

ROBERTO POLI

KAZIMIERZ TWARDOWSKI (1866-1938)

1. BIOGRAPHICAL INFORMATION

Kazimierz Twardowski was born in Vienna,¹ where from 1885 to 1889 he studied under Brentano and met the Brentanians of the period.² In 1891 he submitted his thesis *Idee und Perception. Eine erkenntnis-theoretische Untersuchung aus Descartes*, but since Brentano was only a *Privatdozent*, discussed it with Robert Zimmermann, one of Bolzano's pupils. After graduating he went to Leipzig for a short period to join Wundt's circle of students, and then moved to Munich to study under Stumpf. In 1894 he returned Vienna, where he wrote his major work, *Zur Lehre vom Inhalt und Gegenstand der Vorstellungen*. The following year he moved to Lvov, where he taught until 1930. In 1898 he published *Wyobrazenia i pojecia* [Images and concepts] as both an extension and a simplified version of his theory. A modified German version of the book came out in 1902 bearing the title *Über begriffliche Vorstellungen* and a further Polish version *O istoiciej pojec* [On the nature of concepts] in 1923.

Twardowski inherited from Brentano a number of Aristotelian influences, notably his realism and the correspondence theory of truth. Indeed, the realistic conception of truth would become one of the salient features of the Polish analytical tradition. In his essay 'Über sogenannte relative Wahrheiten', Twardowski criticised those who

¹ On Twardowski, see Czezowski 1939-40 and 1960; Ingarden 1939-49; Pazkowska 1976; Pazkowska-Lagowska 1977; Grossmann 1977; Dambaska 1978; Buczynska-Garewicz 1980; Haller 1982; Modenato 1984; Besoli 1988; Smith 1989, Jadacki 1992, Albertazzi 1992, Schuhmann 1993.

² For further information, see Smith 1989.

failed to distinguish between unconditionally true (or false) statements and statements that are only relatively so. He accused those who committed this error of having confused idiomatic expressions with scientific expressions. The distinction between a relative truth and a non-relative truth applies only to idiomatic expressions, which are true only in a metaphorical, indirect sense; by contrast, as regards judgments as such, it is not possible to speak of relative or non-relative truths, for a judgment is either true, and therefore always and everywhere true, or it is false, and therefore always and everywhere false.³ Of Twardowski's relatively few published works, also worth mentioning is his "O czynnościach i wytworach" [Actions and products] of 1911.⁴

Twardowski's arrival in Lvov in 1895 was an event that had profound repercussions on the development of Polish philosophy, as well as a significant effect on the whole of Polish culture. His philosophical style, his constant insistence on clarity of exposition, the rigour of his arguments, his considerable organizational skills, and his innovative theories were all factors which generated a new intellectual climate and gathered around him a wide circle of colleagues and disciples, many of whom rose to positions of national and international eminence. Suffice it here to mention Lukaszewicz, Ajdukiewicz, Kotarbinski, Lesniewski and Tatarkiewicz from the first generation, and Tarski, Lindenbaum, Mostowski, Ossowski and Sobocinski from the one that followed.⁵ The fact that thirty of his pupils became professors at Polish universities gives a purely quantitative idea of Twardowski's influence as a teacher. He reorganized the teaching of philosophy in the universities, giving it a structure which remained unchanged until after the Second World War; he founded in 1897 the Polish Philosophical Seminar, in 1901 the Polish Society of Experimental Psychology, and in 1904 the Polish Philosophical Society; he promoted the review *Przegląd filozoficzny*, and in 1911 founded *Ruch filozoficzny*, a bio-bibliographical journal informing Polish scholars of international developments in philosophy.⁶

2. TWARDOWSKI'S PHILOSOPHICAL STYLE

³ Twardowski 1965, 335. This anticipates Quine's distinction between eternal and permanent sentences.

⁴ Some extracts from the *Nachlaß* have been published in Pelc 1979.

⁵ Wolenski 1989 has listed 81 scholars as members of the school founded by Twardowski.

⁶ *Ruch filozoficzny* is still being published, with many of its original features, by the University of Toruń as the quarterly review of Polish Philosophical Society.

In an important essay of 1919, “On clear and obscure styles of philosophical writings”, Twardowski declared: “the obscurity in the style in which some philosophers write is not an inevitable consequence of the factors inherent in subject matter of their analyses, but has its source in the vagueness and obscurity of the way they think... An author who does not know how to express his thoughts clearly does not know how to think clearly either, and therefore his thoughts do not deserve our efforts to guess them”.⁷ This position would characterize the whole of Twardowski’s work and strongly influence the philosophical movement that he founded. It explains the intense attention that both Twardowski and his followers devoted to the problem of language and to the clarification and specification of its constituents. It also explains their constant interest in the analysis of philosophical expressions; an interest that qualifies Twardowski as one of the pioneers of semiotics in Poland, a thinker whose teaching was brought to full fruition by his followers.⁸

On the subject of Twardowski’s philosophical style, it could be noted that Twardowski assimilated from Brentano not so much his individual theoretical positions as his basic rigour of approach, his mistrust of pompous language, his ceaseless endeavour to eliminate the obscurity and vagueness from his ideas, and his search for rigorous philosophical knowledge (which was probably Twardowski’s principal legacy, although one not always easily to identify and therefore one often underrated). These in turn became the dominant characteristics of the Polish School, which displayed an essential unity and homogeneity, not because its members’ positions and interests happened to coincide (on the contrary, they were greatly diversified) but because the school developed what Scholz has aptly called “a new philosophical style”.⁹

3. METAPHYSICS AND SCIENTIFIC PHILOSOPHY

As said, Twardowski inherited from Brentano a deep suspicion of philosophical *systems*. In Twardowski’s view, philosophical activity was first and foremost the specific and detailed analysis of particular problems, and in this it was no different from science. Metaphysical inquiry too, he maintained, should be conducted on this basis: the problems of metaphysics were to be resolved scientifically; that is, with

⁷ Pelc 1979, 1-2.

⁸ See for instance Pelc 1979.

⁹ Casari 1979, 30.

clarity, without internal contradictions, and in accordance with the procedures of science.¹⁰ As long as these criteria were respected, everyone was free to construct their own metaphysical theory. Indeed, Twardowski claimed, metaphysical ideas — even though they do not express objective knowledge — play a positive role in the development of science because individual sciences often borrow ideas, concepts and theories from metaphysical systems, and metaphysical systems in their turn borrow back from those sciences ideas, concepts and theories in a non-scientific state.¹¹ Zamecki has written that the general tone of Twardowski's observations shows that, although he may have criticized philosophical conceptions of the world and life because they are still at the non-scientific or pre-scientific stage of human knowledge, he nevertheless envisaged their development into sciences in the future. For Twardowski this development was a never-ending process in which science and philosophy coexist as partners which draw upon each other's resources. Hence particular attention should be paid to those philosophical conceptions of life and the world that can be corrected and brought closer to science.¹²

4. CONTENT AND OBJECT

As regards Twardowski's contributions to philosophical theory, Ingarden stressed that the attribution to himself of the original distinction between the act, content and object of presentation¹³ was not only historically inaccurate¹⁴ but neglected the fact that Twardowski's work contained the first systematic theory of object since scholasticism and Carl Wolff's ontology.¹⁵ And this was well before the work of Meinong and Husserl, who made careful study of Twardowski's theory.

¹⁰ Zamecki 1977.

¹¹ Twardowski 1965, 383.

¹² Zamecki 1977, 50. I owe this observation to Franco Coniglione.

¹³ I use the term 'presentation' instead of the more usual 'representation'. The use of the latter as the translation for 'Vorstellung' and '*rapraesentatio*' implies the presence of a certain degree of symbolization. In this sense it is Kantian. My intention, Brentanian in origin, is to be absolutely neutral and to suggest only pure presence to the mind. See Albertazzi 1989, 56 and Smith 1989, note 29.

¹⁴ In fact the distinction was originally proposed by Zimmermann and by Kerry. By the latter see Kerry 1885-1891. According to Ingarden, Twardowski generalized and improved Kerry's theory.

¹⁵ Ingarden 1939-40, 23. For a preliminary comparison between Twardowski and Wolff see Poli 1992.

Furthermore, one should remember that the complications, if not the ambiguities, of Twardowski's ideas served as the point of reference and the inspiration for the later theories developed by Lesniewski and Kotarbinski; theories, one may argue, which were also an attempt to resolve Twardowski's difficulties.

Twardowski's starting point was Brentanian: he first considered the distinction of psychic phenomena into the three major classes of presentations, judgments and feelings — where presentations have an object, judgments assert or deny the object's existence, and feelings approve or disapprove of it. Twardowski then constructed the crucial analogy (and here he also drew on the work of Marty) between natural phenomena and the linguistic expressions that designate them. In the specific case of the psychic phenomenon of presentation (the only one examined by Twardowski in his book of 1894), this analogy concerns the name. This is a 'categorematic term', by which Twardowski meant that it is a linguistic designating device which, as the expression of a presentation, also conveys a content. These clarifications, however, are not particularly illuminating, since they only (or at least to a large extent) reiterate Brentano's initial thesis.

The analogy between name and presentation entails that a name must have three parts, or that it performs three functions structurally akin to the three functions of presentation. Analysis of the tasks of a name, in fact, shows that: (i) it communicates to the listener the existence of a mental act within the speaker; (ii) it communicates the content of a presentation, (iii) it designates an object. Linguistic analysis therefore provides the instruments with which to analyse and understand the characteristics and properties of mental acts.¹⁶

An ambiguity arises here, however. There is something existent in presentation, but it is not clear what this something is, for presentation can involve both the content and the object of presentation; indeed Brentano used the two concepts interchangeably.¹⁷ This raises an important question: Are the object and the content of presentation really different, or are they are simply two names for the same 'something' in the presentation?

Twardowski answers the question by asserting the non-identity of the object and content of presentation and by drawing a distinction between the content's mode of being present and the object's mode of being present.

Twardowski's theory of the three constituents of presentation asserts that whatever can be presented is presented as an object, regardless of whether this

¹⁶ For a proposal to extend the list to four functions by including Bühler's *Auslösung*, see Poli 1989.

¹⁷ Brentano 1973, 202.

object exists or does not exist, whether it is possible or impossible or even contradictory. Hence, the limit of the presentation is set by the limit of being an object. In Twardowski's theory, therefore, the object is the simple 'something' that can be presented and whose modes (existence, possibility) are extraneous to its correlation with the presentation. Thus the object, as a correlate to the presentation, is always real, but this does not entail that it is also existent or possible. It is precisely for this reason that Twardowski's theory of the object is a *daseinsfreie Wissenschaft*. In other words, his theory of object is a theory of *Sosein*, according to the distinction later introduced by Mally and then developed by Meinong.¹⁸

5. DETERMINATION AND MODIFICATION

In order to differentiate object from content, Twardowski resorted to the Brentanian classification of adjectives into determining and modifying. Every expression that amplifies, narrows or articulates the meaning of a term is determining. For example, 'high', 'good', 'lazy' can all be determinations of 'man'. A modifying adjective, on the other hand, is an attribute which transforms the meaning of an expression. Hence a false friend is not a friend and a false diamond is not a diamond. When we describe what a painter does, for instance, we can say that he paints either pictures or landscapes, and we can call the object he produces a painted picture or a painted landscape. However, the adjective 'painted' has a different function in each expression. It is determining in the first case because a painted picture is still a true picture, a real picture. It is modifying in the second case, because a painted landscape is not a real landscape, but only a painted picture. Therefore the picture represents a real landscape which does not cease to be such because it has been painted.

The verb 'to present' has the same semantic structure as the verb 'to paint' and, in this sense, two 'things' correspond to it: a presented object and a presented content, where 'presented' has determining value for 'content' and modifying value for 'object'.

With appropriate changes, we may apply the theory of modification to the features of the 'something' present in a presentation, so that 'presented' has a determining function for the content and modifying function for the object. Therefore the object in a presentation is not a real object, only a presented one. A presented

¹⁸ Poli 1990.

content is determined by the adjective 'presented' just as a painted picture is determined by the adjective 'painted'. This amounts to saying that these are two cases of internal, nuclear qualification, in the specific sense that a picture is not a picture if it is not painted and a content is not a content if it is not presented. In other words, being painted and being presented are constitutive of the entity 'picture' and of the entity 'content', respectively.

We had also seen, however, that the modifying expression may be used in a determining sense to show the presence of a certain relation between that particular object and that particular content. We can therefore state that the content is present *within* a presentation, while the object is present *through* the content.

Of the various elements of the foregoing analysis — which was certainly known to both Lesniewski and Kotarbinski — what particularly interests us here is the effects of the modifying use of a word. From what has been said it is evident that modification can transform a term into something which no longer denotes the object denoted by the term in its original use but which nevertheless maintains some kind of connection with it. Apart from modifying adjectives, the predicates 'is', 'is not', 'true', 'false' are particularly interesting in this regard.¹⁹

Those who analyse the behaviour of modifying adjectives should bear in mind that they are never reducible only to a specific complement of the terms to which they are applied. If we consider Twardowski's own examples, that of the false friend for instance, it is not sufficient to say that a false friend is not a friend, i.e. a non-friend; we must add, or at any rate remember, that a false friend is somebody who seems or appears to be a friend, even though he is not really such. Likewise, a false diamond is not solely a non-diamond, it is rather an object which is not a precious stone even though it may resemble one. A dead man is not just a non-man, but something that *used to be* a man. We may also add that a painted landscape is not a real landscape, but a picture, and a thought or represented object is not an actual object but an intentional one.²⁰

6. OBJECTLESS PRESENTATIONS

From the position set out in the previous section Twardowski derived the thesis that every presentation has its own object. His doctrine of the necessary presence of an

¹⁹ For some preliminary analyses see Dappiano & Poli 1994.

²⁰ On this see Poli 1993.

object within every presentation directly contradicted Bolzano's theory of the existence of presentations without an object. These latter Bolzano classified into three main groups: (i) presentations of nothing, (ii) presentations of objects characterized by incompatible features, like 'round square'; (iii) presentations of objects which do not belong to the realm of experience, like 'golden mountain'. In these three cases, according to Bolzano, there is no object of presentation. Twardowski formulated his rejoinder as follows.

As regards 'nothing', Twardowski noted, first, that this is not a categorematic expression and hence it does not directly pertain to the realm of presentations. 'Nothing' always entails 'not something', where the 'something' belongs to the presentation and 'not' is a syncategorematic modification of the categoreme 'object'. The problem is thus that of understanding the function of negation. When negated, the presentation is split into two parts, but what we separate is not the presentation of the negated something, but the presentation of something which is superordinate to the presented object. When I say 'not Greek', I do not divide Greeks, but I correlate that is superordinate to them, like 'human beings', who may be 'Greek' and 'not Greek'. Negation — 'infinitezation' in mediaeval terms — therefore relates to the genus to which the negated term belongs as a species. This is an extremely important point if we are to avoid semantic confusion — and it emerges with great clarity if we approach the matter from the point of view of substitutability, since items which can be acceptably substituted for 'not Greek' are, for example, 'Italian', 'Albanian', 'Yugoslavian' but not 'shoe' or 'green'. Hence negation requires the availability of a genus pertaining to the negated species. However, the 'something' does not have a class to which both itself and its negation can belong, simply because if this genus were available, it would be a 'something' itself. So 'nothing' in its quality as 'not-something' is not a name but a complex expression in which negation has syncategorematic significance.

As regards Bolzano's other two types of objectless presentation, we may recall the three functions of the name, and in particular the designation performed by every name. Whether the designated object has contradictory properties or whether it lies outside the realm of experience does not alter the fact that it is still a 'something' which we may judge as non-existent. That it is possible legitimately to speak of 'object of presentation' in these cases as well, becomes clear if we consider the differences between object and content, since the properties of the former are not those of the latter. The object 'round square' is as such round and square, whereas its content is neither round nor square.

We can therefore assume that every presentation presents an object, just as every name designates an object, regardless of whether it exists or does not exist, is possible or impossible.

The existence of the something present in a presentation is not, therefore, genuine existence, because 'existence' in these contexts is a modifying term. The reality, in the sense of the objectuality, of the object should not be confused with its existence. The object is always real because it is the correlate of an actual (and in this sense existing) presentation, although this is not to imply that we can pass from the reality of object to its existence *tout court*.

7. TWARDOWSKI'S THEORY OF THE OBJECT

The whole question can be framed in even clearer terms by saying that for Twardowski 'object' is synonymous with 'conceivable'. The entire spectrum of the conceivable has objectual status. Things, however, only relate to a specific segment of the conceivable.

We may sum up the above-defined characteristics of the object thus:

1. The object is the 'something';
2. Being an object is different from having existence;
3. The genus of objects understood as simple 'somethings' is the highest genus.

To these three initial characterizations we may add that the object of a presentation can always also be the object of a judgment and an emotion. In these two latter cases, we may say, following the mediaeval philosophers, that the object is *verum* and *bonum*.

Thus metaphysics takes the form of a theory of objects, independently of the additional features attributed to them by the sciences that came after metaphysics; that is, without considering whether objects are physical or non-physical, mental or non-mental, real or unreal, existent or non-existent.

8. THE PARTS OF THE OBJECT

According to Twardowski, an object is a whole which may be formed by parts. These latter are of different kinds, and different kinds of relation hold among them. The presentation of any 'something' involves both its presentation as a whole and the presentation of its parts, where the latter are partial objects to which certain elements of the content of the presentation correspond.

For Twardowski, a whole is a compound of material and formal elements. A general analysis of the various material parts of the object must at least draw the distinction between simple parts and complex ones. Simple parts are those which do not admit to any further division; complex parts are those which can be further divided and therefore contain other parts. If material constituents are complex, we have more immediate parts (first-order material parts) and more remote parts (second-order parts, third-order parts, and so on).²¹ If we take, for example, the presentation of a book, we may say that (the presentation of) its pages are its first-order material parts (of the presentation of the book), whilst the size, colour and other characteristics of the pages are second-order material parts (of the presentation) of the book and first-order material parts (of the presentation) of the page. Thus the order of the parts depends on which particular whole is being considered.

Complex parts can be broken down further into what we may call transitive and intransitive parts, according to whether the whole is homogeneous or non-homogeneous. An example of a breakdown into transitive parts is the division of an hour into minutes, and of minutes into seconds. These are called transitive parts because it is just as meaningful to say that an hour is composed of minutes as it is to say that an hour is composed of seconds. An example of intransitive parts is provided by the division of a town into its houses and of the latter into their windows. Traditional philosophy distinguished, in this regard, between parts that are homonymous with the whole and parts that are not.²²

Concerning the presentation, and therefore the concepts used in presentation, the parts that make up the whole may be such that they always and univocally constitute it into the same form, or they may constitute it into different forms. For instance, the concept 'extension' is univocal, whereas 'red' is multivocal: we may use 'red', in fact, to refer to the colour of a ball, to the red of the spectrum, and to red as a colour.

A third distinction can be drawn between the independence and dependence of parts with respect to the whole that contains them. In this case, parts that exist by

²¹ Twardowski 1977, 47.

²² Twardowski 1977, 48.

themselves are independent, while dependent parts must be further subdivided into those that are unilaterally dependent because they are dependent on another part, and those that are bilaterally dependent because they stand in a mutual relation of dependence. As a matter of fact, however, if we return to the problem of presentation, Twardowski himself reminds us that the distinctions just introduced are unacceptable, since they rely on the concept of existence. Hence, in the case of presentation, we must replace the concept of existence with that of presentability.²³

In general, we may say that the material constituents of the object are its parts, while the formal constituents of the object are constituted by the relations among the material constituents of the whole.²⁴ The form of the whole is defined as the totality of its formal constituents.

A further and important problem is the distinction between part and property. For instance, a soldier is a part of an army, but he is not a property of that army. Likewise a minute is a part of an hour but it is not a property of the hour. We may concur with Twardowski in calling metaphysical parts the properties of the object: that is, the parts that may be *distinguished* within a whole by abstraction but cannot be materially *separated* from it. Thus metaphysical parts are extension, colour, weight, identity, and so on. This definition enables us to articulate the concept of property into at least two different cases. In the first, a property is a *relation* which designates any part whatever of a whole with respect to this same whole. Thus *having* minutes as its parts is a property of an hour, just as *having* a colour is a property of a body. The second distinction concerns metaphysical parts and involves the designation of just one of the terms of relation, irrespective of the whole of which they are parts. Twardowski adds that it is in this sense that we speak of things and of their properties, setting them against each other in a specific way.²⁵ The difference resides in the different roles of the auxiliary verbs used. Thus metaphysical parts *are* parts of an object whereas, in the case of non-metaphysical parts, an object *has* this or that part. Metaphysical parts can also become non-metaphysical parts should they be transformed into secondary individuals, for example by nominalization.

If the property relation is in its turn part of the whole, then these relations are possessed by the object just as much as its material constituents. And this leads us into an infinite regress.²⁶ In order to escape from the impasse, Twardowski introduces the concept of essence. The essence of an object is the totality of

²³ Twardowski 1977, 49.

²⁴ Twardowski 1977, 46.

²⁵ Twardowski 1977, 55.

²⁶ Twardowski 1977, 56.

property relations from which all the other property relations of the object can be derived.²⁷

Regarding the formal constituents of the object of presentation, Twardowski distinguishes the relations between the parts and the whole (primary formal constituents) from the relations among the parts of a whole (secondary formal constituents). Primary formal constituents are then further divided into constituents in the strict sense, like those that connect the whole with its parts, and constituents in their loose sense, like those that enable us to state that the whole is greater than its parts; that it resembles them in certain respects and differs from them in others; that there is coexistence or succession between the whole and its parts; and so forth.²⁸

There may be further relations among the different types of formal constituent of a whole: these are second-degree relations, because they have primary relations as their objects. If we proceed further, we obtain relations of the third, fourth, fifth degree, and so on. I shall use 'order' when referring to material constituents and 'rank' when referring to formal elements.

Between the material and formal constituents of the object, the principle holds that the number of the material constituents of an object determines that of the formal ones.²⁹

9. THE PARTS OF CONTENT

Like the object, the content of representation also possesses material and formal parts. In general, the content of presentation of a compound object, presented as a compound, comprises three groups of first-order material elements: (i) presentations of first-order material constituents of the object; (ii) presentations of property relations between the object as a whole and first-order material constituents; (iii) presentations of the secondary formal constituents of the object.

There is a determining connection between the material constituents of the object and those of the content: in other words, to the material constituents of the object of a presentation there correspond certain material constituents of the content.³⁰ The connection does not operate in reverse, however, in that not all the material

²⁷ Twardowski adds: because of the causality relation. Put in these terms, the argument is Kantian.

²⁸ Twardowski 1977, 51.

²⁹ Twardowski 1977, 59.

³⁰ Twardowski 1977, 65.

constituents of the content have as their object material constituents of the object. As we have seen, in fact, there are material constituents of the content that correspond to the formal constituents of the object.

The relationship between the material constituents of the object and those of the content is governed by two conditions. First, not all the material constituents of the content reflect those of the object: as said, some of the material constituents of the content are formal constituents of the object. Second, not all the material constituents of the object can be translated into constituents of the content.³¹

The object is presented by the content in a way that is determined by the manner in which the parts of object are joined together in a whole. The material constituents of presentation are of the following three kinds:

1. Mutually separable parts, like the pages of a book.
2. Mutually inseparable parts, like colour and extension.
3. Unilaterally separable parts, like a genus and its species.³²

Mutually separable parts do not require the other parts of the object in order to be presented; mutually inseparable parts can be only distinguished from the presentation of the other parts of the object, they cannot be separated from it; unilaterally separable parts are characterized by the fact that if A can be presented without B, this does not entail that B can be presented without A.

Of the formal constituents, the most important are the property relations between the overall content and its material parts.³³

Among the material first-degree constituents of the content there obtain relations, that is, formal constituents of first degree of the content.³⁴

The first order material constituents of the object are formed out of the material constituents of all the following orders. If this were not the case, no material constituents of first order could be presented. We may state, therefore, that higher-order material constituents are presented through the content, even if they are not noticed, and hence that there is never an adequate presentation of any object.³⁵

³¹ Otherwise presentation would simply be impossible.

³² Twardowski 1977, 61.

³³ Twardowski 1977, 66.

³⁴ Twardowski 1977, 71.

³⁵ Twardowski 1977, 72.

10. DIRECT AND INDIRECT PRESENTATIONS

Hitherto we have analysed direct presentations. To these must now be added their indirect counterparts: those presentations, that is, in which an object is presented to us by means of its relations with other objects. These are relations that point to an unknown object on the basis of the determinateness of the relation and the knowledge of an initial object to which we apply the relation. For example, in the expression ‘father of Socrates’, ‘Socrates’ is the known term, ‘father of’ is the relation. Yet we do in fact know a number of the characteristics of unknown objects, that is, of these indirect presentations. In the above example, we know that we are dealing not with ‘an *object* which stands in the relation of being the father of’, but with ‘a *man* who stands in the relation of being the father of’, and so forth. A particular instance of indirect presentations is constituted by negative presentations.

We have another case of indirect presentation in the general presentation. For Twardowski the object of a general presentation is different from that of each of the single presentations it comprises — and here he draws on Kant’s distinction between the individual presentations of which we have intuition and our general ideas of concepts. This is therefore a generic presentation, or better one relative to a generic object. Hence the presentation of a triangle is neither the presentation of a right-angled triangle, nor that of an isosceles triangle, nor that of a scalene triangle, even though in each of these cases it is the presentation of a ‘something’ and hence of a *unum*. The difference between direct and general presentations is that general presentations are always indirect and never intuitive. This point was also stressed by Aristotle, who added the further consideration that non-intuitive presentations must be accompanied by intuitive ones.

Finally, mention should be made of certain flaws in Twardowski’s analysis. Although the relation between individual content and individual object seems relatively straightforward, the kind of object that corresponds to generic content is less clear. Twardowski explicitly rejects the hypothesis that the generic concept corresponds to a plurality of individual objects, and holds firm to the position that a content is always and only connected to one object.

11. TWARDOWSKI AND KANT

In effect, at issue here is the extent of Kant's influence on Twardowski; an influence which is particularly marked in Twardowski's treatment of the object of presentation and of the general object, and the consequent importance attributed to the concept of characteristic note.³⁶ A Kantian bias, in fact, can be detected in many of Twardowski's main arguments. Given that the thesis of Kant's influence on the Brentanian tradition has often been systematically rejected, Twardowski's own views on the matter are of particular relevance. Regarding the object of presentation, in his book *On the content and object of presentation* we find, in the first paragraph of section 7, the following explicit declaration: "In calling what is presented by a presentation its object, we give a meaning to this word which Kant had already attached to it". Twardowski continues: "The highest concept — we read in Kant — with which one usually begins a transcendental philosophy, is the division into what is possible and what is impossible. However, since all division presupposes a concept which is to be divided, an even higher concept must be mentioned, and this is the concept of an *object in general* (taken in a problematic sense and leaving open whether it is something or nothing)".³⁷ Again: "We have to modify the sense which Kant attaches to the word 'object' in only one respect. According to Kant, the object can be 'something' or 'nothing'. We have already said earlier (p. 19 f.), in contrast to Kant, that 'nothing' cannot be taken to be a name for objects of possible presentations, but must be viewed as a syncategorematic expression".³⁸

Turning to the idea of characteristic note, Twardowski declares that "one cannot mistake the agreement between our definition of the characteristic note and Kant's".³⁹ Kant's influence is also apparent in Twardowski's resultant concept of the general object, when he states that "This simultaneous excitement of individual presentations through names which mean general presentation is the meaning of the Kantian view that the concept (= general presentation) is related *mediately*, by means of a characteristic which can be common to several things, to the object, while intuition (= individual presentation) is *immediately* related to the object".⁴⁰

³⁶ For these analyses I have drawn in particular on Albertazzi 1992.

³⁷ Kant 1781, B, 259, my emphasis.

³⁸ Twardowski 1977, 32.

³⁹ Twardowski 1977, 79.

⁴⁰ Twardowski 1977, 104. Note the difference between 'object in general' and 'general object'. The distinction is subtle in formulation, but decisive in content. The object in general is the form of 'being an object'; the general object is instead the concept. Curiously, the critical literature ignores this distinction, which is absolutely crucial for correct understanding of Twardowski's thought. Only in Albertazzi 1992 do we find the distinction made explicit for the first time.

Therefore, the influence of Kant on Twardowski, especially in some of his theoretically most significant passages, is beyond doubt.

Albertazzi notes that this Kantian influence is an important factor in interpretation of Twardowski for two reasons. First, it enables us to distinguish Twardowski's ontology from traditional metaphysics. In fact, Twardowski says nothing about the essential nature of the transcendental object; his analysis only considers the object of presentation. The second reason is that it locates Twardowski's ontology within the modern theory of ontology founded by Wolff and which addresses the problem of the foundation of consciousness.⁴¹

12. GENERAL PRESENTATIONS

Twardowski also stressed that the distinction between object and content is crucial to definition of the concept of characteristic note; that is to say, it is crucial to definition of the essence of the object. Since a characteristic note (*Merkmal*) is a part of the object, we must pay careful attention to the distinction between presentative notes — which belong to the object and are parts of it — and the constituents or elements of the content. The former are parts of the object, not parts of the content. As Twardowski puts it, they are constituents of the object which are presented by means of the presentations of the object.⁴²

As said, for Twardowski characteristics designate the essential parts of the object. In a broad sense, we can also call characteristics those parts of the content which correspond to the characteristics of the object — although we must bear in mind that the characteristics of the object constitute the object, whereas what we have termed the characteristics of the content are not sufficient to constitute the content. From this point of view, Twardowski once again adopts a Kantian position. For Kant, it was the characteristics of an object that form our knowledge of it: thinking is knowing by characteristics. Twardowski reaffirmed this idea by asserting that a characteristic of a thing is something the knowledge of which constitutes the knowable part of the thing. What characterizes general presentations is that '*what is common as such*' to different individual presentations is presented. Hence it follows that the object of a general presentation differs from the objects of the individual presentations subordinate to it. "The general presentation differs from the the

⁴¹ On Wolff and Twardowski see Poli 1992.

⁴² Twardowski 1977, 81.

individual presentations which are subsumed under it only in that through the former one conceives, in addition to a characteristic, also a certain relation between certain constituents of the object and certain constituents of other objects, namely the common possession of these constituents”.⁴³ Moreover, “The object of the general presentation is a part of the object of a subsumed presentation, a part which stands in a relation of equality to certain parts of objects of other individual presentations”.⁴⁴ Twardowski finished his analysis with the following words: “the general object is in a certain way a metaphysical constituent of the individual objects which are subsumed under it”.⁴⁵

Also worth noting, before we conclude this discussion, is Twardowski’s remark that in languages which have preserved the definite article, the noun connected with it is normally the name of the general object.⁴⁶

For Twardowski, there are no presentations involving a plurality of objects. All presentations are individual. Those which apparently have a plurality of objects are in fact presentations of constituents, *presented as a whole*, which are common to several objects. In this sense, a general presentation is always an indirect presentation, not an intuitive one. This position is once again Kantian. Kant maintained, in fact, that general presentations are those of concepts which are connected to objects by means of characteristics pertaining to several things. Hence Twardowski’s general object is a metaphysical constituent of objects. Since the general object is constituted by elements which are presented as a whole, it possesses the characteristics of an individual. The lack of direct presentations of general objects also tells us that they are secondary, fictitious entities. In other words, they are whatever corresponds to abstract single terms; they are, that is, the result of the process of nominalization.

In sum, we may conclude that both Twardowski’s point of departure (the object in general) and his conclusion (the general object) have close affinities with Kantian theory.

From the foregoing analysis we may list the following kinds of ‘object’ in Twardowski’s theory:⁴⁷

1. The object in general, which corresponds to ‘being an object’.

⁴³ Twardowski 1977, 99.

⁴⁴ Twardowski 1977, 100.

⁴⁵ Twardowski 1977, 105.

⁴⁶ Twardowski 1977, 101-02.

⁴⁷ Albertazzi 1992.

2. The ontological object or the real-world object.
3. The intentional object (the presented object).
4. The general object or concept.

13. APPENDIX: THE LVOV-WARSAW SCHOOL

I have already mentioned the leading role played by Twardowski in the foundation of the Lvov school (subsequently the Lvov-Warsaw school). The situation that greeted Twardowski on his arrival in Lvov was not particularly encouraging; but nor was it, for that matter, in any of the other Polish universities at the time.

In 1871 the University of Lvov had been granted the right to teach its official courses in Polish, a concession which encouraged the return of Polish scholars from other European countries. Among the most interesting Polish philosophers at work at the time, mention should be made of Jozefem Supinski (1804-1893) and Wojciech Urbanski (1820-1889), exponents of so-called 'Lvov pre-positivism'.⁴⁸ Other academic figures of a certain interest were Alekzander Raciborski (1845-1919), a historian of philosophy and a scholar of Spinoza and J.S. Mill, Alekzander Skorski (1851-1928), a historian of Polish philosophy, and Marcislaw Wartenberg (1868-1938) a metaphysician with an empirical, inductive and hypothetical approach.⁴⁹

As regards the other Polish universities, active in Warsaw before the Russian occupation and the consequent replacement of the Polish university with the imperial Russian-language university, was Henryk Struve (1840-1916), the leading exponent of so-called 'maximalism', as opposed to the 'minimalism' of 'Warsaw positivism'.⁵⁰ This latter was influenced in particular by Comte, J.S. Mill, Darwin and Spencer, and

⁴⁸ Cf. Skarga 1964, 227-29.

⁴⁹ Zamecki 1977, 8-10; Tatarkiewicz 1948-50, III, 359-60; Coniglione 1990, ch. 1.

⁵⁰ Tatarkiewicz uses the terms 'maximalism' and 'minimalism' to refer to two styles of thought: "philosophy of the former kind sets itself enormous tasks and endeavours at all costs to accomplish them; it obviously wishes to do this as reliably as possible, but if certainty is not possible, then even in a non-certain manner. Philosophy of the second kind considers only what is certain and it solves problems as long as they can be resolved with complete certainty. The former directs itself above all to the tasks it has set itself; the latter to the means at its disposal. The former is an ambitious philosophy, the latter is characterized by a more reflective abstinence... In antiquity, neo-platonism was indubitably a maximalist doctrine, Pyrrhonism was minimalist; scholastic philosophy of the 13th century was maximalist, that of the 14th century minimalist; in the modern age Spinoza belonged to the former type of philosophy, Locke and Hume to the latter". Tatarkiewicz 1948-50, III, 8-9.

took the form of the outright rejection of romanticism and idealism. Close to the positivists was the Kantian Adam Mahrburg (1855-1913), who shared with them the common purpose of combatting Struve's 'antiquated' doctrines. The other great centre of Polish culture, the predominantly Catholic city of Cracow, was distinguished by the study of the history of Polish and mediaeval philosophy. Among the scholars at work in Cracow, worthy of mention are the spiritualist Wincenty Lutoslawski (1863-1954) and Wladislaw Heinrich (1869-1957), an Avenarius scholar and a proponent of radical positivism.⁵¹

Twardowski's arrival in Lvov from Vienna in 1895 had an explosive impact on this intellectual *milieu*.

The school that he founded was certainly the peak of Polish philosophical achievement in the 20th century. Against it all other philosophical currents in the country, from phenomenology and its outstanding representative Roman Ingarden to Catholic and Marxist philosophy have had to measure themselves.⁵²

Practically everybody came under its spell and influence. The conception of philosophy, of its subject-matter, task, and method, the standards of philosophical thinking established by the leading exponents of the Warsaw school have been universally accepted. Although the school existed without interruption for less than twenty years, there emerged a living tradition, oral and written, which has turned out to be an intellectual force, with a considerable power of resistance and of attraction, that survived the test of historical catastrophes and upheavals.⁵³

The first three generations of philosophers associated with the Lvov school comprised over eighty scholars, and the bibliography of their books and articles amounts to almost ten thousand items.⁵⁴

⁵¹ Tatarkiewicz 1948-50, III, 359.

⁵² The bibliography on the Lvov-Warsaw school is quite limited. Some fundamental references are Kotarbinski 1959, Jordan 1963, Skolimowski 1967, Franke & Rautenberg 1972, Zamecki 1977, Giedymin 1985, Hempolinski 1987, Wolenski 1989, Szaniawski 1989, Coniglione Poli & Wolenski 1993. Of major relevance is Wolenski 1989. Among anthologies, see McCall 1967, Pelc 1979, Pearce & Wolenski 1988.

⁵³ Jordan 1963, 42.

⁵⁴ It is obvious that I cannot give adequate treatment to the entire movement in the limited space available here. For example, it would be interesting to follow some of its 'lateral' branches, such as the entire complex of Polish philosophy of law, from its pioneer Petrazycki to the work of Ziembinski, Wroblewski, and Opalek; but this is clearly impossible. For a review of Polish philosophy of law see Ziembinski 1987. The literature divides between analysis of the development of the School and of its culminating period. In certain respects, the two world wars represent key turning-points in Polish philosophical history: the First World War because of

The first of Twardowski's followers explicitly to address logical themes in the strictly technical sense was Jan Lukasiewicz. The first generation of logicians to receive their training under Twardowski and Lukasiewicz included, among others, Ajdukiewicz, Czezowski, Kotarbinski, Zawirski and Kaczorowski. In 1912 this first group was joined by Lesniewski. After 1915 Lukasiewicz, Lesniewski and Kotarbinski transferred to the recently reopened university of Warsaw, Czezowski moved to Wilno, and Zawirski to Poznan. Belonging to the new generation of philosophers in part engendered by these movements were Lindenbaum, Jaskowski, Presburger, Slupecki, Sobocinski, Tarski and Waisberg. After the Second World War, in which several Polish philosophers lost their lives, a third generation of scholars appeared, of whom the best known are Mostowski, Lejewski, Wiegner and Greniewski.⁵⁵

It may be of some interest to compare the doctrines of Polish scientific philosophy with the practically contemporaneous theories of the Vienna Circle. In doing so, one should not commit the error of treating the Lvov-Warsaw School as merely an offshoot of Viennese neo-positivism, although it is an error with illustrious precedents ranging from Roman Ingarden to the critical stance adopted by the Polish Marxists

the migration between the universities of Lvov and Warsaw of numerous scholars (after the war, Lvov was in Russian territory); the Second World War because of the questions raised by the advent of the new regime. The thesis of a thematic difference between the first and second phase is advanced in Jordan 1945, 10-11 and in part in Zamecki 1977, 52-3. According to these authors, the Lvov phase was predominantly psychologistic in character, while the Warsaw one was mainly logicist. This interpretation has been vigorously contested by Wolenski 1989, 305-6, who asserts that the School's character remained substantially unchanged, and that the Warsaw phase can be viewed at most as a new stage in the School's development. Equally forthright is Woleński's description of the final phase of the School, which he regards as largely coinciding with the end of the Second World War. Ajdukiewicz instead points to 1953 as marking the end of the tradition begun by Twardowski: its demise in effect coming with the retirement of the third generation of scholars. In any case, there is no doubt that since the 1950s it has made little sense to talk of a specifically Polish philosophy. Partial but nevertheless significant evidence for this is the fact that today almost all Polish research of any importance is also published in English, although many of the traditional analyses of the Lvov-Warsaw school are largely unknown because, still today, they are only available (when they are) in Polish.

⁵⁵ Mention should also be made of another strand of logical research, which proceeded independently of the influence of Twardowski and Lukasiewicz. This centred on the University of Cracow and was founded by J. Sleszynski (1854-1934). Its leading member was Leon Chwistek (1884-1944), a mathematician, logician, essayist and painter. Chwistek studied the theory of types and the axiom of reducibility, developing a non-ramified theory of types, i.e. the so-called simple theory of types. He then worked on the minimalist foundations of mathematics. In 1930 he moved to Lvov. Chwistek's pupils included W. Hepter, J. Herzberg and J. Skarzenski.

after the Second World War. The Polish school developed independently of Viennese positivism, although both movements drew their inspiration from what was in many respects a common source: almost all the most authoritative critics agree on this point.⁵⁶ In Woleński's words:

It should be noted that when one recommends the autonomous treatment of the theories of the Polish philosophers, the intention is not to cast doubt on the links between the Vienna Circle and the Lvov-Warsaw School, nor to affirm that they are altogether irrelevant... Neo-positivism and the Lvov-Warsaw School belong to the same ideal formation, namely, analytical philosophy... There are some essential similarities between them, such as precision and exactness, the minimalist approach in philosophy, the appreciation of the role of logic as an instrument for philosophical analysis, the emphasis placed on language... But something more must be said. Among the various currents of analytical thought, the Lvov-Warsaw School comes closer to logical empiricism as regards its methodological principles, while it is less close to Moore, for example, or to the Oxford analyticists. There are, however, differences in their essential conceptions which go beyond issues of philosophical method.⁵⁷

These differences, moreover, can already be discerned in Twardowski himself and in his criticisms of scientism, and in the attempt by some members of the Vienna Circle to dismantle metaphysics. The Poles never accepted, for example, Carnap's early endeavour to dispense with metaphysics and to replace it with the logical analysis of language, or with the decomposition of philosophical problems into logical syntax. For the Poles, the semantic dimension of philosophical analysis was indispensable for the construction of a scientific philosophy.⁵⁸

The alleged subordination of the Lvov-Warsaw school to the doctrines of the Vienna School, albeit with some minor elements of originality, is a view so widespread that it warrants further comment. The following quotation from Ajdukiewicz, a frequent contributor to *Erkenntnis*, is apposite:

In Poland there is no faithful follower of the Vienna Circle: that is, I know of no Pole who has accepted and assimilated the principal doctrines of the Vienna Circle. The affinity between certain Polish philosophers and the Vienna Circle rests at most on the similarity of their methodological approaches and on the similarity of the problems treated. Among their common features one may mention the following: first, anti-irrationalism and therefore the postulate that only those assertions can be accepted which are provable by means of an accessible test; then, the postulate of conceptual clarity and of precise language. As well as these two features, I would also stress the assimilation of the

⁵⁶ Jordan 1963; Skolimowski 1967; Zamecki 1977; Wolenski 1989.

⁵⁷ Wolenski 1982, 175.

⁵⁸ Wolenski 1982, 177.

conceptual apparatus of the logicist and the particular influence of symbolic logic. As regards the sphere of problems, of principal importance are problems concerning scientific knowledge and therefore the problematic of so-called meta-theoretical research. To this is connected an interest in semantics stemming from the conviction that the search after scientific knowledge can only proceed if it reflects upon its own language. Closely linked with this is investigation into the foundations of science and hence investigation that is no longer meta-theoretical but intra-theoretically concerned with the specific foundations of individual sciences, especially the deductive sciences.⁵⁹

The interest of this extract resides in its emphasis on shared characteristics, in its explicit denial of a conceptual derivation or dependence. Also significant, however, is what Ajdukiewicz omits from his list, notably the fact that the Lvov-Warsaw School never accepted a meaningfulness criterion that was entirely based on verification. Moreover, as regards metaphysics and more in general philosophy, the attitude of the Poles was more liberal than that of the neo-positivists. The Polish School “from its very beginning represented such an attitude towards metaphysics at which logical empiricism arrived only after successive liberalizations of its early and radical criteria, which was due, among other things, to the reception of Tarski’s semantic ideas”.⁶⁰ Finally, the analysis of language, however important, was not considered so essential as to justify the reduction of philosophy to a logical theory of science.

The unity of the Lvov-Warsaw School consisted less in its sharing of a common doctrinaire corpus than in a common attitude towards philosophical problems. Zawirski wrote:

It must be noted, to our disadvantage or perhaps advantage, that while the logical positivists form on the whole a coherent and consolidated camp, we had a programme, people worked with much effort, and success, on the clarification of many special issues, but nobody was in a hurry to undertake a great synthetic study, being convinced that it was still too early to do this.⁶¹

The shared features of the philosophical stance adopted by the Poles were anti-irrationalism, the conviction the philosophical inquiry should be inspired by scientific method, and confidence in the utility of logical techniques.⁶² One may assert that the Poles never regarded metaphysics as ‘senseless’, and that they never considered logic in general to be the prime purpose of philosophical research. They instead

⁵⁹ Ajdukiewicz 1935, 151-2.

⁶⁰ Wolenski 1989, 299.

⁶¹ Zawirski 1947, 9-10; cit. in Wolenski 1989, 307.

⁶² Jordan 1963, 44-5; Wolenski 1982, 183.

regarded it as an extremely powerful and useful tool for clarification of philosophical problems. The Polish philosophers were never tempted to ‘dissolve’ metaphysics and its problems, if anything they constantly sought to ‘resolve’ metaphysical issues.

We may close this excursus by briefly considering those common features that enable us to talk about a Polish philosophical movement which, for all the differences (sometimes major ones) between the positions of individual scholars, always wittingly and deliberately maintained its unitary character.

First, the movement shares a common genealogy which descends from Twardowski, the movement’s founder and its prime point of reference as regards the meaning (also ethical) of philosophical inquiry. For all the members of the School, the aim of philosophy was to build knowledge. Philosophical research was therefore to be conducted with seriousness and rigour.

A second factor resides in the intellectual importance of Twardowski’s successors. Unlike other philosophical movements dominated by the personality of their founder, in the Lvov-Warsaw School the successors achieved greater renown, international as well, than their master. One notes with interest that this did not lead to the dissolution of the School; instead it helped to develop an awareness of the rationality of its philosophical enterprise and of the need for open and unbiased comparison.

In theoretically more specific terms, the common foundation of the entire school was its logic-based anti-irrationalism,⁶³ the constituents of which were the postulate of clarity, intellectualism, an interest in logic, a traditional conception of truth, epistemological and axiological absolutism, an ‘*verstehende*’ view of the human sciences, and minimalism.⁶⁴

One may therefore say that the Lvov-Warsaw School inherited from Twardowski — and indirectly from Brentano — a realist, objectivist position and the correspondence theory of truth. The members of the school made a positive assessment of philosophy which, according to a formulation taken from Twardowski, was the ‘science of science’. They abstained from constructing philosophical systems (perhaps with the exception of Kotarbiński) and instead devoted themselves to minute logico-semantic analysis of philosophical and scientific concepts, using and very often inventing logical tools for the purpose.

⁶³ Zamecki 1977, 53.

⁶⁴ Wolenski 1989, 304.

14. BIBLIOGRAPHY

- Ajdukiewicz 1935 K. Ajdukiewicz, "Der Logistische Antiirrationalismus in Polen", *Erkenntnis*, 151-164.
- Albertazzi 1989 L. Albertazzi, *Strati*, Trento, Reverdito.
- Albertazzi 1992 L. Albertazzi, "Is there a transcendental object?", in Paszniczek 1992, 26-44.
- Albertazzi 1992 L. Albertazzi, "Brentano, Twardowski and Polish scientific philosophy", in Coniglione Poli & Wolenski 1993, 11-40.
- Besoli 1988 S. Besoli, "La rappresentazione e il suo oggetto: dalla psicologia descrittiva alla metafisica", Introduction to Twardowski 1988, 7-21.
- Borutti & Papi 1994 S. Borutti e F. Papi (eds.), *Confini della filosofia. Verità e conoscenza nella filosofia contemporanea*, Como-Pavia, Ibis.
- Brentano 1874 F. Brentano, *Psychologie vom empirischen Standpunkt*, 2 voll., Leipzig, Duncker & Humblot.
- Buczynska-Garewicz 1980 H. Buczynska-Garewicz, "Twardowski's idea of act and meaning", *Dialectics and Humanism*, 153-164.
- Casari 1979 E. Casari, *Dalla logica alla metalogica*, Firenze, Sansoni.
- Cohen & Schnelle 1985 R.S. Cohen and T. Schnelle (eds.), *Cognition and facts. Materials on Ludwig Fleck*, Dordrecht, Reidel.
- Coniglione 1990 F. Coniglione, *Realtà e astrazione. Scuola polacca ed epistemologia post-positivista*, Catania, CUECM.
- Coniglione Poli & Wolenski 1993 F. Coniglione, R. Poli and J. Wolenski (eds.), *Polish scientific philosophy. The Lvov-Warsaw school*, Amsterdam, Rodopi.
- Czewowski, 1939-40 T. Czewowski, "Kazimierz Twardowski as a teacher", *Studia philosophica*, 13-17.
- Czewowski 1960 T. Czewowski, "Tribute to Kazimierz Twardowski on the 10th anniversary of his death in 1938", *The Journal of Philosophy*, 209-215.
- Damska 1978 I. Damska, "François Brentano et la pensée philosophique en Pologne: Casimir Twardowski et son École", *Grazer philosophische Studien*, 117-130.
- Dappiano & Poli 1994 L. Dappiano and R. Poli, "La teoria avverbale della verità", in Borutti & Papi 1994, 230-248.
- Franke & Rautenberg 1972 N. Franke and W. Rautenberg, "Zur Geschichte der Logik in Polen", in Wessel 1972, 33-94.
- Giedymin 1985 J. Giedymin, "Polish philosophy in the interwar period and Ludwig Fleck's theory of thought-styles and thought-collectives", in Cohen & Schnelle 1977, 179-215.
- Grossmann 1977 R. Grossmann, "Introduction" to Twardowski 1977, VII-XXXIV.
- Haller 1982 R. Haller, "Einleitung", to Twardowski 1982, V-XXI.
- Hempolinski 1987 M. Hempolinski, *Polska, filozofia analityczna. Analiza logiczna i semiotyczna w szkole lwowski-warsawskiej* [Polish analytical philosophy. Logical and semiotical analysis in the Lvov-Warsaw school], Wrocław, Ossolineum.
- Ingarden 1939-40 R. Ingarden, "The scientific activity of Kazimierz Twardowski", *Studia philosophica*, 17-30.

- Jadacki 1992 J.J. Jadacki, "The metaphysical basis of Kazimierz Twardowski's descriptive semiotics", in Pasniczek 1992, 57-74.
- Jordan 1945 Z. Jordan, *The development of mathematical logic and of logical positivism in Poland between two wars*, Oxford, Oxford University Press.
- Jordan 1963 Z. Jordan, *Philosophy and ideology. The development of philosophy and Marxism-Leninism in Poland since the Second World War*, Dordrecht, Reidel.
- Kant 1781 I. Kant, *Kritik der reinen Vernunft* (2nd modified ed. 1787), Riga, Hartknoch.
- Kerry 1885-91 B. Kerry, "Über Anschauung und ihre psychische Verarbeitung", *Vierteljahrsschrift für wissenschaftliche Philosophie* (8 papers).
- Kotarbinski 1959 T. Kotarbinski, *La logique en Pologne. Son originalité et les influences étrangères*, Roma, Signorelli.
- McCall 1967 S. McCall (ed.), *Polish logic 1920-1931*, Oxford, Clarendon Press.
- Modenato 1984 F. Modenato, "Atto, contenuto, oggetto: da F. Brentano a K. Twardowski", *Verifiche*, 55-78.
- Pasniczek 1992 J. Pasniczek, *Theories of Objects: Twardowski and Meinong*, Lublin, Wydawnictwo uniwersytetu Marii Curie-Skłodowskiej.
- Pazkowska 1976 E. Pazkowska, "Twardowski's refutation of psychologism", *Zeszyty naukowe Uniwersytetu Jagiellońskiego*.
- Pazkowska-Lagowska 1977 E. Pazkowska-Lagowska, "On Kazimierz Twardowski's Ethical Investigations", *Reports on Philosophy*, 11-21.
- Pazkowska-Lagowska 1980 E. Pazkowska-Lagowska, *Psychica i poznanie. Epistemologia Kazimierza Twardowskiego* [Psyche and knowledge. The epistemology of Kazimierz Twardowski], Warsaw, PWN.
- Pearce & Wolenski 1988 D. Pearce and J. Wolenski (eds.), *Logischer Rationalismus. Philosophische Schriften der Lemberg-Warschauer Schule*, Frankfurt a. M., Athenäum.
- Pelc 1979 J. Pelc (ed.), *Semiotics in Poland 1894-1969*, Dordrecht, Reidel.
- Poli 1989 R. Poli, "Brentano and Freud", *The object and its identity*, Dordrecht / Boston / London, Kluwer Academic Publishers (Topoi Supplements nr. 4), 107-116.
- Poli 1990 R. Poli, "Ernst Mally's Theory of Properties", *Grazer philosophische Studien* 115-38.
- Poli 1992 R. Poli: "Twardowski and Wolf", in Pasniczek 1992, 45-56.
- Schuhmann 1993 K. Schuhmann, "Husserl and Twardowski", in Coniglione Poli & Wolenski 1993, 41-58.
- Skarga 1964 B. Skarga, *Narodziny pozytywizmu polskiego* [The origin of Polish positivism], Warszawa, PWN.
- Skolimowski 1967 H. Skolimowski, *Polish analytical philosophy*, London, Routledge and Kegan.
- Smith 1989 B. Smith, "Kasimir Twardowski: An essay on the borderlines of ontology, psychology and logic", in Szaniawski 1989, 313-73.
- Szaniawski 1989 K. Szaniawski (ed.), *The Vienna Circle and the Lvov-Warsaw School*, Dordrecht / Boston / London, Kluwer.

- Twardowski 1894 K. Twardowski, *Zur Lehre vom Inhalt und Gegenstand der Vorstellungen*, Wien 1894; rist. anast. München-Wien, Philosophia, 1982. Engl. transl. Twardowski 1977; Italian trans. in Twardowski 1988, 55-169.
- Twardowski 1965 K. Twardowski, *Wybrane pisma filozoficzne* [Selection of philosophical papers], Warsaw, PWN.
- Twardowski 1977 K. Twardowski, *On the content and object of presentations*, Nijhoff, den Hague.
- Twardowski 1988 K. Twardowski, *Contenuto e oggetto*, Boringhieri, Torino.
- Wessel 1972 H. Wessel (ed.), *Quantoren, Modalitäten, Paradoxien*, Berlin, Deutscher Verlag der Wissenschaften.
- Wolenski 1982 J. Wolenski, "Szkoła lwowsko-warszawska a logiczny empiryzm" [The Lvov-Warsaw school and the logical empiricism], *Humanitas*.
- Wolenski 1989 J. Wolenski, *Logic and Philosophy in the Lvov-Warsaw School*, Dordrecht / Boston / London, Kluwer.
- Zamecki 1977 S. Zamecki, *Koncepcja nauki w szkole lwowsko-warszawskiej* [The epistemology of the Lvov-Warsaw School], Warszawa, PWN.
- Zawirski 1947 Z. Zawirski, *O współczesnych kierunkach filozofii* [Contemporary philosophical trends], Kraków, Wiedza-Zawod-Kultura.
- Ziembinski 1977 Z. Ziembinski (ed.), *Polish contributions to the theory and philosophy of law*, Amsterdam, Rodopi.

TABLE OF CROSS-REFERENCES

| on: | see also: |
|-------------------------------|--|
| content / meaning | 2.4, 6.6, 6.9, 8.3, 12.5 |
| logic and theory of judgment | 1.10-13, 2.6-7, 3.4, 4.4, 4.6, 11 , 12 , 16.6, 16.12-13 |
| metaphysics | 3.5, 16.15 |
| modification | 2.8 |
| object | 4.5-6, 8.3-5, 12.4-5, 16.3 |
| presentation / representation | 1.9, 9.2, 9.4 |
