Histoire Epistémologie Langage 41/1 (2019), 131-157 © SHESL/EDP Sciences https://doi.org/10.1051/hel/2019001

More on formal feeling/form-feeling in language sciences

Heinrich Gomperz's concept of "formal logical feeling" (logisches Formalgefühl) revisited*

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Abstract

My aim is to revisit the psycholinguistic concept of "formal logical feeling" (logisches Formalgefühl), as it was elaborated by the Austrian philosopher Heinrich Gomperz in the early 20th century. This article is the continuation of some recent studies that have helped to reevaluate the place of "formal feeling" or "form-feeling" in language sciences. By "formal logical feelings", Gomperz referred to affective processes by which means one apprehends the "form" of language, that is, its morphosyntactic properties. Here I propose a detailed analysis of his conception of the nature, function, origin, and taxonomy of this category of feelings, while placing his developments in their intellectual context and in a genealogical perspective.

Keywords

Heinrich Gomperz, formal feeling, form-feeling, linguistic form, semasiology, psycholinguistics, formalism, structuralism

Résumé

Je m'attache ici à revisiter le concept psycholinguistique de «sentiment logique formel» (logisches Formalgefühl) tel qu'il a été élaboré par le philosophe autrichien Heinrich Gomperz au début du xx^e siècle. Cet article s'inscrit dans la continuité de certains travaux récents avant permis de réévaluer la place du «sentiment formel» ou « sentiment de forme » dans les sciences du langage. Par « sentiments logiques formels », Gomperz désigne les processus affectifs au moyen desquels nous appréhendons la «forme» du langage, c'est-à-dire ses propriétés morphosyntaxiques. Je propose une analyse détaillée de la manière dont il conçoit la nature, la fonction, l'origine et la taxinomie de cette catégorie de sentiments, en prenant soin de replacer ces développements dans leur contexte intellectuel et dans une perspective généalogique.

Mots-clés

Heinrich Gomperz, sentiment formel, sentiment de forme, forme linguistique, sémasiologie, psycholinguistique, formalisme, structuralisme

* I would like to thank Valérie Raby, the editor-in-chief of the journal, for having supported my request to submit an article on a rather unusual topic; the two anonymous referees who, thanks to their sagacious comments and constructive criticisms, permitted me to significantly increase the quality of the manuscript; and Friedrich Stadler and Martin Seiler, who encouraged me to pursue the study of Gomperz and pathempiricism and with whom I discussed important issues regarding semasiology.

Introduction

The interest in "form-feeling" or "formal feeling" has been recently revived in the history of language sciences, and, more generally speaking, in the history of psychology and aesthetics. This revival was initiated by Jean-Michel Fortis in two papers published in 2014 and 2015 (Fortis 2014, 2015), in which he discussed the issue of form-feeling in Sapir's theory of language and its presumptive relation to the German aesthetic studies on Formgefühl, and by the author of this article, who showed, independently of Fortis' conclusions, how from the mid-19th century onwards, the so-called Herbartian school of affective psychology developed an early research program on formal feelings (Romand 2015, Romand 2018a). In a book chapter to be published soon (Romand, forthcoming^a), I tried to specify the typology and the genealogy of what psychologists, language theorists, aestheticians, and art historians, between the mid-19th and early 20th centuries, called "formal feelings" or "form-feelings". As I highlighted, the vast majority of the authors in question were Germanspeaking scholars, who used two types of expressions: on the one hand, "Formgefühl", and, on the other hand, "formelles Gefühl", "formales Gefühl", "Formal-Gefühl", "Formal-gefühl", or "Formalgefühl", which I proposed to render into English, respectively, as "form-feeling" and "formal feeling". In this regard, it is worth noting that these two expressions are encountered in the English-speaking literature of that period. That is why I refer here to the corresponding studies collectively as dealing with the concept of formal feeling/ form-feeling. The fact is that what was meant by formal feeling or form-feeling proves to be quite different according to the disciplinary fields concerned, the authors, and sometimes the various publications by the same author (Romand, forthcoming^a). Nevertheless, despite this polysemous character, and beyond merely terminological concerns, there are good reasons to speak of formal feeling/form-feeling as one definite concept. First, as the name indicates, formal feelings and form-feelings basically have to do with the issue of *form* (German: Form), that is, in the case in point, with the form of what is experienced in consciousness. Whatever they may be, they are supposed to be properties of a relational, organizational, or structural nature that contribute to unify experientially a plurality of mental entities. Second, all studies on formal feeling/form-feeling have in common the fact of relating more or less directly to affective psychology (German: Gefühlspsychologie) as it developed in Germany from the early 19th century onwards (Romand 2015, 2017). Here

feeling (German: Gefühl)¹ refers to a category of mental state that has a definite psychological meaning in the context of that period.

In the present article, I analyze the ins and outs of the concept of formal feeling as it was theorized by the Austrian philosopher Heinrich Gomperz in the second volume of his Weltanschauungslehre (Gomperz 1908, p. 220-289) by insisting on its significance within the framework of his theory of language and by discussing it in its contextual and genealogical dimensions. As I suggested in my abovementioned book chapter (Romand, forthcoming^a), Gomperz was among those who introduced the expression "formal feeling" in language sciences, and, as I intend to demonstrate here, he was perhaps the first to make formal feeling an authentic linguistic concept. More specifically, his investigations concern formal logical feelings (logische Formalgefühle), a category of affective states that Gomperz identified in his "semasiology" (Semasiologie), in other words, the doctrine of meaning (Bedeutung), which constitutes the core of his psychological theory of the statement. As a linguistic concept, Gomperz's formal logical feeling proves to be substantially different from Sapir's form-feeling. Whereas for Sapir, the formfeeling reflected the grasp of absolutely specific cultural patterns, of which language was a part (Fortis 2014, 2015), Gomperz, who endorsed a radically

1 In the 19th-century German psychological tradition, which was still prevailing when Gomperz wrote his Weltanschauungslehre, "Gefühl" was an unambiguous term referring to a definite constitutive entity of the mind. German psychologists regarded Gefühle, that is, feelings, as the mental states specifically underlying the manifestation of what they often called "das Fühlen", that is, using the terminological standards of current psychology, "affectivity". Until the early 20th century, Gefühle were defined as evaluative mental properties that, unlike representations (Vorstellungen) and their elementary components, sensations (Empfindungen), are not apprehended in the form of definite contents of consciousness. They were typically conceived as metacognitive factors whose function is to alter the phenomenological or semantic significance of the representational/sensory processes that they relate to (cf. Romand 2015, 2017). Moreover, it is worth highlighting that, in the 19th-century German psychological tradition, "Gefühl" was a generic term that contrasts with "Affekt" and "Stimmung", which both refer to specific dimensions of affectivity (cf. Romand 2015, 2017). Significantly, the adjectivized form "Gefühls-", which was common in the writings of that time, is a term that has to do with affectivity in general and therefore should be translated into English as "affective", in accordance with the terminology in use today. It is encountered in many expressions such as "Gefühlspsychologie", "Gefühlsleben", "Gefühlszustand", "Gefühlspsychologie", "Gefühlsleben", "Gefühlszustand", "Gefühlspsychologie", sprozess"/"-vorgang", etc., which are adequately translated as "affective psychology", "affective life", "affective state", "affective process", etc. (many English expressions that are commonly used by modern psychologists). Regarding "Affekt", it referred to an intensive manifestation of feelings in consciousness, correlatively with the appearance of organic sensations and definite expressive movements (cf. Romand 2017). In the late 19th and early 20th centuries, British and American psychologists usually translated "Affekt", not as "affect", but as "emotion" – an expression that, in my view, captures the essence of the psychological issue at stake, and that will be adopted in the present article (cf. in particular Stout 1901).

psycholinguistic view², identified formal logical feelings with a category of mental states that manifest themselves in the individual's consciousness in order to differentiate the grammatical forms of language—what he also called the "linguistic form" (Sprachform). "Formal" logical feelings, as he explained, contrast with "material" logical feelings (logische Materialgefühle), affective processes that specifically underlie the meaning of words, with which they contribute to the determination of logical statements. As we will see, Gomperz regarded the notion of formal logical feeling as the key element of his attempt at refounding the study of language on the basis of affective psychology.

My article is divided into six parts. First, I briefly review the few studies on the linguistic concept of formal feeling/form-feeling and insist on the necessity of revisiting Gomperz's contribution. Second, in line with my recent investigations in the field (Romand, forthcoming^a), I give a brief survey of the studies on formal feelings/form-feelings as they developed between the mid-19th and early 20th centuries by highlighting the existence of four major research programs. Third, I discuss Horwicz's pioneering research on "formal intellectual feelings" or "formal thought-feelings", which I show to be an important step in the making of the linguistic concept of formal feeling and a presumptive source of Gomperz's formal logical feeling. Fourth, I comment on Gomperz's feeling-based theory of language in general and on his psychological model of the statement in particular. Fifth, I discuss in detail Gomperz's developments on the nature, function, taxonomy, and origin of formal logical feelings. Sixth, I address the question of the genealogy of this concept by highlighting the close relationship between Gomperz's ideas and the views expounded by Horwicz, Lipps, and van Ginneken. In conclusion, I compare Gomperz's formal logical feeling with Sapir's form-feeling, while showing, more generally speaking, that the present study permits a reassessment of the place of the affective paradigm in the history of language sciences and casts new light on the genealogy of formalist and structuralist concepts.

1 REVISITING FORMAL FEELING/FORM-FEELING AS A LINGUISTIC CONCEPT

In a pioneering contribution entitled "Sapir's form-feeling and its aesthetic background", published in 2014 on the academic blog *History and Philosophy of the Language Sciences*, Jean-Michel Fortis drew attention to the importance

² One is forced to admit that the form-feeling, as defined by Sapir, is much less psychologically informed than Gomperz's formal logical feeling, a concept that the latter strove to elaborate in light of the most recent advances in affective psychology. On the other hand, Gomperz's formal logical feeling proves to be devoid of any social-cultural dimension: by maintaining that formal logical feelings are "singular" and not "typical" impressions, he explicitly denies them any collective value.

of the concept of form-feeling in linguistics (Fortis 2014): he showed how Sapir theorized the notion in the 1920s (e.g. Sapir 1921, 1927), echoing to some extent the German-speaking psycho-aesthetic tradition. In addition to discussing in detail what Sapir meant by "form-feeling", Fortis reviewed the various acceptations of the term *Formgefühl* proposed by Vischer (1873), Wölfflin (1888, 1946/1886), Lipps (1897), and Dessoir (1906) in the late 19th and early 20th centuries, suggesting the existence of an indirect terminological and conceptual transfer between these authors and American linguistics. He further developed his views in an article published in French in the present journal (Fortis 2015).

In a 2015 paper devoted to Theodor Waitz's theory of feelings (Romand 2015), I highlighted that the expression "formal feeling" (formales Gefühl) was used as early as 1849 by Waitz in his Lehrbuch der Psychologie als Naturwissenschaft (Waitz 1849, p. 301-333) to refer to a definite class of affective states and that the origin of the corresponding concept is to be found in Herbart's affective psychology (Herbart 1816, p. 51-52). In a further publication (Romand 2018a), I analyzed the concept of formal feeling as it was elaborated by the so-called Herbartian school of affective psychology, that is, basically, Waitz (1849) and later Nahlowsky (1862), and showed that it was remarkably influential until the early 20th century.

Fortis's and my own investigations give credence to the view that "formal feeling" or "form-feeling" was a polysemous expression used in a variety of domains, which all had in common the fact of being (more or less) closely related to affective psychology. In a soon-to-be-published book chapter (Romand, forthcoming^a), I demonstrated how popular the concept of formal feeling/formfeeling became between the mid-19th and early 20th centuries and tried to clarify its genealogy and typology. In particular, I showed that, during that period, formal feeling (Formalgefühl, formales Gefühl) was the subject of a specific research program in German-speaking language sciences. More specifically, I highlighted that the development of the "linguistic" paradigm of formal feelings should be credited to two scholars: a) Adolf Horwicz, who, without really having been a theorist of language, analyzed, in his 1878 book Analyse der qualitativen Gefühle, the involvement of "formal thought-feelings" (formale Denk-Gefühle) or "formal intellectual feelings" (intellektuelle Formalgefühle) in high-level cognitive processes (Horwicz 1878, p. 176-208); and b) Heinrich Gomperz, who, in the second volume of his Weltanschauungslehre, issued in 1908, made the socalled formal logical feeling (logisches Formalgefühl) an authentic linguistic concept (Gomperz 1908, p. 220-289). As I suggested in the above-mentioned

article, the concept of formal feeling, as theorized by Horwicz and Gomperz, proves to be something significantly different from Sapir's notion of form-feeling.

On the basis of the newest results, it is possible to specify a number of issues that have not been mentioned in Fortis's seminal papers on Sapir's form-feeling. Thus, it can be stated that a) the reflection on form and feeling in language sciences does not boil down to Sapir's contribution, but is a broader field of investigation that concerns a variety of linguistic issues; b) linguistic studies on formal feeling/form-feeling did not appear in the 1920s, but can be traced back to at least the late 1870s; and c) linguistic studies on formal/form-feeling were not pioneered in the field of American linguistics, but, in all likelihood, originate in the German-speaking psycholinguistic tradition. As I will demonstrate, formal feeling/form-feeling is a linguistic concept whose theoretical stakes and genealogy are more complex than initially suspected.

2 Studies on formal feeling and form-feeling (c. 1850-1930): A Brief Survey

In my book chapter "'Formal feeling' or 'form-feeling'. Typological and genealogical analysis of a concept between psychology, theory of language, aesthetics, and art history" (Romand, forthcoming^a), I highlighted the existence of three research programs on formal feeling/form-feeling within three major disciplinary fields. Here I aim to discuss each of them briefly, while identifying a fourth one. It is worth noting that all research programs in question emerged in Germany and that the vast majority of studies on formal feeling/form-feeling were performed by German-speaking scholars.

2.1 The Herbartian concept of formal feeling and its posterity

As stated earlier, research on formal feeling originates in the Herbartian school of affective psychology, that is, basically, Waitz (1849), who coined the expression and theorized the concept, and Nahlowsky (1862), who did much to popularize both the term and the concept inside and outside German-speaking countries (Romand 2015, 2018a, 2018b). The "Herbartian" paradigm of formal feelings was, by far, the most important and the most influential research program on formal feelings/form-feelings. By "formal feelings" (Formal-gefühle, formelle/formale/Formal-Gefühle/Formal-gefühle), the Herbartians referred to a class of affective states that, in contrast to "qualitative feelings" (qualitative Gefühle), relate, not to the content of representations, but to the way

in which they flow in consciousness. Here we are dealing with feelings such as expectation, satisfaction, deception, contrast, boredom, etc. that specifically correlate with the form (*Form*) of experience and that allow us at all times to confront what we are supposed to experience with what we are effectively experiencing.

Such a concept was taken up by many psychologists until the early 20th century, who sometimes reinterpreted it while using a different terminology (for review: Romand, forthcoming^a). Among the direct heirs of Waitz and Nahlowsky, it is worth mentioning John Dewey, who devoted a dozen pages of his *Psychology*, first issued in 1887, to formal feelings, which he also called "feelings of adjustment" (Dewey 1893, p. 262-274; Romand, forthcoming^a). In addition to having been the main theorist of formal feelings outside German-speaking countries, Dewey seems to have been the first (and one of the few) to use the expression "formal feeling" within the English-speaking context.

2.2 Formgefühl in aesthetics and Kunstwissenschaft

Fortis (2014, Fortis, 2015) was the first to analyze in detail the notion of *Formgefühl*, as elaborated by German aestheticians and art theorists, by reviewing a number of authors who were active between the late 19th and early 20th centuries. In my own contribution to the issue (Romand, forthcoming^a), I discussed and revised Fortis' developments by showing that the studies in question consisted in reality of two distinct research programs, which were carried out within the framework of psychological aesthetics and *Kunstwissenschaft*, respectively.

The first research program on *Formgefühl* was launched by Wundt in the early 1860s (Wundt 1863, p. 45-99). Wundt was, during almost half a century, the chief theorist of *Formgefühl* in the field of psychological aesthetics (Wundt 1880, p. 179-194, 350-352; 1896, p. 192-198; 1911, p. 115-187). By "form-feelings", he referred to a category of aesthetic feelings, specific to visual arts, that are elicited by the structural properties of the aesthetic object. In his later writings (Wundt 1896, 1911), he also called form-feelings "structure-feelings" (*Gestaltgefühle*) and subsumed them, along with "rhythmic feelings", under the class of "extensive" or "proportional" feelings³. Both the term and concept of *Formgefühl* were taken up

³ Interestingly, the psycho-aesthetic studies on form-feeling seem to originate in the investigations on aesthetic feelings carried out by the Herbartian school of affective psychology, namely, in Nahlowsky's research on "elementary feelings" and "group-feelings" (Nahlowsky 1862; Romand 2018a), and, more remotely, in Waitz's developments on the aesthetic effect of "forms" (Form) or "structures" (Gestalten) (Waitz 1849; Romand 2015). Once again, we see how decisive the Herbartians' contribution was in the making of the concept of formal feeling/form-feeling.

(more or less faithfully) from Wundt by Horwicz (1878, p. 137-175), Lipps (1903, p. 15-28)⁴, and Dessoir (1906, p. 162, 172-183)⁵.

The second research program on *Formgefühl* was typically carried out by historians and theorists of architecture, namely, the young Heinrich Wölfflin (1888; 1946/1886) and the today forgotten Adolf Göller (1887,1888). Both authors defined form-feeling as the expression of our capacity to appraise stylistic forms in accordance with the "national spirit" *(Volksgeist)* that is prevailing at a given historical period. Endowed with a collective significance, a definite form-feeling is likely to be modified correlatively with the changes that affect the language of forms *(Formsprache)*. As I highlighted (Romand, forthcoming^a), *Formgefühl*, as conceived by Wölfflin and Göller, seems to have much to do with contemporary studies in *Völkerpsychologie* (Eisler 1910).

2.3 Formal feeling and form-feeling in language sciences

Between the late 19th and early 20th centuries, the concept of formal feeling/form-feeling was also investigated within the framework of language sciences. As suggested in my above-mentioned book chapter (Romand, forthcoming^a) and as I intend to demonstrate in the present article, the "linguistic" paradigm of formal feeling/form-feeling consisted in reality of two different lines of research.

The first line of research evidenced is Sapir's theory of form-feeling. As shown by Fortis in his above-mentioned articles (Fortis 2014, 2015), Sapir discusses the notion of form-feeling in a variety of writings in the 1920s (e.g. Sapir 1921, 1927). "Sapir", Fortis explains, "uses the term *form-feeling* [...] to refer to the grasp of an unconscious linguistic or cultural and behavioral pattern [that] directs the subject of

- 4 As I emphasized (Romand, forthcoming^a), Lipps changed his mind about the psycho-aesthetic concept Formgefühl between the late 19th and early 20th century. In his Raumästhetik (Lipps 1897, p. 35-39), he regarded Formgefühl as the manifestation of an "unconscious mechanical knowledge", that is, as a surrogate for the mechanical processes that are supposedly necessary for the interpretation of spatial forms. Interestingly, he explicitly draws an analogy between Formgefühl and the psycholinguistic and social-cultural concept of Sprachgefühl (Fortis 2014). Such a conception of Formgefühl is, to some extent, reminiscent of that advocated by Wölfflin and Göller. Seven years later, in the first volume of his Ästhetik (Lipps 1903, p. 15-28), Lipps would abandon his early view in favor of a conception of Formgefühl that was more closely related to that endorsed by Wundt.
- 5 In his two publications on Sapir's form-feeling, Fortis mentions Robert Vischer's 1873 monograph, *Ueber das optische Formgefühl*, and describes Vischer as a pioneering theorist of form-feeling in the field of aesthetics. Nevertheless, as I demonstrated (Romand, forthcoming^a), Vischer did not specify what he meant by "Formgefühl"—an expression that, by the way, appears only twice in the text in question (title included). Although he was not the first to use the term, since Vischer did so earlier (Romand, forthcoming^a), Wundt can be regarded as the real founder of the aesthetic research program on Formgefühl. The fact remains that, in the decades after its publication, Vischer's monograph would be often mentioned by the theorists of psychological aesthetics, notably by Lipps (1907) and Wundt (1911), so that it can hardly be denied that it may have played a role in the spreading of the expression "Formgefühl" and, to some extent, of the corresponding concept.

a given culture and speaker of a given language to act and speak in accordance with the patterns set down in his social and linguistic environment" (Fortis 2014). Although "feeling" has here, at least implicitly, a psychological meaning, Sapir's developments have only indirectly to do with the psycholinguistic tradition. As stated earlier, Fortis hypothesized that the Sapirian concept (an expression) of form-feeling may derive from the psycho-aesthetic research program on Formgefühl—a filiation that, as I hope to highlight in the present study, is only one of several possibilities.

The second line of research was evidenced more recently but emerged earlier in the history. Here we are dealing with, to some extent, Horwicz's studies on "formal thought-feelings" (formale Denk-Gefühle) or "formal intellectual feeling" (intellektuelle Formalgefühle) (Horwicz 1878, p. 176-208) and, first and foremost, Gomperz's investigations on "formal logical feelings" (logische Formalgefühle) (Gomperz 1908, p. 220-289). Unlike Sapir's research on form-feeling, Horwicz's and Gomperz's developments on formal feeling are closely related to psychology and basically have to do with the logical structuring of statements. The nature of this linguistic concept of formal feeling and its possible origin is discussed at length in the rest of the article.

2.4 Gestalt quality as a feeling

Although not dealing here with the expressions "formal feeling" or "form-feeling", I would like to say a word about a research program that is directly related to the issue in question, namely, the feeling-based theories of *gestalt quality* (*Gestaltqualität*)—the kind of mental property that is supposed to structure conscious experience as an organized whole, as made popular by Ehrenfels in his famous 1890 paper (Ehrenfels 1890). As Petzoldt recalled (Petzoldt 1900, p. 300-301), Avenarius (1888-1890) can be regarded as the first to have interpreted gestalt-related issues in affective terms. From the late 1890s onwards, a number of scholars explicitly identified the concept of gestalt quality with a mental state of an affective nature. This was the case of Cornelius (1900), Lipps (1900), Petzoldt himself (1900, p. 279-281), and Gomperz, who devoted many pages to this issue in his *Weltanschauungslehre* (see in particular: Gomperz 1905, p. 223-232).

On the other hand, it is worth mentioning the developments on "total feeling" (*Totalgefühl*) that were proposed by Wundt from the early 1890s onwards (Wundt 1893, p. 497-501; Wundt 1896, p. 88, 186-188; Wundt 1910, p. 351-359, Wundt 1911, p. 178-181, 306-322, 500-502, 599-603). By "total feeling", Wundt referred to the unitary feeling that results from the fusion (*Verschmelzung*) of all affective states present at a given moment in consciousness and that contributes to make it a unified experience. Significantly, he insisted on the fact that total feeling is a mental

entity *sui generis*, irreducible to the sum of "partial feelings" (*Partialgefühle*)⁶ of which it is constituted – a view that directly echoes the above-mentioned studies on gestalt quality as a feeling. Wundt's ideas were taken up and systematized by his pupil Felix Krueger, who, in line with Cornelius and the other affective theorists of gestalt quality, made feeling the core concept of his *Ganzheitspsychologie*, interpreting on the basis of affective psychology what contemporary Gestalt psychologists tried to explain on the basis of abstract principles (see in particular: Krueger 1928).

2.5 To what extent did studies on formal feelings/form-feelings constitute a definite field of investigation?

As highlighted in the previous sections, studies on formal feelings and formfeelings, in addition to having developed at the crossroads of different disciplines (psychology, aesthetics, art history, Kunstwissenschaft, language sciences), were carried out within well-individualized research programs and resulted in various theoretical models. The contrast between studies on "formal feelings" and those on "form-feelings" is, in all likelihood, not merely a matter of terminology: as a rule, while the former deal with the fact of experiencing abstract relationships between mental contents, the latter have to do with the impression made on consciousness by definite perceptual structures. Neither of the two paradigms, however, proves to be uniform. This is particularly true of psycho-aesthetic research on Formgefühl, which was clearly divided into two lines of thought - that launched by Wölfflin and Göller and that epitomized by Wundt- which focused on the *individual* and the collective experience of visual forms, respectively. Moreover, as also discussed in the previous sections, there existed a number of studies that, while not speaking of "formal feeling" or "form-feeling", were nonetheless directly in keeping with the corresponding theoretical issues. This raises the question of whether, beyond the use of a common terminology and the existence conceptual analogies, studies on formal feeling/form-feeling can be treated as a coherent whole. Without denying the heterogeneousness of the research programs and theoretical models at stake, I maintain that the various investigations on feeling and form carried out between the mid-19th and early 20th centuries can rightfully be regarded as pertaining to one great field of investigation for at least two reasons. First, it should be kept in mind that, as the name indicates, the research in question relates to the issue of *feeling* (German: Gefühl), that is, to a well-defined concept within the psychological

⁶ In all likelihood, Wundt borrows the expressions "Totalgefühl" and "Partialgefühl" from Nahlowsky (1862; see also: Romand 2018a). Although Nahlowsky did not identify, as Wundt did in his mature writings, total feeling with a "supervenient" property resulting from the fusion of partial feelings, he clearly contributed to paving the way to the feeling-based research program on gestalt qualities. This reinforces the idea that the Herbartian school of psychology should be regarded as the ultimate source of all studies on formal feelings/form-feelings.

context of that time. In all cases, we are dealing with a mental entity by which means the subject is supposed to intuitively evaluate what he or she is currently apprehending in consciousness. Second, studies on formal feelings and form-feelings were all based on the same basic idea, that of the subjective awareness of an organized totality. Whatever they meant by "form", namely, a visual percept, a linguistic pattern, or a relational property, all theorists tried to explain, in the final analysis, how affective states contribute to structuring and unifying conscious experience.

3 Horwicz's pioneering studies on "formal thought-feelings" or "formal intellectual feelings"

The German philosopher and psychologist Adolf Horwicz (1831-1894) is nowadays almost forgotten and, with the exception of a short section in my above-mentioned book chapter on formal feeling/form-feeling (Romand forthcoming^a), no recent study has been devoted to him. He was nonetheless far from being unknown during his lifetime and even became famous for his multivolume book Physiologische Analysen auf physiologischer Grundlage, especially for the second half of the second part, entitled Analyse der qualitativen Gefühle (Horwicz, 1878), which was one of the most important monographs on affective psychology published in the second half of the 19th century. This work contains in particular remarkable developments on the role of feelings in thought and knowledge processes and, in fact, Horwicz devotes a significant part of his Analyse to these affective processes, which he called, in line with other contemporary psychologists, "intellectual feelings" (intellektuelle Gefühle) (Horwicz 1878, p. 176-225). In this respect, he appears as a prominent theorist of what modern philosophers of mind commonly refer to as "epistemic" or "cognitive feelings"8 (Romand, forthcoming^b).

Among intellectual feelings, Horwicz distinguishes between a) "material truth-feelings" (*materiale Wahrheits-Gefühle*), that is, "feelings that result from the act of thinking itself or that accompany it" (Horwicz 1878, p. 182); and b) "formal

⁷ The expression "intellektuelles Gefühl" was hardly new at Horwicz's time and had been encountered in Waitz (1849) and Nahlowsky (1862). German- and English-speaking authors commonly spoke of "intellectual feelings" until the early 20th century (e.g. Dewey 1893; Lipps 1902; Gomperz 1905; Wundt 1911).

⁸ Interestingly, Horwicz was, as far as I know, the first to use an expression equivalent to "epistemic" or "cognitive feeling" in German, namely, "Erkenntniss-Gefühl", or, more exactly, "materiales Erkentniss-Gefühl", an expression that he used as a synonym for "materiales Wahrheits-Gefühl".

⁹ The expression "Wahrheits-Gefühl" (or "Wahrheitsgefühl" or "Gefühl der Wahrheit") had already been used by the Herbartians as a synonym of "intellektuelles Gefühl" (Waitz 1849) or to refer to a subcategory of intellectual feelings (Nahlowsky 1862).

thought-feelings" (formale Denk-Gefühle), that is, feelings that are involved in the fact of comparing (Vergleichen) and distinguishing (Unterscheiden) high-level knowledge. Also referred to as "formal intellectual feelings" (intellektuelle Formalgefühle) and "feelings of unity" (Einheitsgefühle), the so-called formal thought-feelings are divided into two categories: the formal thought-feelings of comparison (feelings of comprehension, understanding, wit, etc.) and the formal thought-feelings of distinction (feelings of dullness, opposition, surprising astuteness, etc.). As Horwicz explains, such affective states are said to be "formal" (formal) because they "are affective formations that directly originate from the structure (Ineinsbildung) of representational elements and that have to do with the form (Form) of these structures, of which they constitute the particular way of appearing" (Horwicz 1878, p. 211).

Horwicz was, to the best of my knowledge, the first author who used the expression "formal feeling" specifically in reference to thought and knowledge, and thus, indirectly, language. Nevertheless, it should be kept in mind that his concept of formal thought-feeling or formal intellectual feeling has to do with logical and epistemological issues, not with linguistic concerns. It is nonetheless true that Horwicz's contribution marks an inflection in the use of the expression – a semantic change that directly foreshadows Gomperz's developments in the field of language sciences. It is worth noting that, although Gomperz did not refer to Horwicz as a source of inspiration for his own concept of formal logical feeling, he mentioned him once in the first volume of his *Weltanschauungslehre* (Gomperz 1905, p. 122) and listed his *Analyse der qualitativen Gefühle* among the references (*ibid.*, p. 414).

4 Gomperz's feeling-based theory of language

4.1 The place of language in Gomperz's pathempiricism

Heinrich Gomperz (1873-1942) was a leading figure of Austrian philosophy who became famous, in the 1900s, for having been the theorist of "pathempiricism" (*Pathempirismus*), a form of positivism directly inspired by Avenarius' empiriocriticism (Seiler & Stadler 1994). As I showed in a recent paper (Romand 2018c), pathempiricism was an attempt at refounding philosophy on the basis of affective psychology, Gomperz's aim here being to build a whole philosophical system, of which feeling (*Gefühl*) would be the core concept. Gomperz's pathempiricist project was to be implemented through his *Weltanschauungslehre*, a multivolume book that was partially written and published (Gomperz 1905, 1908) but that remained largely uncompleted. The second volume of the *Weltanschauungslehre*, devoted to the study of thought, or "noology" (*Noologie*), was intended to consist of two parts: a first part about the presentation of noological

issues and "semasiology" (*Semasiologie*), that is, the theory of thought contents, which was published in 1908 (*Gomperz 1908*), and a second part about "alethiology" (*Alethologie*), that is, the theory of thought values, which was never written.

Although Gomperz's approach was more that of an epistemologist than of a professional linguist, the second volume of his *Weltanschauungslehre* turns out to be directly in keeping with linguistic concerns. Gomperz also largely addressed the issue of language in the first, introductory volume, issued in 1905 (Gomperz 1905). Despite its incompleteness, the *Weltanschauungslehre* can be regarded as one of the most important and original contributions to language sciences of the early 20th century (Knobloch 1988, p. 308-310).

4.2 Gomperz's semasiology: the theory of the statement in light of affective psychology

In accordance with his pathempiricist program (Romand 2018c), but also in line with the developments of the German-speaking language science of his time (Romand forthcoming^b), Gomperz proposed a systematic investigation of the relationships between language and affectivity. As he explains in the first volume of his Weltanschauungslehre (Gomperz 1905, p. 344-394), feelings are, besides representations (Vorstellungen), one of the two basic categories of mental states: while representations correspond to the content (Inhalt) of "the experiential consciousness", feelings are said to be the "form" (Form)¹⁰ of it, which, by "reacting" against representations, permit one to "characterize" or "determine" them in a specific way. Here, by generalizing it, he takes up the idea, formulated by 19th-century German psychologists, that feelings are the metacognitive factors of the mind, whose function is to evaluate or appraise representational processes present in it (Romand 2015, 2016, 2017). In the wake of Avenarius (1890) and Lipps (1902), Gomperz regarded affective life as consisting of countless qualitatively defined elementary feelings – each of them being, by virtue of its own quality, the immediate expression of an elementary cognizance – which, by interacting with each other and reacting against representations, underpin the manifestation of all forms of knowledge (Romand, 2018c).

According to Gomperz, language, like any other manifestations of the mind's activity, should be explained first and foremost in affective terms: it can be the subject of "an analysis" or "a treatment based on affective psychology" (eine gefühlspsychologische Analyse/Bearbeitung). Such an analysis applies more

¹⁰ Here "form" is a generic psychological concept that has nothing to do with the notions of "linguistic form", "semasiological form", or "grammatical form", which are discussed by Gomperz within the framework of his theory of language, and therefore also has no particular link with the issue of formal logical feelings.

particularly to *statements* (*Aussagen*), the linguistic-logical properties that constitute the very topic of Gomperz's semasiology. A statement, which he tersely defines as "a linguistic form (*Sprachform*)¹¹ plus a thought" (Gomperz, 1908, p. 55-56), is in his eyes a psychological entity largely composed of feelings (see in particular: Gomperz 1908, p. 91 and 206). As he explains, of the three elements that, according to him, constitute a statement, namely, the statement sound (*Aussagelaut*), the statement basis (*Aussagegrundlage*), and the statement content (*Aussageinhalt*), the first and the second consist of representations (*ibid.*, p. 91), while the third consists of feelings only (*ibid.*, p. 206 and 220). Although, as we can see, he did not deny the involvement of representations in the making of statements, Gomperz considered affective processes as the core dimension of his semasiological model.

Without discussing in detail Gomperz's psychological theory of the statement, which has been studied at length previously (Knobloch 1988, p. 308-310; Kiesow 1990; Seiler 1991; Romand 2018c), I would like to say a word about what he meant by "statement sound", "statement basis", and "statement content", and how he conceived the functional relationships between these three constitutive elements. As he explains at the beginning of the second volume of his Weltanschauungslehre (Gomperz 1908, p. 61-90), the statement sound is the linguistic form (Sprachform, sprachliche Form) of the statement, that is, the sequence of words and sentences that constitute meaningful speech; the statement basis has to do with the facts that relate to the statement; and the statement content corresponds to the logical content of the statement, that is, to its sense (Sinn). He called "denotation" (Bezeichnung) the relation of the statement sound to the statement basis, "expression" (Ausdruck) the relation of the statement sound to the statement content, and "apprehension" (Auffassung) the relation of the statement content to the statement basis. Taken together, the statement basis and the statement content form what Gomperz referred to as the "state of affairs" (Sachverhalt), the psychological complex that defines the meaning (Bedeutung) of the statement (fig. 1).

Gomperz devotes a whole chapter of his *Semasiologie*, the third one entitled "Bearbeitung des Bedeutungsproblems" [Treatment of the Problem of Meaning] (Gomperz 1908, p. 220-293), to the question of how affective states effectively take part in the elaboration of statements. More specifically, he tries to analyze the way in which feelings contribute to make a statement something that is linguistically and logically consistent. In this respect, he identifies a number of categories of feelings, of which the so-called logical formal feelings turn out to be of crucial importance.

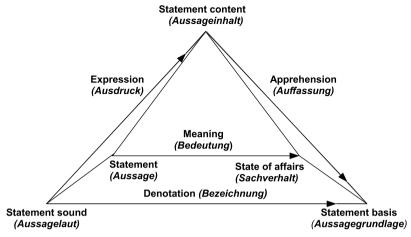


Fig. 1: Gomperz's psychological model of the statement (adapted from an original figure by Gomperz, 1908, p. 77).

5 The notion of formal logical feeling: anatomy of a psycholinguistic concept

5.1 Material logical feelings vs. formal logical feelings

The issue of statement, as discussed by Gomperz in the third chapter of his *Semasiologie*, is basically that of the logical statement. According to him, a statement has a logical valence insofar as it manifests itself in consciousness through a "general-typical total impression" (*generell-typische Totalimpression*). As Gomperz explained, an impression is said to be "typical" when it "emphasizes what is common from many individual cases" (Gomperz 1908, p. 227) and "general" when it does not occur in one individual only, but "in several similar thinking beings" (*ibid.*, p. 220). The capacity of a statement to be experienced as something both general and typical depends on the presence of specific affective factors (*Gefühlsmomente*), of a definite complex of feelings (*Gefühlskomplex*) that determines the logical properties of the statement content, and, first and foremost, of the statement basis. For Gomperz, indeed:

General-typical total impressions are the matter of the logical consciousness: as an intellectual extract of facts, they are the factor that links the statement content with the statement basis and by which the statement relates to what it is about. Thus, they constitute the part of the content of thought called "semasiological matter" [...], which represents the factor of meaning within the factors of "factuality" and "givenness" and finds its expression mainly in the categorematic parts of speech. (Gomperz 1908, p. 231).

Affective factors involved in a general-typical total impression "constitute the conceptual content (*Begriffsinhalt*)"; they are, more specifically, "the psychical data that underlie the logical determinations, the so-called distinctive marks" of concepts (*ibid.*, p. 230). To put it another way, they constitute "the semasiological matter" (*der semasiologische Stoff*), that is, "the material" (*das Material*) of the statement. Gomperz referred to such general-typical feelings as *the material logical feelings* (*die logischen Materialgefühle*). As reported in the above quotation, he subsumed under this category of logical feelings the affective processes that take part in the making of the categorematic parts of speech, that is, all feelings that "underpin [...] the meaning of words (*Wortbedeutung*) in a definite language" (*ibid.*, p. 237).

According to Gomperz, the semasiological matter should be contrasted with "the semasiological form" (die semasiologische Form), that is, "the way in which one deals about facts, the factor of "apprehension" (Auffassung) and "organization" (Gliederung) that is expressed, first and foremost, in the syncategorematic parts of speech" (ibid., p. 231). In this respect, he identified another category of logical feelings¹², the so-called formal logical feelings (logische Formalgefühle). Formal logical feelings represent "the non-factual" or "the formal" factors of meaning that, in addition to the syncategorematic parts of speech, determine the "single grammatical forms (grammatischen Formen) of [...] word stems" and the "status and emphasis of single words" (*ibid.*, p. 232). In short, they correspond to all affective processes that "underpin the grammatical forms of a definite language" (*ibid.*, p. 237). Gomperz insisted on the fact that formal logical feelings, while being "general", like any other kind of logical feelings, are, unlike material logical feelings, not "typical" but "singular" (*ibid.*, p. 236-237). For him indeed, "they are not immediately elicited in us by the statement basis, but they are an affective projection of ourselves (von uns ... hinzugefühlt) onto the latter, so that they cannot be said to have any real relation to a plurality of statement bases" (*ibid.*, p. 236). Formal feelings, as defined by Gomperz within the framework of his semasiology, are in reality nothing but organizational properties whose manifestation is essential to any logical statement. Here we are dealing with affective processes by which means single general-typical total impressions, as determined by material logical feelings, "are put in relation to each other and gathered in organized complexes" (ibid., p. 220). Formal logical feelings are, in other words, the

¹² The expression "logisches Gefühl" was not uncommon in the contemporary psychological literature (see in particular: Wundt 1911).

conditions of appearance of logical statements as consistent and unified mental wholes¹³.

5.2 Formal logical feelings and the determination of the linguistic form

It would be laborious to review in detail the many types of formal logical feelings identified by Gomperz and the way in which he discussed their role in the determination of the grammatical form of the statement, what he also called the "linguistic form" (Sprachform, sprachliche Form)¹⁴. Suffice it to recall here that, by "formal logical feelings", he referred, in the final analysis, to a great variety of affective states such as the feelings of coercion, conflict, overcoming, submissiveness, transition, activity, passivity, objectuality, etc. That is, he referred to manifold affective qualities *sui generis*, which he assumed to be the ultimate psychological foundation of "consecutive and final clauses, causal and conditional clauses, adversative and concessive clauses" (Gomperz 1908, p. 232), in that in particular they determine the nature of conjunctions, but also of word forms, in that they are responsible for the appearance of cases, moods, the processes of substantivization and adjectivization, etc. Interestingly, Gomperz regarded the study of formal logical feelings as the core of his project to refound language sciences on the basis of affective psychology. As he emphasized, although it may be unquestionably fruitful to analyze material logical feelings at stake in word meaning, it is quixotic to believe that the latter may be reducible to "an ordered system of well-defined affective elements", because the content of concepts pertains to too many "specific affective nuances" (ibid., p. 237). By contrast, the fact of analyzing grammatical forms on the basis of formal logical feelings appears scientifically much more promising, insofar as, in that case, we are dealing with affective factors that "are in relation to feelings that are already known and therefore [that] one can define without falling into a vicious circle" (*ibid.*, p. 237-238).

In the third chapter of his *Semasiologie*, Gomperz tries to illustrate, by discussing a number of particular cases, how the analysis of grammatical forms can be refounded on the basis of what he calls formal logical feelings. Here I will give a

¹³ Although material logical feelings may give the impression of constituting the "objective side" and formal logical feelings the "subjective side" of statements, both classes of feelings encompass mental phenomena that are, according to Gomperz, equally "affective" and distinct from representations. In his *Semasiologie*, Gomperz, against the then prevailing psycholinguistic views, strongly denies the fact that what he called the statement basis (*Aussageinhalt*), that is, what determines the sense of the statement, may be a mental entity of a representational or a sensory nature (Gomperz 1908, p. 91-97, 167-200): in this respect, the statement basis, which is typically mediated by material feelings, must be clearly distinguished from the representational content (*Vorstellungsinhalt*).

¹⁴ More specifically, as explained in the conclusion, Gomperz refers, by "linguistic form", to the morphosyntactic properties of language. On the concept of *Sprachform* in the Germanspeaking linguistic tradition, see: Knobloch (1988) and Formigari (2013).

brief account of two examples analyzed at length by him: the psycho-affective foundation of a) the conjunction "and" and b) the active form of verbs and the accusative (*ibid.*, p. 235-236).

In the first case, Gomperz explained, the fact of connecting two words or clauses by means of "and", such as in the statement "horse and rider" (Roß und Reiter), should be interpreted in psychological terms as the manifestation of a feeling of transition (Gefühl des Uebergangs). We are dealing here with a specific affective state that allows the speaker to pass subjectively from the thought "horse" to the thought "rider" and to experience them as being in relation to each other. As Gomperz emphasizes: "This transition is thus something purely subjective that neither lies in the statement bases nor is inserted by us in the latter, and that is why nothing corresponds to it in the general-typical total impressions elicited in us by these statement bases" (ibid., p. 235). Thanks to such a formal feeling of transition, the two general-typical total impressions "horse" and "rider" result in "an overarching, organized complex of feelings that is represented in consciousness as the logical content of the statement" (ibid., p. 235).

In the second case, Gomperz maintains that the fact of apprehending an active verb and a complement in the accusative in a statement such as "Der Hund sieht den Knochen" [the dog sees the bone] should be explained, respectively, on the basis of a feeling of activity (Gefühl der Tätigkeit) and a feeling of passivity (Gefühl des Leidens). Here Gomperz insists on the fact that these two feelings of the "verbal activity" (Verbalaktivität) and the "accusative passivity" (Akkusativpassivität) are "formal" and not "material" logical feelings, "because, through them, we complete the total impression of the facts for the purpose of the logical formulation" (ibid., p. 236). According to him, the fact that, in both instances, the "apprehension' does not necessarily lies in facts", that is, that "passivity [is] not contained in the general-typical impression of the bone [and that] activity is not contained in that of the dog" (ibid., p. 236) is well evidenced by the possibility of inverting the terms: instead of "Der Hund sieht den Knochen", one could say as well "Der Knochen erscheint dem Hund" [the bone comes out to the dog] without altering the meaning of the word stems "dog" and "bone".

5.3 Taxonomy of formal logical feelings

The only subcategory of formal logical feelings clearly identified is that of "the noetic formal feelings" (*die noetischen Formalgefühle*). The affective states in question are said to be "noetic" because, Gomperz explains, they "merely arise from the movement of our thoughts (*Gedanken*)", that is, because they are "connected with our own thoughts only, not with facts" (Gomperz, 1908, p. 234). A typical representative of this subcategory of formal logical feelings is the feeling of coercion (*Gefühl des Zwanges*) that underpins conditional statements. In that case,

Gomperz speaks of "the formal feeling of coercion" (das Formalgefühl des Zwanges) or, even more precisely, "the noetic formal feeling of coercion" (das noetische Formalgefühl des Zwanges). He also classifies, among the formal logical feelings, the above-mentioned feeling of transition, which is actually a "noetic formal feeling of transition" (noetisches Formalgefühl des Ueberganges) and, more generally speaking, all "feelings that underpin disjunctive, concessive, and adversative statements" (ibid., p. 235). As Gomperz emphasizes, these formal logical feelings are par excellence those that ensure a syncategorematic function, by "put[ting] partial thoughts in relation to each other" in order to "gathe[r] [them] in one complex, in one intellectual totality" (ibid., p. 135).

Besides noetic feelings, one distinguishes the logical feelings that relate, not to the relational properties between the general-typical total impressions, but to the total impressions themselves, while remaining "formal" in the sense that they contribute to determining the linguistic form. Basically, we are dealing here with all of these affective processes that underlie, to quote Gomperz again, "the single grammatical forms [...] of word stems" and the "status and emphasis of single words" (ibid., p. 232). The fact is that Gomperz does not propose any specific expression to refer to such a subcategory, which he defines only implicitly. Nevertheless, in a passage of his Semasiologie devoted to the psychological analysis of a definite logical statement, he identifies a number of affective states falling under the subcategory of the non-noetic formal feelings (*ibid.*, p. 245-247). Among the latter, he identifies the two feelings of passivity and activity, which, as discussed earlier, he regards as being involved, respectively, in the apprehension of the active form of verbs and of the accusative. Moreover, he deals with the socalled feelings of objectuality (Gegenständlichkeitsgefühle), which have to do with "the feelings of personality (Persönlichkeitsgefühle) characteristic of the human individual" and by which means we experience the "statement basis as an object", that is, as a substantive. A third example given by Gomperz is what he calls "the feeling of the capacity to distinguish" (das Gefühl des Unterscheidenkönnens), which consists in "the withholding (Enthaltensein) of an affective factor in a total impression", that is, in the phenomenon of attribution, and should thus be regarded as the psychological foundation of the adjectival function.

In any case, one is forced to admit that Gomperz, although identifying the subcategory of noetic feelings and a great number of individual affective states involved in the making of grammatical forms, fails to propose an accurate typological analysis of formal logical feelings. This seems to contradict his above-mentioned statement that the investigation of formal logical feelings, unlike that of material logical feelings, should lead to the elaboration of "an ordered system of well-defined affective elements".

5.4 Formal logical feelings as "logical derivatives" of affective life

It should be kept in mind that all affective factors that Gomperz subsumed under the category of formal logical feelings, whether "noetic" or "objectual", ultimately boil down to countless kinds of elementary affective states, which he referred to, in the first volume of his *Weltanschauungslehre*, as "non-hedonic", "non-emotional", or "intellectual feelings" (*nicht-hedonische/nicht-affektive/intellektuelle Gefühle*) (Gomperz 1905, p. 349-352)¹⁵. Taken individually, these elementary affective states have no other function than the fact of expressing an experiential quality of their own, different from pleasure or displeasure, that is, of being the carriers of an intuitive and abstract form of cognizance. In this respect, they should be regarded, not as being involved in this or that linguistic phenomenon in particular, but as ubiquitous mental factors that are likely to take part in a great variety of psychological processes, whether directly related to language or not.

The fact is that, for Gomperz, there is, per se, nothing particularly "logical" in the affective processes called "formal logical feelings", insofar as, in addition to not being characteristic of language and thought processes, they do not originate from the latter. According to him, indeed:

If we take it for granted that feelings of this kind first appear outside thought (*Denken*) and not within thought itself, so we can refer to as "*logical derivatives*" the forms of these feelings specifically adapted to logical ends. The feeling of coercion that underpins *conditional* statements is thus a formal logical feeling or a logical derivative (Gomperz 1908, p. 233).

As Gomperz explains, formal logical feelings are basically *logical derivatives* (*logische Derivate*), in that they "derive" from affective processes devoid of logical valence that find their specifically logical function through their involvement in language processes. In this respect, he spoke of noetic formal feelings as "noetic derivatives" (*noetische Derivate*), as in the case of the noetic formal feeling of coercion, which is primitively nothing but an "alogical feeling of coercion" (*alogisches Gefühl des Zwanges*) (Gomperz 1908, p. 234). By identifying the feelings responsible for grammatical forms with ordinary affective factors of conscious life, he gives prominence to the fact that language is not, by essence, different from the other manifestations of mental activity and that, just like the

¹⁵ As a derivation of "Affekt" (emotion), "affektiv" should be translated into English as "emotional" and not as "affective". Cf. footnote 1. Here the fact of contrasting "affektive Gefühle", that is, basically, the manifestation of pleasure and displeasure, with "intellektuelle Gefühle" probably originates from Avenarius (1890) – one of Gomperz's major source of inspiration (Romand 2018c)—who regarded "die affektiven Charaktere" (and more specifically, "das Affektional") as a definite category of feelings.

latter, it can be explained in psychological terms. In this respect, Gomperz's developments on formal logical feelings appear emblematic of his program of naturalization of language sciences on the basis of affective psychology.

6 Presumptive sources of Gomperz's concept of formal logical feeling

6.1 Horwicz

It was suggested earlier that both the expression and the concept of formal logical feeling may have been directly inherited from Horwicz's pioneering developments on formal intellectual feelings or formal thought-feelings. As I highlighted, Horwicz was allegedly the first to speak of "formal feeling" in relation to intellectual processes, and apparently his investigations were familiar to Gomperz. Gomperz's distinction between "formal" and "material" feelings is already found in Horwicz and his expression "noetic feeling" is clearly reminiscent of the expression "thought-feeling" used by the latter. Moreover, Gomperz concurred with Horwicz in understanding "formal feeling" as an affective state of a relational nature that serves to unify contents of thought. Nevertheless, the closeness between the two scholars should not be overemphasized insofar as Horwicz's formal intellectual feeling remained a broadly defined concept that has only indirectly to do with linguistic concerns.

6.2 Lipps

An author to whom Gomperz seems to be much indebted is Theodor Lipps, whose booklet *Vom Fühlen, Wollen und Denken* (Lipps 1902), which he abundantly quotes in his *Weltanschauungslehre*, especially in the first volume (Gomperz 1905), was published only a few years before the latter. This writing, indisputably one of the most important contributions of the time to affective psychology (Romand, forthcoming^b, forthcoming^c), was in all likelihood Gomperz's main source of inspiration regarding the theory of feelings in general. In *Vom Fühlen, Wollen und Denken* (Lipps 1902), Lipps proposes extensive developments on epistemic feelings and the way in which they determine conscious experience and intellectual processes by insisting in particular on their role in the making of the "consciousness of reality" (*Wirklichkeitsbewusstsein*). Here he identifies generic affective states, such as the feelings of objectivity, subjectivity, passivity, or striving, and more specific states, such as the feelings of tension, effort, necessitation, conflict, etc., which appear to be closely related to those that Gomperz would subsume under the category of formal logical feelings. Nevertheless, it is worth noting that

Lipps did not deal with the issue of language per se and that at no time did he use the expression "formal feeling"¹⁶. Here my hypothesis is that, as an affective psychologist, Lipps made available rich material that was taken up and reinterpreted by Gomperz within the framework of his semasiology.

6.3 Van Ginneken

Interestingly, Gomperz's semasiology, and notably his ideas about linguistic form, prove to be closely related to the developments on the role of feelings in language as expounded by Jacobus van Ginneken in his Principes de linguistique psychologique (van Ginneken 1907, p. 122-240) – a work published just one year before the second volume of the Weltanschauungslehre. Van Ginneken devotes a whole chapter of his book to "le sentiment de connection (sic)", a category under which he subsumes the affective processes underpinning conjunctions, particles, and prepositions (*ibid.*, p. 132-161) and that is much reminiscent of Gomperz's formal logical feelings, especially of his subcategory of noetic formal feelings. Gomperz does not mention van Ginneken's book and it is likely that he ignored its existence when writing his Semasiologie. Here, it is worth noting that van Ginneken – as he himself acknowledged – draws much inspiration from Lipps's Vom Fühlen, Wollen und Denken (Lipps 1902) as well. Thus, there are strong indications that Lipps constituted a common source of inspiration for both Gomperz and van Ginneken. As I show in a book chapter to be published (Romand, forthcoming^c), Lipps was indebted to the Herbartian school of affective psychology, notably the concept of formal feeling, as elaborated by Waitz (1849) and popularized by Nahlowsky (1862).

Conclusion

In this article, I showed how Gomperz discussed, before Sapir, the question of the relationships between form and affectivity in language sciences and contributed to making formal feeling a well-defined psycholinguistic concept. In doing so, I demonstrated that, as a linguistic issue, formal feeling/form-feeling was not confined to the American linguistics of the 1920s and did not even appear in it, but that it emerged, like all other studies on formal feeling or form-feeling, within the German-speaking context. By revisiting Gomperz's research on formal feeling and

16 On the other hand, in the first edition of *Vom Fühlen, Wollen und Denken* (Lipps 1902, p. 149-161), Lipps uses, as in his aesthetic writings (Lipps 1897, 1903), the expression "Formgefühl" to refer to "these feelings of pleasure and displeasure that are attached to a togetherness, a totality of elements, in short, to a manifoldness" (Lipps 1902, p. 149). Here the difference is that form-feeling is conceived as a generic concept that has to do, not with the structural properties of the aesthetic object in particular, but with those of the objects of experience in general (on this use of the term Formgefühl, see also: Wundt 1896, p. 195-196). In this case, too, Formgefühl has no specific relation to language.

highlighting the fact that the theoretical model that he proposes is quite different from Sapir's developments on form-feeling, I also demonstrated that the issue of the affective processes specifically relating to the formal properties of language is more complex than originally thought. In Gomperz's theory of language, "form" does not refer, as in Sapir's, to a "pattern" that allows the speaker to apprehend collective linguistic knowledge, but to the way in which single words are structurally and functionally organized within a definite logical statement. In other words, what Gomperz called the "linguistic form" (Sprachform, sprachliche Form) corresponds, mutatis mutandis, to what modern linguists call morpho-syntax. In that case, the corresponding feelings are said to be "formal" because they serve to put in relation and to unify the constitutive elements of the statement without being involved in the determination of the word meaning per se, that is, independently from the "material" dimension of language. One is forced to admit that, although both concepts specifically relate to the issue of language, Gomperz's formal logical feeling has relatively little to do with Sapir's form-feeling.

Apart from the question of the comparison between Gomperz's and Sapir's respective contributions, the present study raises the problem of the existence of a genealogical link between the two authors, namely, the issue of the (potential) impact of Gomperz's ideas on Sapir's. Gomperz, to the best of my knowledge, is not mentioned in any of Sapir's writings and has never been considered as having constituted one of his prime sources of inspiration. Further investigations are required to determine the nature of the (direct or indirect) intellectual connection between the two scholars. What is beyond doubt, in contrast, is that Gomperz's formal feeling, as well as Sapir's form-feeling, ultimately originate, both lexically and conceptually, in the seminal studies carried out by the Herbartian school of affective psychology. More generally speaking, Gomperz's research on formal logical feelings is emblematic of the place taken by the psychological concept of feeling (Gefühl) in German-speaking language theorists of the early 20th century. His Weltanschauungslehre appears to be the epitome of the "affective paradigm" as it developed in language sciences from the late 19th century onwards. Although not all language theorists considered affectivity a core concept, the influence of affective psychology is palpable in most of the linguistic writings of that period (e.g. Marty 1908, p. 363-383; Wundt 1904a, p. 43-142, 637-674, Wundt 1904b, p. 246-248, 272-276, 353-354, 572-580; Paul 1920, p. 51-73, 109-113, 180-182, 338-348). Sapir's research on form-feeling can be said to be, to some extent, the outgrowth of this affective paradigm within the American context. Regarding the role devoted to mental states in language processes, historians of the Germanspeaking psycholinguistic tradition have focused, thus far, on the issue of representations (Vorstellungen), that is, the contents of consciousness, while largely disregarding that of feelings (Knobloch 1988; Formigari 2013; Romand

forthcoming^d). The present study highlights the necessity of reconsidering the ins and outs of the "affective turn" that occurred in psycholinguistics and, more generally speaking, in all domains of language sciences, at the turn of the 20th century.

Finally, my research on Gomperz's logical formal feeling addresses the question of the origins of formalist and structuralist concerns in language sciences and the role played by psychology, especially affective psychology, in their emergence. As I demonstrated, Gomperz tried to explain how language processes are experienced in their interrelations and in their globality on the basis of the psychological concept of feeling—an approach that was in keeping with the organizational and unifying role devoted to affectivity since the mid-19th century. In this respect, it can be argued that the systematic interest of theorists of language for form, structure, and related issues, far from being the outcome of the "antipsychological turn" of the 1910s and the subsequent development of the formalist and structuralist doctrines¹⁷, originates in the psycholinguistic paradigm itself, as elaborated by German scholars in the second half of the 19th century. In the wake of some recent publications in the field (Romand & Tchougounnikov 2013), this case study on formal feelings/form-feelings may help shed new light on the genealogy and the context of the appearance of formalist and structuralist thought.

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17 Although, from the early 1910s onwards, psychology ceased, as a rule, to be considered as a founding discipline and an epistemological frame of reference by linguists, aestheticians, or philosophers (Romand 2009), it did not abruptly cut off any relationship with the corresponding domains, especially language sciences. Not only psychological terminology, but also the concepts and the theoretical models developed by psychologists, continued, to some extent, to have an impact on language sciences until late in the interwar period, as nicely shown by Knobloch (1988) and, more recently, Romand and Tchougounnikov (2013). Moreover, the rise of formalism and structuralism that accompanied the "depsychologization" of language sciences in the early 20th century does not mean that formalist and structuralist approaches of language should be regarded as being immune to psychological concerns (Romand & Tchougounnikov 2013).

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