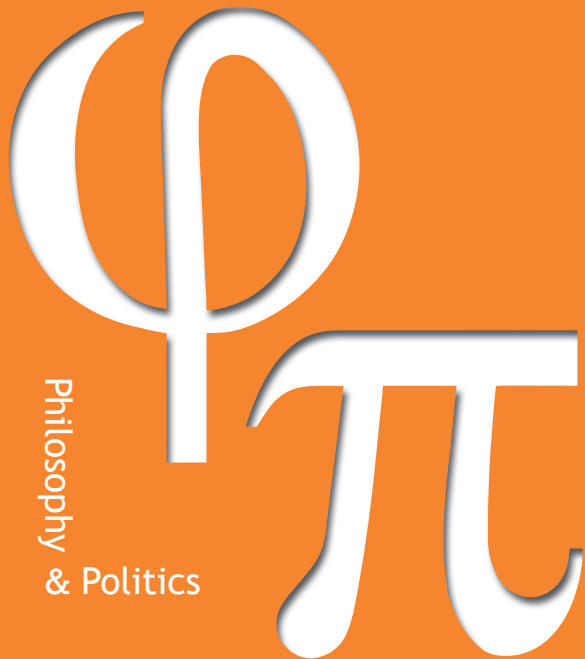


Giulio PRETI

# Philosophical Essays

Critic Rationalism as Historical-objective  
Transcendentalism

Edited by Fabio MINAZZI



P.I.E. Peter Lang

**T**hese *Philosophical Essays* by Giulio Preti explore, with particular acuteness and originality, some of the major problems addressed by contemporary philosophy. Preti's objective was to outline a "scientific" philosophy capable of embodying the rigour and concern for the factual found in scientific procedure.

His analysis engaged with the complex tradition of logical empiricism and he also devoted attention to pragmatism and the philosophy of praxis in early Marx. Preti succeeded in establishing a dialogue with these traditions of thought while also considering both Husserl's early phenomenology and the methodical approach derived from Kantian and neo-Kantian transcendentalism.

He used this wide range of theoretical and practical horizons in innovative ways, presenting a critical metareflection receptive to these varying positions. In doing so Preti developed a new critical rationalism that incorporated a historical-objective transcendentalism.

---

**Giulio Preti** (1911-1972) was the most eminent Italian representative of European critical rationalism. Engaged in a continuous critical dialogue with the epistemological debate stemming from logical empiricism, Preti occupied a unique position internationally. The *Philosophical Essays* are his ultimate expression of the practice of philosophy as a Socratic exercise of freedom and social responsibility.

**Fabio Minazzi** is Professor of Theoretical Philosophy at the Università degli Studi dell'Insubria, director of the Centro Internazionale Insubrico and a member of the Académie Internationale de Philosophie des Sciences. He is a specialist in the European tradition of critical rationalism and has published on Galileo, Kant, Popper and Geymonat among others. His publications include over eighty authored or edited volumes and over 300 academic papers.





# **Philosophical Essays**

## **Critic Rationalism as Historical-objective Transcendentalism**



P.I.E. Peter Lang

Bruxelles · Bern · Berlin · Frankfurt am Main · New York · Oxford · Wien



Giulio Preti

# Philosophical Essays

## Critic Rationalism as Historical-objective Transcendentalism

*Edited by Fabio Minazzi*

*Translation from Italian by Richard Sadleir*

“Philosophy & Politics”

No. 22

With the financial support of the Centro Internazionale Insubrico "C. Cattaneo" e "G. Preti", of the Programma di Ricerca Miur, Cofin, anno 2008, prot. 2008ZX72NK\_003, Unità dell'Un. degli Studi dell'Insubria; and of DICOM, Un. Insubria, Va.

First Italian Edition: Giulio Preti, *Saggi filosofici, Presentazione* di Mario Dal Pra, "La Nuova Italia" Editrice, Firenze 1976, 2 voll.; the present edition is the translation of thirteen out of nineteen essays of the first volume: *Empirismo logico, epistemologia e logica*.

No part of this book may be reproduced in any form, by print, photocopy, micro-film or any other means, without prior written permission from the publisher. All rights for the english version reserved.

© P.I.E. PETER LANG S.A.  
Éditions scientifiques internationales  
Brussels, 2011  
1 avenue Maurice, B-1050 Brussels, Belgium  
info@peterlang.com; www.peterlang.com  
Printed in Germany

ISSN 1376-0920  
ISBN 978-90-5201-778-5 ISBN 978-3-0352-6126-4 (eBook)  
D/2011/5678/72

Library of Congress Cataloging-in-Publication Data  
Preti, Giulio. [Essays. English. Selections]  
Philosophical essays : critic rationalism as historical-objective transcendentalism  
/ Giulio Preti ; edited, with a critic study, by Fabio Minazzi ;  
translation from Italian by Richard Sadleir.  
p. cm. -- (Philosophy & politics, ISSN 1376-0920 ; no. 22)  
Includes bibliographical references and index. ISBN 978-90-5201-778-5  
1. Philosophy. I. Minazzi, Fabio, 1955- II. Title.  
B3636.P672E5 2011 195--dc23 2011035774

*CIP also available from the British Library, GB*

Bibliographic information published by "Die Deutsche Nationalbibliothek".

"Die Deutsche Nationalbibliothek" lists this publication in the "Deutsche Nationalbibliografie": detailed bibliographic data is available on the Internet at <<http://dnb.d-nb.de>>.



# Contents

Preface .....	9
---------------	---

## INTRODUCTION

The Revaluation of the Transcendental by Giulio Preti and the Prospects of Logical Neorealism .....	13
Giulio Preti, a Bio-bibliographic Profile, with a Note to the Text .....	43

## PHILOSOPHICAL ESSAYS

I. Two Orientations in Epistemology .....	53
II. Dewey and the Philosophy of Science .....	73
III. Critique and Perfect Language .....	93
IV. The Philosophy of Mathematics of B. Russell .....	111
V. Some Scientific Concepts of Philosophy Today .....	147
VI. The Three Phases of Logical Empiricism .....	165
VII. Grammar and Logic .....	181
VIII. The Problem of L-Truth in Carnapian Semantics .....	197
IX. Historical Materialism and Theory of Evolution .....	227
X. Ontology of the “Nature” Region in Newtonian Physics .....	255
XI. The Language of Philosophy .....	273
XII. My Empiricist Point of View .....	289
XIII. Plurality of Sciences and the Eidetic Unity of the Scientific World .....	305
Index of Names .....	319



**Giulio Preti (1911-1972) in the 1960s in a classical portrait**

## Preface

This volume presents a wide and varied selection of the most important and original philosophical and epistemological essays published by the Italian philosopher Giulio Preti (1911-1972) in his lifetime. The texts collected here offer a significant record of the original program of rationalist philosophical research conducted by Preti. In the course of his reflection Preti undertook an interesting program of study, in which he explored the possibility of constructing a philosophy of strictly “scientific” type, which would therefore be capable of respecting both rigour of argument and the factual dimension, adopting as his privileged frame of reference the strategies made available by the scientific process. Hence his keen and primary interest in the major, complex tradition of logical empiricism (from the early *Wiener Kreis* of Schlick, Waismann and Carnap and the *Berlin Circle* of Reichenbach, down to his studies of the “American” phase of positivism, again above all in the work of Carnap, Neurath and Hempel). However, while analysing and engaging freely with this tradition of thought, he also devoted close attention to the tradition of pragmatism and the philosophy of praxis in early Marx. Further, he always cultivated these epistemological interests without ever omitting to interweave his reflections with the horizon of the phenomenological perspective that emerged from the lesson of early Husserl, and with the critical rationalism which goes back to Kant, studied in all the richness of the tradition of the neo-Kantian school of Marburg, the teachings of Cassirer and Banfi.

In this way the critical debate conducted analytically by Preti with diverse and complex traditions of thought, always offers a privileged opportunity to present his original and acute philosophical talent, his specific taste for philosophical analyses which the reader is uncertain whether to appreciate more highly for their acuity or the ability to correlate, critically and in increasingly fruitful ways, the conceptual threads of different traditions of thought (such as classical empiricism, idealism, scepticism, conventionalism, Marxism, pragmatism, phenomenology and neo-Kantianism), enabling him to skilfully unravel the intrinsically unresolved nodes of the issues which he dealt with in turn. Preti’s judgment these issues arose from the specific tension that always develops between the dimension of human rationality, life itself and the concrete experience that mankind faces daily, with all its characteristic cognitive, existential, axiological and moral anxieties. In these innovative analyses he always sought scope for refined critical transcendental

analyses, similar to those conducted by neo-Kantians such as Cassirer and Banfi, but at the same time he was still capable of practising, in highly creative ways, his own distinctive critical metareflection, which took as its unified object the different articulations of human culture, ranging from science to morality, from ethics to aesthetics, from literature to art, from mathematical logic to epistemology, from physics to biology, from historical materialism to evolutionary theory and from the history of scientific thought to that of philosophical thought (a philosophical-scientific tradition always present in his work with precise consideration of the classics of the history of thought, as well as medieval and modern thinkers, uniquely interwoven in his critical dialogue with the contemporary debate).

In this way Preti's innovative critical-transcendental rationalism is constituted as an interesting philosophical program, unfolding through essays and studies, "so spare and geometric" (Mario Dal Pra) that they gave rise to an open-ended and systematic philosophical reflection, embodying an authentic *historical-objective transcendentalism* in Preti's thought that undoubtedly made him one of Europe's most original and fertile voices of critical rationalism. It is to be hoped, therefore, that this volume will not only serve to raise awareness of Preti's work and thought among an international public, but that it will also serve to critically further the very program aimed at the delineation of a possible metareflexive critical philosophy that is more open and rigorous and respectful of the complex empirical-factual, historical and vital dimension in which this same critical-rational thinking is configured and constructed.

Università degli Studi dell'Insubria  
Varese, June 2011

Fabio Minazzi

## INTRODUCTION



# The Revaluation of the Transcendental by Giulio Preti and the Prospects of Logical Neorealism

Fabio MINAZZI

## 1. Empiricism as the Ideology of the Free Man Who Has No Ideology?

A famous story by Andersen tells of an emperor who spent all his money on fine clothes. One day two fraudsters turned up. [...] They told His Majesty they were able to weave and sew garments of a beautiful and precious material, but enchanted. It could never be seen by those unworthy to hold high office in the State and society. [...] So all those other State officials, as well as the poor Emperor-gaga (who is, after all, the first officer of State) *saw* that fabric of nothingness and that wonderful dress made of vacuity. And when the Emperor paraded in the midst of his faithful people, strutting in his superb new clothes, there was no indecency: each devoted subject, well aware that the social order requires everyone should stay in their own place and be worthy to stay there, obedient to the authorities, *saw* and admired his clothes. Only a little boy dared (but perhaps it is not right to say “dared” and he was simply ignorant) to *see* with his own eyes, to see... that his Sacred Imperial Majesty was walking naked in the midst of his loyal subjects. And he said so. There is nothing worse than freedom of speech: it is a plague that spreads with frightening speed (which is why a good government concerned with the fate of the Country and the established order takes so much trouble to gag the press). And the blasphemous rumour passed from mouth to mouth.<sup>1</sup>

This was the rather unusual opening of a small but very valuable volume by Giulio Preti, *Linguaggio comune e linguaggi scientifici*, published in 1953 in the series of monographs sponsored by the “Rivista critica di storia della filosofia” (founded by Mario Dal Pra in 1946 in Milan), to which Preti contributed assiduously throughout his life.

---

<sup>1</sup> G. Preti, *Linguaggio comune e linguaggi scientifici*, Fratelli Bocca Editori, Rome-Milan 1953, p. 5, italics in the text, then reissued in his *Saggi filosofici, Presentazione* di Mario Dal Pra, “La Nuova Italia” Editrice, Florence 1976, 2 Vols., Vol. I, pp. 127-220, where the quotation is on pp. 127-8.

This opening is indeed emblematic for many reasons. *Firstly*, because Preti used, with a move highly unusual in the Italian tradition of philosophical essays, a famous and popular fairy tale like Andersen's to present the philosophical and civil value of logical empiricism with which the philosopher from Pavia then felt a profound theoretical harmony (but for this point see below). In this perspective the empiricism advocated by neo-positivism is certainly assimilated to the "naïve" view of the child who says what he sees: *the emperor is naked*. While the officials and citizens "see" only what they *are supposed* to see, submitting to their roles as civil and social *subjects*, respectful of constituted authority, the child breaks with this dependence based on the principle of authority and power because he has the courage (or, if you prefer, the ignorance...) to proclaim just what he sees, without being much concerned about the context in which he lives, just because he is free from social conventions and unrestrained by any hierarchical dependence.

In this particular perspective the empiricism which Preti is focused on also seeks to be, programmatically, and above all, a *free and liberating philosophy*: that, indeed, of the common man who no longer believes in myths and fables but prefers judge programmatically on the basis of his own intelligence and his own five senses, so as to build for himself an image as fair and accurate as possible of the world and the reality in which he lives. The voice of the child is therefore equated with the voice of experience and common sense, and logical empiricism is thus conceived and presented as a philosophy that appears to be deeply unpopular with all the different political parties engaged in a struggle, "attacked from right and left, accused variously of Bolshevism and Fascism". For this reason, empiricism constitutes, at least in Preti's eyes,

a democratic philosophy par excellence – the philosophy of the child, of common sense, of seeing with one's own eyes, the philosophy of the man without myths and without creeds, without gods and without masters. [...] Positivism is anything but a philosophy of mobilization and faith – it is a powerful weapon to mock all slogans and all faiths. And if it is an ideology, it is the most "dangerous" ideology: the ideology of the free man, who has no ideologies.<sup>2</sup>

Of course – as even Preti knew full well (as, indeed, is clear from these lines) – "the ideology of the free man, who has no ideologies" is itself an ideology. However, to Preti the ideology of logical empiricism appeared as a *liberating* ideology, especially in a context like the Italian philosophical tradition within which metaphysics, spiritualism and rhetoric were hegemonic and *against* which Preti sought, in fact, to

---

<sup>2</sup> G. Preti, *Saggi filosofici, op. cit.*, Vol. I, p. 130 (the first part of the quotation is taken from the text, while the second is at the end of footnote 1).



move openly, not only to introduce other issues, other problems and a different sensitivity to critical-philosophical into the national debate, but also to build a different image of the *honest job* of philosophizing.<sup>3</sup>

## **2. Philosophical Significance of the Theoretical-civil Conflict between the Empiricism of Diogenes the Cynic and the Idealism of Plato**

But *secondly*, this time on a more strictly theoretical, empirical plane, the empirical voice of the child is also associated with the criticism made (to refer to a classic and emblematic moment of the Western philosophical tradition) by Diogenes the Cynic in his famous confrontation with the divine Plato. According to the record handed down by Diogenes Laertius in his *Lives of the Philosophers* (VI, 53), Diogenes the Cynic objected to Plato that he could definitely see and feel, without any problems, *empirical* tables and *empirical* cups, but that he could not see Plato's *tablehood* and *cuphood*. Plato's contemptuous and polemical reply is also well known: Diogenes the Cynic can see empirical cups and tables because he has empirical eyes, but he cannot but see the *eidos* of plates and cups, because he does not possess the eye of the mind...

The authoritarianism evident in the Platonic response, forced to invoke the intellectual intuition of the divine Plato, does not detract, however, from the intrinsic heuristic (and social!) value of the objection by Diogenes the Cynic. In fact it actually makes it even more evident. If to the idealist all empiricists appear "blind" and "deaf", unendowed with "mind" and "intellectual intuition", the empiricists, on the other hand, can always retort to the idealists that what the divine Plato "sees" can be seen and understood only by him and so poor mortals, who always let themselves be guided by their physical eyes, can do nothing but believe, *by faith*, the Platonists' word. But if you do not want to fall into this blind dogmatic fideism (ultimately based on *ipse dixit*), then the recourse to the *quinque sensibus* again appears as a (democratic!) heuristic criterion which is both valuable and indispensable, by which we can always subject, in principle, every statement to critical, public and intersubjective control.

However, in reality this clear contraposition, at least as it has come down to us in the Western tradition, does not exhaust all the different theoretical options. Without wishing to necessarily defend the view of one of the two parties, it is still possible to reverse this same interpretation, seeing also *the reasons* that militate in favour of Plato's response,

---

<sup>3</sup> On this point the reader is referred to the monograph by the present writer: Fabio Minazzi, *L'onesto mestiere del filosofare*, Franco Angeli, Milan 1994.

beyond its obvious dogmatic authoritarianism. If we adopt this particular point of view there is then no doubt that the objection of Diogenes the Cynic, though it may appear at first sight extremely effective and persuasive, ends up by constituting a point of view that unduly neglects an important epistemic standpoint on which Plato constructs his own philosophical response, however authoritarian and paradoxical. In fact, the *ability* to see cups and tables never constitutes a neutral, banal, predictable and totally passive process. We may be able to distinguish cups and tables at a glance, but the matter would be greatly complicated if we were required instead to distinguish between a plurality of many cups: tea cups, coffee cups, mugs, bowls, etc.

In all these different cases the reference to the pure and immediate empirical dimension can function only to a certain extent. Why? Because the distinctions between different “types” of cups or bowls, including their different “models”, cannot be derived solely from experience. If anything, the presence of different “models” structures, conditions and finally makes significant experience itself, which may in fact contribute to the delineation of a taxonomy of the different cups only if one possesses, *in advance*, a non-empirical criterion to *encode* the different models of the cups. In this specific sense Plato is surely right to raise an objection to the naive empiricism of Diogenes the Cynic, since in some cases experience *in itself* can teach us nothing, nor can it provide us, again *in itself*, with any cognitive, heuristically relevant and definitive information. To interpret the world (i.e. to distinguish between the different cups) we need to have a clear theoretical point of view by which we are indeed able to invest the world with different significances, thus developing a rich taxonomy of possible different cups. For this reason it is not enough to see, but we have to be *capable* of seeing. With the result that *those who do not know cannot see*, even if they rest their eyes on the world. Our vision of the world is never neutral and passive: our ability to know always depends on our theoretical ability to ask fruitful questions of the world that we wish to investigate.

On the other hand it is also true that this rightful epistemic observation should not cause us to lose sight, in turn, of the opposed reason that motivates the criticism of Diogenes the Cynic. Though one can appeal to the different abstract epistemic models of the multiple kinds of cups, we will always have to refer, *ultimately*, to empirical cups (made of ceramic, glass, metal, crystal, wood or any other possible materials) which we can actually handle and use in the real course of our concrete existence. Even the different abstract models still refer to the experience of the five senses. In fact they are even capable of being useful in distinguishing between the different kinds of cups precisely because we always have to refer to the pragmatic experience of life as actually lived.

We always begin from life and then return to life, in the virtuous circle identified by Simmel: *life – more life – more than life*. The theoretical, abstract phase, by which we “suspend” the different vital impulses, constitutes only one phase and can never efface the reality of life, the vital empiricism of our existence. To say it with Preti, *in the beginning was the flesh*, not the spirit.<sup>4</sup> And the flesh is also *at the end* of each life cycle for human beings, whom the Greeks wisely qualified as *mortals*.

### **3. Diogenes the Cynic and Plato Are Right in What They Deny and Wrong in What They Affirm**

In light of this truly singular dialectical contraposition between the perspective of Diogenes the Cynic and that of Plato we could also argue briefly that, ultimately, both of these two interlocutors *are right in what they deny but are wrong in what they affirm*. Note: *they are wrong in what they affirm*, because they claim to resolve, unilaterally and dogmatically, the process of knowledge either into the phase of significant human experience alone or into the phase of ideal and theoretical modeling alone. Conversely, *they are right in what they deny*, as each is certainly perfectly capable, evangelically speaking, of seeing the mote in the other's eye but not the beam in their own. Plato certainly perceives the inadequacy of a crude and naive empiricism, devoid of critical mediation, which would systematically reduce all knowledge to the empirical alone by absolutizing it. By contrast, Diogenes the Cynic perceives the basic flaw in an a priori and dogmatic outlook, unable to grasp the heuristic, intersubjective role on the empirical-pragmatic plane, by which we always form our different, yet shared, social, civil and cultural ideas. Both positions are therefore unacceptable to the extent that they absolutize a single pole of reality (meaning the *ideal* pole, emphasized by Plato, or the *empirical* pole affirmed by Diogenes the Cynic), each forgetting that human knowledge arises rather out of the critical and problematic interweaving of these two different poles, each of which has to be given a different epistemic role and a different horizon of validity and reality.

If we take into account these theoretical findings it also becomes easier to understand the particular theoretical path by which Preti approached the logical empiricism associated with the great tradition of neo-positivism in the twentieth century, without ever quite being able to rest passively in this significant tradition of thought. In fact, to fully understand the critical use Preti made of neo-positivist logical empiricism, one should never forget that he came from the ranks of Antonio

---

<sup>4</sup> See G. Preti, *In principio era la carne. Saggi filosofici inediti (1948-1970)*, edited by Mario Dal Pra, Franco Angeli, Milan 1983.

Banfi's school of critical rationalism. Banfi had accustomed all his students to develop a highly problematic and critical attitude in approaching not only the most diverse cultural experiences but also the problematic nature of pragmatic life itself. Banfi, especially in his masterpiece of 1926, the celebrated *Principi di una teoria della ragione*, had also sought to weave together critically and problematically Kantianism and Hegelianism, raising the problem of how it was possible to historicize the formal and empty structures of Kantian transcendentalism without, however, confining them in a Hegelian philosophy of history. It was necessary, in short, to open those forms to the dimension of history, but without falling in any kind of historicist dogmatism.

Faced with this challenging Banfian program of research, many of his pupils have also tried to investigate, on their own and in increasingly independent and original ways, the same Banfian problematic, identifying certain other specific paths of inquiry which they moved investigating different approaches. Exploring these different paths of inquiry, these different students of Banfi's, from Remo Cantoni to Dino Formaggio, from Enzo Paci to Giulio Preti (not to mention his musicologist pupils such as Luigi Rognoni, poets such as Antonia Pozzi, Vittorio Sereni or Daria Menicanti, educationists such as Giovanni Maria Bertin, literary scholars, such as Maria Corti, and many others), also sought to go beyond a theoretical *impasse* in which Banfi's problematic risked remaining caught, at least to the extent that in Banfi the abstract structures of rationality did not always succeed in grasping all the inherent potential of human life. Significantly Banfi, faced with this polarization of his thought, often tried to overcome it not by identifying the *different degrees* of a possible critical mediation between these opposed polarities, but as if trying to overcome these tensions with a "leap", an *élan vital*, capable of uniting what analysis revealed as moving on different planes, interrelated and independent. Hence the charges of "romanticism" and "vitalism" frequently directed by students at their teacher, especially in the second phase of his thought, where Banfi increasingly fused these issues with the theme of Marxist dialectical materialism.

For this very basic reason all Banfi's students have sought to resolve this constitutive antinomy between reason and life, between *Geist* and *Leben*, investigating the different positivities of many areas of research which ranged, to mention some outstanding points related to the figures previously mentioned, from the anthropology of Cantoni to the existential dimension of Paci (not to mention his relationalism and also the close ties with the lesson of Husserl cultivated by Paci also in his Marxist phase), the study of music by Rognoni, the practice of poetry by Sereni, Pozzi and Menicanti, the study of literature, conducted primarily by Corti, the investigation of the cultivated aesthetic by Formaggio,

from reflection on education, especially as outlined by Bertin, to the consideration of epistemology as developed by Preti. Now, in all these many and disparate concerns, the theoretical critical discourse inaugurated by Banfi has always been renewed and rethought *ab imis fundamentis*, often giving rise to some highly original and unpublished prospective solutions, which greatly enriched the overall landscape of Italian philosophical reflection in the second half of the twentieth century.

In this precise context Preti, too, moved along this fertile and independent prospective and hermeneutic path, at least to the extent that he explored the lesson of his master Banfi in highly innovative ways, seeking to supplement critically the programmatic perspective of logical empiricism with a different epistemic assessment of the role and function which the categories of thought exercise in the construction of human knowledge. For this reason, although, as we have seen, Preti defended the voice of common sense, embodied by the child in Andersen's fairy tale, in reality, even in this study of the relationship between the common language (the voice of the child and that of common sense) and the scientific languages (the voice of science and specialization), he systematically showed the overall theoretical insufficiency of the classical response presented by Diogenes the Cynic, at the same time as he also denounced the authoritarianism of Plato's solution. To Preti experience certainly remained always a ground of privileged reference on which to combat *a priori* faiths and dogmas, because human life always starts from human experience and then returns to it as an indispensable polarity. However, experience *in itself* is never a sufficiently articulated critical ground to respond truly to Plato's haughty declaration. To refute Plato's authoritarianism one must therefore be able to grasp the value of Plato's epistemic point of view so as to identify a much more complex and satisfying critical conception of human experience. For this reason, logical empiricism indeed constituted a truly indispensable and vital phase for Preti, even if one cannot even stop at it because there is a more complex issue which threatens to elude even the critical neo-positivist perception.

#### **4. Why Being in General and Not Nothingness?**

In his discussion, however, Preti is also well aware of the role that the pragmatic plane plays in the framework of all lives. Not for nothing did Preti openly denounce any ontological and dogmatic metaphysical realism which stemmed invariably from the metaphysical presupposition which creates an abstract contraposition between man and the world, and then gives the former the task, impossible to fulfil, to reflect a reality presupposed as wholly *other than him*. In fact, if one conceives the world as "external" (but "external" in relation to what: man's mind?

man's skin? his cranium?) and "absolute" (such, in short, as to constitute the basis and standard of knowledge), then there exists no *adeguatio* capable of filling the absolute hiatus that is assumed to exist between man and the world: "thought does not contain any criterion to establish the *adeguatio*, precisely because it has its criterion outside *itself*, in the *res*".<sup>5</sup> Within this precise context, the Platonic fideism-authoritarianism is then bonded with the scepticism that represents its specular theoretical negation: "once knowledge is understood as a *mental image* of an external reality and truth as the correspondence of such an image with that given reality, the proposition that affirms or denies the correspondence is *eo ipso* meaningless, because it can no longer 'correspond' to anything, there is no 'image' of anything". Seen in this perspective, the Platonic authoritarian intuitivism is then the twin brother of scepticism: the realistic assumption of the former inevitably generates the latter. However, if we remove the assumption of metaphysical ontological realism we also remove, as a consequence, dogmatic and metaphysical scepticism: "The solipsist and the Platonic can debate for years and will never come to an understanding; but if their discussion heats up and they threaten to punch each other, then they will understand each other clearly – from the incommunicable metaphysical language they have passed to pragmatic language". In this way immediate sense evidence becomes the pragmatic criterion of events: if with Descartes I can doubt everything, but not of the fact that I am doubting, on the other hand, on the pragmatic plane I can never doubt what appears to be concretely connected with concrete and immediate existence. *We are certain of our perceptions for what they are*. Of course it is always a pragmatic certainty with the consequence that the "phenomenon" associated with this pragmatic certainty is always exhausted in itself. It constitutes, in short, a "manifestation" which does not relate to anything outside itself. The pragmatic phenomenon, and in this lies its value, does not have behind it any reality that has to "manifest itself". Consequently the question insistently raised by the metaphysical tradition that stretches from Schopenhauer to Heidegger, "Why being in general and not nothingness?", from the pragmatic point of view turns out to be meaningless, as are likewise meaningless all the many attempted answers to this misplaced question. Preti observes: "common sense does not move from the phenomenon; but from the event, from what matters, which does not 'manifest' anything but itself as it is given, and is not defined by means

---

<sup>5</sup> G. Preti, *Saggi filosofici*, *op. cit.*, Vol. I, p. 131, while the quotations that follow in the text are all taken from, respectively, the following pages: from p. 132 (italics in the text), from p. 141, from p. 143, from pp. 163-4, from p. 186, from p. 187, from pp. 199-200, from p. 204 (italics in the text), from p. 210 and from p. 211 (italics in the text).

of anything – that does not need to be defined, being in fact the best known, and hence the means by which we define all that is less well known, the means by which we decide, whenever it makes sense, all that is the object of controversy”.

## 5. The Heuristic-Transcendental Role of Pickwickian Senses

However, if common sense is always closely connected with the pragmatic evidence, we also have to recognize that the statements of common sense are true only *pragmatically*: their negation implies, therefore, only a pragmatic contradiction, but if they are instead *analysed*, meaning translated into scientific language, they are no longer true and they lose their specific significance (which is always and only a pragmatic significance). As Preti writes, “the analysis of the facts of common sense that is performed in a technical language is a real *transvaluation* of these facts; it is in essence their replacement by expressions having a significance (while the expressions of common sense does not have one), but also by a *different sense* – a meaning defined within its own universe of discourse”.

Expressly referring to a suggestion by Charlie Dunbar Broad,<sup>6</sup> Preti then proposes to consider the “correspondence” established between the

---

<sup>6</sup> A significant paper by Broad, *Critical and Speculative Philosophy* (first published in *Contemporary British Philosophy: Personal Statements* (First Series), ed. J.H. Muirhead (London 1924): pp. 77-100) was translated by Preti's wife in the volume *Filosofia inglesi contemporanei*, edited by J.H. Muirhead, which appeared in an Italian edition translated by Daria Menicanti, edited with an *Introduzione* by Antonio Banfi, Bompiani, Milan 1939, pp. 253-83, which explains the nature of the *principle of the Pickwickian senses* recalling that “This principle has always been familiar in Theology. When theologians say that the Second Person of the Trinity is the son of the First Person, they are using the word ‘son’ in a highly Pickwickian sense. Anyone who will read, e.g., St. Thomas's brilliant discussion of this subject in the *Summa contra Gentiles* will see how careful St. Thomas is to point out in his own language that phrases like ‘sonship’ and ‘begetting’ cannot be interpreted literally here, and will further see what an elaborate and metaphorical interpretation St. Thomas puts upon such phrases. Now Whitehead and Russell have explicitly carried this principle over into philosophy, where I am quite sure that it is destined to play a most important part” (p. 274). This concept was then taken up also by Preti in his essay on *The Philosophy of Mathematics of B. Russell* of 1953, which states that: “This, as noted by L. Geymonat about the relationship between abstract geometry and ‘intuitive’ geometry, poses the great philosophical question ‘whether it makes sense, and what kind of sense, to require that a rigorous scientific concept translates in logical terms an intuitive notion of common sense’” [the quote is taken from an article by L. Geymonat, *Significato filosofico-scientifico delle ricerche moderne sugli spazi astratti*, “Archimede”, January-February 1953, p. 2, ed.]. The British (Moore, Broad) speak here of *Pickwickian senses*. A “Pickwickian sense” is a concept which, being essentially different from a corresponding (or homonymous) term in common lan-

most sophisticated scientific and technical language and the pragmatic language of common sense in the light of what Broad, also by drawing on the lesson of G.E. Moore, identified as the *principle of the Pickwickian senses*. So, for example, if one considers the relationship that exists between the water of the chemical  $H_2O$  and commonsense water (what we drink from a tap or spring), the two notions are not identical. The chemist's water is nothing but  $H_2O$ , because the universe of discourse of the chemist is pure water (a protoxide of hydrogen). By contrast, the water we drink from a tap or spring is pure  $H_2O$  plus many other minerals in suspension, as well as carbon dioxide and, possibly a good deal else... In this precise sense the protoxide of hydrogen  $H_2O$  of the chemist is, ultimately, water in an eminently *Pickwickian* sense.

But it is precisely in this ground that is rooted the constitution of the meaning of the scientific languages, which always and systematically perform a *critical transvaluation* of the pragmatic meaning of the statements of common sense. Insofar as physics does not limit itself to building a universe of discourse, but also seeks to speak to us cognitively of reality, it follows, then, that in this discipline, its concepts are systematically *coordinated* and carefully circumscribed to particular aspects of the real world, with the consequence that a modern scientific theory is not based only on an axiomatization (by which, *à la* Hilbert, the theoretical system has to be non-contradictory, independent and complete), but also on the presence of the particular and specific "definitions of correspondence" (*Zuordnungsdefinitionen*, to quote Reichenbach, an author explicitly invoked by Preti in this regard), wherein the "concepts" of a given theory are precisely coordinated with real "things". Therefore, within the same universe of discourse the statement that " $H_2O$  corresponds to the protoxide of hydrogen then constitutes, to speak in Kantian terms, an analytical judgment, and in claiming that "water is  $H_2O$ " one is formulating a definition of equivalence which, like all definitions, will also be conventional. In any case, for Preti "*definitions of correspondence are keys or dictionaries for translating a*

---

guage, nevertheless retains its fundamental relations (namely those that concern the purposes for which it is constructed). So in theology, when one says that Christ is the Son of God, "son" is used in a *Pickwickian* sense. This is, of course, a relation which establishes a correspondence between statements (or a class of statements) in formalized discourse and statements non-formalized discourse, such that a certain series of relations (which are those that one is concerned to "save") remains constant so that if, for example,  $p_1$  and  $p_2$  are propositions of formal discourse, and  $p_1$ ,  $p_2$  their homologues in the other discourse, for certain relations  $R$  are simultaneously and always valid  $R(p_1, p_2)$  and  $R(p_1, p_2)$ . For example, if  $p_1$  implies  $p_2$  also  $p_1$  implies  $p_2$ . It must be said that Russell had, in essence, glimpsed that it was a situation of this kind: already in the *Principia*, especially as concerned geometry and most clearly in the *Introduction*, where there are some hints in this respect" (G. Preti, *Saggi filosofici*, *op. cit.*, Vol. I, p. 268).



*series of theoretical formulas into protocols* (statements of facts), *and vice versa*". But if the correspondence between the concept and the reality (i.e. a particular reality) is always Pickwickian, it also follows that the same correspondence can be realized only within a particular type of definition that cannot be either the traditional nominal definition, nor that by *genus proximum et differentiam*, because it will be a *definition of use* which serves as a linguistic rule, making it possible to connect the *definiendum* with a given *definiens*: "If this *definiens* is an empirical statement while the *definiendum* contains a proposition of formal language, then the definition of use is a definition of correspondence". In this way the terms are made determinate and univocal, at least if the *definiens* is verified: "This is the precise meaning of Broad's principle of the Pickwickian sense: one term  $t$  Pickwickianly represents another term  $t_1$  when a necessary and sufficient condition for a certain series of propositions  $f_i(t)$  is true and a series of statements  $g_i(t_1)$  have been verified".

An example might be the classic case of the problem of the seven bridges of Königsberg on the River Pregel, for which there is no route that will cross them all once and once only. In the attempt to demonstrate this pragmatic empirical fact, however, actually very well known to every inhabitant of the town bathed by the River Pregel, Leonhard Euler succeeded in establishing a new discipline, topology, which made it possible to inaugurate a new chapter of mathematical research. Reichenbach's "coordinative definition" (and also, we might add, the "coordinated abstraction" of Marx, which Preti, however, does not take into consideration) makes it possible to interpret a pragmatic fact in a profoundly innovative way, endowing it with a sense and a meaning that are far from specific, and which change depending on the different universes of discourse (specific, technical and particular) in which they are located. This enables Preti to bring out the full epistemological (and critical) evidence of the heuristic role that "sense" and "meaning" always perform within different universes of discourse. Indeed, when a notion of pragmatic common sense is "transferred" into a particular discipline it not only entails a more accurate translation into a more precise language, but the pragmatic event is also endowed with a highly specific meaning. In this respect Preti writes:

If I kill my aunt, this event acquires a different meaning for the different disciplines by which it is considered: it becomes a crime (murder) in the law, a bad action in morals, a chain of physical events represented by a set of differential equations in physics, a traumatic death in medicine, etc. But, as we see, its acceptance *eo ipso* implies a choice: the meaning has a selective power, by which not all events can be accepted, and even those that are accepted are reduced to those specific meanings, shedding all the other meanings that may arise from other points of view (in other disciplines).

## 6. The Epistemic Revaluation of the Kantian Transcendental

Individual events are thus made to correspond to certain given propositions which are then inserted, in turn, into a particular theoretical system from which the events will receive a highly specific meaning. The technical-scientific language performs this “translation” whereby only a part of the fact is taken into account and “translated”. Only that particular component is translated that is significant *from that particular theoretical point of view*. The “objectivity” of all scientific knowledge is thus constituted, precisely thanks to and by virtue of this specific “translation” in which, as we have seen, an epistemically specific role is performed by different factors. “*For this reason the facts are reduced to a limited number of ‘standard’ facts or models, to which correspond certain sets of propositions forming a clearly defined system*”. In this epistemic and philosophical perspective Preti sees scientific laws (e.g. Newton’s laws of dynamics or Ohm’s law of electrical resistance, etc.) as always constituting “implicit definitions”. As such, these laws possess a method to translate empirical facts within the language specific to a particular theory; they have, in short, their own specific method to interpret-signify the facts and are therefore associable with the *formative ascriptors* spoken of by a semiologist such as Charles Morris in *Signs, Language and Behavior*.<sup>7</sup> In fact they possess an eminently systematory role and therefore make it possible to identify correspondences between the propositions of the theory with series (or classes) of facts. Again for this reason they can also be assimilated to the Kantian categories, by which, as is well known, at least with reference to the system in the *Critique of Pure Reason*, the multiple data of sense intuition of transcendental aesthetics are transformed into empirical concepts of the transcendental analytic. In other words, only through scientific laws, formulated in their proper axiomaticized formalism, can the facts acquire a precise and specific theoretical significance. And this, says Preti, is due expressly to the specific nature of these laws, which do not appear to be “*only* formators-systemators but are *also* empirical axioms”. Certainly the term “empirical axiom” is contradictory; but it clearly expresses the specific *symbolic* vocation of these laws which are formulated “so as to contain an empirical destination which functions as a definition of use: and for this reason [the empirical axiom, *ed.*] contains a general rule of translation of the facts into the theory in which it acts as an axiom. The facts translated into theoretical propositions are empirical propositions; and the things invested with significances by the theories are precisely ‘empirical concepts’”.

---

<sup>7</sup> See *Signs, Language and Behavior*, New Jersey 1949.

In developing his original and fruitful discussion, Preti thus succeeded in moving critically beyond the traditional approach of neo-positivist logical empiricism and did so to the extent that he was clearly aware that the theoretical plane enjoys a specific relative autonomy of its own which can never be reduced without residues to the level of protocolary experience, as in the classically empiricist dream, pursued by virtually all the neo-positivists (apart from the celebrated controversy about the nature of the protocols and of the physicalism which soon saw Neurath – also followed by Hempel – and Schlick arrayed on opposed theoretical fronts). In this sense Preti critically moves beyond the traditional empiricism that has always harboured the neo-positivist philosophical program which has cultivated the dream of actually making a verificationist reduction of abstract thought to the plane of possible experience. Preti's approach takes the form rather of a *critical empiricism*, which can be called such precisely because of the critical openness with which Preti looks to the tradition of Kantian criticism, fully revaluing his epistemic discovery of the plane of transcendentalism, whereby the categories enable us to formulate empirical concepts. But again and for this reason, Preti's critical empiricism is then qualified as a critical epistemology that fully understands the epistemic importance and decisive heuristic-strategic role of the transcendental dimension within the constitution of scientific knowledge:

To say that the categories are formal concepts means that they are also variable; they are no other than *meanings*, i.e. abstract of propositions and classes of propositions. For this reason, holding that those axioms that form the basis of a science are founded on categories is equivalent to putting things with their legs in the air, since the exact opposite is true, namely that, if anything, that element of factual content (F-significance), which can be attributed, within a defined universe of discourse, to a category derives precisely from the rules of use contained in the empirical axioms.

To Preti, therefore, facts are Kantianly rendered intelligible and humanly comprehensible only by the heuristic application of a scheme under which the events acquire a precise significance, peculiar and specific to a particular discipline. On this particular epistemological and philosophical plane, however, it is not difficult to find the student of Banfi who is never willing to study logical empiricism passively, since he is moved to make his own all his traditional metaphysics as well as the very popular neo-positivist "spinsterish acidity" against Kant's teaching. On the contrary, the appreciation of the epistemological dimension of the transcendental allows Preti to critically relocate all the analyses conducted by neo-positivism on a philosophical plane of understanding of the complexity of science, which is far more sophisticated and articulate, as he then illustrated, in a way that was acute and

masterly, by analytically reviewing all the different developments that have constellated the debate on the positivist principle of verification and its many, possible epistemological formulations.<sup>8</sup>

## 7. The Transcendental Unity of Science and Banfi's Lesson

In developing this approach, from the fifties, Preti believed that the unity of science itself cannot only stem from a unified epistemology. To put it in Hegelian terms, what concerned Preti at this stage was interesting to study the reality of the scientific enterprise as a expression of a specific "objective spirit" that must be comprehended as a unity. His critical epistemology stems from the identification of this specific transcendental plane, for the analysis of which Preti was also largely indebted to his Banfian training, which on this point resurfaces in all its philosophical value.

Seen in this perspective, human rationality can never be conceived as a system of objectively ideal concepts, because "the unity of knowledge is only transcendental; it consists only in the unity of the theoretical process by which are developed the various forms of knowledge itself, namely the process of rational resolution of experience".<sup>9</sup> In accordance with this Banfian perspective the results of knowledge can never be assumed dogmatically as such, for it is instead necessary to be able to identify the precise *theoretical process* from which they stem, and then reconnect them with each other as a function of a common theoretical law that integrates the different processes. The unity of science – as also that of epistemology – thus appears as an open-ended undertaking, a program of work never completed and defined, which can be realized only by reference to a *critical methodology* capable of configuring partial and always perfectible solutions of critical integration of the various aspects of scientific practice. Seen in this particular perspective with its undoubted Banfian pedigree, this critical methodology thus appears as the consciousness itself of the formation of knowledge. This was the philosophical perspective with which Preti read and reinterpreted, from the fifties, all the developments in the neo-positivist debate, with the ability to grasp its truest philosophical and theoretical significance. Even better, faced with the development of a technical epistemology, Preti claimed space and philosophical validity for a historical

---

<sup>8</sup> In this respect see the refined analyses by Preti in his *Lezioni di filosofia della scienza (1965-66)*, edited by Fabio Minazzi, Franco Angeli, Milan 1898.

<sup>9</sup> G. Preti, *Saggi filosofici, op. cit.*, Vol. I, p. 60, the quotation comes from the important study *Due orientamenti nell'epistemologia*, of 1950, originally published in Dal Pra's journal. The quotation that follows in the text from p. 77 (italics in the text) which concludes this essay.

epistemology capable of enabling us to understand that in the practice of the scientific enterprise one is always dealing with an entire and complex structure – made up of categories, methods, languages and operative rules – by means of which scientific knowledge is extended and transformed in the course of its history. For this reason, the discovery and the heuristic revaluation of the transcendental plane within epistemological reflection makes it possible to envisage “the epistemological (formal) unity of science as a *historical unity of science*, a dynamic unity, a unified stimulus of variation that follows the variation in the fundamental logical-formal and logical-transcendental parameters”. This helps explain why even for Preti, as indeed happens analogously in the reflection of John Dewey (to whom Preti, in 1951, devoted a felicitous essay titled *Dewey and the Philosophy of Science*, having already published the year before the Italian translation of one of his books as *Problems of men*<sup>10</sup>) science itself is configured as a particular intellectual approach that uses mental acuity to seek to solve human problems. Consequently, science must never be understood as a “set of propositions theoretically true and/or practically useful” or, again, as a specific “form of the spirit”. Science is, however, a mode of being, the unity of a specific attitude that is closely intertwined with the emergence of democracy itself. “The advent of democracy coincides with the advent of science: the democratic man is identically equal to the man who was and is the protagonist of the new science, and the destiny of democracy is closely bound up with that of science”. Seen in this perspective, the scientific attitude coincides with the critical-problematic attitude by which modern man no longer perceives himself as dependent on something that dominates and surpasses him, because, if anything, he always seeks to deal increasingly with the various situations by drawing on his critical intelligence and the strength of his will. This also explains why Dewey’s *Logic: The Theory of Inquiry* can be summed up in the statement that *the true coincides with the verified*: truth always follows from verification; it emerges within a specific operative process. It always constitutes, in short, a result achieved, and ascertained and confirmed. For Dewey, truth is always *warranted assertibility*, and the guarantee springs precisely from the process by which it can be subjected to critical control – verification – a decisive affirmation.

---

<sup>10</sup> Arnoldo Mondadori Editore, Milan 1950, while the essay on Dewey again appeared in Dal Pra’s journal, and was then reissued in *Saggi filosofici*, *op. cit.*, Vol. I, pp. 79-103. But it should not be forgotten that also in 1949 Preti had published the study *La ricostruzione filosofica della società nel pensiero di J. Dewey* in Banfi’s journal “Studi Filosofici”, anno X, January-April 1949, No. 1, pp. 36-74. The quotations that follow in the text all come from *Dewey e la filosofia della scienza* (in his edition present in the *Saggi filosofici*), in particular from the following pages of the first volume: p. 83; p. 87 (italics in the text).

But then, one might ask, how is science configured in this approach? Science, Preti replies in line with Dewey, “is not, nor has need to be, inquiry into the necessary: it is the search for *significances*, i.e. for the possible effects (or, more generally, the consequences) of manipulations of the given situation, manipulations that it learns to perform through its instruments”. On this specific point the critical openness to the transcendental – of distant Banfian derivation – then enables Preti to go well beyond Dewey’s pragmatism, at least in so far he critically fuses Viennese positivism with Dewey’s instrumentalism through the critical mediation of the lesson of Morris’s semiotics, without forgetting the phenomenology of Husserl or the lesson of early Marx. But in reality, all these different, felicitous and multiple critical “borrowings” proposed by Preti can be woven together, at least from his particular theoretical and philosophical point of view, precisely because he has always had the ability to recover on the epistemological level the full heuristic value of the dimension of Kant’s transcendental, even without being hobbled by the various dogmatisms and typical sclerosis that have distinguished that tradition of criticism.

## **8. Preti’s Philosophical Critique and the Heuristic-Epistemological Function of his Transcendentalism**

As we have seen, to Preti the language of common sense has an undisputable pragmatic validity, but it functions and is valid only as long as one moves on the plane of immediate experience and pragmatic certainty. However, once we move from the pragmatic language, typical of and peculiar to common sense, to the “technical” language of any specific discipline we then effect a transvaluation of semantics. The facts of common sense are systematically “interpreted”, meaning placed in an “architectural” relationship, being gradually analysed and intertwined within a particular theoretical system and thus finally made *meaningful*. What is the relationship between the language of pragmatic common sense and the other technical languages? Preti considers we can answer this question by observing that the different technical languages are always placed on different and plural levels of analysis. If the analysis coincides with criticality, meaning by this term a procedure of critical control in which the critical breakdown of a certain assumption (discourse) then coincides with its critical evaluation (so producing a critique that constitutes an analysis from which finally arises a particular judgment), it then follows that critical-philosophical comprehension can never be separated from the different linguistic levels and their specific analysis.

In his essays Preti develops and articulates this specific critical-philosophical-analytical approach in various ways, in multiple directions

of inquiry and by following a wide range of speculative interests, and he also tests it in his very personal assessment of the historical-critical developments that have marked the main phases of the neo-positivist debate. To analyse the history of neo-positivism Preti adopts a particularly advantageous point of view: that which studies and treats the different formulations of the principle of verification, which, undoubtedly, constitutes the most penetrating and critical aspect of logical empiricism, the privileged and most piercing weapon with which this movement has conducted a critique, often quite radical, of the earlier metaphysical and speculative tradition. Considering the different neo-positivist formulations of the principle of verification, Preti observes that there have been formulated at least three different and possible versions of the principle of verification which, in their turn, distinguish a total of three phases peculiar to the history of this movement. Initially it was thought, neo-positivistically and empiricistically, that a statement was meaningful only when it was, in principle, verifiable. But it was soon perceived that there were many difficulties with this excessively rigid and schematic formulation which, to quote Popper, not only had the undoubted virtue of destroying much-hated metaphysics, but also risked undermining much-loved science. It was then decided to reformulate the principle of verification in a second acceptance, arguing that a statement is meaningful only when it is, in principle, translatable into an observational statement. But even this second version, though it attenuated the drastic extreme of the first, was unable to solve many other problems. This led to a third possible formulation of the principle of verification, by which it was finally considered that a theory possesses a factual sense only when, in principle, all of its consequences can be associated with sets of observational statements. In this way, notes Preti, it seems that the neo-positivist movement has identified a total of three different *degrees of empirical certainty*, because the third formulation implies, as its special cases, the first two formulations and likewise the second formulation contemplates the first as its most narrow and restricted case. Be that as it may, it should be remembered, stresses Preti, that in developing these three different *degrees of empirical certainty* “empiricism did not deny itself; it only become gradually... more empiricist,”<sup>11</sup> precisely because it has always asserted that our discourses about the world must always be guided, in the final analysis, by empirical operations and observations that can’t be disregarded.

Verifiability and precision are thus not only the eternal guiding star of the different formulations of the neo-positivist principle of verifica-

---

<sup>11</sup> G. Preti, *Saggi filosofici*, *op. cit.*, Vol. I, p. 312, the quotation comes from the essay *Le tre fasi dell'empirismo logico*. The quotation that follows in the text again comes from the first volume of the *Saggi filosofici*, on p. 325.

tion, but also, more generally, of all scientific philosophy that seeks to present itself as a controllable and intersubjective discourse. However, we can certainly not help observing that these three different degrees of empirical certainty have been established in open contrast with the dream (utopian and mythical) peculiar and specific to empiricism: to be able to systematically reduce, *without residue*, the theoretical plane to the plane of empirical verifiability and observability. In fact, at least in my opinion, the progressive critical complication of the formulation of the principle of verification seems to respond to the need to safeguard a specific role that has always to be attributed to the theoretical-rational composition of scientific knowledge itself. This knowledge does not arise solely from the empirical plane, but rather grows out of the critical-problematic interweaving of the abstract theoretical structures of scientific discourse and the different levels of verifiability and empirical-experimental observability.

It would be even truer to say that the various epistemological shifts in the neo-positivist principle of verification attest to how the structure of scientific knowledge is, and can only be, fundamentally twofold; and therefore the progressive weakening of the strict and rigid Viennese verification of its origins can also be read as the gradual and laborious recognition of the specific and autonomous heuristic role within the scientific worldview performed by the abstract, structural, theoretical, conventional and rational dimension. Science, as Galileo already saw clearly, always walks on two legs, with its typical “sailor gait”, because it systematically interweaves “reliable demonstrations” with “reasonable experiences”. Besides, Preti was well aware of this, precisely because he possessed a specific sensitivity also to the complex tradition of Kantian criticism which, moreover, he read and interpreted above all through the writings of the Marburg school, as well as the works of a philosopher Ernst Cassirer. Not surprisingly, in his essay *Grammatica e logica* of 1955, Preti openly states that “‘empiricism’ certainly does not consist in not constructing or not using such [theoretical-rational, *ed.*] frameworks (which would amount to giving up engaging in science), but in using them consciously and methodically as frameworks and not as hypotheses about ‘reality’”.

This then leads Preti to study in a highly innovative way, with a new and sophisticated critical-philosophical sensibility, the problem of logical-analytic truth in Carnap’s semantics, to which he devotes a challenging essay (also of 1955). Preti’s move, theoretically very unusual, consisted of creating a direct and fruitful relation between Carnap’s philosophical analyses and those of Husserl, so as to identify an effective possibility of constructing a critical ontology that is decidedly non-metaphysical, developed using strict formal-logical methods. Carnap



and Husserl are therefore seen as two authors who both work towards the same goal: to subject to a fruitful and rigorous scientific treatment some traditional metaphysical concepts (such as truth, for example). If Carnap (and Tarski), with their contributions to semantics, worked to “found, through [...] abstract analyses of pure semantics, a *formal ontology* of the generic region of “science”,<sup>12</sup> analogously Husserl, from his *Logische Untersuchungen*, pursued (according to Preti) a similar philosophical objective, because he thought he could reform logic so as to define a general formal ontology endowed with its own specific normative value also in relation to the concrete sciences historically constructed by man. In Carnap, too, there would therefore be present the twofold purpose, theoretical and normative, clearly present in the works of Husserl, “because also for Carnap Logic is a theory of science, which starts from a recognized intentional direction in empirical, historical, scientific discourses leading towards a certain ideal of scientificity. And in practice, despite appearances to the contrary, it is precisely the fulfilment of this movement towards scientificity which Carnap also saw as necessary to solve the problem of the unity of science”. Certainly in Carnap the twofold function, theoretical and normative, of pure formal logic is not always clearly distinct, but also his logical discourse on the different structures of linguistic statements is a necessarily metalinguistic discourse which oscillates between one polarity by which Logic is certainly regarded as a metalanguage and another polarity whereby Logic is conceived as an ideal or perfect language, as a sample to which the multiplicity of scientific discourses which are actually delineated in the history of science must be systematically related. If the first part of the second volume of the *Logische Untersuchungen* Husserl showed, through a number of minute analyses, how words in discourse will always be “animated” and “enlivened” by a specific purposeful direction brought into being by *Bedeutung*, which actuates an *Erfüllung*, a more or less complete and successful fulfilment, then Preti shows how this concept of Husserl’s of the possible “fulfilment” of significance is found, though reformulated in a very mathematical language, in the notion “semantics” of truth developed by Tarski and then further developed by Carnap. So if Husserl in both the first volume of the *Logische Untersuchungen*, but especially in *Formale und transzendente Logik* outlined an *apophantic analysis* articulated in *pure morphology*, in the *logic of consequence* and the *logic of truth*, Preti shows that Husserl’s first two levels are assimilable to Carnap’s syntactical dimension, the

---

<sup>12</sup> G. Preti, *Saggi filosofici*, op. cit., Vol. I, p. 340 (italics in the text), while the quotations that follow come from, respectively, the following pages: p. 342; p. 356 and p. 375 (italics in the text). Preti’s essay *Il problema della L-verità nella semantica carnapiana* appears on pp. 337-76.