

THE SEMANTIC FOUNDATIONS AND IMPLICATIONS OF SIGNIFIC LANGUAGE GRADATIONS

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ABSTRACT : Looking at the history of linguistics, it is possible to discover over and above the more well-known conceptions of language, linguistic structure, description and analysis, so called « language-gradation-theories » which have gone almost unnoticed, and in which semantic aspects are central to the analysis of linguistic structure (Sprachaufbau). So as to characterize the different backgrounds and purposes of such theories, the first part of this investigation is devoted to the relevant reflections of J. H. Lambert, F. Tönnies, and F. Waisman. It is demonstrated in the second part that the analytic and synthetic gradations of language, developed by Gerrit Mannoury, the most important theoretician of the Dutch signfic movement, are related to these theories. His analytic language gradation is based on the observation that so called « linguistic acts » are associated to very different degrees with other representations or complexes of representations, such that many names of persons, for example, are mainly associated with non-auditive representations, others, and for example, mathematical terms almost exclusively with combinations of words. The synthetic gradation of language proceeds from the opposite end of the hierarchy. In this case, one starts from terms belonging to analytically higher language levels as intentionally chosen « basic words », from which an artificial terminology for the psychology of the individual is derived by means of systematic step by step definitions. This terminology is itself expanded step by step to form a terminology for general psychology, physics, biology, economics, etc., until a close connection with the natural language is achieved. Whereas analytical language gradations have a communication-semantic and empirical orientation, the synthetic ones prove to be extra-communicational and logico-formalist ; purposes and areas of application diverge correspondingly.

RÉSUMÉ : Il est possible de découvrir dans l'histoire de la linguistique des conceptions du langage qui vont au-delà des conceptions bien-connues de la structure linguistique, sa description et son analyse ; ce sont ce qu'on appelle les théories de la « gradation linguistique », dans lesquelles les aspects sémantiques du langage occupent une place centrale. Afin de caractériser les arrière-fonds divers de telles théories, la première partie de cette recherche sera consacrée à la présentation des conceptions de J.H. Lambert, F. Tönnies et F. Waismann. On démontrera dans

la deuxième partie que les gradations linguistiques analytiques ou synthétiques développées par Gerrit Mannoury, le théoricien le plus important dans le mouvement « signifique » aux Pays-Bas, sont apparentées à ces théories. Sa gradation analytique du langage se fonde sur l'observation que ce qu'on appelle les « actes linguistiques » sont liés à de degrés variés avec d'autres représentations et complexes de représentations. Beaucoup de noms propres sont par exemple associés avec des représentations non-auditives, d'autres, comme les termes mathématiques par exemple sont presque exclusivement associés avec des combinaisons de mots. La gradation synthétique du langage prend son départ à l'autre bout de la hiérarchie. Dans ce cas, on commence avec des termes qui appartiennent à des niveaux de langue analytiquement supérieurs pris comme « mots primitifs » choisis intentionnellement. De ces mots une terminologie artificielle est dérivée pour la psychologie individuelle par définition systématique, l'une étant dérivée de l'autre. Cette terminologie elle-même est élargie graduellement pour constituer enfin une terminologie pour une psychologie générale, pour la physique, la biologie et l'économie, etc. jusqu'à ce qu'on s'approche de très près de la langue naturelle. Tandis que les gradations analytiques du langage sont empiriques et orientées vers une sémantique de la communication, les gradations synthétiques sont extra-communicatives et logico-formalistes ; les fins et les domaines d'applications divergent donc largement.

1. Introduction

Since theorizing on the subject began, many divergent conceptualizations of « language » have emerged most of which can be subsumed under one of the following three categories. The first conceives of language as a collection of means or « tools » available to persons within a certain group, without which it would not be possible for them to engage in communication (and thought). The second characterizes language as the universal set of all concretely manifested communication processes which can be empirically observed as occurring in a group of people. The third posits that both aspects form an inseparable union (cf. Schmitz 1991a).

Conceptualizations whose roots can be traced to the first paradigm have given rise to views on the structure, description, and analysis of language which are doubtless the most widely known and commonly used to date. Such analyses and descriptions of the interrelatedness of linguistic means and the internal structure of language give far more attention to form and matter than to semantic considerations. Even more recent linguistic theories in which the semantic component carries greater weight must be considered far removed from adequately acknowledging the dominance of semantic phenomena in natural languages. Instead, the tendency for the lexicon « to be constituted as a systematic entity per se » (Ungeheuer 1990 : 174) prevails. And the

corresponding stance typifying all recent theories of grammar with regard to the technical terminology contained therein still represents one of the weakest points in modern linguistics. Even today, a «totally inadequate ability to handle the connection between linguistic signs in the lexicon and linguistic signs in the sentence or in speech» persists (Ungeheuer 1990 : 174).

It is, however, also possible to identify a different sort of conceptualization occurring in the history of linguistics, in which semantic considerations are clearly in the foreground of language's internal structure. These may be designated as «theories of language gradations», to coin a general term¹. They have received little notice in historical accounts of linguistic theory, which can no doubt be explained at least in part by their position outside the mainstream schools of thought that eventually led to the establishing of linguistics as an independent discipline. To the best of my knowledge, theories of language gradations are found exclusively in the writings of authors whose focus was on epistemology. This applies especially to Johann Heinrich Lambert (1728-1777) (cf. Lambert 1764 ; commentary by Ungeheuer 1990 : 168-179), the undeservedly neglected author Josef Schächter (cf. Schächter 1935 ; 1938), formerly a lesser known member of the Vienna Circle, and Friedrich Waismann (1896-1959) (cf. Waismann 1946 ; 1968 : 91-121 ; 1985 : 612-643), who, like Schächter, had ties to the Dutch signific movement for a number of years and also published in their periodical called *Synthese*. Of a similarly epistemological orientation but with a decided penchant for addressing theoretical concerns related to language and communication are the language gradation theories proposed by the philosopher and linguistic critic Otto Friedrich Gruppe (1804-1876) (cf. Gruppe 1914 ; commentary by Bergmans 1991 : 99-102), the sociologist Ferdinand Tönnies (1855-1936) in the essay which was awarded the Welby Prize (Tönnies 1899/1900 ; 1906 ; commentary by Schmitz 1985a : cxvii-cxli ; 1985b ; 1986), and the Dutch significians such as the writer,

1. Only a few of the authors whose theories I would include in this category actually refer to a «layered» or «multi-level» structure of language. Schächter (1938 : 228), for example, speaks of «layers» («Schichten»), Waismann discusses the «many-level-structure of language» (1946 : 221) or «language strata» (1968 : 91ff). Mannoury and other significians refer to «levels of language» («taaltrappen»). The theories of the other authors are, however, also consistent with the idea that the internal structure of language comprises gradations.

psychiatrist, and social reformer Frederik van Eeden (1860-1932) (cf. van Eeden 1897 ; commentary by Schmitz 1990a : 54- 93 ; 1990b) and the mathematician Gerrit Mannoury (1867-1956) (cf. Mannoury et al. 1919a, b ; Mannoury 1934, etc. ; commentary by Heijerman 1990 : 263ff. ; Schmitz 1990a : 276-283).

Such an ordering of language gradation theories must, however, be taken with a grain of salt. More to the point would be a consideration of the different contexts and purposes for which the respective theories were formulated, using some contrasting examples. To this end, I will first review the salient points made by Lambert, Tönnies, and Waismann, and then give a more detailed account of Mannoury's analytic and synthetic language gradations, with their psychological orientation.

2. Gradation according to Word Class, Sign Class, and the Logical Style of Sentences

a) Lambert's « Semantic Tectonics of Vocabulary »²

In the Prologue to his work entitled *Neues Organon* (1764) and in the final chapter of that work's third book (*Semiotik*), Lambert outlines the principle of global layering in vocabulary. The Prologue approaches the subject in the following manner.

All words in a language can be divided into three categories. The first

does not require definitions, since it is possible to point to the object in its entirety and thereby identify a direct connection between word, concept, and object. Another class, in which words from the first class are used metaphorically, uses a determination of the *tertium comparationis* in place of a definition. The third consists of words which must be defined, i.e. when words of the first two classes can be used to do so, and then in turn incorporating the words of the third class defined thusly into the definitions. It goes without saying that words in the third class can also take on the character of metaphors, and indeed in large part actually do.

To name some underlying criteria of this semantic stratification (cf. Ungeheuer 1990 : 168-179 for greater detail), words in the first category can be defined by ostension and therefore « constitute at the

2. Compare the title of Ungeheuer's (1990 : 168-179) study on Lambert's theory of language gradations.

same time the basis for determining the meaning of the other words » (§ 338 Sem.), namely as a function of two operations. The first is to establish a trope based on resemblance (metaphor), whereby an explicit precondition asserted by Lambert (1764 : II, ii, 45-51) is that resemblances or dissimilarities can be recognized not only by means of comparing objects from the physical world or those from the intellectual realm to each other, but likewise by crossing over from objects of the physical world to the realm of the intellect. The second operation is to create a nominal definition, provided that it contains no generic terms since the definition is supposed to proceed from species to genus. Following Locke's lead, Lambert designates the associated conceptual analysis and synthesis « Anatomy ». In Lambert's view, the foundations of these pertinent operations are at the same time fundamental to the human capacity to experience knowledge, and he therefore sees the semantic stratification of language as rooted in human nature itself and thus universal.

One of the many aspects under which it is possible to view the vocabulary of a language (cf. Ungeheuer 1990 : 174ff), mentioned by Lambert only in passing, is that of diachronic change. He does, however, state in so many words that his threefold semantic classification scheme conforms to linguistic phylogenesis and language acquisition by children. But at the heart of Lambert's work are aspects related to the role played by vocabulary in the practice of communication and symbolic cognitive processes. For he equates the criteria used to determine the three semantic word classes to methods not only for solving the « word conflicts » or communication conflicts that increase progressively from the first on through to the third class, but also for shedding light on obscure concepts or words.

b) Tönnies' Layering of Linguistic Sign Classes Based on Psychological and Sociological Considerations

In the first section of his prize-winning essay *Philosophical Terminology* (1899/1900)³, Tönnies describes his own theory of signs. On the basis of his theory of will, he proceeds in a constructionist and

3. A revised and expanded version of this text in German dated 1906 bears the more revealing title « Philosophische Terminologie in psychologisch-soziologischer Ansicht ». — See Tönnies 1988 for a French translation of linguistically relevant excerpts from Tönnies' prize-winning work. Schmitz 1988 contains an introduction to Tönnies' theories on semiotics and language gradations in French.

axiomatic manner to address the systematic placement of scientific and philosophical terms in sign theory, giving particular attention to the special nature of their underlying sign-meaning relation. In so doing, he considers the whole group of artificial signs, and linguistic signs in particular, and ventures to define and differentiate ideal types in terms of a theory of will representing different kinds of fundamental sign-meaning relations. According a certain meaning to a sign is an act of the social will, says Tönnies, be it « natural social will » (WF) in which feelings, the unconscious, and moral constraints predominate, or « arbitrary social will » (WT), influenced primarily by thought, conscious goals, and arbitrary constraints. Both forms of social will are said to facilitate or inhibit, by making available certain connections between ideas, the formation of idea sequences — quite in line with the psychological school of voluntaristic association to which Tönnies subscribed. Each form of will is then differentiated further depending on whether the idea sequences are characterized predominantly by sensual elements (s), i.e. sensations and perceptions, intellectual elements (i), i.e. ideas and thoughts, or a combination of both (si).

Applied to the relation between sign and meaning, this means that an object (A) becomes by social will a sign for another object (B), such that one is disposed to think of (or remember) B when A is present. Thus, recall is fundamentally linked to perception (s) or idea (i). In other words, the sign-meaning connection arises on the basis of how A is perceived (e.g. as in the case of written language or ritualized linguistic formulas), or perception and idea in combination (si), as when custom predominates (common language usage), or lastly an idea (i), namely a belief or intellectual certainty (e.g. the term used to identify a concept in purely scientific usage). The six fundamental forms of social will are designated by Tönnies as « natural harmony » (WFs), « custom » (WFsi), « belief » (WFi), « convention » (WTs), « legislation » (WTsi), and « science » (WTi); or in reference to language — « the impulse to form language », « the usage of language », « the genius of language » (« poetry »), « agreement », « determination », and « definition » (Tönnies 1899/1900 : 326 f).

Thus, as seen by Tönnies, the six forms of will represent classes of different relations between sign and meaning whose permanence, stability, and connection to a determinate objective increases by being accompanied by parallel development of increasing precision and delineation of meaning, as a function of habit or repetition, learning, convention, and finally explicit definitions along a progression from

WFs on through to WT_i⁴. Although the attitude initially assumed by Tönnies is on the whole limited to the semantics of words outside their communication context, his further discourse turns to linguistic patterns and styles which are typical of different levels, depending on the form of will, and the various prerequisites and modes that make communication possible, thereby plainly documenting that his intent is not merely to differentiate and characterize different classes of words, but also and by the same token different forms or levels of language. This becomes evident above all when he draws a connection between the previously identified types of sign-meaning relations and certain social functions exercised by the different linguistic signs respectively, and similar connections to the specific demands emanating from social organizations or types of acts. This is the theoretical context which is necessary if one is to follow the steps by which Tönnies assigns the linguistic levels 1-3 (WF) to three manifestations of social grouping based on affective affirmation, called « community » by Tönnies, and assigns linguistic levels 4-6 to manifestations of a social form designated as « society » which rests on pragmatic and goal-oriented considerations.

c) Waismann on the Logical Styles of Language Strata

In a number of works, Waismann put forward and discussed the interesting proposal⁵ that, from a macrological viewpoint, every language contains several « strata », each with its own logic, an « eigen logic »⁶, whereby all sentences belonging to one and the same stratum are homogeneous, i.e. have the same behavior with regard to logic. Examples which illustrate what is meant by classes of sentences constituting or belonging to different language strata include the following (Waismann 1968 : 93) :

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4. In the context of this paper we must refrain from examining the impact these positions articulated by Tönnies would have upon a more highly differentiated consideration and definition of the general concept of the arbitrary nature of linguistic signs.
 5. This tenet was first formulated in « Über Hypothesen » (Waismann 1985 : 612-643). Related articles published thereafter are readily accessible in *How I See Philosophy* (Waismann 1968 : especially pp. 49-60, 78-85, 91-121).
 6. This term as coined by Waismann is analogous to « eigen values » of a certain equation (in the parlance of physics).

laws of nature, material object statements, sense datum statements, statements describing a dream, a blurred memory picture, sentences which occur in a novel, and so on.

Waismann uses several « formal ideas » (1968 : 94) or « formal motifs » (1968 : 119) to characterize a language stratum intrinsically. The first is logic (*sensu stricto*). Each stratum is characterized by a particular logical style or system of logic, which is instrumental in the construction of sentences belonging to that stratum (1968 : 94f, 110). — One need only call to mind the characteristic logic found in aphorisms. The second is completeness. The sense in which statements, e.g. descriptions (of a carpet, a chess game, a triangle, a dream, etc.) can be called complete may vary widely. One important characteristic of a language stratum is the nature of the completeness or incompleteness of the statements it includes (1968 : 95, 117). The third is « open texture » (1968 : 95). Unlike logical and mathematical terms, most empirical terms, regardless of how carefully they are defined, characteristically retain something like the « possibility of vagueness » (1968 : 42, 97), i.e. they cannot be defined with absolute exactness to the point where future doubts can be categorically ruled out. The fourth is verifiability. The nature, method, and possibility for verification differs from one language stratum to another. Thus, the meaning of « verification » varies accordingly (1968 : 114f). The fifth is truth. The sense in which statements (say, a law of physics as opposed to the description of an object) can be said to be true varies from stratum to stratum. That is : « truth », is characterized by the same « systematic ambiguity » (1968 : 99) as « verification », « meaningful », « existence », « fact », « real », etc., because all such expressions take on different meanings in different strata.

These characterizations of language strata have repercussions on connections between the strata which can be summed up as follows (Waismann 1968 : 100) :

Thus language seems to be separated into strata by gaps over which one may jump but which cannot be bridged by logical processes. This fact accounts for many of the traditional problems in philosophy.

Thus, the problem of perception surfaces at the interface between sense datum statements and material object statements, and at the transition from there to laws of physics one encounters the problem of induction, while proceeding in the opposite sense the problem of

verification turns up at both these crossover points (cf. Waismann 1968 : 100). To extend Waismann's examples by adding a further one, at the transition from accounts of dreams to accounts of everyday experiences and from there to sentences in a novel, the problem of « multiple realities » appears (cf. Schütz 1967 : 207ff)⁷.

At this point, the similarities and differences between Waismann's language gradation theory and those formulated by Lambert and Tönnies may have become apparent. It is, however, worth noting a few of them in particular. Waismann offers no criterion which could be used to order the strata hierarchically or otherwise. Furthermore, he addresses himself to the semantics and pragmatics of sentences rather than dealing solely or principally with words in a language. Finally, his orientation, at least in outlining research guidelines, is organized along empirical lines. An assumption which is shared at least implicitly by all three theories is that it is possible to use the same words in the field of different strata, albeit with a resulting modification in meaning (Lambert) or possible shifts in meaning (Tönnies, Waismann). Likewise, all three authors emphasize the epistemological relevance of different linguistic levels and shifts between different levels. However, only Lambert expressly makes the connection between linguistic levels and the issue of misunderstandings and their resolution. — No matter how different the approach, viewpoint, and universe of discourse may be in the theories of Lambert, Tönnies, and Waismann, they share several basic features with analytic or logical aspects of the signific theory of language gradation.

3. Signific Language Gradations

a) Some Foundations of Significs and Its Conceptualization of Meaning

In the following, I shall limit myself to the explication of a few select terms as set forth in the writings of Gerrit Mannoury, the main theoretician of the signific movement in the Netherlands. In the interest of brevity and clarity, I shall refrain from discussing their historical

7. See Schmitz (Ms) for an application of communication semantics in the analysis of changes in reality referred to in utterances.

context as the movement gradually evolved or commenting on modifications in theoretical components⁸.

Mannoury (1953 : 162f) characterizes signifiés in a manner which is largely representative of others who contributed to the signifié movement, namely as

the study of mental and linguistic phenomena involved in communication, comprising one branch for the psychological examination of currently existing means of achieving understanding (analytical signifiés) and another branch to systematically expand and improve the repertory of such means (synthetic signifiés).

The branch to be viewed as an empirical science is analytical signifiés, which focuses on the study of human linguistic acts, or, to be more precise, takes the mental associations underlying linguistic acts as its objects of study (Mannoury 1934 : 290).

Generally speaking, a linguistic act is an act by means of which living beings attempt to exert influence on each other (Mannoury 1930 : 6 f. ; 1947 : 16). It is aimed at causing a reaction in others (1953 : 164). However, in a narrower sense « linguistic act » denotes acts of communication realized by spoken or written natural language (1953 : 164). The term generally used for the individual or group who produce the linguistic act is « speaker » ; that for the individual or group being influenced is « hearer » (1947 : 19). It follows that every linguistic act is not only a goal-oriented act (1934 : 292). It is also, as Mannoury (1934 : 290) says, « since it attempts to influence other living things, purely subjective in the truest sense of the word ».

The linguistic act is a communicative kind of social act that has a « climatic high point or kernel » that in everyday matters usually consists of « uttering a short sentence or uttering a more or less independent portion of a larger sentence » (1947 : 19 f.). Thus, the utterance itself made by the speaker represents the essence of the linguistic act. At least in his later works, when Mannoury calls an utterance a linguistic act, he uses the term as a synecdoche.

Linguistic acts are units of content or of the mind. As such they cannot be handled solely with recourse to the order and organization of

8. For a historical account of the evolution of signifiés see Schmitz (1985a ; 1990a) and Schmitz (ed.) (1990). For a systematic description of signifié concepts and the signifié theory of linguistic acts, see Schmitz (1984).

linguistic elements determined largely by grammar and common usage (cf. Mannoury 1933 : 6). In fact, the order in which the words are uttered does not even correspond exactly to the order of their underlying mental processes (as earlier associationists claimed). According to Mannoury (1933 : 6), speaking is more accurately described as a kind of film editing which in turn determines the series of words.

This leads us to see the significian's territory as « unparcelled language usage » in the form of linguistic acts and that of the linguist as « parcelled language usage » (Mannoury 1949 : 25 f.). In so doing, we take « parcelling » to mean the breaking down of sounds (acoustic symbols) or mental content into parts (parcels) and then their realignment into new combinations. For example, language parcels include such items as « lexicological words », idiomatic expressions, prefixes, suffixes, etc. (1953 : 160).

Signific investigations take identical linguistic act kernels as their starting point. They include the circumstances and phenomena that are found to be causally related to these linguistic acts (as cause and effect). Related to the linguistic act is the necessary distinction between a « spoken meaning », the influencing of the hearer as intended by the speaker, and a « heard meaning », the influencing of the hearer that actually occurs (1953 : 153). Finally, there is the influence that led to this linguistic act, known as « symptomatic linguistic act meaning » (1949 : 38 ; 1953 : 153), i.e. circumstances and milieu behind the fact that something was said and how it was said.

Referring to all these linguistic act meanings, Mannoury differentiates the following « elements of meaning » or « elements of language function ». 1. The « indicative » element, which is related to the « realm of perception » or to the « mental world » (cognition). 2. The « emotional-affective » element, which refers to the « realm of feeling » or the « distribution of affect » (affect). 3. The « volitional » element, related to the « realm of activity » or « directed will » (conation), which acts as intermediary between the two other poles of our mental life, namely the realms of feeling and perception (1947 : 136 ; 1948 : 18 ; 1949 : 36 ; 1953 : 153). 4. The « formal » or « formalistic » element which is largely implicit for Mannoury (1930 : 56 ; 1934 : 308) and was explicitly developed by the mathematician D. van Dantzig (1900-1959) (1948 : 338). It is related solely to registering the form of the parts of the linguistic act and to the relationship among these parts. This is seen by Mannoury as a particular sort of indicative element of meaning. In the case of nearly every concrete linguistic act,

the elements are all components of the linguistic act's meaning as a mental phenomenon on the part of the speaker or hearer. From one linguistic act to another, however, one or another of the four element of meaning is in the foreground.

Mannoury's psychological theory of meaning and his pragmatic theory of linguistic acts are opposed to the linguistic concept of word meaning, which is frequently associated with two precepts : a) that there exists a one-to-one correspondence between the words of a sentence and clearly separate units of thought ; and b) that speech and the connection of words to thoughts are synchronized. As to the first, it applies at best to the use of « independent words » or « sign words » such as « container », « table », « get up », « sit », as Mannoury sees it (1947 : 36) — to which linguists of the most widely varying provenience are wont to restrict their semantic analyses. It applies not at all to words like « this », « is », « a », etc. The reason is that « dependent words » do not denote a specific kind of experienced entity. But they do fulfill important functions by adding new dimensions to other elements of a linguistic act that the elements originally possessed to little or no extent. The dependent words are not confined to one particular grammatical category. Rather, they can be differentiated into those that depend on the personal circumstances in which they are used by the speaker or hearer (« yes », « I », « here », « this », etc. ; « subjectivity of word function »)⁹, and those which depend more or less on the linguistic context of their use (« large », « not », « time », « three », etc.) (Mannoury 1947 : 42). As a result, there is often a need for two or more words (« this container », « stand up », « sit down ») to comprise one « sign word », significantly speaking (1947 : 37). Finally, the « common element » represented by one word to many speakers may in fact not be one thought. What if it has an indicative as well as volitional as well an emotional nature, or even a mixture of all three ? As for the second point concerning the synchronicity of speech replacing thought with words, Mannoury would argue that while we can indeed speak of a definite order when referring to words, this is not so in the case of ideas and affects that accompany them.

Now signifies, unlike linguistic semantics, is usually not concerned with what elements the mental thought contents (or concepts)

9. Mannoury does not speak explicitly of indexical expressions at this point, but they are precisely what he means.

associated with a word have in common. It deals only with the actual association of word with thought, the individual psychological phenomenon that takes place within a given « one who participates in a linguistic act » (1947 : 39). Mannoury maintains that the spoken and heard meanings of a linguistic act, when considered in this way, always deviate from each other in several ways. If, nonetheless, a certain measure of understanding is achieved, this can be attributed to a number of reasons. Usually it is due to the effect of sign words, but also to the influence which group language usage has on individual language usage, especially the individual connection of words (not of a grammatical nature). It is through this influence on the individual connection of words that the group in which the individual lives influences his thoughts and thought complexes, too (1947 : 40 ff.).

Thus, Mannoury's arguments are based on his subtle formulation of the psychology of association, of which only the following brief summary will be presented here. He distinguishes between three types of mental associations. First are « thought associations » (T-T associations), in which a correlation exists between the reproducibility of the divergent « memory images » or « complexes of memory images » (1948 : 20). Second are the « word-word associations » (W-W associations) where « auditive » or « motor word images » are associated with one another. Third are « word-thought associations » (W-T associations) where an associational connection exists between auditive or motor word images on the one hand and memory images or ideas on the other. Finally, it is possible for « associational networks » to be formed, which are more or less fixed systems of « associational pathways », understood to be linked associations which exercise a guiding influence on thought processes. According to Mannoury, motor and auditive images tend more than others to assume the character of « serial images » (1947 : 33). That is : word images rarely occur individually, and usually stand in relation to other word images. This characteristic feature of word images, namely their occurrence in series (W-W associations), is the principal reason for the « levelling and selective effect (i.e. the alternation between forces which are either inhibitory-repressive or simulating-enlightening) » (1947 : 32) of internal and external language usage. This phenomenon is dubbed the « fly-wheel effect » (1947 : 32) by Mannoury.

Either the W-W association brings about a certain configuration of accompanying ideas (thoughts), or a chain of (word-free) thoughts accompanied by a congruent word series is formed, as a result of which

it is subsequently more easily reproducible than would otherwise be the case were there no connector attached.

Mannoury qualifies his own scientific position as « relativistic-psychologicistic » (1949 : 94). He identifies the main impulse behind his position as the « principle of graduality » which holds that every hierarchy, differentiation, or opposition of concepts, can be resolved or bridged by a gradual transition from one concept to the next (1953 : 155). Accordingly, boundaries between concepts are arbitrarily drawn depending on (relative to) the purpose for which they are erected and of the person who does so. This is the rationale behind the « significant principle of relativity » (1953 : 163) which states that the meaning of a word and the range of a concept depends on (is relative to) other attached mental components.

b) Analytical or Logical Language Gradations

In 1919, the signifiicians Gerrit Mannoury, L.E.J. Brouwer (1881-1966), Henri Borel (1869-1933), and Frederik van Eeden (Mannoury et al. 1919a) published a theory of language gradation along the lines developed by Mannoury that was intended to serve as the basis for an analytically and synthetically oriented dictionary. In it, the language gradations are derived from analytic — or, as it was later called by Mannoury (1948 : 61ff) « logical » — language gradation¹⁰ :

a. *Basic Language*, in which the connection of the words exerts little or no influence and each word (or each group of words) speaks straight to the imagination. To this level belong the primordial language of the child, the language of vehement or profound emotions, hypothetical primitive language ;

b. *Emotive Language*, in which word connections (especially contrasting ones) are clearly perceptible without, however, preponderating or having become rigid. The words (groups of words) have their effects on the mind [gemoed] of the hearer either directly or through words recalled (whether spoken outloud or not). The languages of modern Western society, construed in terms of subject and predicate, belong to this level only insofar as they are limited to the formulation of personal experience and emotional expression (popular language, poetic language, oriental languages with imagistic script, the language of non-pasigraphic, non-applied mathematics) ;

c. *Utility Language*, [Verkeerstaal], in which the connections of words have become the chief element, so that the words are almost never intended to have an independent effect, and every deviation from the traditional classifications in terms

10. The text by Mannoury et al. (1919a : 8f) which follows was translated after consulting previous English translations by Brouwer (1946 : 194) and Thiel (1991 : 24f).

of contraries (e.g. white-black, good-bad, freedom- constraint, yes-no) is viewed as disagreeable and disturbing (the language of trade and commerce, Western written languages) ;

d. *Scientific Language*, in which the word connections, at least for the greater part, depend upon explicit agreement or prescription : the language of laws and regulations, that of financial relations, the language of technology and science in the narrow sense ;

e. *Symbolic Language*, comprehending the logical systems which depend exclusively upon pre-established substitution formulas (axioms, postulates, proposizioni primitivi) regarding the symbols employed. (Whether these substitution formulas are provided in linguistic form or not.) Mathematical logic belongs here along with that part of non-applied mathematics which has been brought into pasigraphic form or which can be brought into such a form. On this level of language, there is little talk of meaning in the sense specified above, since in general an effect on the hearer is intended only if the symbolic language images are inserted in scientific or utility language.

At the point of inception for this theory of language gradations outlined by Mannoury is the problem of meaning. For it is taken as a generally accepted underlying precept that language can never be successfully used as a means of creating an adequate representation of reality, i.e. nomenclature theories are rejected out of hand, as is the assumption that the structure of sentences corresponds to the structure of the world. Instead, the meaning of words rests on the effects they produce, either as anticipated by the speaker or as experienced by the hearer (cf. Mannoury et al. 1919a). But here the nature of language results in meaning's being changeable and relative to such a degree :

that one can no longer discover the function of a certain *word* or even of a particular *expression* and closer analysis of the function elements can only be applied for the particular *linguistic act*, in which we must also separate the analysis for the speaker and the hearer (« speaker's meaning » and « hearer's meaning ») (Mannoury 1948 : 55 ; 1970a : 40f).

So how is it possible to speak generally of a word's meaning, as any dictionary must needs do ? Mannoury argues the matter (Mannoury et al. 1919a : 7) by saying that the degree to which meaning can change — its relativity — varies considerably. It varies as a function of the extent to which human acts are differentiated in response to the underlying human needs. The degree to which acts are differentiated is paralleled by a differentiation in language and, to this end, by greater stabilizing

of language¹¹. This view of Mannoury, with all his intended phylogenetic and ontogenetic ramifications, has a dual justification extending, on the one hand, from the close connection between ordering the world by means of language and the associated repertory of possible acts, to the need to adjust the linguistic coordination of concerted action involving more than one participant to the complexity of such acts, on the other. In this sense, the linkage between differentiation and stabilization of language is social in nature, and involves, as is shown below, social differentiation in language based on stabilizing measures such as custom, convention, or rules.

Mannoury distinguishes between « external » and « internal » forms of stabilization. The former category includes writing and printing, while the latter refers to the organization of language as a factor in defining the situation in which one word's meaning relates to that of other words. The reference here is not to grammar, and certainly cannot be construed as referring to grammar alone (nowhere in the entire text is the term « grammar » used). The reference is twofold, encompassing both « genuine definitions » (Mannoury et al. 1919a : 7) in the realm of science and all word clusters or word connections rooted in custom, common usage, and tradition. — We shall return presently to the critically important idea of differentiation and stabilization of meanings through word clusters.

Growing differentiation and stabilization of language is understood by Mannoury to extend to both ontogenetic and phylogenetic aspects. Thus, « purely 'basic words' » are found, albeit in limited numbers, in children's speech (Mannoury et al. 1919a : 7). These are similar to the first word class in Lambert's work, since a child does not come to know these words and their meanings indirectly by way of other words, but solely by means of ostension and imitation. This is a case where auditive word images are directly connected to (associated with) ideas of an extralinguistic sort (cf. Mannoury 1930 : 24). In addition, in the first stages of language, children soon use words whose meanings are facilitated by basic words (Emotive Language). That is to say, the auditive image of a word on this second level is associated with word images of the first level (which therefore correspond roughly to

11. The similarity to the arguments presented by Bühler (1927 : 50) regarding the « Quellpunkt der Semantik bei Tier und Mensch » [the wellspring of semantics in animals and humans] will be noted.

Lambert's third class). However, clearly discernable ties between words with contrasting meanings also occur here. Before long, word groupings used by adults which exhibit causal, temporal, and oppositional underpinnings come to influence the child's language. With this influence comes an increasing stability in vocabulary and meaning until finally a Utility Language is achieved whose form is so fixed that only subsequent reflection on and perception of language reveal the mutability and relativity of meaning. Regarding the phylogenetic aspect, Mannoury sees a parallel progression from the « poetic languages of the dim and distant past » to the highly articulated and systematic languages used in more recent natural sciences and jurisprudence.

Let us return to the problem of differentiation and stabilization of meaning. It seems that the range of word and conceptual associations¹² connected either with words or larger components of linguistic acts in the minds of speakers or hearers are used as the defining criterion of linguistic levels (cf. Mannoury 1938b : 372). Using this criterion, it is possible to arrive at a relatively clear definition only for the lowest and uppermost linguistic levels, namely that words of Basic Language are coupled not at all to other auditive (or visual) word images (or complexes of word images), while words of Symbolic Language are coupled exclusively to such word images. Thus, the word image consisting of the name of someone known to us personally is connected directly and at least primarily with *one* non-auditive idea, while the class name « table » is connected with the idea of *a number* of things we associate with the word image « table ». This can be contrasted with a different example, such as a mathematical term, which is associated with the auditive or visual « word images » that make up its definition, i.e. other mathematical terms, which are in turn themselves associated with other word images and so on, so that in principle association chains reaching all the way down to the Basic Language can be traced by means of reconstruction. Turning to Emotive Language, one finds the intrinsic propensity for Utility Language to develop to be based on the regular re-occurrence of certain sounds or sound complexes in conjunction with certain situations leads to two different kinds of associations. First, the heard/spoken sounds are associated with images

12. A « concept » as defined by Mannoury is the psychological pendant to a « word family ». He takes the term « word family » to mean a group of words or expressions which have equivalent objectives or functions.

of these sounds found in memory, which are in turn themselves linked to sound images that can be remembered. In addition, the sounds are associated with recalled images of corresponding situations. Thus, associations unrelated to the context are found to occur between the speaker's word images. Such W-W associations serve to stabilize meaning (remember, too, the « flywheel effect » they have on accompanying thoughts),

because the idiom of a member of a social group is more strongly and more directly dependent on the « group influence » exercised by the other members of the group than it is in the case concerning his other thought contents : we are restricted after all to the linguistic means which we have taken over from our environment and can (generally speaking) add to or subtract from it very little. This is also the reason that the W-W-association nets referred to are more subject to group consideration and why one can speak justifiably in the more general sense of distinct and distinguishable « linguistic levels » (Mannoury 1948 : 55 ; 1970a : 41).

The name given by Mannoury (1934 : 319 ; 1948 : 57f) to the existence or development of independent associations between word images of the speaker/hearer is « the formalization of language ». Here Mannoury takes « formalization » to be any act which establishes, defines, or creates units. It is always dependent on (and relative to) the underlying purpose and the person engaging in the formalization (cf. Schmitz 1990a : 234, 247). Linguistic or other symbolic means are used to indicate and maintain formalizations. Applied to language, this means that the association nets with their stabilizing effect on language usage and meaning have at the same time a differentiating role and correspond to different human needs as a function of the linguistic level, serving to meet specific social objectives for which they are uniquely appropriate. The function of formalization is met not only by axioms and definitions, but also by verbal explanations, offering synonyms and approximations, antonyms, the overall linguistic context, « conversational tone », and the type of communication situation (cf. Mannoury 1948 : 55-60 ; 1970a : 41-46), etc. With regard to the increasingly strict formalizations and the means by which they are achieved, accompanied by decreasing spontaneity in usage and the resulting changes in meaning it entails, differences between linguistic levels are but differences in degree.

Means and forms of formalization uniquely characteristic of the various linguistic levels lead to — in a manner resembling Waismann's findings — different logical styles which take the form of linguistic mannerisms consisting of fixed W-W associations. This is quite in

keeping with our previous description of linguistic levels. Nonetheless, it may be informative to illustrate this point by considering the lower levels. The « traditional classifications in terms of contraries », found to occur even in Emotive Language but firmly entrenched in Utility Language, are the fixed linguistic manifestations of thinking in pairs of opposites. In the case of negations, e.g. « not large », « not permitted », « not good », two basically indicative elements of meaning are involved which are placed in a mutual relationship by the linguistic method of disjunction, i.e. « large » or « small », « permitted » or « prohibited », « good » or « bad ». Often the affective or volitional values of what is expressed differs hardly at all from the negative form to the positive form. This is so because both forms place the disjunctive pair's counter-term at the center of attention (« small », « prohibited », « bad »). In these instances of what is known as « choice negation » (cf. Mannoury 1934 : 333f), the principle of the excluded middle is adhered to far less strictly¹³ than in the case of « exclusion negation », if it is followed at all. In cases of exclusion negation (« That is impossible », « That does not exist », « I am not hitting you »), a well-defined disjunction either is absent, or at least is not the focus of attention. However, in such cases clearly emotional components of meaning are in the foreground which by nature have the quality of a rejection or inhibition (cf. Mannoury 1934 : 333). Something is rejected or denied, but no alternative is given or implied. Nevertheless, utilizations of exclusion negation as a figure of a contradiction (albeit not a formal one) is the basis of the « linguistic form of a generality » (Mannoury 1934 : 334). Among such forms and generalities are included expressions such as « infinite », « eternal », « immortal », « reality », « empty », « I », « death », etc. At the level of mathematical language, the linguistic form in question is encountered in the concepts of the empty set and the infinite set, the meaning of which is purely formal, much as at other linguistic levels « immortal » has a purely emotional meaning. So, it is useless to discuss the question whether it is true that man is immortal or whether the actual infinite exists (cf. Heijerman 1990 : 266).

13. When introducing a strict differentiation between antonymy and « complementarity », Lyons (1969 : 460ff) is not describing the logic of daily colloquial speech (such as embodied in the Utility Language). That is : Mannoury builds a case based on the analysis of concrete linguistic acts, while Lyons analyzes findings derived from extracommunicative reflections on language !

The nature and progression of significant linguistic levels have been found to conform in large measure to the levels defined by Tönnies, but the similarities are even greater when we direct our attention to the various components of meaning which characteristically predominate at different linguistic levels¹⁴. From an ontogenetic (and phylogenetic) viewpoint, Mannoury (1938a : 182) considers the passage from the first two stages to the Utility Language to be « the transition from the purely volitional and emotional language of children to the partially indicative and affirmational language of adults », with Scientific Language then seen to be purely indicative and Symbolic Language purely formal or formalistic. In other words, as the transition is made from the lower to higher linguistic levels, the emotional and volitional components of the meanings of words and word complexes decreasing in generality and become simpler in their connectivity to the most intimately experienced feelings. All the while, the indicative component of meaning and consequently the stability of meaning attached to words or word clusters increases, resulting in a lower risk of misunderstanding. Ultimately, at the level of Symbolic Language, the term meaning in its strictest sense no longer applies, and there is no meaning function left except a formal one¹⁵. Still, some portion of emotional and volitional meaning components, be it ever so small, is retained as an element of linguistic acts at all linguistic levels. An emotional element of expectation is associated even with purely mathematical linguistic acts (cf. Mannoury 1934 : 319 and elsewhere), or at least an « aesthetic value » or a « sportive value » (cf. Heijerman 1990 : 265).

The implications for communication between people is that progressing from the lower to the higher linguistic levels, two things occur. For one thing, the risk of a misunderstanding's occurring is greatly reduced. On the other hand, increasingly rigid exclusion of emotions, primary feelings, and wants precludes their being communicated (cf. Mannoury et al. 1919b). The resulting drastic decline in individual features goes hand in hand with increasingly depersonalized and formalistic social relations. But that also means that

14. See Schmitz (1990a : 220 ff) on the impact of Tönnies' *Philosophical Terminology* on the emergence of the significant movement in the Netherlands.

15. Along the same lines, Mannoury states « that it is only appropriate to speak of formalism or formal mathematical language if the hearer's reaction to the speaker's linguistic act has the least possible connection to specific persons and surrounding circumstances » (Mannoury 1934 : 338f).

communication which makes use of higher linguistic levels must presuppose that growing numbers of primary concepts and shared assumptions¹⁶ must be available to all participants in the communication process, without being able to address them within the confines of that particular linguistic. Thus, a collection of laws such as the Civil Code may contain a whole catalog of rules of evidence, but it is in no position to account for the origins and extent of human certainty. Only in Emotive Language can the strength of a conviction be expressed (cf. Mannoury et al. 1919a : 12).

It should, however, be kept in mind that the identification of linguistic levels is strictly an analytical undertaking and therefore does not define language strata whose limits cannot be transgressed during the course of actual communication processes. Indeed, concrete linguistic acts generally contain words and word groupings which, upon closer analysis, are found to belong to different linguistic levels. Also, words which sound identical may represent a kind of scientific or technical term for one party in the conversation, but be part of Utility Language as far as the other party is concerned. There are numerous examples of words which are integral parts of specialized terminology and in the minds of specialists are associated with a certain formal definition, but also are frequently encountered in the Utility Language, where in many cases they are not imbued with clearly delineated indicative meanings, and where their use as often as not is governed solely by common usage based on linguistic patterns or habits. For example, animals are commonly said to be guided by *instinct*, whereas man is guided by *reason* (cf. Mannoury 1938b : 373). But the written or spoken words themselves bear no clear markers identifying the linguistic level to which they belong. Also, situational or contextual clues may also not provide adequate indications of the linguistic level of the words as used by their author or speaker. So discrepancies between assignments of the words to particular linguistic levels by the speaker and hearer are a significant source of misunderstanding. By the same token, an analytical theory of language gradations is a potentially powerful aid for analyzing linguistic acts and communication processes. The significians found a further application of their analytical language

16. Thus, Scientific Language presupposes the existence of an objective and perceivable reality which is equally accessible to and shared by all individuals.

gradation to basic research on the theory of science and epistemology (cf. Mannoury 1934 for one).

Before closing, it must be noted that the kind of analytic language gradation described above, while it is the one expounded on in the most detail, is not the only one targeted by signficians (cf. Mannoury 1949 : 39-45). By changing the criteria for gradation, one arrives at other kinds of linguistic levels. Purely terminological gradation will serve as an example of a gradation viewed by the signficians (cf. van Dantzig 1948 : 338f) as unrelated to phenomena which are actually discussed by drawing upon the respective terminologies. It follows that the terminologies can be transformed from one into another, but on the other hand, that mixing different terminologies will create pseudo-problems. Along these lines, a differentiation is made between a) physicalistic terminology or « It-Language », b) autopsychological terminology or « I-Language », c) heteropsychological terminology or « He-Language », and collective psychological terminology or « We-Language ». Languages c and d may be viewed as intermediate forms between a and b, while everyday activities are conducted in a « Mixed Language » compared to these analytically distinguishable terminologies.

c) Synthetic Language Gradation

In contrast to analytical language gradation, the synthetic variant is not derived from observation of concrete linguistic communication processes. Instead, it is an artificial construct, usually for purposes relating to epistemology or the theory of science. The groundwork for the synthesis lies in words or technical terms (regardless of how well they are defined), which from an analytic standpoint belong to one of the higher linguistic levels (cf. Mannoury 1938b : 374 ; 1953 : 15). As part of the synthesis, these terms are then taken as basic words without regard to their original import or definition. For example, for the synthetic gradation in « Psychological Analysis of Mathematical Thought » (cf. Mannoury 1937), Mannoury designates the terms « psychological elements » and « psychological associations » as his point of departure and assigns them the status of « basic terms », in order to use them as the groundwork on which he proceeds to construct a terminology, which ultimately crosses over into the commonly used terminologies (that of the « I-Language », « It-Language », etc.). The erection of this structure, much like analytical language gradation, also proceeds in stages, arriving at derivations one by one, from the

subjective psychological terminology to the objective psychological terminology, the language of physics, biology, sociology, and so on. Each of these constructed or derivative terminologies or languages is likewise called a linguistic level.

It is safe to say that synthetic language gradation is essentially a logical and formalistic method that aims at terminological reconstruction. When this calls for providing a connection to commonly used terms, only the extracommunicative reflections of the person engaging in scientific pursuits as to which meanings or concepts are, or are capable of being associated with these terms are of interest, and not those meanings or concepts which others engaged in concrete linguistic acts may assign to the terms. Analytic linguistic gradation, in contrast, is empirically oriented. The empirical range which falls within its scope, at least in theory, covers all concrete linguistic acts which can be observed to occur in a given society. The meanings of such linguistic acts which have any relevance for analytic gradation are determined in a communicative and not an extracommunicative manner. That is to say, meanings which the linguistic acts as a whole or parts thereof have for the participants are dealt with, as are the processes used by participants themselves to create meanings while engaging in linguistic acts. In this respect the signific understanding of semantics clearly differs from the view of semantics commonly found in modern linguistics and is much closer to the approach which Ungeheuer (1987 : 70ff) has called « communication semantics ».

Generally speaking, nowhere has the contrast between the fields of linguistics and significs been formulated more clearly and accurately than by the linguist and philosopher H.J. Pos (1898-1955), a colleague of Mannoury's at the University of Amsterdam :

The contrast between language viewed as a special sort of thing in and of itself and language viewed in the concrete context of human action is hereby reduced to a contrast between conflicting points of view. Significs *focuses* on one single aspect, namely the linguistic act and its effects. Linguistics *focuses* on one single factor which is an indispensable tool in that concrete context, in its own right, and that is language (Pos 1933 : 17)

RÉFÉRENCES

- Bergmans, L.J.M. (1991) « Otto Friedrich Gruppe as a Precursor of the Significians », in Heijerman/Schmitz (1991), 89-104.
- Brouwer, L.E.J. (1946) « Synopsis of the Signific Movement in the Netherlands. Prospects of the Signific Movement », *Synthese*, 5, 201-208.
- Brouwer, L.E.J., Clay, Jacob et al. (1933) *De uitsprakkingswijze der wetenschap*, Groningen/Batavia : P. Noordhoff N.V.
- Bühler, K. (1927) *Die Krise der Psychologie*, Jena : Fischer.
- Dantzig, D. van (1948) « Significa ». *Tien jaren. Kroniek van de belangrijkste staatkundige en wetenschappelijke feiten in den jaren 1938-1948*. Samengesteld door de redactie van de Winkler Prins. Supplement bij de 5e druk van de Winkler Prins Encyclopedie, Amsterdam/Brussels : Elsevier, 337-341.
- Eeden, F. van (1897) « Redekunstige grondslag van verstandhouding », in Eeden Frederik van. *Studies. Derde reeks*, Amsterdam : W. Versluys, 5-84.
- Gruppe, O. F. (1914) *Philosophische Werke I. Antäus*, Edited by Fritz Mauthner, Munich : Georg Müller.
- Heijerman, E. (1990) « Relativism and Significs : Gerrit Mannoury on the Foundations of Mathematics », in Schmitz (ed.) (1990), 247-272.
- Heijerman, E. and Schmitz, H. W. (eds.) (1991) *Significs, Mathematics and Semiotics. The Signific Movement in the Netherlands*, Münster : Nodus.
- Lambert, J. H. (1764) *Neues Organon oder Gedanken über die Erforschung und Bezeichnung des Wahren und dessen Unterscheidung vom Irrthum und Schein*, Leipzig : Johann Wendler. (Reprint of the *Philosophische Schriften* [Philosophical Works] edited by Hans-Werner Arndt, Vol. I/II, Hildesheim : Olms.).
- Lyons, J. (1969) *Introduction to Theoretical Linguistics*, Cambridge : Cambridge University Press.
- Mannoury, G. (1930) « Een inleiding tot de significs, inzonderheid met het oog op het onderwijs in de wiskunde », *Euclides* 7 (1), 1-61.
- Mannoury, G. (1933) « De significse methode van taal- en begrippenonderzoek », in Brouwer/Clay et al. (1933), 1-15.
- Mannoury, G. (1934) « Die significschen Grundlagen der Mathematik ». *Erkenntnis*, 4 (4/5), 288-309, 317-345.
- Mannoury, G. (1937) « Psikologia analizo de la matematika pensmaniero (Psychologische analyse van de wiskundige denkvorm) », *Synthese* 2 (10), 406-418.

- Mannoury, G. (1938a) « Signifische Analyse der Willenssprache als Grundlage einer physikalistischen Sprachsynthese », *Erkenntnis* 7, 180-188, 366-369.
- Mannoury, G. (1938b) « Enige opmerkingen over taalgradatie », *Synthese* 3 (9), 372-375.
- Mannoury, G. (1947) *Handboek der analytische signifika. Deel I. Geschiedenis der begripskritiek*, Bussum : F.G. Kroonder.
- Mannoury, G. (1948) *Handboek der analytische signifika. Deel II. Hoofdbegrippen en methoden der signifika. Ontogenese en fylogeneze van het verstandhoudingsapparaat*, Bussum : F.G. Kroonder.
- Mannoury, G. (1949) *Signifika. Een inleiding*, Den Haag : N.K. Servire.
- Mannoury, G. (1953) *Polairpsychologische begripssynthese*, Bussum : F.G. Kroonder.
- Mannoury, G. (1970a) « Analytical Significs », *Methodology and Science* 3 (1/2), 1-65.
- Mannoury, G. (1970b) « Synthetic Significs », *Methodology and Science* 3 (3/4), 53-142.
- Mannoury, G., Brouwer, L.E.J. et al. (1919a) « Signifisch taalonderzoek », *Mededeelingen van het Internationaal Instituut voor Wijsbegeerte te Amsterdam* 2, 5-29.
- Mannoury, G., Brouwer, L.E.J. et al. (1919b) « Onderscheid der taaltrappen ten aanzien van de sociale verstandhouding », *Mededeelingen van het Internationaal Instituut voor Wijsbegeerte te Amsterdam* 2, 30-32.
- Nerlich, B. (ed.) (1988) *Anthologie de la linguistique allemande au XIXe siècle*, Münster : Nodus.
- Pos, H.J. (1933) « De taal als symbolische functie », in Brouwer/Clay et al. (1933), 16-29.
- Schächter, J. (1935) *Prolegomena zu einer kritischen Grammatik*, Vienna : Julius Springer.
- Schächter, J. (1938) « Der Sinn pessimistischer Sätze », *Synthese* 3 (5), 223-234.
- Schmitz, H. W. (1984) « Scarle ist in Mode, Mannoury nicht : Sprech- und Hörakt im niederländischen Signifik-Kreis », *Zeitschrift für Semiotik* 6 (4), 445-463.
- Schmitz, H. W. (1985a) « Victoria Lady Welby's Significs : The Origin of the Signific Movement », in Welby (1985), ix- cccxxv.
- Schmitz, H. W. (1985b) « Tönnies' Zeichentheorie zwischen Signifik und Wiener Kreis », *Zeitschrift für Soziologie* 14 (5), 373-385.
- Schmitz, H. W. (1986) « Sind Worte für bare Münze zu nehmen ? Ferdinand Tönnies über Geld als Zeichen und Zeichen als Werte », *Kodikas/Code* 9 (1/2), 137-154.
- Schmitz, H. W. (1988) « Introduction : Ferdinand Tönnies (1855-1936) », in Nerlich (ed.) (1988), 215-217.

- Schmitz, H. W. (1990a) *De hollandse significa. Een reconstructie van de geschiedenis van 1892 tot 1926*, Assen/Maastricht : Van Gorcum.
- Schmitz, H. W. (1990b) « Frederik van Eeden and the Introduction of Significs into the Netherlands : From Lady Welby to Mannoury », in Schmitz (ed.) (1990), 219-246.
- Schmitz, H. W. (1991a) « Sprache versus Sprechen. Beitrag zu einer Problemgeschichte der Sprachwissenschaft », *Beiträge zur Geschichte der Sprachwissenschaft* 1 (1), 3-17.
- Schmitz, H. W. (1991b) « Empirical Methods of Signific Analysis of Meaning : Transformation and Exhaustion of Linguistic Acts », in Heijerman/Schmitz (1991), 147-159.
- Schmitz, H. W. (ed.) (1990) *Essays on Significs. Papers presented on the Occasion of the 150th Anniversary of the Birth of Victoria Lady Welby (1837-1912)*, Amsterdam/Philadelphia : John Benjamins.
- Schmitz, H. W. (Ms.) « Das Erzählen von Träumen als kommunikationstheoretisches Problem. Über mannigfaltige Wirklichkeiten, mittelbare Mitteilung und Kommunikationssemantik » (Ms., Bonn 1991).
- Schütz, A. (1967) *Collected Papers I : The Problem of Social Reality*, Edited and introduced by Maurice Natanson with a preface by H.L. Breda, The Hague : Martinus Nijhoff.
- Thiel, C. (1991) « Brouwer's Philosophical Language Research and the Concept of the Ortho-Language in German Constructivism », in Heijerman/Schmitz (1991), 21-31.
- Tönnies, F. (1899/1900) « Philosophical Terminology (I.-III.) (Welby Prize Essay) », *Mind* N.S. 8 (31/32), 289-332, 467-491 ; 9 (33), 46-61.
- Tönnies, F. (1906) *Philosophische Terminologie in psychologisch-soziologischer Ansicht*, Leipzig : Th. Thomas.
- Tönnies, F. (1988) « Terminologie philosophique du point de vue psychosociologique (Ce traité a remporté le Prix Welby) (1906) », in Nerlich (ed.) (1988), 219-228.
- Ungeheuer, G. (1987) *Kommunikationstheoretische Schriften I : Sprechen, Mitteilen, Verstehen*, Edited and introduced by Johann G. Juchem, Aachen : Rader.
- Ungeheuer, G. (1990) *Kommunikationstheoretische Schriften II : Symbolische Erkenntnis und Kommunikation*, Edited and introduced by H. Walter Schmitz, Aachen : Alano.
- Waismann, F. (1946) « The Many-Level-Structure of Language », *Syntese* 5 (5/6), 221-229.
- Waismann, F. (1968) *How I See Philosophy*, Edited by R. Harré, London/Melbourne/Toronto/New York : Macmillan/St Martin's Press.

- Waismann, F. (1985) *Logik, Sprache, Philosophie*. With a preface by Moritz Schlick, edited by Gordon P. Baker and Brian McGuinness with assistance from Joachim Schulte, Stuttgart : Reclam.
- Welby, V. Lady (1985) *Significs and Language. The Articulate Form of Our Expressive and Interpretative Resources*, Edited and introduced by H. Walter Schmitz, Amsterdam/Philadelphia : John Benjamins.

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