paul, un véritable apôtre des peuples, et à ses disciples.

En ce qui concerne le territoire situé entre les Carpathes, le Danube et le Pont Euxin, on considère que l'oeuvre d'évangélisation, du moins pour la Scythia Minor, aurait appartenu au Saint Apôtre André:

«quand les Saints Apôtres et Disciples du Rédempteur (...) se sont répandus dans tout le monde, Thomas, comme dit la tradition, a reçu la Partia, et André, la Scythia» (Origène, Commentaires à la Genèse, III).

Assimilant cette idée, le Saint Hypolite a affirmé que l'Apôtre André «a annoncé aux Scythes et aux Thraces" (Hypolite le Romain, *Sur les douze apôtres*). Si la Thracie est une région plus étendue, dont la nomination peut donner naissance à des interprétations, «les Scythes" (dont nous avons déjà discuté) devraient habiter au moins dans une partie du territoire roumain. Dans la *Doctrine syriaque des apôtres* on affirme que «le Saint André a prêché dans la Gothia et dans les régions d'alentour" — ce qui signifiait que le répandissement du christianisme d'ici — idée qui ne nécessite plus de commentaires — a été attribué ensuite à l'activité missionnaire menée par l'apôtre.

Dans *L'Histoire de l'Église* (III, 1) l'évêque Eusebiu de Cezareea a écrit que

«lorsque les saints apôtres se sont répandus dans tout le monde, Thomas a été désigné par le sort pour la Parthia, et André, pour la Scythia"».

Les mêmes informations nous sont offertes par *Les Légendes de l'Église de Constantinople (La souffrance du Saint Apôtre André)*, où nous trouvons la Thracie, la Scythia, le Pont Euxin — toutes ces régions étant mentionnées en liaison avec l'activité de missionnaire de l'apôtre².

Les opinions qui essayaient d'identifier la Scythia des sources littéraires à la Scythia Major ne résistent pas à une analyse plus détaillée et ne peuvent pas être conformes à la réalité trouvée sur le terrain. Mais il est vrai que les historiens byzantins ont gardé jusque tard au moyen âge les noms antiques et alors le recours à la Scythia n'est pas déplacé.

Toujours en ce qui concerne l'activité du Saint Apôtre André il faut encore mentionner que dans *Les Légendes de l'Église de Constantinople* on précise que celui-ci a ordonné comme évêque à Odessos son disciple Ampilat ou Apion, comme il écrit, dans un autre lieu, le moine Epiphane (*La vie, les faits et la fin du Saint et loué Apôtre André, le premier appelé*, 15). Ce disciple était probablement proche aussi au Saint Paul, qui affirmait dans une de ses épîtres (*Romains*, 16; 18)³:

«Dites santé à Ampilat, mon bien aimé en Dieu"».

L'information sur l'évêque d'Odessos — qui pourrait être le même que celui de l'épître vers les romains — trouvée dans *La Légende de l'Église de Constantinople*, souffre, selon Nelu Zugravu⁴, d'un vice de fond, sur la base duquel elle pourrait être mise en doute. Il s'agit du fait

que le recueil de légendes a été influencé par la liste de 172 apôtres et disciples, dans laquelle Ampilat apparaît à côté de personnages légendaires. L'évêque évoqué peut être ou non réel, si on a en vue qu'il ne serait pas pour la première fois dans les sources littéraires que les personnages réels se mêleraient à ceux de légende. Les héros éponymes, si nous voudrions approfondir le sujet, n'existent pas, mais ils montrent un fait réel. C'est pourquoi nous nous limitons seulement à souligner le fait réel, c'est-à-dire le répandissement du christianisme dans cette zone.

La tradition de son répandissement par l'Apôtre André, basée sur les écritures d'Eusebius de Cezareea, peut être une légende, ayant en vue le fait que la Scythia Minor a été constituée officiellement à peine au temps de Diocletian (284-305) et, comme nous le savons, la Scythia Major n'existait plus depuis longtemps. Ce nom pouvait se conserver aussi auparavant, mais il est important de voir aussi les problèmes concernant le répandissement du christianisme dans tout l'Empire Romain. Il est très peu probable que les Apôtres présents dans le Nouveau Testament et dans les écritures patristiques aient parcouru toutes les provinces, en répandant l'Évangile dans une époque où Jacob, le frère de Jésus Christ et le chef de l'Église de Jérusalem, ne désirait pas la voir répandue parmi les «peuples», Paul, par contre, la désirait et les autres — Jean, Pierre — en avaient des doutes. Il est même possible que les autres apôtres, sauf Paul, n'aient pensé qu'aux Juifs⁵. Le rôle de l'Église de Jérusalem est inexistant⁶, tout comme l'église même, après l'année 70. Le christianisme a été répandu, en réalité, par des groupes héliénistiques ayant à la base, conformément à la tradition, le groupe des sept diacres⁷. Nous ne devons donc pas nous attendre que les compagnons-mêmes de Jésus Christ soient ceux qui parcourent l'Empire, maintes fois dans plusieurs lieux en même temps (le Saint Apôtre André a christianisé la Gallia et les autres régions à la fois), en répandant les nouvelles idées. D'autre part, cela ne signifie pas du tout que la religion chrétienne ne s'est pas répandue d'une telle manière. C'est donc un autre problème si un peuple ou autre attribue cette chose à l'activité missionnaire d'un certain disciple de Jésus Christ.

Ainsi, «*les Scythes*» sont encore mentionnés dans une épître (*Corynthiens*, 3: 11) en liaison avec le répandissement du christianisme:

«ici il n'y a aucun Grec, ni Juif (...), ni Barbare, ni Scythe, ni esclave, ni libre, car Jésus Christ est tout et en tous».

Nous avons analysé auparavant le nom générique de «*Scythe*». Si l'épître citée n'est pas assez convaincante, les territoires de cette zone

sont mentionnés en liaison avec le répandissement du christianisme par d'autres sources aussi. Mais la mention des *Scythes* dans cette épître leur confère un certain primat après les Grecs et les Juifs.

Macarius de Magnezia disait que la religion chrétienne n'est pas arrivée dans «*le pays des Scythes*» (*Le Seul né ou Réponse envers les Grecs*, IV, 13). Il a vécu à la fin du IV^e siècle et au début du V^e siècle et il a fait peut-être référence aux Daces libres (ou aux Gothes), mais nous considérons pourtant que ses affirmations sont en contradiction avec la réalité.

A la fin du II^e siècle et au début du III^e siècle, Origène posait déjà ce problème dans le *Commentaire 39* de l'*Évangile de Matei*:

«la plupart des Britains, des Allemands, des Daces, des Sarmates, des Scythes n'ont pas entendu la parole de l'Évangile».

Si nous pensons à la province de Dacie dans cette période, à la situation générale de l'Empire, nous allons tirer la conclusion que l'oeuvre d'évangélisation avait commencé, qu'il y avait beaucoup de Daco-Romains qui n'étaient pas convertis, mais non pas tous. Dans la même période, Tertullian de Cartagena, dans *Adversus Judaeus*, soutenait dans une plus grande mesure les progrès de la nouvelle religion, dont on disait qu'elle s'était répandue «*dans la région des Sarmates, des Daces, des Allemands et des Scythes*» et personne ne s'attendrait que ces peuples aient été intégralement christianisés ou qu'il y ait été une institution organisée en ce sens.

La nouvelle religion a eu aussi un statut différent dans l'Empire dans les diverses périodes. Certains empereurs ont persécuté leurs adeptes, les autres (comme Gallienus etc.) ont été très tolérants⁸. En 325, pendant le règne de Constantin le Grand⁹, a été convoqué le célèbre Synode de Niceea. Ici apparaît un «*Téophile de la Gothia*», prédécesseur de Wulfila, selon Socrates le Scolastique (*L'Histoire de l'Église*, II, 41), et aussi un évêque scythe mentionné par Eusebiu de Cezareea (*La vie de l'heureux empereur Constantin*, II, 7).

Tout cela nous détermine à affirmer que, jusqu'au IV^e siècle, le christianisme était déjà très connu au nord du Danube aussi, et au début du V^e siècle, après la stabilisation des Huns dans la Pannonie, pendant un siècle, aucune population migratrice ne viendra plus ici¹⁰. Cet intervalle de temps de silence (seulement) à la gauche du fleuve nous suggère que pendant les V^e-VI^e siècles l'oeuvre de christianisation des Daco-Romains était accomplie¹¹, et dans la Dacie postaurelienne une série de facteurs y ont contribué. Ainsi, les relations permanentes avec l'Empire et les influences de celui-ci, le contact des missionnaires et des

refugiés chrétiens avec la population autochtone, les conditions spéciales de l'ancienne province ont eu un rôle important.

NOTES

¹ G. Ory, *Originile creștinismului*, București, 1981, p. 125 et les suivantes.

² E. Popescu, *Izvoarele apostolice ale creștinismului românesc: Sfântul Apostol Andrei*, dans *Studii teologice*, 1994, n^o. 1-3, p. 80-88; pour les deux variantes — *Pătimirea Sfântului Andrei* — voir I. Rămureanu dans *Sfinți români apărători ai legii strămoșești*, București, 1987, p. 104 et les suivantes.

³ Voir, par exemple, R. Roesler (*Römanische Studien. Untersuchungen zur älteren Geschichte Rumäniens*, p. 90) qui se réfère à un "rege al goșilor" au temps de Wulfila dans la Crimée — en liaison avec une lettre de Jean le Chrisostome, apud N. Iorga, *Istoria românilor...*, vol. II, . 84, n. 33. Iorga montrait à juste titre que la Scythia Maior n'existait plus — elle ne portait ce nom depuis longtemps, et là-bas (dans la Crimée) ne se trouve ni au moins le souvenir de quelques martyres. Nous ajouterons que l'activité du Saint André peut être liée à la tradition, mais elle reflète les faits réels, c'est-à-dire la pénétration du christianisme; que se passerait-il si nous rappellions, conformément à la chronique de Nestor, que l'Apôtre serait arrivé aussi à Novgorod, où il aurait été impressionné par les bains à vapeur de ceux-là.

⁴ N. Zugravu, *Geneza creștinismului popular al românilor*, București, 1997, p. 159.

⁵ M. Simon, *Primii creștini*, București, 1993, p. 71 et les suivantes.

⁶ G. Ory, *Op. cit.*, p. 26.

⁷ *Ibidem*, p. 33-38, p. 125; M. Simon, *Op. cit.*, p. 43 et les suivantes.

⁸ En 260 Gallienus a restitué même les propriétés confisquées par Valerianus etc.

⁹ Barnea, O. Iliescu, *Op. cit.*, p. 45-46.

¹⁰ D. Gh. Teodor, *Creștinismul la est de Carpați de la origini până în secolul al XIV-lea*, Iași, 1991, p. 59.

¹¹ *Ibidem*, voir aussi E. Popescu, *Christianitas Daco-romanae*, București, 1994, p. 164 et les suivantes.