Form and formalism in linguistics

Edited by

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Preface

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Notions of "form" have a long history in Western thought on language. When linguistics emerged as an institutionalized discipline in the early decades of the nineteenth century, its practitioners could look back on a multitude of senses and uses of "form", embedded in a variety of conceptual schemes. Even though many nineteenth-century linguists sought to emphasize the novelty of their work and imagined a radical break with the "pre-scientific" past (see Morpurgo Davies 1998: chap. 1), both their everyday practice and their theoretical views were permeated by an intellectual inheritance stretching back over centuries, in which "form" occupied a central place.

On a practical level, "form" has long been employed in a general sense to refer to the perceptible outer appearances of linguistic expressions, especially in connection with the inflectional variants of words. On a deeper theoretical level, there has often been an effort to find underlying motivations for these appearances and so conceive of "form" in senses loaded with metaphysical and epistemological significance. This was the path taken by such movements as the medieval Scholastics and the Enlightenment-era General Grammarians (see Law 2003: chaps. 8 and 11), whose successors in the ninetenth century – despite often disavowing their predecessors – were similarly engaged in a search for the cognitive, biological or aesthetic bases of linguistic form.

A particularly prominent figure in nineteenth-century discussions of form in language was Wilhelm von Humboldt (1767–1835), whose writings served as the point of departure for many later scholars. For Humboldt and his followers, there is a sense in which all language is form and nothing else, in that language is the representation we make of the world which, in Kantian fashion, we shape according to our perceptive faculties. "The essence of language", writes Humboldt (1905 [1820]: 17), "consists in pouring the material of the phenomenal world into

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the form of thoughts." (*Das Wesen der Sprache besteht darin, die Materie der Erscheinungswelt in die Form der Gedanken zu giessen.*) A commonplace among the Humboldtians was to claim that each language has its own characteristic form of representation discernible in the form of its expressions. The task of the linguist is to capture these forms and analyse them for what they reveal about the mental, cultural and physical life of language speakers (see Morpurgo Davies 1998: chap. 5; Trabant 1986; McElvenny 2016).

The centrality of form to linguistic scholarship continued into the structuralist era. The *Cours de linguistique générale* of Ferdinand de Saussure (1857–1913) famously contains the assertion that "language is a form and not a substance" (*la langue est une forme et non une substance*) (Saussure 1922 [1916]: 169). Following on from the earlier Humboldtian position, a fundamental tenet of structuralism is to conceive of languages as self-contained structures imposed on the material substrate of the world. In describing phonological, grammatical and semantic apparatuses of languages, the structuralist is engaged in an investigation of linguistic form (for a classical structuralist account couched in these terms, see Lyons 1968: 54–70).

In the generativist era, Noam Chomsky's (b. 1928) efforts to construct an intellectual genealogy for his work involved an attempted appropriation of Humboldtian "form", which rekindled awareness of these ideas in mainstream linguistics. In his *Cartesian linguistics*, Chomsky (2009 [1966]: 69–77) sought to assimilate Humboldtian form to his own innovation of generative rules as the underlying system that allows for the creative use of finite means to produce an infinite array of expressions.

The fecundity of "form" is visible not only in its polysemy, but also in the family of derivatives it has brought into the world, including such terms as "formal", "formalized" and "formalist/formalism". Like their parent, these terms defy concise definition, although when applied as labels to directions in linguistic research they generally imply concentration on internal systematicity to the exclusion of external explanatory factors alongside an inclination to abstraction and axiomatization – two tendencies that may in fact manifest independently of one another (cf. Newmeyer 1998). As is explored in several contributions to this volume, formalism as a research mindset is at home in many fields – such as logic, mathematics, aesthetics and literary studies – and represents an area of rich historical cross-pollination between linguistics and other disciplines.

In a separate but related sense, "formalism" as a count noun refers to the devices employed in the representation and analysis of phenomena. Various formalisms in this sense, along with the theoretical views to which they are tied, are also examined in the following chapters.

In composing this volume, we have come together as historians of science and philosophers of language and linguistics to take a critical look at notions of form and their derivatives, and the role they have played in the study of language over the past two centuries. We investigate how these notions have been understood and used, and what this reveals about the way of thinking, temperament and daily practice of linguists.

The first contribution to our volume is Judith Kaplan's examination in Chapter 1 of the role of visual formalisms in representing genealogical relationships between languages. Engaging with some of the latest literature on material culture in the history of science, Kaplan explores how visual diagrams and metaphors helped in grasping relationships between languages in comparative-historical grammar, from the nineteenth century up to the present day. She finds that the tensions between the dominant models of language relationship – "tree" versus "wave" models – were typically conceived in a visual mode, whether this was explicitly represented in a diagram or initially described only as a visual metaphor. She observes shifting commitments to the realism of representations and mutual influences between linguists and those working in neighbouring sciences.

In Chapter 2, James McElvenny compares competing nineteenth-century accounts of "alternating sounds" – a cover term for the apparent unstable phonological variation found in "exotic" languages – for the different attitudes towards linguistic form that they reveal. The traditional view took alternating sounds to be a feature of "primitive" languages, which were assumed to have not attained the levels of formal arbitrariness characteristic of European languages. Franz Boas (1858–1942) famously refuted this view by insisting that all languages have fully developed phonologies and ascribed alternating sounds to perceptual error on the part of outside observers. Georg von der Gabelentz (1840–1893), on the other hand, embraced the phenomenon and wielded it against Neogrammarian doctrine, the leading formal theory of his day. Both Boas' and Gabelentz' positions can claim a measure of theoretical sophistication and at the same time contain obvious faults. McElvenny places these positions in their historical context and considers why Boas' view was so well received in linguistics while Gabelentz' was not.

Chapter 3 turns to the links between linguistic, psychological and, above all, aesthetic theory in the work of Edward Sapir (1884–1939). In this chapter, Jean-Michel Fortis provides a detailed exposition of Sapir's writings on form in language, concentrating in particular on Sapir's notion of "form-feeling" and following the trail – in some places explicitly marked by Sapir himself and in others reconstructed by Fortis through terminological and conceptual detective work

– to identify his sources of inspiration. Fortis places Sapir in a finely interlaced intellectual network spanning across contemporary *Gestalt* psychology and German art theory, with a heritage extending at least as far back as the Romantic period around the turn of the eighteenth to the nineteenth century.

The focus on Sapir continues in Chapter 4, where Els Elffers critically compares Sapir's philosophy of science to that of Jerry Fodor (1935–2017) and examines the implications of their views for the treatment of linguistic form. Looking at Sapir's arguments against the "superorganic" in language scholarship and Fodor's proposal for "token physicalism", she finds striking similarities between the two, despite their very different intellectual contexts: Sapir was responding to ideas in anthropology emerging from debates about the nature of the *Geisteswissenschaften* in contrast to the *Naturwissenschaften*, whereas Fodor was responding to logical positivism. Both scholars, however, concerned themselves with how best to demarcate the individual sciences, with the specific example of linguistics in mind, and settled on the principle of demarcating the sciences not according to their subject matter but the way in which that subject matter is conceived.

In Chapter 5, Bart Karstens undertakes a re-examination of the genesis of linguistic structuralism and its early interaction with Russian Formalism, a school of literary analysis from the early twentieth century. Karstens engages in a detailed investigation of the scholarly network around Roman Jakobson (1896–1982) and his role as a vector for the transmission of Russian Formalism first to the Prague School of structuralism in the 1920s and then later to the United States. While formalist doctrine was often heavily criticized by the early structuralists, Karstens shows that various formalist views informed elements of early structuralism.

A similar story of "resistant embrace" is told in Chapter 6, where John Joseph reconsiders the place of structuralism in French linguistics of the mid-twentieth century, before the onset of the "post-structuralist" period. Focusing on such figures as Émile Benveniste (1902–1976), Henri Meschonnic (1932–2000), Aurélien Sauvageot (1897–1988) and their closest contemporaries, Joseph demonstrates that each of these figures has a complex relationship to structuralism: at times criticizing the apparent premises of the approach while employing recognizably structuralist forms of analysis, or publicly avowing structuralism while straying away from its principles in their own work.

In Chapter 7, Ryan Nefdt surveys some of the radical changes in theory that generative linguistics has undergone in its short history and derives from them positive lessons for the philosophy of science. Amid the turbulence and instability that has characterized generative theory, he identifies one constant: the

formal structures in language that generative linguists describe. With the durability of this constant in mind, he advocates for a position of structural realism in the philosophy of linguistics. Such a position, he argues, would allow linguists to escape pessimistic meta-induction – that is, the notion that we must necessarily expect our theories to one day be refuted and superseded – and allows them to step away from the ontology of natural languages, thereby securing the epistemological basis of the formal approach to language.

The gaze of the last two chapters in our volume is largely directed towards current questions in the philosophy of linguistics, specifically the role of normativity and authority in language description. After first tracing the origins of generative grammar in formalist approaches to logic, Geoffrey Pullum, in Chapter 8, develops a new perspective on the classical distinction between prescriptivism and descriptivism. He contends that the value of a grammatical description lies in the precise, formalized account it provides of a particular set of linguistic practices, which can guide those who may wish to participate in those practices. In serving as a guide, every grammar has normative force, but is not necessarily prescriptive: the grammar-reader may follow its advice but is not compelled to do so.

In Chapter 9, Nick Riemer identifies the ideologies of language he sees embodied in the "unique form hypothesis", the assumption that every linguistic expression can be reduced to a single, universally agreed underlying representation. While linguists might seek to distance themselves from this hypothesis and its implications, it is, argues Riemer, a recurring motif in linguistics, especially prominent in the teaching of the discipline. Its effects in education are particularly pernicious, since teachers, due to the exigencies of pedagogy, can usually offer no justification for the unique forms they present to their students other than arbitrary authority, a practice that reinforces unreflective submission to authority of all kinds, both at university and in life. Acknowledging that most linguists would shudder at such consequences, Riemer pleads for greater open-mindedness among linguists towards critique of the discipline's foundations.

Although dealing with a broad range of topics from diverse perspectives and in different styles, this volume is the product of concerted collective effort. Each of us came to this project with existing ideas about form and formalism in linguistics. These ideas we set out in draft chapters, which we discussed in person at a meeting in Edinburgh in August 2018. After our meeting, we revised the chapters to reflect the insights gained through our discussion. It is these revised chapters, shaped and harmonized by our dialogue, that are contained in this volume.

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Chapter 1

Alternating sounds and the formal franchise in phonology

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A matter of some controversy in the intersecting worlds of late nineteenth-century linguistics and anthropology was the nature of "alternating sounds". This phenomenon is the apparent tendency, long assumed to be characteristic of "primitive" languages, to freely vary the pronunciation of words, without any discernible system. Franz Boas (1858–1942), rebutting received opinion in the American anthropological establishment, denied the existence of this phenomenon, arguing that it was an artefact of observation. Georg von der Gabelentz (1840–1893), on the other hand, embraced the phenomenon and fashioned it into a critique of the comparative method as it was practised in Germany.

Both Boas and Gabelentz – and indeed also their opponents – were well versed in the Humboldtian tradition of language scholarship, in particular as developed and transmitted by H. Steinthal (1823–1899). Although the late nineteenth-century debates surrounding alternating sounds were informed by a number of sources, this chapter argues that Steinthal's writings served as a key point of reference and offered several motifs that were taken up by his scholarly successors. In addition, and most crucially, the chapter demonstrates that the positions at which the participants in these debates arrived were determined not so much by any simple technical disagreements but by underlying philosophical differences and sociological factors. This episode in the joint history of linguistics and anthropology is telling for what it reveals about the dominant mindset and temperament of these disciplines in relation to the formal analysis of the world's languages.

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1 Introduction

Phonology is in many ways the promised land of formal conceptions of language. The apparent orderly transmutation of sounds over time stimulated the mechanical minds of historical-comparative linguists, ultimately inspiring the Neogrammarians to their postulation of exceptionless sound laws. The vanguard of linguistic formalism in subsequent generations continued to look to sound patterns – although now chiefly in their synchronic aspect – as the pristine embodiment of the self-contained systems they sought. In this way, the classical American structuralist grammar sets out from the firm ground of phonology and ascends to increasingly less regular linguistic levels.

But a question that remained controversial into the last decades of the nineteenth century was just how far the formal franchise in phonology should be extended. Do the sound systems of all languages of the world meet the standards of arbitrariness and regularity identified in the Indo-European languages? An apparent phenomenon prevalent in the "primitive" languages of the Americas, Africa and the South Seas suggested limits to law-governed language. European scholars and adventurers who tried to learn and transcribe the words of these languages were frequently frustrated by the way in which native informants would seemingly change the pronunciation of the same word from utterance to utterance. From the perspective of present-day phonological theory, this phenomenon would be considered variously a manifestation of free variation, allophonic variation and difficulty perceiving articulations markedly foreign to the recorder's own phonological system. Nineteenth-century scholars, by contrast, conceptualized this phenomenon in a number of different, competing ways. These differences in conceptualization led to terminological instability, but a common cover term, also adopted here, was "alternating sounds".

This chapter explores some responses from prominent language scholars in the mid- to late nineteenth century to the phenomenon of alternating sounds, and looks at what these responses reveal about the underlying philosophical commitments and sociological structure of the intersecting fields of anthropology and linguistics in this era. The investigation spans the intellectual worlds of America and Germany which, although closely intertwined, were organized around different disciplinary structures. The figures featured here who were active in America described themselves as anthropologists, for whom linguistic research was one of the "four fields" of American anthropology.[1] The corresponding German dis-

[1]The essays contained in Kuklick (2008) provide an excellent comparative overview of the history of anthropology in America and Europe, including their disciplinary structures.

cussion, on the other hand, took place largely within the discipline of linguistics, in which the study of "exotic" languages was a niche pursuit. The exception is the work of H. Steinthal (1823–1899), who is put forward in this chapter as an inspiration to – and therefore link between – both the German and American worlds. His *Völkerpsychologie*, developed with his collaborator M. Lazarus (1824–1903), strove to offer an all-encompassing scientific account of human culture, history and society.[2]

The starting point for this chapter, in §2, is the 1889 paper "On alternating sounds" by Franz Boas (1858–1942), a milestone marking the way to modern explanations of alternating sounds and modern views on the equality of all languages. Here Boas rebutted the received position of the American anthropological establishment, represented in particular by such luminaries as Daniel Garrison Brinton (1837–1899) and John Wesley Powell (1834–1902), which held that the alternating sounds observed in American languages were a manifestation of their alleged primitiveness. Boas argued, by contrast, that the alternating sounds were an illusion caused by the conflicts of incommensurable phonological systems in informant and ethnographer.

From a present-day perspective, this episode may seem like a simple case of science triumphing over naivety and prejudice. But arguments presented on both sides of the American debate could claim some degree of theoretical sophistication. Indeed, Brinton and Boas shared a key source of theoretical inspiration in the work of Steinthal, whose views were in turn anchored in the linguistic writings of Wilhelm von Humboldt (1767–1835). While phonological issues occupy at most a peripheral place in Steinthal's work, aspects of his linguistic and psychological theory would seem to have informed the later debate. §3 offers an account of the nuanced views advanced by Steinthal and their possible links to later arguments.

Despite its now canonical status, the American debate was not the only reconsideration of principles of phonological regularity around the turn of the nineteenth to the twentieth century. In Germany, Georg von der Gabelentz (1840–1893), also drawing on the Humboldtian tradition as transmitted by Steinthal, affirmed the existence of alternating sounds, in a turn that could be seen as prefiguring key features of later phonemic theory. Like Boas, Gabelentz fashioned his treatment of alternating sounds into a critique of the linguistic establishment. But unlike Boas, Gabelentz' goal was not to extend the formal franchise to all languages, but rather to redefine it and thereby challenge the comparative method

[2]For a detailed account of *Völkerpsychologie* from its beginnings with Steinthal and Lazarus to its later developments and ultimate fate, see Klautke (2013).

as it was practised at the time. §4 looks at Gabelentz' proposals for alternative methods in historical-comparative linguistics and their rather unfavourable reception.

Finally, §5 brings the American and German debates together to discuss what they reveal about the dominant mindset and temperament in the intersecting fields of linguistics and anthropology in relation to questions of the nature and correct treatment of linguistic form.

2 Alternating sounds in America

Boas' (1889) "On alternating sounds" occupies a prominent place in the standard disciplinary narrative of linguistic anthropology as a text that helped to establish the scientific foundations of the field. According to this story, Boas overcame contemporary evolutionary prejudice by demonstrating that an alleged characteristic of "primitive" languages was in fact nothing more than an artefact introduced by insufficiently trained observers.[3] Alternating sounds, in various guises, were a recurring motif in the description of exotic languages throughout the nineteenth century, but the two key figures against whom Boas developed his position were Brinton and Powell, the leading anthropologists of the previous generation.[4]

In the year before Boas' seminal article appeared, Brinton reaffirmed several tropes about "primitive" languages in an 1888 address to the American Philosophical Society, "The Language of Palæolithic Man", which in an 1890 volume of his collected papers became "The earliest form of human speech, as revealed by American tongues" (Brinton 1890 [1888]). As the titles suggest, Brinton sought insights into the nature of the earliest stages of human language evolution through an examination of the supposedly characteristic features of American languages. While much of Brinton's paper focuses on the lexical and grammatical properties of these languages, it begins with a discussion of their phonological features.

Primitive speech, in Brinton's assessment, has not yet attained the levels of arbitrariness and fixedness that characterize the more developed languages: in European languages individual sounds carry no sense, words have fixed sound

[3] "Evolutionary prejudice" was the term later used by Boas' student Edward Sapir (1884–1939) to describe the assumption that the world's languages can be categorized according to their putative level of grammatical development (see Sapir 1921: 130–132).

[4] On the relationship between Boas, Brinton and Powell in the context of late nineteenth-century American anthropology, see Darnell (1988) and Darnell (1998). See also Laplantine's (2018) preface to her translation of Boas' (1911) *Handbook of American Indian Languages* for a succinct summary of his life and work in context.

forms, and the articulated word alone is enough to convey its meaning. American languages, by contrast, frequently attach meaning to individual phonetic segments (Brinton 1890 [1888]: 394), word meaning is often modified by such devices as "[t]one, accent, stress, vocal inflection, quantity and pause" (Brinton 1890 [1888]: 399) that are not reducible to graphic writing, and sounds in words can vary freely: "In spite of the significance attached to the phonetic elements, they are, in many American languages, singularly vague and fluctuating" (Brinton 1890 [1888]: 397). His concluding observation is that "[t]he laws of the conversion of sounds of the one organ into those of another have not yet been discovered; but the above examples, which are by no means isolated ones, serve to admonish us that the phonetic elements of primitive speech probably had no fixedness" (Brinton 1890 [1888]: 398–399).

Under the name of "synthetic sounds", this same phenomenon of apparent fluctuating phonology in American languages found a place in Powell's (1880 [1877]) *Introduction to the Study of Indian Languages*. Given Powell's influential position as director of the Bureau of American Ethnology, which was founded on his initiative in 1879, the *Introduction* achieved widespread use in the recording of American languages, not only in projects officially sponsored by the Bureau, but also in the efforts of other researchers and amateurs, including Boas and his students (see Darnell 1998: 50–51).

Powell was very conscious of the difficulties associated with capturing the phonology of American languages. His commitment to scientific rigour led him to commission the noted Sanskrit scholar and general linguist William Dwight Whitney (1827–1894) to devise a standardized alphabet for recording American languages. Despite Powell's efforts to encourage its use, the alphabet was generally considered inadequate and impractical by many of those who worked for the Bureau. Whitney himself felt no great attachment to the alphabet, regarding its design and implementation not as a theoretical task but merely a matter of expedience (see Darnell 1998: 50–51). For Powell, however, the alphabet was a foundational element of language description: his *Introduction* opens with a sophisticated discussion of articulatory phonetics and the principles of accurate transcription, which observes a number of phonological peculiarities of American languages still recognized today, such as ejective consonants ("interrupted sounds") (Powell 1880 [1877]: 1–16).

"Synthetic sounds" appear in this discussion as another characteristic of American phonologies. Powell (1880 [1877]: 12) speaks of the "indefinite character of some of the sounds of a[n American Indian] language", although this is not due to the chaotic variation imagined by Brinton but rather because the sounds are

"made by the organs of speech in positions and with movement comprehending in part at least the positions and movement used in making the several sounds to which they seem to be allied". That is, Powell believes these "synthetic" sounds are insufficiently "differentiated" – they are produced by articulating several simple sounds at once. Through historical sound change, such synthetic sounds have been simplified and disappeared from the European languages, but this is a process yet to take place in the American languages. In their present undifferentiated state, these sounds "will be heard by the student now as one, now as another sound, even from the same speaker." There is, however, a trace of humility in Powell's approach to the American languages, an admission that science may not yet have fully grasped the principles underlying this phenomenon: "When the phonology of our Indian tongues is thoroughly understood, much light will be thrown upon the whole science of phonology […]" (Powell 1880 [1877]: 13).

In response to views of the kind put forward by Brinton and Powell, Boas argued that such sounds are not a peculiarity of primitive languages at all, but rather the result of perceptual error on the part of the language researcher. All languages, European and American alike, make use of a fixed and finite repertoire of the total range of sounds that can be produced by the human articulatory organs. When an observer encounters a sound in a foreign language that is not present in their native repertoire, they will "apperceive" it as a similar sound that is in their repertoire. A term with a long history and a diverse range of uses, "apperceive" became in the early nineteenth century part of the technical apparatus of Johann Friedrich Herbart's (1776–1841) associational psychology, from where it was taken up into the *Völkerpsychologie* of Steinthal and Lazarus, and later into the *Bewusstseinspsychologie* of Wilhelm Wundt (1832–1920).[5] Boas' invocation of "apperception" is too fleeting and off-hand to align him with any specific school of psychology at the time, but his usage attests to a familiarity with contemporary psychological jargon and a desire to dress his own work in the latest technical garb.

According to Boas, the mapping from foreign to native sound that results through the process of apperception may vary from occasion to occasion, creating the illusion of alternating sounds. The presence of this perceptual filter on the part of the observer is demonstrated by the fact that "the nationality even of well-trained observers may be readily recognized" in the transcriptions they make of foreign sounds (Boas 1889: 51). Boas sums up his argument with the following words:

[5]For a recent survey of approaches to what can retrospectively be called "psycholinguistics" in this period, including the work of Lazarus, Steinthal and Wundt, see Levelt (2013).

> I think, from this evidence, it is clear that all such misspellings are due to a wrong apperception, which is due to the phonetic system of our native language. For this reason I maintain that there is no such phenomenon as synthetic or alternating sounds, and that their occurrence is in no way a sign of primitiveness of the speech in which they are said to occur; that alternating sounds are in reality alternating apperceptions of one and the same sound. A thorough study of all alleged alternating sounds or synthetic sounds will show that their existence may be explained by alternating apperceptions. (Boas 1889: 52)

Boas was no doubt correct to impugn the perception of his colleagues in many cases where they accused American languages of phonetic fluctuation. But it must be acknowledged that the potential for cross-linguistic phonological interference was already well recognized in the literature of the time. Powell (1880 [1877]: 2) noted this difficulty in his own guide to transcription:

> [T]here are probably sounds in each [Indian language of North America] which do not appear in the English or any other civilized tongue; […] and further, […] there are perhaps sounds in each of such a character, or made with such uncertainty that the ear primarily trained to distinguish English speech is unable to clearly determine what these sounds are, even after many years of effort. (Powell 1880 [1877]: 2)

As is shown in the following sections, this awareness of cross-linguistic interference is clear in many other contemporary and antecedent sources, where it co-existed with a range of different attitudes towards alternating sounds. A scholar's stance in relation to these questions was therefore shaped to a very large degree by beliefs and commitments beyond the immediate language data.

A key motivation for Boas was of course to subvert the then current discourse of primitive languages and language evolution. But this was not his only aim, and indeed this subversion was at least in part beholden to other goals. Although he enjoyed mostly respectful and collegial relations with both Brinton and Powell, Boas was always engaged in a project to proclaim his superior scientific expertise and secure institutional support for his coterie of students and adherents. The chief and most valid source of data in Boasian anthropology were the descriptions made and texts recorded by the scientifically trained observer in a fieldwork situation. By contrast, Brinton, the doyen of the previous generation, relied mainly on the critical philological analysis of written documents that had been collected and compiled by others (see Darnell 1988: 21–24). By diminishing

existing written documentation, Boas' critique undermined the legitimacy of the mode of research employed by Brinton and boosted his own fieldwork-oriented approach.

Even among confirmed fieldworkers, Boas' critique helped to assert the exclusive expertise of his own school. In later years, Boas developed a reputation for his domineering role in the world of Americanist anthropology, freely blocking the work of researchers who did not meet his frequently quite arbitrary standards (see Darnell 1998). Pointing out the technical inadequacies of his predecessors, as in the case of alternating sounds, served this end well. In his 1911 *Handbook of American Indian Languages*, which was explicitly intended to supersede Powell's (1880 [1877]) *Introduction*, Boas' doctrine of the conditioned apperception of foreign sounds is incorporated as part of the propaedeutic guide to the correct recording of American languages, as a simple and uncontroversial methodological principle (see Boas 1911: 16–18).

That assertions of expertise are a decisive factor in Boas' campaign is demonstrated by his enduring commitment to the possibility of objective observation in language documentation. While previous transcribers of American languages may have been afflicted with a phonological filter, the goal of the Boasian anthropologist must be to eliminate this interference altogether. Even after the importation and elaboration of phonemic theory in America, Boas maintained a preference for fine-grained phonetic transcription. It was not enough for the observer to simply enter the foreign phonological system; they had to step outside phonology and record the given phonetic datum as accurately as possible.[6] Boas' zeal extended to correcting written texts from one of his native speaker informants, which were essentially phonemic in nature, to include as much phonetic detail as possible (see Anderson 1985: 204–208). Even the phonemic testimony of the native speaker did not pass Boasian muster.[7]

[6] Another perspective from which Boas' position should perhaps be explored is that of contemporary debates on the "personal equation" in recording data, which were prominent across the natural sciences (see Schaffer 1988) and also played a role in attitudes to fieldwork in anthropology (see Kuklick 2011). I thank Judith Kaplan for drawing my attention to these debates.

[7] A further piece of circumstantial evidence is perhaps Boas' work on a revised standard alphabet for American languages. After Powell's death in 1902, Boas was asked by William John McGee (1853–1912), Powell's successor at the Bureau of American Ethnology, to form a committee to update the Bureau's alphabet. The resulting system, published 1916, clearly contains many compromises between various conflicting constraints, but the overall Boasian impulse towards greater phonetic detail and specialist exclusivity is quite apparent (see Darnell 1998: 195–197).

3 Steinthal and the Humboldtian tradition

The American debate on alternating sounds was shaped by a number of influences: the three figures mentioned in the previous section – Brinton, Powell and Boas – all had broad backgrounds spanning the natural sciences and humanities that informed their attitudes and approaches (see Darnell 1998). But a central point of reference – in particular for Brinton and Boas – was the Humboldtian tradition of linguistic scholarship as it was interpreted and propagated by Steinthal. Boas had met Steinthal personally in Berlin and freely acknowledged Steinthal's influence on his linguistic research. Brinton was the leading Humboldt scholar in America and frequently cited Steinthal (see Bunzl 1996: 63–69; Trautmann-Waller 2006: 289–292). Although the questions of phonology and language documentation that lay at the heart of the American debate on alternating sounds are addressed only at the periphery of Steinthal's work, we see in his texts several threads unpicked and woven into the later accounts.

Steinthal's great achievement in linguistics was to construct a monolithic theoretical edifice dealing with issues ranging from the mental processes underlying individual language use to language evolution and typology, and to attempt an empirical demonstration of these principles through detailed investigations into the languages of the world. Through his collaboration with Lazarus from the 1850s onwards, Steinthal's linguistics became a central component of the broader project of *Völkerpsychologie*.[8]

Following Humboldt, Steinthal imagined an "idea of language" (*Sprachidee*), an ideal form towards which linguistic expression strives. The evolution of language passes through three stages on the way to the full realization of this ideal; these stages are recapitulated in child language acquisition and can be discerned in the contours of "primitive" languages (cf. Bumann 1965: 81–93). The first stage consists in self-awareness, the psychological attainment that distinguishes humans from animals. Unlike animals, humans can represent, share and understand their "intuitions" (*Anschauungen*), which they "apperceive" (*appercieren*) in their consciousness. Here Steinthal invokes the core notion of "apperception" from Herbartian associational psychology; this is the same term that Boas would later use in generic form (see §2 above).

At the first stage language is made up of nothing more than "reflex sounds" (*Reflexlaute*), which merely represent and communicate intuitions in an unanalysed

[8]Trautmann-Waller (2006) is a comprehensive intellectual biography of Steinthal, which examines his linguistic work and *Völkerpsychologie* in depth. For studies of Steinthal's linguistics, see Bumann (1965) and Ringmacher (1996).

way. These sounds are brought forth through unreflected action and are solely mimetic in character. The further development of language occurs as speakers become increasingly aware of the thoughts they entertain in consciousness and begin to analyse them. At the second stage, language progresses beyond reflex sounds to a proper conscious analysis of thoughts. It is at this point that sentence structure develops, with a distinction between subject and predicate and individual words that can be abstracted from the sentence as a whole:

> It is therefore already at the point where language first appears in its true quality, where it achieves its full intellectual character, that it breaks through onomatopoeia. And *words in their true conception develop only with the development of the sentence form; that is, simultaneously with the opposition of subject and predicate*, which soon establishes itself as the difference in the naming of things and expressions for circumstances and changes. The logical character of words seems to be decisively hostile to their onomatopoeic origin. (Steinthal 1881 [1871]: 424–425)[9]

At the third stage of evolution, language continues its ascent from its mimetic origins: the etymological bond between words and their meanings fades from consciousness and the connection between them becomes truly arbitrary.

For Steinthal, the crucial moment in language evolution is the second stage, as this is the point at which "inner linguistic form" (*innere Sprachform*) emerges (Steinthal 1881 [1871]: 425–426). "Inner linguistic form" is a term that first appears in Humboldt's (1998 [1836]) introduction to his work on the Kawi language of Java. The term is therefore generally associated with Humboldt, even though, as Borsche (1989) definitively demonstrated, its elaboration into a theoretical construct is the later work of Steinthal. In Steinthal's hands, inner form became a wide-ranging concept covering all aspects of the immanent structure of languages. Like "apperception", "inner form" grew in the second half of the nineteenth century into a favourite but rather indefinite term in linguistic and philosophical scholarship. Despite the explosion of senses attached to the term in this period, its ultimate origin in Humboldt's essay and its deep association

[9]Original: "Also gerade schon da, wo die Sprache zuerst in ihrer wahren Eigentümlichkeit auftritt, wo sie ihren vollen intellektuellen Charakter gewinnt, durchbricht sie die Onomatopoie; und *das Wort in seinem wahren Begriff entsteht erst mit der Satzform, also zugleich mit dem Gegensatze von Subjekt und Prädikat*, der sich bald zu dem Unterschiede der Benennung von Dingen und der Ausdrücke für Zustände und Veränderungen festsetzt. Der logische Charakter des Wortes scheint dem onomatopoetischen Ursprunge desselben entschieden feindlich zu sein." Italics in this quotation renders *Sperrung* in the original.

with Steinthal's work remained foremost in the minds of those who employed it. Both Brinton and Boas keenly spoke this idiom and acknowledged the tradition with which it was aligned: Brinton constantly advocated for attention to the inner form of languages and Boas (1911: 81) set capturing the unique inner form of each language as the goal of the language sketches in his *Handbook* (cf. Darnell 1988: 98–105).

Steinthal's typological efforts were aimed at assessing how far towards the "idea of language" the inner form had progressed in different languages and at identifying the grammatical means – such as morphological or syntactic structures – in which it manifests itself. His 1860 *Charakteristik der hauptsächlichsten Typen des Sprachbaues* provided a survey and classification of the world's languages, in which the primary division is between those language with properly developed inner form (*Formsprachen*) and those without (*formlose Sprachen*). This work was followed by his 1867 *Mande-Neger-Sprachen*, which subjected several Mande languages of Africa – Mandingo, Bambara, Soso and Vai – to a detailed examination that revealed alleged developmental deficiencies in all aspects of their inner forms. This examination is based on a philological analysis of existing written sources, similar to the preferred research practice of Brinton. The analysis proceeds from both a "phonetic" (*phonetisch*) perspective, which looks at the grammatical apparatus of the languages, and a "psychological" (*psychologisch*) perspective, which investigates how expressions are formed.[10]

In his "phonetic" examination of the Mande languages, Steinthal found no way to distinguish individual words from the sentences in which they appear: there are allegedly no phonological processes observed to operate only at the word level distinct from the sentence as a whole. In their grammars, the languages supposedly rely on mechanisms that are not truly arbitrary, such as the "interjectional" process of reduplication, used for a variety of purposes in the languages. The grammatical affixes and particles that can be identified in the languages all seem to have transparent etymologies that link them to "material" words, which keep them bound to their mimetic origins.

From the "psychological" perspective, the Mande languages did not fare any better. Steinthal's assessment of how various meanings are rendered using the lexical and grammatical means available in the languages reveals that the Herbartian processes of "isolation" (*Isolirung*) and "condensation" (*Verdichtung*) of "representations" (*Vorstellungen*) in the minds of speakers are not carried out properly. The inevitable conclusion for Steinthal (1867: 255) is that the speakers of

[10]For a discussion of the historical background to this dual-perspective approach to language description, see McElvenny (2017: 2–6).

Mande languages have not completely raised their "intuitions" to the level of "representations": "in the consciousness of the Mande negro the concrete intuition with its material relations is still dominant, and its conversion into representations is not carried out completely".[11]

Up to this point, Brinton's account of the "primitive" phonological features of American languages accords well with Steinthal's story of language evolution. The alleged lack of arbitrariness and fixedness Brinton identified in the sounds of American languages are features that could be expected of languages at Steinthal's first stage of evolution. Steinthal in fact considered the possibility that a lack of arbitrariness in the earliest languages could lead to greater variability, since the sounds produced by reflex are bound to the mental moment and subject to all of its modifications:

> We may think that language, as long as it is still the immediate creation of the excited soul, shares in the fluctuations and inequalities of these excitations. So just as the representation, even though its content is the same, is not always the same in its psychological behaviour – e.g. not always as lively and energetic to the same degree, vivid, strongly concentrated – the word, as the reflex of this representation, is not always the same. The energy of thinking expresses itself most immediately in intonation, then also in the sharpness of articulation, i.e. the clearness and definiteness of the sound. And both together most certainly influence the quality or even the content of the sound, the way in which it is articulated. (Steinthal 1867: 3–4)[12]

But such questions remained hypothetical for Steinthal. According to Steinthal (1867: 3–4), the "uncivilized peoples" (*culturlose Völker*) living today are not the *Natur-Völker* of the earlier stages of human evolution. He accepted a greater degree of variation in the sounds of the languages of "uncivilized peoples" because

[11] Original: "im Bewußtsein des Mande-Negers ist die concrete Anschauung mit ihren materiellen Verhältnissen noch vorwiegend, und ihre Umsetzung in Vorstellungen ist unvollständig vollzogen."

[12] Original: "Wir dürfen uns denken, daß die Sprache, so lange sie noch die unmittelbare Schöpfung der erregten Seele ist, auch an den Schwankungen und Ungleichheiten dieser Erregungen Theil hat. Wie also die, obschon ihrem Inhalte nach gleiche und selbe, Vorstellung doch in ihrem psychologischen Verhalten nicht immer gleich ist, z. B. nicht immer gleich lebendig und energisch, gleich anschaulich, gleich kräftig concentrirt: so lautet auch das Wort, als der Reflex dieser Vorstellung, nicht immer gleich. Die Energie des Denkens drückt sich am unmittelbarsten in der Weise der Betonung aus, dann auch in der Schärfe der Articulation, d. h. der Klarheit und Bestimmtheit des Lautes; und beides zusammen beeinflußt sicherlich die Qualität oder den Inhalt selbst des Lautes, die Weise seiner Articulation."

these languages lacked the stabilizing and standardizing influence of an orthography, but even before the invention of writing, human language will "have established itself in the consciousness" and "its word forms [will] have crystalized in definite shape" (*[…] hat sich die Sprache im Bewußtsein gefestigt, sind ihre Wortformen in bestimmter Gestalt krystallisirt*; Steinthal 1867: 4–5).

In Steinthal's estimation, the Mande languages find themselves in this situation: they stand uneasily on the threshold to the second stage of evolution, but their apparent phonetic inconstancy in comparison with European languages is not due to enduring mimetic reflexes but simply anarchy arising from the absence of a regulating instance. Steinthal (1867: 257–266) discounts the fact that the Vai do indeed possess a native writing system, since it is an imitation of European scripts fashioned without proper understanding of those scripts' underlying principles. The result is a massive syllabary – of over 200 characters – lacking system and internal order, which is chiefly used by distinguished members of the community to write books containing "tales from the life of their authors, sayings, observations and fables – without any unity" (Steinthal 1867: 260).[13] While the Vai may have a script, they do not have an orthography: they simply transcribe whatever pronunciation occurs to them as they write (Steinthal 1867: 264–266), and this can vary even within the same text.[14]

The perceptual problems to which Boas (1889) attributed alternating sounds in American languages were acknowledged by Steinthal in the case of the Mande languages. Steinthal (1867) critiqued the transcriptions found in all of his sources, commenting, among other observations, that the influence of the transcriber's native phonology and writing habits had to be taken into consideration. On his English sources, he remarked:

> Since we frequently have to rely on English works, the influence of the English ear and English orthography must be taken into account. However, although this influence may be responsible for some things, it is hardly responsible for everything. The same sources offer at times, both consciously and unconsciously, double forms, e.g. *bombong* and *bambang*, "hard" […].

[13] Original: "Der Inhalt dieser Bücher besteht in der Erzählung von Ereignissen aus dem Leben ihrer Verfasser, in Sittensprüchen, Betrachtungen und Fabeln – ohne alle Einheit."

[14] Steinthal (1852) presented an account of the development of writing from ideographic systems to alphabets. Like his language typology, this represented an evolutionary scheme in which language users became progressively more aware of the structure of their languages. The Vai syllabary has reached the upper echelons of a pure phonetic script – i.e. a script without ideographic elements – but has not reached the highest point of a full alphabetic script (Steinthal 1867: 262–264). The place of the Vai script in this hierarchy does not bear directly on the question of its consistency.

> The most frequent alternation is perhaps that between *i* and *e*. (Steinthal 1867: 9)[15]

While phonology as such was never among Steinthal's core concerns, in his empirically oriented researches he was inevitably confronted with the practical difficulties that arise in reducing to writing the sounds of exotic languages with no native orthographic tradition. The dangers he identified in written materials produced by European observers were precisely those that Boas would later turn into the fatal failures of perception on the part of his predecessors. On the other hand, the corroboration Brinton provided for existing accounts of phonetic fluctuation in American languages could in principle be licensed by Steinthal's scheme of language evolution, although Steinthal explicitly denied that any language spoken today would still find itself at this most elementary stage. Steinthal accepted greater degrees of variation in the languages of "uncivilized peoples", but only because they lacked a standard imposed by authority.

4 Phonetic latitude and sound laws

Around the same time that Boas launched his attack against alternating sounds – but independently of the American debate – Georg von der Gabelentz marshalled related phonetic phenomena to mount a critique of the linguistic establishment in Germany. His opponents were the Neogrammarians, whose work was built upon an insistence on the exceptionless nature of sound change, and Gabelentz embraced the prospect of relative regularity in languages as a means to undermining this fundamental Neogrammarian tenet. As in the American context, a key theoretical reference in Germany – in particular for Gabelentz – was the work of Steinthal.

In his magnum opus, *Die Sprachwissenschaft*, Gabelentz (2016 [1891]: 341–384) undertakes an extensive investigation into contemporary linguistic typology that is essentially organized around the principles espoused by Steinthal.[16] Gabelentz rejected the strong distinction between "formal" and "material" elements in language hypothesized by Steinthal and used by him to demonstrate the alleged infe-

[15] Original: "Da wir mehrfach auf englische Arbeiten angewiesen sind, so darf hierbei der Einfluß des englischen Ohrs und der englischen Orthographie nicht unberücksichtigt bleiben. Indessen, er mag manches verschulden, schwerlich alles. Dieselben Quellen stellen zuweilen unbewußt und bewußt doppelte Formen auf; z. B. *bombong* und *bambang*, hart […]. Am meisten vielleicht wechseln *i* und *e* mit einander."

[16] Gabelentz (1889) had already presented key parts of this section of his book in an address to the Saxon Academy of Sciences. An English translation can be found in McElvenny (2019).

rior mental development of speakers of the Mande and other languages. Instead, argued Gabelentz (2016 [1891]: 380–384), linguistic form is the product of an aesthetic drive to achieve subjective self-expression.[17] In his view, all shaping of linguistic expression, regardless of how transparently its origin shows through, is formal in nature (see McElvenny 2016). Gabelentz (2016 [1891]: 406–408) accepted, however, that in the most primitive stages linguistic forms would have been created spontaneously and freely, and only over time become constrained and fixed through force of collective habit.

Given the dominance of historical-comparative grammar in the disciplinary linguistics of his day, Gabelentz dedicates an entire "book", or primary section, of his *Sprachwissenschaft* to this approach to language study. He finds that the principle of gradual fixing of the linguistic system applies also on the phonetic plane, and uses this principle both to critique the supposed exceptionless nature of sound change as promulgated by the Neogrammarians and as a means to explain how sound change can occur at all. "Fluctuating articulations" (*schwankende Articulationen*), according to Gabelentz (2016 [1891]: 196), are a very real part of languages, and indeed they are the force driving sound change in the first place. If, as the Neogrammarians argued, sound change proceeded according to inviolable rules then everyone would always speak the same way. For sound change to occur, one speaker has to innovate a new pronunciation and then it has to spread to the rest of the speaker community. Gabelentz (2016 [1891]: 196–197) is very clear that he means not only variation in pronunciation between speakers, but also variation in the same speaker over the course of their lives and even from utterance to utterance.

The way in which Gabelentz describes the range of variation that each language allows in fact seems to evince an inchoate concept of the phoneme as an ideal sound which may have multiple realizations:

> But languages, even the smallest dialects, distinguish only a certain number of sounds, which are related to individual phonetic phenomena like species to individuals, like circles to points; a language draws the boundaries more broadly or narrowly, but it always tolerates a certain degree of latitude. (Gabelentz 2016 [1891]: 35).[18]

[17] Jean-Michel Fortis, in Chapter 3 of this volume, examines similar aesthetic ideas in the work of Edward Sapir, and their possible connection to Gabelentz' work.

[18] Original: "Die Sprache aber, und wäre es die kleinste Mundart, unterscheidet nur eine bestimmte Anzahl von Lauten, die sich zu den lautlichen Einzelerscheinungen verhalten wie Arten zu Individuen, wie Kreise zu Punkten; sie zieht die Grenzen weiter oder enger, immer aber duldet sie einen gewissen Spielraum."

The "degree of latitude" allowed may vary from language to language, according to Gabelentz (2016 [1891]: 197–198), and this greater or lesser latitude provides the theoretical basis for countenancing the possibility of alternating sounds of a more extreme kind outside the familiar European languages.

A similar recognition of variation within limits is also a feature of Boas' (1911) account of alternating sounds in the officially codified version of the *Handbook*. Here Boas admits variations in the realization of sounds in languages, but crucially he denies that the range or latitude of variation can vary from language to language: the American languages admit neither more nor less variation in their sounds than any other languages, and certainly no more than European languages. Taking the example of a sound in Pawnee, Boas (1911: 17) insists:

> Thus the Pawnee language contains a sound which may be heard more or less distinctly sometimes as an *l*, sometimes an *r*, sometimes as *n*, and again as *d*, which, however, without any doubt, is throughout the same sound, although modified to a certain extent by its position in the word and by surrounding sounds. […] This peculiar sound is, of course, entirely foreign to our phonetic system; but its variations are not greater than those of the English *r* in various combinations, as in *broth*, *mother*, *where*. (Boas 1911: 17)

Gabelentz' theoretically grounded belief in varying degrees of latitude in pronunciation leads him, in contrast to Boas, to accept and repeat several well-known cases of alternating sounds from the corners of the world: Gabelentz (2016 [1891]: 202–204) offers examples from Samoan, Malay languages, Australian languages and of course various American languages. Gabelentz is willing to trust the data on alternating sounds delivered by scholars in the field, insisting that they are fully qualified observers who through extended immersion in the foreign language have had the opportunity to overcome the interference of their native phonology. Indeed, it is because they have become so accustomed to the phonological systems of the languages they record that they have developed the feeling for the languages that allows them to perceive the subtle alternating articulations:

> We could raise the following objection: most of our informants were not schooled in the scientific observation of sounds; they judge the foreign sounds according to their native language, and intermediate grades between these sounds seem at one moment to tend to one side and in another moment to another side. We may retort that at least some of these men

> have lived long enough among the aborigines that their ear has become as accustomed to the foreign language as it was previously to their native language. It is to this, or rather to their multilingual schooling, that they owe precisely this fine ability to hear that allows them to perceive those uncertain, fluctuating articulations. (Gabelentz 2016 [1891]: 204–205)[19]

In an inversion of the assignment of expertise effected by Boas, Gabelentz endorses the data and uses them to undermine the theoretical edifice of the Neogrammarians. Rather than refining sound laws to explain away exceptions, Gabelentz (2016 [1891]: 198) advocated statistical surveys that would embrace all variants observed, the deviants as well as the well-behaved regular forms. Gabelentz' model for this endeavour was perhaps the statistical analyses undertaken by William Dwight Whitney (1827–1894) of variant forms throughout the history of Sanskrit and in modern English dialects (Whitney 1874; Whitney 1896 [1875-1878]; cf. Silverstein 1971: vix-xx, xxii-xxiii).[20] Wilhelm Wundt similarly suggested that a statistical approach to the study of sound change may prove more fruitful than the absolutism of the Neogrammarians (see Formigari 2018).

Gabelentz' first steps towards applying a statistical method were taken in an 1893 address to the Berlin Academy of Sciences in which he tried to prove a genealogical relationship between the Basque and Berber languages.[21] As Gabelentz (1893: 593–594) himself noted, the hypothesis that the Basques of southern Europe, whose language could not be aligned with any known family, were in some way related to the "Hamites" of North Africa was not a novel idea. That no linguistic proof of this relationship had yet been given, he contended, was due to the inflexibility of the comparative method as it was practised at the time. The comparative method needed to be ramified to accommodate the radical mutability of linguistic form that had been discovered in regions beyond the familiar Indo-European context, as in Indo-Chinese and Melanesian sources:

[19] Original: "Folgenden Einwand könnte man erheben: Die meisten Gewährsmänner waren nicht zu wissenschaftlicher Lautbeobachtung geschult; sie beurtheilten die fremden Laute nach denen ihrer Muttersprache, und Zwischenstufen zwischen diesen schienen ihnen bald nach der einen, bald nach der anderen Seite zu neigen. Darauf ist zu entgegnen, dass mindestens ein Theil jener Männer lange genug unter den Eingeborenen gelebt, um ihr Ohr an die fremde Sprache so zu gewöhnen, wie es vordem an die Muttersprache gewöhnt gewesen. Dieser, oder richtiger ihrer mehrsprachigen Schulung, verdankten sie eben das feinere Gehör, das sie jene unsicheren, schwankenden Articulationen empfinden liess."

[20] Gabelentz (1894b) also later proposed using a statistical approach for the typological study of languages. McElvenny (2018) offers an English translation of this text.

[21] For a comprehensive account of this episode, including Gabelentz' initial address, the subsequent book-length publication (Gabelentz 1894a), and the reaction of Gabelentz' colleagues, see Hurch & Purgay (2019).

> The belief in the constancy of the outer and inner linguistic form is among the achievements to which our science clings most tenaciously, and the facts that could shake this belief are for their part newly acquired and poorly known, since they are in the territory of Indo-Chinese and Melanesian. (Gabelentz 1893: 594)[22]

Looking across Basque dialects, Gabelentz (1893) postulated extremely irregular sound correspondences between apparently cognate words, leading him to the conclusion that "they offer a picture of phonetic wildness which, as far as I know, must be one of a kind in the world of languages" (*sie geben ein Bild lautlicher Verwilderung, das meines Wissens in der Sprachenwelt kaum Seinesgleichen hat*; Gabelentz 1893: 596). He found a similar situation in the Berber languages. On this basis, Gabelentz (1893: 604) assumed the existence of a "prehistoric period of the most uncertain articulation" (*vorgeschichtlichen Periode der unsichersten Articulation*) in these languages, "where the phonetic images appeared before the soul only in vague outlines, as if they were drawn with a mop or paint-roller" (*wo die Lautbilder der Seele nur in vagen Umrissen vorgeschwebt haben, als wären sie mit dem Wischer gezeichnet oder mit dem Vertreiberpinsel gemalt*). To bring order into this chaos, Gabelentz employed his statistical method, tabulating the frequencies of putative correspondences across the Basque dialects, the Berber languages and between these two groups.

The extraordinarily large latitude in pronunciation of the kind attributed to Basque and Berber is, Gabelentz (1893: 606) argued, characteristic of languages "at a lower level of culture" (*auf niederer Culturstufe*). At this cultural level, articulated forms are only rejected when they cannot be understood. This lack of constraint on variation leaves linguistic forms subject to the temperamental and corporeal contingencies of the moment, as in Steinthal's conception of the first stage of language evolution. Distant analogues of such cases can even be observed in Indo-European languages, claimed Gabelentz, offering the example of an uneducated Saxon from Germany (the same example with a more moderate moral occurs also in Gabelentz 2016 [1891]: 398):

> In this way a strange thing can happen, that a very indefinite sound image appears before the soul, and yet the mouth produces a very clearly articu-

[22] Original: "Der Glaube an die Beständigkeit der äusseren und inneren Sprachform gehört zu den Errungschaften, an denen unsere Wissenschaft am zähesten festhält, und die Thatsachen, die ihn erschüttern könnten, sind ihrerseits neuer Erwerb und wenig bekannt, da sie auf indochinesischem und melanesischem Gebiete liegen."

> lated sound, although not always the same one, but rather at one moment this one and then at another that one, depending on chance and mood. […] I can offer an example of an at least distant analogue of this from our own languages. The Saxon, who does not distinguish between *d* and *t*, between *i* and *ü*, *e* and *ö*, *ei* and *eu*, *äu*, can in the heat of the moment pronounce the *d* as *t* and – when he is talking about deep, dark, terrible things – turn all *i*, *e* and *ei* into *ü*, *ö*, *eu* in a kind of onomatopoeia. (Gabelentz 1893: 606–607)[23]

Needless to say, Gabelentz' attempted reform of the comparative method did not gain a foothold. The exceptionless dismissal of Gabelentz' approach may not, however, have been so much due to his underlying premises as to his cavalier treatment of his sources. Even among those who could be expected to sympathize with Gabelentz' proposal, the criticism was widespread that he had not properly curated or analysed the Basque and Berber data, which led him to obvious errors in presentation and interpretation (cf. Hurch & Purgay 2019). Brinton (1894), for one, in his brief review of the 1894a expanded book version of Gabelentz' Basque and Berber studies, did not criticize Gabelentz' underlying views on variation, but did note that he had not properly distinguished between cognates and loan words in his analyses.

Hugo Schuchardt (1842–1927) – one of the most prominent contemporary opponents of the Neogrammarians, as he acknowledged himself (see, e.g., Spitzer 1928 [1922]) – was similarly unimpressed by Gabelentz' methodological laxness, despite being sympathetic to the motivating idea of the radical mutability of linguistic forms. In a review of Gabelentz (1894a), he questioned the wisdom of taking such an adventurous course in comparing these languages when the more conventional and uncontroversial methods had yet to be tried properly:

> The Kabyle and Tuareg words that the author [Gabelentz] compares to the Basque words differ from these greatly for the most part. He does indeed attempt to explain this on the basis of muddled and washed out phonetic confusion. However, even if I do not dispute this possibility in general, it

[23] Original: "So kann das Seltsame geschehen, dass der Seele ein sehr unbestimmtes Lautbild vorschwebt, und doch der Mund ein sehr scharfes hervorbringt, aber nicht immer dasselbe, sondern bald dieses bald jenes, je nach Zufall und Stimmung. […] Aus unserem Sprachkreise wüsste ich wenigstens entfernt Analoges anzuführen. Dem Obersachsen, der zwischen *d* und *t*, zwischen *i* und *ü*, *e* und *ö*, *ei* und *eu*, *äu* nicht unterscheidet, kann es geschehen, dass er im Affecte jedes *d* wie *t* ausspricht, und dass er, wo es sich um tiefe, dunkele, grausige Dinge handelt, alle *i*, *e* und *ei* lautmalend in *ü*, *ö*, *eu* verwandelt."

> still seems to me that we should for the time being – that is, as long as further and more careful examinations of Basque phonetic history are not available – not seek refuge in this "last resort". (Schuchardt 1893: 334)[24]

Gabelentz' freewheeling approach, commented Schuchardt (1893: 334), offers no credible way to navigate language history. It could just as easily be used to link Basque to the languages of the Caucasus or the Ural as to those of North Africa. Although there were linguists dissatisfied with the rigid system-building of the Neogrammarians and prepared to face the messiness of the raw data, Gabelentz' scheme did not present a viable alternative for them.

5 Conclusion

In the last decades of the nineteenth century, the phenomenon of alternating sounds was instrumentalized in different ways by scholars hoping to advance their various academic and disciplinary agendas. In America, Boas denied the reality of the phenomenon as part of a project to assert the scientific superiority of the anthropological school he was busily building up. In Germany, Gabelentz moved in the opposite direction, embracing the phenomenon as a means to undermine the hegemony of Neogrammarian linguistics. The positions of both Boas and Gabelentz – and indeed also their rivals – were informed in no small way by the mid-nineteenth-century writings of Steinthal, who developed a unified theory of the psychological basis and evolution of language with a strongly empirical accent.

Although both Boas and Gabelentz indulge in exaggeration and caricature in their critiques, and exhibit obvious faults in elaborating their own positions, their views have had very different fates in the received histories of linguistics and anthropology. External factors no doubt play a role here: Boas achieved institutional dominance and is feted as the founding father of modern American anthropology, while Gabelentz died early and disappeared into relative historical obscurity.

The different fates of their views on alternating sounds are perhaps also indicative of the temperament of linguistics and anthropology as disciplines. Despite

[24] Original: "Die kabylischen und tuaregischen Wörter, die der Verf. zu baskischen Wörtern stellt, weichen von diesen zum grossen Theil sehr stark ab. Zwar sucht er das aus einer verworrenen und verwaschenen Lautirung zu erklären: aber wenn ich auch im Allgemeinen die Möglichkeit einer solchen nicht bestreite, so dünkt mich doch, wir sollten vorderhand, d. h. so lange nicht mehr und sorgfältigere Untersuchungen über die baskische Lautgeschichte vorhanden sind, hier nicht zu dieser 'ultima ratio' unsere Zuflucht nehmen."

his apparent hostility to later conceptions of the phoneme, Boas' attack on the notion of alternating sounds is celebrated for expanding the formal franchise, making all languages equal subjects under the laws of linguistics. Gabelentz' efforts to problematize the comparative method, by contrast, could find no supporters: his dismembering of current historical linguistics offered no practical alternative. Boas is more welcome than Gabelentz in fields that place a premium on technical progress, conceived positivistically as the ability to capture and catalogue phenomena within a universalizing system. This case study offers informative parallels to the "resistant embrace" of structuralism in France that John Joseph (Chapter 6, this volume) sketches and the "unique form hypothesis" that Nick Riemer (Chapter 9, this volume) imputes to present-day linguistics.

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Chapter 2

On Sapir's notion of form/pattern and its aesthetic background

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> "I find that what I most care for is beauty of form, whether in substance or, perhaps even more keenly, in spirit. A perfect style, a well-balanced system of philosophy, a perfect bit of music, the beauty of mathematical relations — these are some of the things that, in the sphere of the immaterial, have most deeply stirred me."
> Sapir, letter to Lowie, 29 September 1916 (cited in Silverstein 1986: 79)

On Sapir's view, units of cultural behaviour (such as linguistic units) can only be identified through the relations they maintain to other elements of the same kind. This set of interrelations is what Sapir calls a "pattern", or refers to simply as "form". The chapter begins by examining Sapir's notion of pattern in his analysis of phonological systems. It is shown that, to a certain extent, Sapir conflated the notion of pattern with that of *Gestalt*, yet his own conception was idiosyncratic insofar as it placed much emphasis on the purely formal potency of patterns, understood as aesthetic configurations existing for form's sake and independent from functional motivations.

The second part of the chapter is devoted to Sapir's description of how patterns are formed and grasped. Complex interrelations are not laid bare in ordinary conscious

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thinking; they can only be accessed through an intuition that Sapir characterizes as a "form-feeling". Form-feeling, as Sapir himself tells us, takes its origin from art theory. It is argued that the source of this notion is to be found in German-speaking art theory, specifically the notion of *Formgefühl*. In the course of the discussion, the hypothesis is set forth that Sapir's "form drive", which underlies the elaboration of patterns for form's sake, might also have its source in German thought, notably in Humboldt and Schiller.

1 Introduction[1]

The vast range of scholarly interests which Sapir nurtured during his life far exceeds what would fall under our current conception of linguistic matters. In particular, psychology, especially Gestaltist, psychoanalysis, as especially represented by Carl Jung (1875–1961), music and aesthetics were to him concerns of prime importance. As we shall see, his interests are reflected in the general conceptions he entertained about culture and language, and more precisely about linguistic form, or, in terms also used in his writings, linguistic pattern or configuration.

In what follows, it will be shown that the aesthetic leitmotiv running through many of Sapir's writings is essential to understand what is idiosyncratic in his notion of form or pattern. The aesthetic viewpoint, as will be argued, is fundamental for understanding how Sapir conceived of an individual's relation to cultural and linguistic patterns; it also helps us see in what ways Sapir's ideas about the constitution of patterns and their diachrony deviated from anything we are familiar with. Further, the theoretical connections of Sapirian form with Gestaltist ideas and psychoanalysis might be best appreciated by, again, following the aesthetic thread.

What about the historical roots or inspirations of Sapir? Their very heterogeneity and the fact that they were not always disclosed by him appear to have produced a gap, or an indecision, in Sapirian studies. Were we to suggest probable influences beyond the well-attested ones, this gap could be at least partially filled and our comprehension of Sapir deepened. Any attempt in this direction is certainly worthwhile and we will do our best to offer proposals on this historical context throughout the discussion and particularly in the last part of this chapter.

[1]Parts of this chapter have already appeared as a post of the multi-author blog *History and Philosophy of the Language Sciences* (Fortis 2014) and in an extended French version (Fortis 2015). Many thanks to James McElvenny for his suggestions and corrections of this English version.

2 An example of pattern: the phonological system

Sapir's conception of a phonological system is a good entry point for his notion of pattern. As early as *Language* (1921), phonemes are said to be "points" of an "underlying phonetic pattern". A potential simplifying misconception should first be dispelled: we may be tempted to read into Sapir's analysis of a phonological pattern the idea that phonemes are merely identified by their distinctive features, in effect, then, by the contrastive relations they hold to other phonemes of the language. Sapir's conception is more complex. In a phonological pattern, the relative distance of elements is also determined by the degree to which they share common contexts of occurrence and partake of the same functional/semantic role. See, for example, the fact that a Nootka speaker conflates /p'/ and /'m/ into a single phonological structure /C'/ (Sapir 1951 [1933]: 55–57). There can be no other reason, as Sapir explains, than the fact that the occurrences of /p'/ and /'m/ are sufficiently similar to warrant the assimilation of their phonological structure. This assimilation, in other words, manifests the fact that the occurrences of /p'/ exert an attraction on /'m/ which results in a levelling out of their phonological structure. The relative proximity of elements in the system is also determined by functional and semantic factors. For instance, in English /f/ contrasts with /v/, as /p/ contrasts with /b/, but /f/ is closer to /v/ than /p/ to /b/ for the reason that /f/ and /v/ belong to common paradigms, such as *wife*/*wives*. In turn, /f/ and /v/ form with /θ/-/ð/ and /s/-/z/ what we may call a subsystem or subpattern, in view of parallel voicing contrasts like *sheath*/*sheathe* and *mouse*/*mouses* (Sapir 1951 [1933]: 48). The very existence of idiosyncratic patterns, and the fact that the relational feelings of speakers have an effect on phonetic change, do not make it permissible "to look for universally valid sound changes under like articulatory conditions" (Sapir 1951 [1933]: 48). This is not to reject the search for regularities, nor is it in contradiction of the neogrammarian assumption of the inviolability of sound laws, rather it is an implicit restriction of their validity to a family of languages. In fact, Sapir occasionally points out the perpetuation of patterns or subpatterns within a language or genetically related languages.

On several points, it should be noted, Sapir's view is in line with Hermann Paul (1846–1921) in his *Prinzipien* (1880–1920): linguistic elements form dynamic groups which absorb or repulse elements that are, respectively, similar or dissimilar in their form, function and semantics. The series *wife*/*wives* = *sheath*/*sheathe* = *mouse*/*mouses* would constitute, in Paul's parlance, a *stoffliche Proportionengleichung*, a "material equation" (Paul 1920 [1880]: 86). In the German context, such views on representations acting as groups can be traced back to Johann Friedrich

Herbart (1776–1841), whose psychology of the unconscious appears to have furnished theoretical tools to many thinkers, not only to Paul. By contrast with Paul, however, Sapir isolates phonemes from morphemes, an abstraction which Paul might have found implausible from a psychological point of view. In addition, Sapir's aesthetic conception of patterns strongly colours his interpretation of Herbartian groups, as we shall see later.

Again in conformity with Paul and much of the linguistic literature of the time, for Sapir the organization of groups is *unconscious*. Latent factors can be brought to light in a variety of ways: through the conflation of phonemic structures, as in the Nootka example; through the filling in of phonemes which reflect co-occurrences latent in the speaker's knowledge (Sapir 1951 [1933]: 52–53); or through what Herbartian psychology and Boas (1858–1942) had described as apperceptive phenomena, for example, in English speakers, the illusory addition of a weak consonant in syllables ending with a short vowel (Sapir 1951 [1933]: 58–59).[2] More generally, unconscious patterning gives rise to what we would characterize as "categorial perception"; that is, the perception of forms that is consonant with their position in a pattern and abstracts away from physical features. Such perception, as Sapir (1951 [1933]: 46) points out, is a general trait of human cognition; indeed, the distinction between physical features and their position in a cultural or linguistic pattern, and the psychological primacy of the latter, is a point repeatedly emphasized in Sapir's texts. Lastly, and this brings us back to aesthetics, in Sapir's (1951 [1925]) "Sound patterns in language", the ability to access and use this sytem of positions, in other words *speech*, is characterized as an "art". This rather surprising characterization, undeveloped and allusive as it is in the text, will hopefully be made more understandable when Sapir's notion of form (or pattern) and the aesthetic motif are more closely examined.

3 Patterns as Gestalten

Most remarkable is the very salient fact that Sapir does not speak of a network of groups but of patterns of elements. This shift of emphasis only underlines the action of unconscious patterns on forms surfacing as conscious elements, for only elements are conscious, not groups. Speaking of "pattern" or, at times, of "con-

[2] "A new sensation is apperceived by means of similar sensations that form part of our knowledge" (Boas 1889: 50). Apperception is one of those notions which belong to the stock-in-trade of Herbartian psychology. The concept of apperception was presumably passed on to Boas through Steinthal. Its application to the issue of "alternating sounds" in Native American languages is discussed by McElvenny in Chapter 2 of this volume.

figuration" also reveals the connection Sapir established between unconscious organization and configurations designated as *Gestalten* in the psychology of the same name.

We do not know for certain when Sapir became acquainted with *Gestalt* psychology. Several testimonies (including a letter by Sapir himself) have revealed Sapir's admiration for Kurt Koffka (1886–1941) and more specifically his book *The Growth of the Mind* (1924), which he appears to have read in 1924.[3] We know the book lay at hand's reach in the family house, and that it was recommended reading for Sapir's seminars on the impact of culture on personality and on the psychology of culture at Yale (years 1933–34 and 1935–36; Sapir 1999 [1933]: 677). It is also a matter of historical record that Sapir met Koffka personally in a symposium on the unconscious in 1927.

There is certainly a kinship between the Gestaltist rejection of elementist psychological accounts and its holistic view of perception and behaviour and, on the other hand, Sapir's idea that all units of culturally determined behaviour are pyschologically active only as "points in a pattern", not as bundles of physical features. The "psychological reality of phonemes" (the title of Sapir's famous paper) has its match in the Gestaltist affirmation that "sensations" do not have phenomenal reality. The contexts of the two theories were vastly different, but this common point shoud be highlighted.[4]

Perhaps most congenial to Sapir was Koffka's definition of a configuration (*Gestalt*) which, although it occurred in the context of a discussion of figure/ground organization, was of the widest generality. A configuration (or *Gestalt*),[5] said Koffka (1924: 146), was definable as a "co-existence of phenomena, in which each member possesses its peculiarity only by virtue of, and in connection with, all the others". In a similar vein, Sapir explained that a linguistic sound

> is not only characterized by a distinctive and slightly variable articulation and a corresponding acoustic image, but also — *and this is crucial* — by

[3]Sapir's positive judgment of the book is conveyed with particular elation in a letter to Benedict (cited in Sapir 2002 [1928-1937]: 121). David Sapir's testimony is cited in Cowan et al. (1986: 478). These testimonies alone suffice to show that Murray (1981), who denies any influence of Gestaltist ideas on Sapir, has seriously misjudged the influence of *Gestalttheorie* on Sapir's thinking.

[4]Sapir's view was also an argument in favour of a minimalist position in the debate on the phonetic notation most suited to Amerindian languages: should one complexify or simplify it? See Darnell (1990: 285).

[5]Mead had lent Koffka's book to Sapir in its English version, where "configuration" translates *Gestalt*/*Struktur* (Darnell 1990: 185). Koffka explains that the translation as "structure" was not retained for fear that in an American context it might be interpreted in connection with structural psychology (i.e. the Wundtian-style analysis of mental states promoted by Titchener in the United States).

> a psychological aloofness from all the other members of the system. […] A sound that is not unconsciously felt as "placed" with reference to other sounds is no more a true element of speech than a lifting of the foot is a dance step unless it can be "placed" with reference to other movements that help to define the "dance". (Sapir 1951 [1925]: 35; Sapir's emphasis)

Sapir's allusion to an organized sequence of actions (dancing), in this passage and elsewhere (Sapir 2002 [1928-1937]: 104–105), might point to the fact that patterned behaviour was appreciated as a major step towards an enlargement of the notion of configuration. This enlargement was especially noticeable in the way Koffka described Köhler's experiments with apes: learning how to solve a task is, says Koffka, the establishment of a new configuration in which an element of the field – for example, a stick – comes to find a role in an action sequence with a beginning and an end; that is, a configuration which has the property of closure (a term significantly reused by Sapir in *The Psychology of Culture*, 2002 [1928-1937]: 104). Further, the apprehension of something as a tool is configurational insofar as a chimpanzee, when putting together a thicker and a thinner stick, is sensitive to their relative length, not to their absolute size; in another situation, the thinner stick may thus play the role of the thicker one.

The vicarious character of units of behaviour and their identification through the configuration of which they partake is precisely the point being made in the initial example of Sapir's (1951 [1925]) "Sound patterns of language": the expiration *wh* that blows a candle gets entirely reconfigured when it becomes a linguistic gesture.

An essential property of formal patterns is their transposability. By "transposable" is meant here the capacity for a system of relations to remain unaltered under a change in physical implementation. Language furnishes several instances of transposability. Thus, the formal patterning of language is said to underlie the possibility of "linguistic transfers"; that is, the possibility of resorting to various (de)coding techniques, such as writing, lip-reading or gestural systems; or again, the system of initial consonants in English is a historical transfer from the Indo-European one (Sapir 1921: 200). The latter kind of transposition, which involves a phonological system, will be further elaborated through an artificial example in "Sound patterns of language".

Now, transposability, in *Gestalt* thought, furnished evidence for the existence of qualities not reducible to sums of sensations. Indeed, from the very beginning of *Gestalt* psychology, in the seminal work of Christian von Ehrenfels (1859–1932), transposability was played upon as a favourite theme: "proof of the existence of Gestalt qualities", said Ehrenfels (1988 [1890]: 90), "is provided, at least

in the sphere of visual and aural presentations, by the similarity-relations […] which obtain between melodies and figures having different tonal or positional foundations". Note that the transposability of melodies as "systems of relations" was cited as a universal of human musical cultures by Carl Stumpf (1848–1936) in *Die Anfänge der Musik* (1911), a book Sapir reviewed at an early stage of his career. Gestaltist ideas thus came to Sapir at least in part through the mediation of aesthetic theory, and much earlier than 1924. There remains, however, a point on which Sapir is at variance with the Gestaltists: whereas a *Gestalt* quality is phenomenally more directly accessible than its elements, the structure of a pattern is, for Sapir, unconscious. However, its units are grasped in a way which, because it does not lay its structure bare, Sapir most often describes as a "feeling". We shall now turn our attention to this feeling for form.

4 The form-feeling

In many places, Sapir refers to the grasping of patterns of all kinds, be they phonological, morphological and syntactic, or behavioural and social, as a "feeling" or, less frequently, as an "intuition" of the same order. This view, as far as I know, makes its first appearance in *Language* (1921), where it is applied to linguistic patterning. For example, we read that "both the phonetic and conceptual structures show the instinctive feeling of language for form" (Sapir 1921: 56) or that every language has a definite feeling for its inner phonetic system and "also a definite feeling for patterning on the level of grammatical formation" (Sapir 1921: 61). The notion of a feeling for form/pattern recurs in different guises which we may assume to carry the same meaning: "relational feeling", "form intuition", "feeling for form/relations/patterning/classification into forms", "to feel a pattern/form" etc. These expressions are used in various contexts: quite generally, as above, to refer to the phonological/morphosyntactic apparatus of a language, as in discussing the unconscious direction imparted to thinking by the forms a language has laid down (Sapir 1951 [1924]: 153); more specifically, while speaking of vocalic alternations in English (*goose-geese*, *sing-sang-sung*; Sapir 1921: 60–61), active constructions (Sapir 1921: 84–85, 111), of which the speaker is said to feel the SVO structure, possessive pronouns, the animate/inanimate distinction (Sapir 1921: 156), case-marking on the English interrogative pronoun (Sapir 1921: 159), the semantic relation between *boy* and *man* (Sapir 1951 [1929]: 61), the meaning of *est-ce que* in French and of verbal stems in Athabaskan languages (Sapir 1991 [1923]: 147), causative forms (Sapir 1951 [1924]: 154), which are an unconscious, unreflective mode of the mental representation of the concept of causa-

tion; French reflexive verbs (Sapir 1951 [1931]: 116), which, to French speakers, induce a "formal feeling", a sense of belonging together, although from an external perspective semantic homogeneity is hard to find. Of all these texts, the notion of "form-feeling" is probably most frequently referred to in "Sound patterns" (1951 [1925]).

A passage from "The unconscious patterning of behavior in society" (1951 [1927](b)) provides a good illustration of the issues intertwined with the notion of form-feeling.

> To most of us who speak English the tangible expression of the plural idea in the noun seems to be a self-evident necessity. Careful observation of English usage, however, leads to the conviction that this self-evident necessity of expression is more of an illusion than a reality. If the plural were to be understood functionally alone, we should find it difficult to explain why we use plural forms with numerals and other words that in themselves imply plurality. "Five man" or "several house" would be just as adequate as "five men" or "several houses." Clearly, what has happened is that English, like all of the other Indo-European languages, has developed a *feeling* for the classification of all expressions which have a nominal form into singulars and plurals. So much is this the case that in the early period of the history of our linguistic family even the adjective, which is nominal in form, is unusable except in conjunction with the category of number. (Sapir 1951 [1927](b): 550; my emphasis)

The example brings home the point that a structural feature is, as it were, "exercised" in actual speech in a way that is not of the order of conscious knowledge. Such a feature gives form to experience and may perpetuate itself by the sheer force of the unconscious pattern which imposes itself on the speaker. Their thoughts being channelled in these formal grooves, speakers may resist the elimination of what, in the eyes of cool reason, would appear to be non-functional or a superfluous luxury.

Note too that the form-feeling has implications for the way diachrony should be conceived. In the passage just cited, and in other places, Sapir seems to be engaged in an implicit dialogue with Otto Jespersen (1860–1943), who had famously argued that languages evolve toward greater economy and analyticity (1894, 1965 [1924]; see e.g. 1965 [1924]: 207ff for the example of plurality). Against Jespersen, yet not in complete disagreement with him, Sapir apparently claims that languages may not evolve toward the complete elimination of superfluities

and toward absolute or near absolute analyticity, for speakers' unconscious attachment to formal patterns carries with it an inertia which resists this evolution. We shall return to the issue of diachrony shortly.

A clue to the understanding of Sapir's "form-feeling" may be found in the following excerpt, which clearly points to the aesthetic source of the notion:

> Probably most linguists are convinced that the language-learning process, particularly the acquisition of a feeling for the formal set of the language, is very largely unconscious and involves mechanisms that are quite distinct in character from either sensation or reflection. There is doubtless something deeper about our feeling for form than even the majority of *art theorists* have divined, and it is not unreasonable to suppose that, as psychological analysis becomes more refined, one of the greatest values of linguistic study will be in the unexpected light it may throw on the psychology of intuition, this "intuition" being perhaps nothing more nor less than the "feeling" for relations. (Sapir 1951 [1924]: 156; my emphasis)

There are two possible ways of interpreting the reference to aesthetics: our feeling for linguistic form can be conceptualized in analogy with its counterpart in aesthetic theory; or both feelings reflect a common ability, the intuitive grasp of complex patterns. From what we have said so far, from the way Sapir conflates phonological intuition with art (Sapir 1951 [1925]: 34), or seems to equate *Gestalten* with aesthetic forms (Sapir 2002 [1928-1937]: 145–150), we may gather that aesthetic intuition was for him a general ability exceeding the bounds of the perception of artistic forms as such (see too, in this respect, the epigraph to this chapter). Such an interpretation would allow us to draw a parallel between this formal linguistic play which is supposed to reflect an innate striving for formal elaboration and, on the other hand, the Boasian idea that artistic creation begins with the purely formal, unrepresentative exercising of technical skills (Boas 1927 [1922]). In the realm of aesthetic thought, Sapir would have as counterparts those theorists granting pride of place to ornamentation, decorative arts; that is, to formalist considerations. In the same way, linguistic change becomes comparable to stylistic change, at that time an all-important question of aesthetic theory. It is now time to see the relation of linguistic change to the aesthetic perspective.

5 Diachrony

We may wonder if Sapir's concepts of pattern and form-feeling have important consequences for his descriptive linguistic work. They certainly do in phonology.

It is suggested here that his view of diachronic processes might furnish another illustration and demonstrate again the relevance of the aesthetic perspective.

In *Language*, diachronic change is described as a "drift", a notion which Sapir (1921: 155) defines as follows: "The drift of a language is constituted by the unconscious selection on the part of its speakers of those individual variations that are cumulative in some special direction".[6] This view of change can be made more palpable through an illustration, Sapir's account of the progressive disappearance of *whom* in favour of *who*. According to Sapir, four causes have contributed to the decline of *whom*. They are summarized in Table 1.

Table 1: Sapir's causes for the decline of *whom*

Cause	Phenomenon	Consequence
1	The forms marking the non-subject ("objective forms") are *me*/*him*/*her*/*us*/*them*/*whom*. In this group *whom* is isolated. The functional class of *whom* comprises *which*/*what*/*that* but these are not inflected.	The isolation of *whom* causes its weakening.
2	Interrogative words like *where*/*when*/*how*, are invariable, except *who*/*whom*	The isolation of *whom* causes its weakening.
3	Objective forms are strongly associated with the post-verbal position (cf. *he told him, it's me*), while interrogative ones are strongly associated with pre-verbal positions.	*whom* belongs to two groups whose members are associated with distinct positions. *Who* is not associated with distinct positions and is thereby favoured over *whom*.
4	*whom* is followed by a slight hesitation in *Whom did you see?*	*whom* is often "clumsy", from a rhythmical point of view, which weakens it.

[6] On the meanings of "drift", and its reception after Sapir, see Malkiel (1981). Malkiel suggests that drift may have its source in the continental drift (*Verschiebung* in German) of Wegener. The idea seems outlandish to me. Hermann Paul, like other authors, speaks of drift (also *Verschiebung*) when dealing with those slight variations which cause constant linguistic change. The definition of "drift" just cited would be perfectly in line with Paul.

Points 1 to 3 in Table 1 are faithful to Hermann Paul's style of explanation: elements which formally or functionally deviate from a group (*Isolierung*) are weakened, except if they are very frequent. However, Sapir's description has its own peculiarities. The frequency factor has disappeared and Sapir has his own way of accounting for the cause of isolation. For example, on the isolation of *whom* in situation 1, he suggests that "there is something unesthetic about the word. It suggests a form pattern which is not filled out by its fellows" (Sapir 1921: 158). He is a little more affirmative in case 2, when he adds: "it is safe to infer that there is a rather strong *feeling* in English that the interrogative pronoun or adverb, typically an emphatic element in the sentence, should be invariable" (Sapir 1921: 159; my emphasis). Apparently, a purely "mechanical" account of the formation and dissolution of groups of the kind advocated by Paul is not deemed sufficient. The form-feeling, with its aesthetic connotation, had to come into play.

As hinted at above, the aesthetic perspective on language made it possible to envisage a comparison of linguistic change and stylistic change. The similitude is explicitly endorsed in *The Psychology of Culture*:

> Practically all aesthetic patterns run through such a gamut: a rise from humble beginnings, an authoritative pinnacle, a prestige hangover — then down! The progress of an aesthetic cycle, then, means that there is aesthetic development within an aesthetic idea. […] Even language forms have something like a cyclical development. Although the language's development is continuous, it is possible to define a certain set of linguistic forms — or point to a certain stage of development of a form — as classical. The classical stage would have a perfectly consistent and tightly-wrought use of forms. Now people participating in an aesthetic cycle are not conscious of it. (Sapir 2002 [1928-1937]: 132–133)[7]

Sapir then goes to explain that English has embarked on an evolution toward analyticity but, unlike Chinese, has not yet completed the cycle.

As already noted, the formal efficacy of entrenched patterns explains Sapir's qualifications on Jespersen's idea of a progress toward analytic forms.[8] English, says Sapir, still mixes up concrete and relational concepts in some limited domains, hence is not fully analytic. For example, the animate/inanimate distinction correlates with distinctive markings, since *I*/*me* and the possessive *'s* are

[7] It is difficult to find any originality in this cyclical view of history. Winckelmann is famous for having defended it in aesthetics.

[8] McElvenny (2013, 2017b) shows how Jespersen's views relate to the debate on the form of international languages.

associated with forms denoting animate entities. Through this convergence, formal configurations reinforce each other, with the consequence that "however the language strives for a more and more analytic form, it is by no means manifesting a drift toward the expression of 'pure' relational concepts in the Indo-Chinese manner" (Sapir 1921: 168). In other words, if we apply to this case the same reasoning as for *whom*, linguistic change is at least partly determined by an aesthetic feeling responding to the (dis)harmony of groups. This view leads to the rejection of purely "mechanical" (Paul) and teleological (Jespersen) accounts.

6 Form, function and formal play

The potency of a pattern is not determined by the function it might fulfil; we have seen that formal patterns have their own efficacy. Reciprocally, function may counteract a well-established pattern. An example of such a counteraction in the non-linguistic realm is given in "Anthropology and sociology" (Sapir 1951 [1927][a]). In many Indian tribes, Sapir observes, there is an entrenched social pattern according to which prestigious positions are a matter of inheritable privilege. This pattern may even extend to positions which should require special individual capacities, and thus may be transferred to domains in which it is clearly non-functional. However, some tribes resist this transfer, because "the psychic peculiarity which leads certain men and women ('medicine-men' and 'medicine-women') to become shamans is so individual that shamanism shows nearly everywhere a marked tendency to resist grooving in the social patterns of the tribe". In the present case, functionality (the exigencies of the craft) supersedes a dominant social pattern (the prevalence of inheritable privilege).[9] However, it is not clear that any such counteraction of function can be observed in the linguistic realm. Given what Sapir says about the greater insulation of language from conscious rationalization, it would be coherent to think that a counteraction of function is

[9]Sapir's notion of cultural/social pattern is in line with Boasian relativism, and its opposition to cross-cultural descriptive schemes appealing to race, evolution or environmental factors. Within diffusionist Boasian anthropology, some emphasized that a proper understanding of the diffusion and assimilation of cultural traits involved moving to the pattern level: substantively identical cultural traits are functionally different if placed within different patterns (Wissler 1917). A radical view holds that substantive traits are of little importance for characterizing some cultural patterns. Totemism, for example, is not to be defined by a substantive trait nor analysed as having originated from any particular trait (be it a guardian spirit, exogamy, taboo, the use of totemic names etc.). Rather, it is a classificatory social pattern, whose origin matters little; what matters is the totemic pattern spreading over a group (Goldenweiser 1912). The analogy with the purely structural Sapirian view of a phonological pattern is obvious.

perhaps only found in non-linguistic domains: language "forms a far more compact and inherently unified conceptual and formal complex than the totality of culture. This is due primarily to the fact that its function is far more limited in nature, to some extent also to the fact that the disturbing force of rationalization that constantly shapes and distorts culture anew is largely absent in language" (Sapir 1951 [1916]: 432–433).

This "largely" unilateral autonomization of form in the field of language would seem to imply that the aesthetic form-feeling plays a greater role in linguistic matters than in any other field. The action of this form-feeling would also be more coercive. In several texts, Sapir connects the potency of patterns with their being unconscious, saying for example that "we act all the more securely for our unawareness of the patterns that control us" (Sapir 1951 [1927][a]: 549).[10] In this respect, language has a special status since, explains Sapir (1951 [1912]: 100), "linguistic features are necessarily less capable of rising into consciousness of speakers than traits of culture". Though less radical, such an affirmation is in agreement with Boas' (1911: 67) claim that linguistic classifications, of all ethnological phenomena, are unique in being inaccessible to consciousness. For Sapir, the access point is obviously the form-feeling.

The relative independence of form and function also manifests itself in a process we may call the "semantic disinvestment" of form. By this term is meant that the "full" content of linguistic forms may not be activated in all of their occurrences, insofar as forms may be simply conventionally applied to ends to which they are not suited. An example from *Psychology of Culture* may illustrate this point (the square brackets indicate places where the reconstructed "manuscript" has been patched by significant additions from the editors):

> Consider, for example, verbs that are not entirely active [in their meaning but are treated as active in the linguistic structure:] in English the subject "I" is logically implied to be the active will in "I sleep" as well as "I run". [A sentence like] "I am hungry" might, [in terms of its content, be logically] better expressed with "hunger" as the active doer, as in [the German] *mich hungert* [or even the French] *j'ai faim*. In some languages, however, such as Sioux, a rigid distinction is made between truly active and static verbs. […] [It seems, then, that] when we get a pattern of behavior, we follow that [pattern] in spite of [being led, sometimes, into] illogical ideas or a feeling of inadequacy. We become used to it. We are comfortable in a groove of behavior. [Indeed], it

[10] This conception, as noted by Joseph (2002), gives the linguist an important role in weakening the grip of linguistic patterns.

> seems that no matter what [the] psychological origin may be, or complex of psychological origins, or a particular type of patterned conduct, the pattern itself will linger on by sheer inertia. […] Patterns of activity are continually getting away from their original psychological incitation. (Sapir 2002 [1928-1937]: 109–110)

In other words, the SV pattern is disinvested of its full significance when it gets applied to cases in which S is not an active doer and the verb is static (cf. also Sapir 1921: 14–15). In English, the generalization of this pattern conforms to the general observation that "all languages evince a curious instinct for the development of one or more particular grammatical processes at the expense of others, tending always to lose sight of any explicit functional value that the process may have had in the first instance, delighting, it would seem, in the sheer play of its means of expression" (Sapir 1921: 60). The description of this formal play is couched in terms that can hardly fail to evoke artistic activity. This step is taken most explicitly in "The unconscious patterning of behavior in society". In this text, the conception of language as an aesthetic product serves to capture two features of linguistic activity: the disconnection between form and function, yet the fact that the formal consistency of language seems to act as a surrogate of this functional demotivation:

> Purely functional explanations of language, if valid, would lead us to expect either a far greater uniformity in linguistic expression than we actually find, or should lead us to discover strict relations of a functional nature between a particular form of language and the culture of the people using it. Neither of these expectations is fulfilled by the facts. […T]he forms of speech developed in the different parts of the world are at once free and necessary, in the sense in which all artistic productions are free and necessary. Linguistic forms as we find them bear only the loosest relation to the cultural needs of a given society, but they have the very tightest consistency as aesthetic products. (Sapir 1951 [1927][b]: 550)[11]

An important aspect of the Sapirian version of the so-called Sapir-Whorf hypothesis may well reside in this aesthetic view, besides, of course, those facets it owes to other motivations, well described in Joseph (2002), and which relate in particular to the publication of Ogden and Richard's *Meaning of Meaning* (1923).

[11] This interplay between freedom and necessity invites a comparison with what Sapir says of the rules of etiquette: etiquette "combines a strong moral necessity and tyranny and a felt element of choice" (Sapir 2002 [1928-1937]: 236).

In view of this aesthetic dialectic between the free and the necessary, Allen (1986: 462) is quite justified in stating that, for Sapir, the linguistic coercion of thought and the compliance of behaviour with cultural patterns "is not the grip of a master (culture) upon a slave (the individual) but is, instead, more closely analogous to the felt need of the member of an orchestra to play his instrument in accordance with a musical score".

The fact that forms may be disinvested of their semantic/psychological content finds its counterpart in Sapir's typology of symbols. In the entry "Symbolism", which was written for the *Encyclopedia of the Social Sciences*, Sapir (1951 [1934]) calls "referential symbolism" the kind of symbolism that has been divested of affective content, in contrast to those symbols that act as substitutes for emotionally charged behaviour, which are said to belong to the second main type, that of "condensation symbolism".[12] During the evolution of mankind, one symbolism has developed from the other:

> It is likely that most referential symbolisms go back to unconsciously evolved symbolisms saturated with emotional quality, which gradually took on a purely referential character as the linked emotion dropped out of the behavior in question. Thus shaking the fist at an imaginary enemy becomes a dissociated and finally a referential symbol for anger, when no enemy, real or imaginary, is actually intended. (Sapir 1951 [1934]: 565)

From a psychoanalytical point of view, this was a very neutral and agnostic way of describing the evolution of symbolism, without, for instance, the concept of repression. Quite significant in this respect is the *non-affective* factor adduced by Sapir to explain the development of referential symbolism, namely "the increased complexity and homogeneity of symbolic material"; that is, the evolution to more richly patterned symbols. This can be brought in relation to Sapir's examples of pattern extensions, and their "getting away from their original psychological incitation" (cf. the quotation above).

[12] The manifestly Freudian "condensation", a rendering of *Verdichtung*, only underlines the importance of affect in the way Sapir conceived of this symbolism, whose immediate emotional significance puts it at the origin of symbolization in mankind. There is a certain kinship between Sapir and some views defended by Ernest Jones (1879–1958) in his psychoanalytical essay on symbolism (Jones 1916), in particular a duality of symbolisms correlated with the unconscious/conscious distinction.

7 The form drive

Form for form's sake is the aesthetic motto for explaining the routinization of linguistic processes, against "mechanical" accounts which narrowly concentrate on low-level processes:

> It is usual to say that isolated linguistic responses are learned early in life and that, as these harden into fixed habits, formally analogous responses are made, when the need arises, in a purely mechanical manner, specific precedents pointing the way to new responses. We are sometimes told that these analogous responses are largely the result of reflection on the utility of the earlier ones, directly learned from the social environment. Such methods of approach see nothing in the problem of linguistic form beyond what is involved in the more and more accurate control of a certain set of muscles towards a desired end, say the hammering of a nail. I can only believe that explanations of this type are seriously incomplete and that they fail to do justice to a certain innate striving for formal elaboration and expression and to an unconscious patterning of sets of related elements of experience. (Sapir 1951 [1924]: 156)

The contrast between the hammering of a nail and speaking is reminiscent of that between blowing a candle and uttering the linguistic sound *wh*; it is, says Sapir (1951 [1925]: 34), what separates mere practical behaviour from art.

In the above passage, the mention of an "innate striving for formal elaboration and expression" echoes other declarations, such as the following one, in which the aesthetic leitmotiv reappears: "the projection in social behavior of an innate sense of form is an intuitive process and is merely a special phase of that mental functioning that finds its clearest voice in mathematics and its most nearly pure aesthetic embodiment in plastic and musical design" (Sapir 1951 [1927][a]: 344). Sapir's appeal to a sort of instinctual "form-craving" of the human mind and to an innate sense of form (e.g. Sapir 1951 [1924], Sapir 1951 [1927](a); see Handler 1986: 445) is not without antecedents. His form-drive is reminiscent of the Schillerian *Formtrieb*, which Friedrich von Schiller (1759–1805) characterized as a drive to a free expression of personality and toward insulating a permanent self from ever-changing worldly conditions (Schiller 1795, letters 12 to 16). The wedding of this "form-drive" to the flow of sensations is accomplished through an aesthetic impulse, the "play-drive" (*Spieltrieb*). Even if Schiller's *Formtrieb* was not on Sapir's mind when he wrote *Language*, Jung's (1921) *Psychological Types*, a book and a theory Sapir was very fond of, may have reminded him of it. For

Jung, however, the *Spieltrieb* was not interpreted as an essentially aesthetic attitude, nor as a systematization of formal patterns, but rather the conciliation of abstract thinking and sensation, of ego-centred vs object-centred orientation, and the source of symbolic creativity.

Sapir is not the only linguist of the time to speak of a form-drive. As McElvenny (2016) observes, Georg von der Gabelentz (1840–1893), in a passage of his *Sprachwissenschaft* (2016 [1891]), speaks of a drive towards the creation of forms (*Formungstrieb*) which would acccount for the formal lavishness (*Formengepränge*) of languages, whose profusion goes beyond functional needs. This *Formungstrieb* accounts for people's delight in formal play, says Gabelentz, who describes this human urge with Schiller's word *Spieltrieb*; that is, the play-drive which grounds the aesthetic attitude (Gabelentz 2016 [1891]: 381; no explicit reference to Schiller is made). The play-drive implies that the "little surplus of effort that I made on my work over and above bare utility was already a piece of love, and gave the dead material a breath of the personal for all time." Indeed, continues Gabelentz (2016 [1891]: 344), "precisely the same thing happened with language" (trans. McElvenny 2016: 35).

In an addition to the second edition of Gabelentz' text, and in the context of the present discussion, Gabelentz' nephew, Albrecht Graf von der Schulenburg, refers back to Wilhelm von Humboldt (1767–1835) (see also McElvenny 2017a). Especially praised are speakers of languages which systematize this formal play by resorting to obligatory inflections, that is, speakers of Indo-European languages; in them, says Schulenburg, one finds a specific sense of form (*Formensinn*, a word also found in texts on art) and an outstanding "aesthetic" gift (Gabelentz 2016 [1891]: 394). While the value judgement might not have been to Gabelentz' taste, I believe the reference to Humboldt puts us on the right track.

Although the term *Formungstrieb*, so it seems, is not used by Humboldt (Jürgen Trabant, p. c.), what we do find in Humboldt is the idea of a formative power which is especially active in some phases of language evolution, a power that Humboldt calls *Bildungstrieb*. The term can be found in two contexts: in texts about language, and in instances where the discussion revolves around biological questions (respectively Humboldt 1907 [1830-35], vol. VII: 95, 168, cf. Eng. trans. in Humboldt 1988 [1830–1835], p. 88, "constructive urge", and p. 150, "formative urge"; Humboldt 1903 [1794], vol. I: 328). The latter contexts point to the biological source of the *Bildungstrieb*, a concept borrowed from Humboldt's former teacher at Göttingen, Johann Friedrich Blumenbach (1752–1840). For Blumenbach (1781), the *Bildungstrieb* is a force creating and perpetuating organic forms (Jürgen Trabant, p. c.). In the linguistic domain, the stage at which lan-

guage forms, as it were, "outgrow" the mind seem to be evaluated negatively (cf. *Über die Verschiedenheit*, Eng. trans. §20, in Humboldt 1988 [1830–1835]), which of course separates him from Sapir.

In short, linguistic structures are produced by an instinct which governs the creation of aesthetic objects through its formal play. I believe that by setting Sapir's aesthetic form-drive in the very German genealogy sketched above I am not going far beyond the bounds of decent speculation. This brief digression on the sources of the form-drive is not all the German lead has to offer, as we shall now see.

8 On the source of the form-feeling: Croce?

We have shown that the form-feeling has its origin in aesthetic theory. Aesthetics is a continent unto itself, and the potential sources are many. Let us first go back to what Sapir himself said about his influence(s). The crucial passage is repeated here:

> Probably most linguists are convinced that the language-learning process, particularly the acquisition of a feeling for the formal set of the language, is very largely unconscious and involves mechanisms that are quite distinct in character from either sensation or reflection. There is doubtless something deeper about our feeling for form than even the majority of *art theorists* have divined, and it is not unreasonable to suppose that, as psychological analysis becomes more refined, one of the greatest values of linguistic study will be in the unexpected light it may throw on the psychology of intuition, this "intuition" being perhaps nothing more nor less than the "feeling" for relations. (Sapir 1951 [1924]: 156; my emphasis)

In this passage, "intuition" is equated with "feeling for form". On the other hand, we have explicit statements by Sapir in *Language* in which he acknowledges his debt to Benedetto Croce (1866–1952); further, in one instance, Sapir (1921: 224) says he borrows the term "intuition" from Croce, who in his *Aesthetics* uses "intuition" in contrast to "logical knowledge". Altogether, this may be conducive to an adventurous syllogism: Sapir owes his notion of intuitive knowledge to Croce, intuitive knowledge = form-feeling, *ergo* Sapir's form-feeling is a version of Croce's intuition, or at least related to it. This conclusion is endorsed by Modjeska (1968: 347), who claims that in Croce Sapir "found a confirmation, if not the source of his own thoughts on formal pattern". Hymes (1969) agrees with Modjeska, while Hall (1969) begs to differ.

That Sapir borrowed "intuition" from Croce is acknowledged by Sapir himself, as we just saw. Whether the notion of form-feeling can be conflated with Croce's "intuition" is another matter. Croce's definitions of intuition, however hazy, show that intuition is for him a faculty essentially dedicated to the apprehension of individual objects. Further, Croce wields his notion of intuition against an intellectualist view of cognition and implicitly against Kant's concept of intuition; at any rate, his discussion shows he completely misses the Kantian doctrine of forms of intuition and categories, which certainly should detract from its interest for an informed reader.[13]

In the *Aesthetic*, there is no particular emphasis on the grasp of unconscious patterns. On the contrary, genius, as superlative intuition, is essentially conscious, and in the chapter on language (chap. 18), Croce makes clear that parts of speech, which might be taken here as building blocks of linguistic patterning, are dubious abstractions floating above linguistic intuition. Intuition is also, however, a faculty that is inherently expressive, insofar as its operation is fully realized (intuiting a geographical area is being able to draw it, says Croce); this aspect, at least, is consonant with the dynamic character of the Sapirian unconscious (see Allen 1986).

Given the philosophical context in which Croce introduces his notion of intuition, what was its relevance for Sapir? In *Language*, occurrences of "intuition" that may be considered to come close to Croce's notion appear in the section devoted to literary criticism; that is, when discussing the idiosyncrasy of writers. In this section, the irreducibly individual character of an artist's "intuition" is said to have its origin in personal experience, within "thought relations" which, says Sapir (1921: 239), "have no specific linguistic vesture". If this were not clear enough, shortly after this passage, a distinction is drawn between this personal intuition and the "innate, specialized art of language", an art that would seem to be exercised by the form-feeling.

When Sapir uses "intuition" in a sense that would appear to be more relevant to his own understanding of the term, he does not go back to Croce but to Jung. In this respect, the way he handles Jung's functional types of mental activity (thinking, feeling, sensation, intuition) is revealing. Of all these types, intuition is singled out. Intuition, he says, is not on a par with the rest of the functional types; it is rather a mode of apprehension which cuts across the other functional

[13] Against Kant, Croce says for instance that we have "intuitions without space and time": "Noi abbiamo intuizioni senza spazio e senza tempo: una tinta di cielo e una tinta di sentimento, un 'ahi !' di dolore e uno slancio di volontà oggettivati nella coscienza, sono intuizioni che possediamo, e dove nulla è formato nello spazio e nel tempo" (Croce 1908 [1902]: 6–7). Here, intuition is used in reference to Kant's *Anschauung* (which adds to the confusion, if anything).

types. Intuition is really an awareness of relations provided by a quick rate of apprehension, and the intuitive mind might be described as "an historical mind, aware of all the relations that are locked up in the given configuration" (Sapir 2002 [1928-1937]: 167). Thus, in the realm of abstract thinking, the quick glance of intuition is a privilege of the great mathematician, who sees the answer before it is proven (Sapir 2002 [1928-1937]: 167). In the realm of sensationist apprehension, intuition is the process which lies behind the ability of a cook to project the result of combining flavours (Sapir 2002 [1928-1937]: 168). Being thus generalized to all sorts of fields, Jungian intuition is redescribed by Sapir in a way that makes it come very close to the form-feeling.

The aesthetic aspect, however, is not essential in Jung's conception, except when the discussion leads him to find objections to it; for example, when he scrutinizes Schiller's *Spieltrieb*. On the other hand, in the preface to *Language* (1921: iii), a short eulogy praises Croce for being "one of the very few who have gained an understanding of the fundamental significance of language", and apparently expanding on what this significance consists in, Sapir goes on to say that Croce "has pointed out its [i.e. language's] close relation to the problem of art" and that he is "deeply indebted to him for this insight."

A glance at what Croce has to say about language, both simplistic and vague, suggests that Sapir, beyond this fundamental insight, could find little of value for his own concerns. First, the notion of "form-feeling" does not figure in the theoretical apparatus of Croce. Second, Sapir had reservations about Croce. Thus, in notes he jotted down on Croce he criticizes him for conceding too much to an individual's expressive capacity and not enough to formal conventions (Handler 1986). As a matter of fact, this is a recurring objection. It is for example levelled against Jung and Lévy-Bruhl: we should not transfer to individuals qualities which come from their complying with cultural patterns.

From this excursus on Croce, we may conclude, in agreement with Handler (1986: 441), that Sapir's analyses of linguistic patterning owe little to Croce, and we should take him at his word when he says that his debt to Croce is one fundamental insight, the connection of language to aesthetics. Further, even if Sapir borrowed "intuition" from Croce, his use of the term is his own and may at least as much reflect the influence of Jung.

9 Form-feeling and Formgefühl: Vischer and Wölfflin

We are left without an answer to the question of Sapir's sources in aesthetics. I suggest that "form-feeling" is in fact a translation of the German *Formgefühl*, a

term commonly used by art theorists of the time. Note also that the plural in the quote above ("the majority of art theorists") points to a notion that is not the prerogative of a single author, and this is indeed the case for the *Formgefühl*. A few words need to be said about the historical background to this notion.

Formgefühl has various meanings. In the *Ästhetik*, the magnum opus of the "ponderous Hegelian" (Croce's words) Friedrich Theodor Vischer (1807–1887), the term is used abundantly without, however, being thematized as such. Its signification is essentially that of aesthetic sensibility, and it is most often used in connection with a people and a period. It may also characterize one of the opposed principles into which Vischer resolves styles, namely the painterly and the plastic (Vischer is one of the sources for the analyses of styles into opposing pairs; cf. for example the *Principles* of Wölfflin).

Since the psychological aspect of the *Formgefühl* is our first concern here, we should mention that early occurrences of the term in psychological literature can be found in the writings of the great mandarin of the field in Germany, Wilhelm Wundt (1832–1920). Wundt (1908–1911 [1874]) appears to employ *Formgefühl* in contradistinction to, on the one hand, sensations of (dis)harmony between elementary impressions and, on the other hand, "intellectual" contents associated with the perception of forms, including, for example, the functionality of body parts in representations of the human figure (cf. the 1902 edition, chap. 16, part 2). The *Formgefühl* is thus associated with the perception of organization and order.[14] In this "structural" meaning, its genealogy can be traced back to some of Herbart's followers, namely, to Nahlowsky (1812–1885) and his notions of "elementary feelings" and "group-feelings" (Nahlowsky 1862; Romand 2018), and to Waitz (1821–1864) and his observations on the aesthetic effect of *Form* and *Gestalten* (Waitz 1849; Romand 2015, Romand In press).

The notion of *Formgefühl* seems to gain a larger audience with the advent of an empathy-centred, psychological aesthetics. An important landmark in this tradition, which goes back to the Romantic era, is the work of Robert Vischer (1847–1933), son of Friedrich Vischer.[15] In a short treatise (his dissertation) entitled *On The Optic Feeling of Form* (*Über das Optische Formgefühl*, 1873), Vischer explains that contemplating and forming images always implies an active involvement of the body or a projection of bodily feelings and affects onto the object (a projection he calls *Nachfühlung*/*Einfühlung*, "concurring-feeling", as it were, and

[14] My thanks to David Romand for having called to my attention Wundt's *Grundzüge* and the Herbartians. According to Romand, the Wundtian concept was the one taken over by Lipps and Dessoir (Romand In press).

[15] For an English introduction to Robert Vischer, see Barasch (1998).

"empathy"). Thus, a rock facing a subject may appear to defy or challenge her, a road which widens awakens a triumphant feeling etc. This is not yet art, but its prelude: the artist's task consists in imbuing such projected feelings with a more general and spiritual meaning. In sum, the *Formgefühl* is for Vischer a projection of a feeling into a form.

Heinrich Wölfflin (1864–1945), in his first study Wölfflin (1886), pursues Vischer's line of thought, and applies it more specifically to the description of factors which condition the affective effect produced by an architectural style. In *Renaissance und Barock* (1888), Wölfflin explains that the features which define a style reflect a way of projecting inner feelings and corporeal habits, characteristic of a period, into forms. The tapering of Gothic forms, for example, reflects a muscular tension and an effort of the will that one does not find in the serene and vigorous equanimity of Renaissance constructions. Further, the *Formgefühl* offers a psychological definition of style which cuts across arts and thus unites architecture with painting, sculpture and decorative arts (e.g. clothing). This relative homogeneity of style is manifested in recurrent formal patterns (e.g. the pointed elongated shape of Gothic art), of which the *Formgefühl* is therefore both an intuition and a source.[16] Moreover, Wölfflin lays great importance on the idea that artistic forms cannot be determined by cultural-historical factors nor by functionality or technical necessity. And although the notion of *Formgefühl* is still framed in an empathy-based theory (or Wölfflin's own version of empathy, the *Lebensgefühl*), the *Formgefühl* itself circumscribes a relatively autonomous formal plane.

On the whole, Wölfflin's formalist style of analysis, which reflects an emphasis on non-representative art (such as architecture), resonates with the great interest of the time in ornamental design and decorative art, exemplified in particular by Alois Riegl (1858–1905; see e.g. Riegl 1893) and Gottfried Semper (1803–1879). The latter, for example, placed much emphasis on the role of decorative arts, small artefacts, costume, furniture and architecture (i.e. all objects close to the body; Semper 1884).[17] Such an emphasis could hardly be lost on anthropologists who often had to deal with everyday objects. Indeed, Boas does not seem far from Semper when he states that "so far as our knowledge of the works of art of primitive people extends the feeling for form is inextricably bound up with technical experience. Nature does not seem to present formal ideals, — that is fixed types that are imitated, — except when a natural object is used in daily life; when it is handled, perhaps modified, by technical processes" (Boas 1927 [1922]: 11).

[16] See, for example, Wölfflin (1888: chap. 3); the English translation has somewhat distorted the text, *Formgefühl* being variously rendered as "formal sensibility", "formal response" and, worse, "conception of form".

[17] On the relation of Wölfflin to Semper and Riegl, see Payne (2012).

In this way, the formalist perspective in aesthetic theory may be considered as a counterpart to Sapir's view on the potential autonomization of linguistic form.

10 Form-feeling and Formgefühl: Lipps and Dessoir

Perhaps most relevant for our concerns are the discussions of Theodor Lipps (1851–1914) and Max Dessoir (1867–1947), in view of their insistence on the structural features of form, and therefore their possibly greater proximity to Sapir's understanding of the form-feeling.

In his *Aesthetics of Space* (*Raumästhetik*), Lipps (1897) draws a parallel between, on the one hand, this form of unconscious and rule-driven knowledge, intuited by feeling, which we exercise when engaged in "mechanical activities" (such as riding a bicycle) and, on the other hand, the feeling which rules our speech productions, the "language-feeling" or *Sprachgefühl* (a term in common parlance at the time; cf. Tchougounnikov In press). Further, Lipps (1897: chap. 8) states that this "language-feeling" is akin to the "form-feeling" which is built from our bodily experience and our acquaintance with the world of physical objects, and which results in the grasp of general geometrical patterns. These various feelings, though rule-driven, do not rest on an exact memory of past events, since each new case which presents itself is different from the preceding ones; they constitute a *sui generis* kind of knowledge, unconscious and "amazingly sure", says Lipps.

In an introduction to his conception of psychological aesthetics, Lipps (1907) explains that the *Formgefühl* is a feeling assigning a value to the way in which parts are articulated into a whole; that is, to the structure of a pattern. The rules which govern this part-whole organization fall under two main principles: those related to the identification of global organization (e.g. rhythm), and those related to the hierarchical structure of the whole. For instance, in the Greek temple, because of the regular disposition of columns, the principle of rhythmic organization prevails, while in the Gothic cathedral the hierarchical principle is dominant. The beautiful is defined as a vital affirmation of the Ego (*Lebensbejahung*), an affirmation which results from a positive empathy, which Lipps attempts to define in not too nebulous terms. Finally, Lipps characterizes art as a formal language (*Formensprache*), and this formal language he identifies with a play with forms endowed with a functional role (e.g. a capital stylized into a vegetal form).

Close to some positions advocated by Lipps, Dessoir (1906) defines the *Formgefühl* as that feeling which arises from the structural features of proportion, harmony and rhythm, as well as from the quantitative and intensive aspects of

forms. The *Formgefühl* itself is carefully distinguished from feelings associated with pure sensations and the content of aesthetic objects; it is therefore a feeling which revels in the organization of formal elements. Much of the discussion centres on rhythm and music and, in fact, the term *Formgefühl* surfaces from time to time, in addition to Dessoir's text, in discussions about the "new music" (*Neue Musik*), such as those of Schönberg and Webern (see e.g. Webern 1912). Given Sapir's intense interest for music and the similarity he perceived between music and language (Darnell 1990: 156), these discussions may have been a possible source too.

11 Conclusion

In a Sapirian spirit we may say that Sapir has assembled into a unique configuration ideas which he had found consonant with his own perspective. That linguistic structures are unconscious was almost a commonplace in the linguistics of the time. However, Sapir's notion of pattern has, to the best of my knowledge, no equivalent. On the one hand, patterns are formed out of groups which are formally and functionally/semantically defined, as in Paul's theory; on the other hand, the combinatorial potential of units, be they phonemes, morphemes or words, helps define unconscious groups, an aspect which brings him closer to Bloomfield. In contrast to Paul, the form-feeling is a window on unconscious structures; its intuitive grasp of linguistically relevant units attests to the psychological reality of forms which abstract away from physical features. The form-feeling warrants, perhaps makes possible, the linguist's labour.

Unconscious patterns were obviously connected in Sapir's mind with the notion of *Gestalt*, and the way Koffka conceived of *Gestalten* may have enticed him to generalize the notion of pattern-*Gestalt* to any culturally significant activity; that is, beyond linguistic behaviour. As to the unconscious structuring of linguistic units, this was not apprehended by Sapir in the "mechanical" fashion of Paul, but as the result of the creative facet of the form-feeling, or form-drive. The form-drive and the form-feeling operate in accordance with entrenched patterns, which may have lost their functional motivation. The conventionality or routinization of patterns invites a parallel with what aesthetics knows as style, and we have seen that for Sapir the creation and perception of linguistic pattern is fundamentally of the same order as the artistic attitude. This insight he said he owed to Croce, but, as we have shown, it can be doubted that Croce's influence went far beyond this very general idea.

If the form-feeling is an allusion to the German *Formgefühl*, as was suggested above, it seems legitimate to examine more closely this notion as it circulated in aesthetics, and ask what, among its various aspects in different authors, had seemed to answer to Sapir's concerns. In this respect, Lipps' theory seems to be especially relevant: like the Sapirian form-feeling, Lipps' aesthetic form-feeling is an unconscious form of knowledge which cannot be reduced to a kind of conceptual knowledge, yet it is rule-driven. Further, it is explicitly compared with that feeling for language which regulates speech production. Given his fame, Wölfflin may have come to Sapir's attention and may have suggested to him a parallel between language and style. Moreover, Wölfflin's formalist perspective and in the same respect that of Lipps and Dessoir was also potentially congenial to the Sapirian view of "form for form's sake". In addition, we may speculate that the problem of stylistic change, of major importance for Wölfflin, could suggest a comparison with the question of linguistic change. Finally, the interplay, in art productions, between functionality, stylization and convention, between emotion-laden and detached formal play may have reinforced the Sapirian view of language as an aesthetic form.

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Chapter 3

The resistant embrace of formalism in the work of Émile Benveniste and Aurélien Sauvageot

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Rarely claimed by linguists as labels for their own work, "structuralist" and "structuralism" have been more often hurled at others as criticisms. Yet those doing the hurling were themselves often pursuing a similarly formalist analysis, and were not averse to claiming their share of the academic capital that structuralism brought to linguistics. Work by Émile Benveniste (1902–1976) and Aurélien Sauvageot (1897–1988) shows different modes of a "resistant embrace" to structuralist formalism, with their resistance centred on a perceived abandonment of attention to phonological and philological detail; and to the role of speakers, a concern that culminates with Benveniste's concept of enunciation. Their reactions are examined here within the framework of two different ways in which structuralism was conceived, one based on holism, the other on universalism.

1 Introduction

Quentin Skinner (1969) expressed concern about the growing use in the history of ideas of the notion of paradigm, which had emerged in the history of art (Gombrich 1960) and of science (Kuhn 1962). Skinner argued that it fosters a mythology that how people thought at any given period was more unified than has ever historically been the case. Insofar as we buy into this "mythology of doctrines", Skinner writes, quoting Voltaire, "History then indeed becomes a pack of tricks we play on the dead" (Skinner 1969: 7, 13–14).[1]

[1]The quote is from Voltaire's letter to Pierre-Robert Le Cornier de Cideville, 9 Feb. 1757: "l'histoire […] n'est, après tout, qu'un ramas de tracasseries qu'on fait aux morts".

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We are ninety years on from the first uses of the term "structuralism" by linguists,[2] first to manifest, then to identify a paradigm, to which some subscribed wholeheartedly, while others resisted no less strongly, and others still, a majority perhaps, were ambivalent. This is not always easy to determine, making it all the more tempting to use the mythology of doctrines to unify the middle decades of the twentieth century into a structuralist period.

Not only do linguists no longer apply "structuralist" to our work, we even struggle to remember what exactly it represented, and why it had the power it did.[3] Actually, "structuralist" and "structuralism" were more often hurled at others as criticisms than claimed as methodological labels. Yet those doing the hurling were themselves often pursuing a recognizably structuralist form of analysis, and were not averse to taking their share of the academic capital that structuralism brought to linguistics. This paper examines some of the modes of resistance to the formalist commitments of structural linguistics in mid-twentieth-century France — before the onset of a "post-structuralist" period — and explores what drove it.

[2]Joseph (2001) gives details on these early uses, and later ones, as well as on the "structuralism" proclaimed in psychology starting in 1907.

[3]Having detected recently that younger colleagues in my department were using the term "generative" in a way that struck me as different from my own use of it, I went around to some of them and asked, "Are you a generativist?" This included phoneticians and phonologists as well as people who work in pragmatics and syntax, none of them committed Chomskyans like the people with whom I worked at the University of Maryland in the 1980s. Each of my present colleagues whom I queried hesitated for a few seconds, then answered "yes". I then asked what "generativist" means to them. None of them mentioned innateness, or universal grammar, or rules and representations, or principles and parameters, or infinite creativity or any other of the ideas which I associate with generativism. Rather, all said that they are generativists because they believe in the existence of a language system which speakers know, and which is the basis of language production and comprehension. This, to me, does not a generativist make. It is structuralism, part of the considerable structuralist heritage that continued into generativism. But to make it the criterion for being a generativist is like being asked to define Episcopalianism, and answering that it means believing in God. I have argued for a long time now (since Joseph 1999, and most fully in Joseph 2002) that "American structuralism" actually begins not with Bloomfield and Sapir but with Chomsky, or else perhaps the day in 1942 when Jakobson landed in New York. Yet one now meets linguists who think that the idea of a mental language system originated with Chomsky. When it comes to meaning in language, my colleagues often prove to be pre-Saussurean, conceiving of a language as an encoding of a pre-existing external reality — what Saussure rejected as "nomenclaturism". They are divided over whether the sound side is essentially mental or acoustic. In these respects they are not yet structuralists, let alone generativists. But they value the label.

2 Benveniste and structuralism

Émile Benveniste (1902–1976) was the most important French linguist of the "structuralist period". When asked about structuralism in interviews, he did not keep his distance, but answered the question as though he embraced the term and what it stood for (Benveniste 1974 [1968](a), Benveniste 1974 [1968](b)). His linguistic work became progressively less structural in some senses of that term, starting from when he resumed it after his Swiss exile during the war. Starting in the 1950s and culminating in 1969, he introduced his concept of "enunciation", which is the direct opposite to the structuralist approach in key respects. As discussed in section §6 below, his stated aim was not to replace structuralism, but to supplement it — to provide a parallel mode of enquiry in which the focus is not on the structure of the *langue*, nor on *parole*, but on speakers; on the "semantic" rather than the "semiotic", in his terms, which seems to make him pre-Saussurean, as does his placing of writing at the centre of language.

He continued to publish prolifically on ancient Indo-European languages, as he had done since the 1920s, and also undertook fieldwork on American Indian languages in Alaska and the Yukon, though he published little of this research. He also produced a small but steady number of papers offering radical revisions to key concepts of linguistic analysis such as person, deixis and performatives, the sort of thing that his teacher Antoine Meillet (1866–1936) had often done. A number of these papers were republished in 1966 in a volume entitled *Problems in General Linguistics*, of which a second volume appeared in 1974. The 1966 volume (henceforth referred to as PLG 1, and the 1974 follow-up as PLG 2) appeared just at the time when "structuralism" as a generalized mode of enquiry was getting established as dominant across the fields that comprise what in France are called the "human sciences", and indeed beyond.

The focus of Benveniste (1969) on words, rather than sounds and forms (although they come into the picture in a secondary role), gives it a precarious place within linguistics *tout court*, let alone structural linguistics, which treated words as a pre-scientific concept, necessary to refer to when communicating with the general public and specialists in other academic fields, but kept at bay in their formal analyses. This despite two of the core figures of structural linguistics, Roman Jakobson (1896–1982) and André Martinet (1908–1999), giving the title *Word* to the journal which they co-founded in New York in 1945. The 1969 book is his attempt at the sort of structuralism that had spread beyond linguistics. He read the work of his contemporaries such as Georges Dumézil (1898–1986) and Georges Canguilhem (1904–1995) with admiration mixed with an awareness that

the philological knowledge they brought to bear in their enquiries was shallow in comparison with his own. Claude Lévi-Strauss (1908–2009) could not see anywhere near so deeply into the cultures he studied as Benveniste could into the remote Indo-European past.

Yet Benveniste, in spite of all his work aimed directly or indirectly at subverting structuralism, never rejected it. In contemplating why, I have been inclined to attribute it to practical concerns: his awareness that structuralism, in promoting linguistics to master science, had brought considerable advantages to the French linguistics establishment and to him as its leader. That may sound like a cynical motive, except that Benveniste was not a Jakobson or a Martinet, men with flamboyant personalities who strove to attract followers and worried about their place in the academic pecking order. Benveniste's place at the top was assured institutionally, from Meillet's death until his own forty years later, even during the last seven years when he was paralysed by a stroke and could not speak or write. The advantages which the wide attention to structuralism brought were ones that he personally did not need, but they offered benefits to his students and the other French linguists of whom he was the acknowledged leader.

There was still more to his ongoing semi-commitment to structuralism than the pragmatic benefits for others. Even his late work contains signs that he was drawn to what structuralism promised, in an almost religious way — like an agnostic who never misses church, drawn to the vision and promise he aches to believe in.[4]

It is striking how in a 1968 address (Benveniste 1974 [1970][b]: 95), and again in a lecture the following January (Benveniste 2012: 79), Benveniste insists that "the language contains the society".[5] Meillet (1905–1906) had been the first to state in print, more than sixty years earlier, that "a language is a social fact". But Benveniste is asserting much more than that. To understand why, we can look for example at the brief chapter headed *thémis* in his *Vocabulaire des institutions indo-européennes*:

> The general structure of society, defined in its broad divisions by a certain number of concepts, rests on an assemblage of norms which add up to

[4] No links to traditional religious thinking are apparent in Benveniste's work, but see Dosse (1997 [1991]: 245–247) on Christian interpretations of the semiology of Jacques Lacan (1901–1981), to whom Benveniste was sufficiently close to have contributed an article to the first issue of his journal *La Psychanalyse* (Benveniste 1966 [1956][b]), and on displaced Christianity in the work of Louis Althusser (1918–1990), Lacan's ally in the École Normale Supérieure (pp. 294–295).

[5] "[…] la langue contient la société." He adds that "la langue inclut la société, mais elle n'est pas incluse par elle" (the language includes the society, but is not included by it) (Benveniste 1974 [1970][b]: 96). Translations are mine unless otherwise indicated.

> "law". All societies, even the most primitive […] are governed by principles of law relating both to persons and to goods. The rules and these norms are traceable in the vocabulary.
>
> […] We can in the first place posit for common Indo-European an extremely important concept, that of "order". It is represented by Vedic *ṛta*, Iranian *arta* (Armenian *aša*, by a special phonetic development). We have here one of the cardinal notions of the legal world of the Indo-European to say nothing of their religious and moral ideas: this is the concept of "Order" which governs also the orderliness of the universe, the movement of the stars, the regularity of the seasons and the years; and further the relations of gods and men, and finally the relations of men to one another. Nothing which concerns man or the world falls outside the realm of "Order". It is thus the foundation, both religious and moral, of every society. Without this principle everything would revert to chaos. (Benveniste 2016 [1973]: 379–380)[6]

Benveniste is attuned to the differences among Indo-European societies. Words that are not shared across the languages are interpreted as representing later historical developments. Through close study of texts in which the words occur, Benveniste works to establish their precise meanings, and in so doing to reconstruct the societies themselves. In the case of words shared across all or the great bulk of the family, he is reconstructing the earliest recoverable Indo-European social stratum. The language contains the society.

His remarks about the nature of law are grounded in the findings of this linguistic method, but also apply to the method itself, particularly to the guiding principle of Benveniste's training, which he embraces even as he resists it. Structuralism is the search for the system that is "an assemblage of norms which add

[6] "La structure générale de la société, définie dans ses grandes divisions par un certain nombre de concepts, repose sur un ensemble de normes qui constituent un droit. Toutes les sociétés, mêmes les plus primitives, […] sont régies par des principes de droit quant aux personnes et aux biens. Ces règles et ces normes se marquent dans le vocabulaire. […] On peut poser, dès l'état indo-européen, un concept extrêmement important : celui de l''ordre'. Il est représenté par le védique *ṛta*, iranien *arta* (avestique *aša*, par une évolution phonétique particulière). C'est là une des notions cardinales de l'univers juridique et aussi religieux et moral des Indo-Européens : c'est l''Ordre' qui règle aussi bien l'ordonnance de l'univers, le mouvement des astres, la périodicité des saisons et des années que les rapports des hommes et des dieux, enfin des hommes entre eux. Rien de ce qui touche à l'homme, au monde, n'échappe à l'empire de l''Ordre'. C'est donc le fondement tant religieux que moral de toute société; sans ce principe, tout retournerait au chaos" (Benveniste 1969: vol. 2, 99–100).

up to 'law' ". No wonder its draw was so strong: it "is the concept of 'Order' which governs also the orderliness of the universe, the movement of the stars, […] the relations of men to one another". It is as true of structure in language as of order in law and society that "Without this principle everything would revert to chaos".

Who knows whether Benveniste saw, let alone intended, the reflexivity of his comments? But a few paragraphs on, after going through various Indo-Iranian, Greek and Latin reflexes of this root *ar–*, including Latin *ars* "art" and *ritus* "rite", Latin *artus* "joint" and Greek *árthon* "joint, limb", he remarks: "Everywhere the same notion is still perceptible: order, arrangement, the close mutual adaptation of the parts of a whole to one another […]" (Benveniste 1969: 101).[7] If you seek a definition of the structuralist view of the language system, look no further.[8]

So why did Benveniste not seek unambivalently to be the Galileo of language, reducing the vast chaos of diversity to Order? The clue is in the word 'reducing'. Reduction is the genius of structuralism. Its ancient and deep-seated appeal in our languages and cultures is evident in Benveniste's analysis of *thémis*. The one small minority to which it might not appeal are those who actually love the vast diversity of languages, who enjoy nothing more than reading ancient texts in barely-known languages and working through their minute details. In other words, linguists, particularly the sort who entered the field in the nineteenth and the first two-thirds of the twentieth centuries, and who still exist, in reduced numbers.

I am suggesting that the founding tension in structuralism was that it was driven by a reductionist search for order, carried out by people who varied considerably in how fast and how far they thought such reduction could legitimately be taken. Indeed, some of them believed that legitimate knowledge required an

[7] "Partout, la même notion est encore sensible : l'ordonnance, l'ordre, l'adaptation étroite entre les parties d'un tout […]". *ar–* is also the root of French *ordre* and English *order*.

[8] The desire to find order in language, with the promise it held out of keeping everything from reverting to chaos, was by no means exclusive to linguists. It was extremely widespread, lying behind movements for language standardization, and for what linguists disparage as prescriptivism. In my view, the descriptivist-prescriptivist dichotomy is ultimately rhetorical, a veneer which masks a shared desire for order — law and order, given how fond linguists have always been of discovering laws comparable to those by which the movement of the stars is explained. One might expect linguists to regard prescriptivism as a phenomenon of language understanding and use, as worthy of study and analysis as their supposedly prescription-free data, but such an outlook is rare. We claim the unique right to define what order is and how it is to be sought, and see it as our duty to stamp out other conceptions of order in language, exposing their ignorance and error and treating them as an even greater threat to order because they decline to acknowledge our unique authority.

accumulation of ever greater data and detail, in direct contrast to the genius of structuralism, and they would form the hard resistance. But my interest here is in the soft resistance of those who embraced the programme even while holding it at bay. Who smoked, but didn't inhale.

3 The issue of discontinuity

I shall start from the end of the structuralist period, and the critique of structuralist linguistics mounted from the 1970s onward by Henri Meschonnic (1932–2000), who belonged to the generation of Benveniste's students.[9] This is well into the period which, outside France, was being labelled as "post-structuralist", characterized by resistance to key aspects of structuralist work being mounted by academics from fields other than linguistics. Such was the din from without that Meschonnic's resistance from within did not have the full impact one might have expected. Like the integrationist critique of linguistics mounted by Roy Harris (1931–2015) at Oxford, it produced a clique of devoted followers, along with rejection and enmity from the linguistics mainstream — which however had by now cut itself off from any commitments to a structuralism henceforth associated with the past. This masked its enduring heritage, and made it inevitable that by the late 2010s linguists would no longer distinguish structuralism from generativism.

For Meschonnic, the tragedy of structuralism lay in what he called its "triumphalism of scientizing the discontinuous" (*triomphalisme d'un scientisme du discontinu*) (Meschonnic 2009: 20). It is true that, if you ask a linguist what linguistics is, the answer you are likely to get is, first, something about the scientific study of language, and then a litany of the sub-specializations, phonology, syntax, semantics, historical linguistics, sociolinguistics etc. and what they are concerned with.[10] The existence of those sub-fields, with their division of the labour of analysing sound, order, meaning and the rest each allotted to specialists, is taken to signify the field's progress to a mature state. Specialists tend to avoid treading on each other's turf; yet no one would deny that the ultimate goal is an understanding of language *as a whole*. The institutionalizing of discontinuity is seen as a means to that end, yet, as Meschonnic shows, it has tended to become an end in itself.

[9] His *magnum opus*, Meschonnic (1982), sits within a massive output that branches across the disciplinary boundaries which he rejected.

[10] For an example, see https://www.youtube.com/watch?v=7HOsQDD1Res.

Taking inspiration from Benveniste's (1974 [1970](a)) conception of utterance, the perspective which starts from the speaker or writer rather than from the linguistic system, Meschonnic devoted his mature career to exposing the structuralist fetishization of the discontinuous and shifting the focus to the *continu* ("continuous") in language. It is not always clear who did and did not count as a structuralist for him, though Ferdinand de Saussure (1857–1913) definitely did not. In fact, when Meschonnic reads out his charge sheet against structuralism, each of the nine crimes is described in its opposition to Saussure. Here are the first three:

1. when Saussure says "system", a dynamic notion, structuralism says "structure", a formal and ahistorical notion;

2. when Saussure proposes that with language all we have are points of view — a crucial notion: representations — structuralism with the sign presents itself as describing the nature of language;

3. and Saussure constructs the notion of point of view according to an entirely deductive (rational-logical) internal systematicity, but structuralism created descriptive (empirical) sciences of language […]. (Meschonnic 2009: 20)[11]

Again, he is right about the discontinuous — though it is complicated. Starting in the 1920s, those who got called structuralists, or more rarely, called themselves that, were torn between two urges. One was to reject the methods of an earlier generation who wanted to decompose phenomena into elements. That can be construed as a desire for continuousness. The other was to seek out what connects phenomena to each other, and doing that demanded the decomposition into discontinuous elements that their first urge was to reject.

Early structuralists invoked Gestalt psychology as continuous with what they were trying to achieve. By 1945, the first volume of *Word* contains two articles laying out visions of structuralism that superficially overlap, but in fact embody these complexly opposed urges. For the older writer, Ernst Cassirer (1874–1945),

[11] "1. quand Saussure dit *système*, notion dynamique, le structuralisme dit *structure*, notion formelle et ahistorique ; 2. quand Saussure pose que sur le langage on n'a que des points de vue, notion capitale : des représentations, le structuralisme avec le signe se présente comme décrivant la nature du langage ; 3. et Saussure construit la notion de point de vue selon une systématicité interne toute déductive, mais le structuralisme a fait des sciences du langage descriptives […]". Saussure's theory of language was famously laid out in the posthumous *Cours de linguistique générale* (Saussure 1922 [1916]).

systems such as language need to be approached holistically. Language for Cassirer (1945: 110) is organic, "in the sense that it does not consist of detached, isolated, segregated facts. It forms a coherent whole in which all parts are interdependent upon each other".

The younger Lévi-Strauss seems at first to be singing from the same hymn sheet when he rejects the analysis of kinship by W. H. R. Rivers (1864–1922) on the grounds that it is concerned merely with an atomistic charting of the details of relationships in some particular society: "Each terminological detail, each special marriage rule, is attached to a different custom, like a consequence or a vestige: we descend into an orgy of discontinuity" (Lévi-Strauss 1945: 37).[12]

But a careful reading shows Lévi-Strauss singing in a different key from Cassirer. His concern is not with organicity, but with the failure to take a *universalist* point of view, one that looks past superficial differences to find how kinship systems are fundamentally the same from culture to culture. They must be so, Lévi-Strauss assumes, because the human relationships they encode are the same. Taking maternal uncles as an example, he writes:

> We see that the avunculate, to be understood, must be treated as a relationship interior to a system, and that it is the system itself which must be considered in its totality, in order to perceive its structure. (Lévi-Strauss 1945: 47)[13]

If this sounds like Cassirer's holism, the resemblance is deceptive because of what Lévi-Strauss understands by "system". It is not like Saussure's language system, which is specific to each particular language. Lévi-Strauss is not talking about the Yoruba kinship system, as distinct from the Inuit one. He means the *human* kinship system, regarded as a product of evolutionary forces.

There is a double continuity-discontinuity tension at work in this defining structuralist moment: on the one hand, holism versus atomism, Cassirer's tension; on the other hand, the universal versus the language-culture-particular, Lévi-Strauss's tension. Meschonnic's discontent with the discontinuous falls within the first type. When he takes up arms against the structuralist dissociation of language from the body, he cites language-culture-particular examples (notably

[12] "Chaque détail de terminologie, chaque règle spéciale du mariage, est rattachée à une coutume différente, comme une conséquence ou comme un vestige : on tombe dans une débauche de discontinuité."

[13] "Nous voyons donc que l'avunculat, pour être compris, doit être traité comme une relation intérieure à un système, et que c'est le système lui-même qui doit être considéré dans son ensemble, pour en apercevoir la structure."

from the Hebrew of the Old Testament, but also from modern languages) as evidence for a universal language-body continuity. Any language-culture-particular versus universal tension is left aside, or at least pushed into the background.[14]

Lévi-Strauss sees the development of phonology, as opposed to the merely physical, empirical study of phonetics, as "playing for the social sciences the same renewing role as nuclear physics, for example, has played for the exact sciences" (Lévi-Strauss 1945: 35).[15] He locates the renewal in four fundamental points of method identified in 1933 by Nicolai S. Trubetzkoy (1890–1938):

> [F]irst, phonology passes from the study of *conscious* linguistic phenomena to the study of their *unconscious* linguistic infrastructure; it refuses to treat terms as independent entities, instead taking as the basis of its analysis the *relations* between terms; it introduces the notion of *system* […]; and finally it aims at discovering *general laws* either by induction or by logical deduction, […] which gives them an absolute character. (Lévi-Strauss 1945: 35)[16]

The second and third points, concerning relations and system, are ones Cassirer would have endorsed. But the unconscious is not a concept Cassirer deals with. Although he recognises that consciousness "grows" in the child, the dyad suggested by Lévi-Strauss would have been too simplistic for his liking.

When Cassirer talks about atomism and holism, it is on the level of a particular system. Lévi-Strauss talks about atomism and totality of the general system, for example the avunculate, considered universally. The two approaches are not always at cross purposes, only sometimes, but enough to generate an enduring tension within structuralism. A defining moment came in 1955, when the *succès fou* of Lévi-Strauss's *Tristes Tropiques* defined structuralism for the public at large and for the next generation of scholars. Cassirer's worries about internal discontinuity were shunted aside, not to vanish but to fester.

For Meschonnic and his contemporaries who took up academic posts with the expansion of the Parisian university system after May 1968, structuralism stood

[14] The tensions we repress can come back to haunt us, and this, I argue in Joseph (2018b), is potentially the case with Meschonnic's approach to the Hebrew-language body.

[15] "[…] vis-à-vis des sciences sociales, le même rôle rénovateur que la physique nucléaire, par exemple, a joué pour l'ensemble des sciences exactes."

[16] "[E]n premier lieu, la phonologie passe de l'étude des phénomènes linguistiques *conscients* à celle de leur infrastructure *inconsciente* ; elle refuse de traiter les *termes* comme des entités indépendantes, prenant au contraire comme base de son analyse les *relations* entres les termes ; elle introduit la notion de *système* […] ; enfin elle vise à la découverte de *lois générales* soit trouvées par induction, soit déduites logiquement, […] ce qui leur donne un caractère absolu."

for discontinuity. In linguistics, that meant treating phonology, prosody, morphology, syntax, semantics, semiology and so on as separate levels of language and distinct areas of specialization; and divorcing linguistics from poetics or applied areas such as translation, and ultimately even semiology, though linguistics continued to focus on the sign and combinations of signs as the essence of language. This never sat well with Meschonnic, but since he was teaching linguistics, he could only go so far in opposing it in these early years of his career, though later he would attack it relentlessly.

The greatest damage wrought by this discontinuity, as Meschonnic saw it, was that it resulted in the unifying core of language — rhythm — being relegated to a minor corner, when it should be at the very centre of an investigative enterprise where everything connects to everything else. Meschonnic's rejection of structuralist linguistics can be read as an assertion that structuralism itself was not structuralist enough.

4 Benveniste's early work: in what sense is it structuralist?

Can Benveniste's earlier work really be called structuralist? It is, after all, diachronic rather than synchronic in orientation, where structuralism is usually characterized as having replaced diachronic with synchronic enquiry. But that characterization is flawed — it is based on a misunderstanding of "diachronic" as a synonym of "historical", when Saussure's intention in calling for a diachronic linguistics was for it to replace the historical tracing of sound and forms through time with, instead, the comparison of *états de langue* at different points in time, each analysed synchronically. Saussure's 1879 *Mémoire* on the primitive vowel system of the Indo-European languages is really a synchronic study, a reconstruction of the system at some indeterminate point in the past. Benveniste's doctoral thesis and first published book (1935) follows the model of Saussure's *Mémoire* to the extent possible, given that it is a morphological rather than a phonological system that he is reconstructing.

The first three-quarters of Benveniste's book consists of focussed surveys of forms and alternations that appear to have been written as separate studies. Not until Chapter 9 does Benveniste explain how they fit together.

> All the lines of facts we have traced have led us progressively and by ultimately converging paths to recognize in neuters and adjectives a coherent structure and rule-governed alternations. In turn, these nominal forms

> posited in their most ancient state reveal principles which, once defined, confronted and grouped, constitute a theory of the Indo-European root. (Benveniste 1935: 147)[17]

Before explaining what that theory is, however, Benveniste sets out his structuralist stall, with a sweeping attack on everything written on the subject heretofore:

> What has been taught up to now about the nature and modalities of the root is, in truth, a heteroclite assemblage of empirical notions, provisional recipes, archaic and recent forms, all with an irregularity and complexity which defy ordering. (Benveniste 1935: 147)[18]

He illustrates this with a catalogue of reconstructed roots varying from one to five phonemes in length, monosyllabic or disyllabic, with either a vowel or a diphthong as their nucleus,

> with an initial vowel (**ar*–) or a final vowel (**po*–); in long degree (**sēd*–) or zero degree (**dhək*–); with a long diphthong (**srēig*–) or a short diphthong (**bheudh*–), with a suffix or a lengthening, etc. It would be difficult to justify or even to enumerate completely all the types of roots that are attributed to Indo-European. (Benveniste 1935: 147)[19]

This is akin to what Lévi-Strauss a decade later will disparage as "an orgy of discontinuity" in Rivers' ethnography, which he wants to replace with a structural analysis (see section §3). One might expect Benveniste to argue that no language could be this complicated, but he does not. His critique extends only to the analysis:

[17] "Toutes les lignes de faits que nous avons suivies nous ont acheminé [sic] progressivement et par des voies finalement convergentes à reconnaître aux neutres et aux adjectifs une structure cohérente et des alternances réglées. A leur tour, ces formes nominales posées en leur état le plus ancien révèlent des principes qui, une fois définis, confrontés et groupés, constituent une théorie de la racine indo-européenne."

[18] "Ce qu'on a enseigné jusqu'ici de la nature et des modalités de la racine est, au vrai, un assemblage hétéroclite de notions empiriques, de recettes provisoires, de formes archaïques et récentes, le tout d'une irrégularité et d'une complication qui défient l'ordonnance."

[19] "[…] à voyelle initiale (**ar*–) ou à voyelle finale (**po*–) ; à degré long (**sēd*–) ou à degré zéro (**dhək*–) ; à diphthongue longue (**srēig*–) ou brève (**bheudh*–), à suffixe ou à élargissement, etc. On serait en peine de justifier et même d'énumerer complètement tous les types de racines qui sont attribués à l'indo-européen." It is interesting that **ar*–, the root of *order* and its congeners in other Indo-European languages as discussed in section §2 above, should figure among the examples here.

> There is here an abuse of words that betrays an indecisive doctrine. The way to arrive at Indo-European is not by piling up the various Indo-European forms with a verbal theme, nor by projecting into prehistory the particularities of an attested language state. It is necessary to try, through broad comparisons, to find the initial system in its simplest form, then to see what principles modify its economy. It is this mechanism that we are attempting to define here. (Benveniste 1935: 147–148)[20]

A number of words are striking: Saussure's *système*, and also *mécanisme*, which occurs repeatedly in the *Cours*; but also *économie*, in a sense more reminiscent of Martinet, Benveniste's younger contemporary and, in Martinet's mind at least, his rival. As Benveniste pursues this theme, the word *structure*, absent from the *Cours*, comes to dominate:

> The essential thing being the problem of structure, we shall neglect on principle questions of "value", "aspect" etc. If the definition of the root we arrive at is judged to be valid, these notions of value and aspect will have the morphological basis which they now lack. It will then be the right time to re-examine them. (Benveniste 1935: 147–148)[21]

"Value" does not refer here to Saussurean *valeur*, but to a more particular use of the term by Meillet when writing in his proto-sociolinguistic vein, where he talks about the "abstract" and "concrete" value of words, linking the abstract to the aristocratic, and to the oldest, most enduring strain of the Indo-European lexicon, whereas the concrete belongs to the peasantry, is imbued with "affective" value and is historically unstable. As for "aspect", it figures in Meillet's work mainly in its familiar form, referring for instance to perfective versus imperfective in verbs, but more extensively. For example, "verbs bearing preverbs offer a nuance of 'aspect' different from that of the simple verb: they indicate a process, the

[20] "Il y a ici un abus de mots qui trahit une doctrine indécise. On n'obtient pas de l'indo-européen en additionnant les diverses formes indo-européennes d'un thème verbal ni en projetant dans la préhistoire les particularités d'un état de langue historique. Il faut essayer, par de larges comparaisons, de retrouver le système initial sous sa forme la plus simple, puis de voir quels principes en modifient l'économie. C'est ce mécanisme que nous cherchons à définir ici."

[21] "L'essentiel étant le problème de la structure, nous négligerons en principe les questions de 'valeur', d''aspect', etc. Si la définition de la racine à laquelle nous aboutirons est jugée valable, ces notions de valeur et d'aspect auront le fondement morphologique qui leur fait encore défaut. Il sera temps alors d'en reprendre l'étude."

end of which is envisaged" (Meillet 1931: 263–264).[22] Although Benveniste has dismissed, or rather postponed, investigation of aspect in the same breath with that of value, aspect in the more usual, limited sense is actually central to his theory of the Indo-European root. What he is doing here is distancing himself from Meillet's extension of the concept, where Meillet tends to link it with the "mentality" of speakers — this despite the fact that Meillet repeatedly places his analyses in opposition to that of "Mr Vossler and his school" on the grounds that *they* have recourse to mentality. Meillet's accounts are not as different from Karl Vossler's (1872–1949) as his rhetoric would make it appear. Regarding tense and aspect in the development from early Latin to Classical Latin, Meillet writes of how

> with the development of a civilization of intellectual character, in which the thinking of the upper echelon takes an exact philosophical turn, and in which children and youths are educated in schools, the notion of "tense" takes precedence over the notion of "aspect". (Meillet 1931: 270–271)[23]

Again, a matter of sociolinguistics: the thinking of the upper echelon, education in schools being invoked to explain the rise of rational, which is to say abstract, tense – not entirely replacing concrete aspect, but taking precedence over it, quite as the upper echelon, the aristocracy, take precedence over the peasantry.

The development of structural linguistics is then a story of difference, of differentiating oneself from someone else who is perceived as too psychological, insufficiently concerned with establishing the facts of language structure before offering explanations of them, rendering dubious the sustainability of those explanations. Meillet sees Vossler's "idealism" as too, well, idealist, whereas his own approach is better grounded in "concrete" facts. In historical terms Meillet believes that the move from the concrete to the abstract represents progress; and so too in methodological terms, in that his own method proceeds in this

[22] "[…] les verbes munis de préverbes offrent une nuance d''aspect' différente de celle du verbe simple : ils indiquent un procès dont le terme est envisagé." He gives the contrasting examples of *Nec* ***tacui*** *demens* "I was mad enough not to keep silent" (*Aeneid* II, 94) and ***Conticuere*** *omnes* "All fell silent" (*Aeneid* II, 1), where, since the highlighted verbs have the same root and are both in the perfect tense, the preverb *con–* is analysed as conveying the perfective aspect.

[23] "[…] avec le développement d'une civilisation de caractère intellectuel, où la pensée des hommes dirigeants prend un tour philosophique exact, où les enfants et les jeunes gens se forment dans les écoles, la notion de 'temps' prenne le pas sur la notion d''aspect' ". In his review of Vossler (1932), Firth (1933: 234) contrasts Vossler's conception of "inner language form" with Saussure's "'bloodless system of signs' (*langue*)".

way, deducing higher-level explanations from detailed examination of phenomena. Whereas abstraction that is not so deduced, but simply asserted, risks being fantasy, and so is not progress at all; not a nobility destined to rule over the concrete-minded, but a tyranny that the true nobles must resist.

Meillet is polite when rejecting Vossler, keeping his remarks to a minimum. When it comes Benveniste's turn to make a similar move vis-à-vis Meillet, he is more than polite towards his *cher maître*, not even naming him, just two features of his analysis of Latin, value and aspect in its extended sense, which he says he wants not to eliminate, but to postpone, until the structure of Indo-European is better established. This is not even a criticism of Meillet's analysis of Latin, a language the structure of which *is* well established — at least, not an overt criticism. But perhaps he is undertaking some distancing from what is said in the Preface to Meillet (1931), which, after underscoring the role of value and aspect as key features of the analysis, ends with a paragraph thanking Benveniste for helping to revise the text and compiling its index.

One of the curious aspects of Benveniste (1935) is the sizeable gap between the title, "origins of the formation of nouns", and the contents, which are not restricted to nouns, but culminate in a "unitary and constant definition of the Indo-European root and its aspects" (*une définition unitaire et constante de la racine indo-européenne et de ses aspects*) (Benveniste 1935: 170). This definition says that the "Indo-European root is monosyllabic, triliterate, composed of the fundamental vowel *ĕ* between two different consonants", then gives four further specifications about how it may be constituted (Benveniste 1935: 170–171).[24] Benveniste's theory of the Indo-European root was received by Indo-Europeanists somewhat as Saussure's *Mémoire* had been received: with astonishment at its daring brilliance and respect for its command of linguistic data, mixed with a wait-and-see dubiety that is appropriate with any stunningly simple model, to which scholars are bound to respond with examples that do not appear to fit it.

In the longer term, Benveniste's approach to Indo-European reconstruction has not held up,[25] and has even been rejected as "brutally reductionist" (Dunkel 1981: 560). That does at least furnish him with strong credentials as a structuralist — but one determined to supplement the formalist approach with serious consideration of what speakers do with language, redeeming his 1935 promissory note to re-examine notions of value and aspect if his morphological analysis proves valid. This is what he began to do after the war.

[24] "La racine indo-européenne est monosyllabique, trilitère, composée de la voyelle fondamentale ĕ entre deux consonnes différentes."

[25] I am grateful to the eminent Indo-Europeanist and Benveniste scholar Georges-Jean Pinault for confirming to me that this is the case.

5 The spirit of philology in Sauvageot

Another French linguist of the "structuralist period", Aurélien Sauvageot (1897–1988) was born in Constantinople, to a Belgian mother and a French father working as an architect for the Sultan. As a student at the British School of Pera the boy, a natural polyglot, learned English and German, and also picked up Greek and Turkish (see Jean-Robert Armogathe's Preface to Sauvageot 2013: 9). In 1911 his family returned to Paris, where, preparing for the competitive examination for entry into the École Normale Supérieure, he came to Meillet's attention. Many years later Sauvageot would recall his first summons to a private meeting at Meillet's home, in September 1914. The seventeen-year-old made a confession:

> "Look, Professor, I should tell you straightaway that I have no visual memory".
>
> "What?"
>
> "No, with me everything happens only with phonic memory, or acoustic if you prefer. I have only auditory images. So I'm really bad at linking what I hear with what's written, and I can only work on a language insofar as I know how it's pronounced".
>
> "Oh, how extraordinary," he said to me, "because I, you see, never hear any auditory image".
>
> And I said to him: "But, then, how do you think?".
>
> And he said to me: "Well, by sequences of written signs".
>
> With that a lot of things made sense to me. It was one of the first discoveries I made about Meillet. (Sauvageot 1992: 193)[26]

Both are rather extreme cases. Sauvageot's mind worked as one might expect a blind lad's to, Meillet's a deaf man's. There are deep differences in how people think, differences we tend to erase, or sort into normal and pathological cases. I shall come back round to Sauvageot's acute acoustic sensitivity and memory.

[26] "Je lui dis : 'Ecoutez, Monsieur le Professeur, je vous dis tout de suite que je n'ai pas de mémoire visuelle.' 'Comment?' 'Non, chez moi tout se passe uniquement avec la mémoire phonique ou si vous voulez acoustique. Je n'ai que des images auditives. Alors, je suis très malheureux pour lier ce que j'entends à ce qui s'écrit et que je ne peux travailler sur une langue que dans la mesure où je sais comment elle se prononce.' 'Oh, c'est extraordinaire, me dit-il, parce que moi, alors, voyez-vous, je n'entends jamais une image auditive.' Et je lui dis : 'Mais, alors, comment pensez-vous?' Et il me dit : 'Eh bien, par séquences de signes écrits.' Alors là, j'ai compris bien des choses. Cela a été une des premières découvertes que j'ai faites de Meillet."

In April 1917 Sauvageot received another summons, this time to Meillet's office. The only French linguist covering Finno-Ugric, Robert Gauthiot (1876–1916), had been killed in the war, and it was decided that Sauvageot would have to replace him, even though he knew no Finno-Ugric language at the time. He asked why he had been chosen, and Meillet replied, "Why, that's simple, because you were born in Constantinople, you spoke Turkish and you still know a fair bit of Turkish, that's why, and because Turkish is a language whose mechanism is very similar to that of the Finno-Ugric languages" (Sauvageot 1992: 194).[27]

Meillet sensed the young Sauvageot's lack of enthusiasm at the prospect, but assured him that it would come. And come it did, very much so, from his arrival in Finland in the summer of 1919 (the date is from Perrot 2007: 296), where he began studying Finnish with Meillet's friend Emil Nestor Setälä (1864–1935). For the rest of Sauvageot's long life, Setälä would remain one of his principal touchstones not just for Finnish but for the understanding of language generally, rivalled only by Setälä's Hungarian friend Zoltán Gombocz (1877–1935), along with, of course, Meillet, and the linguist Meillet revered above all others, his own teacher Saussure. These four were not a foursome, but a pair of twosomes; and we can see throughout Sauvageot's career a tension between what "structural" linguistics came to represent, versus the sometimes diametrically opposed concerns of the Finnish and Hungarian philologists.

Jump ahead now thirty years. Meillet had died in 1936. Benveniste, who succeeded him in his chair in the Collège de France, that last surviving royal institution, was king of the nation's linguists. The dauphin, Martinet, had exiled himself to New York after being hounded from the Sorbonne under suspicion of having been a collaborator (see Joseph 2016). Beneath Benveniste were the barons, including Sauvageot. He had occupied the first chair of Finno-Ugric languages in France, in the École Nationale des Langues Orientales Vivantes, Paris, since it was established in 1931, with an interruption from 1941–43 at the insistence of the Vichy government (Perrot 2007: 296), probably because for years he had been a prominent and outspoken member of the Communist Party (see Chevalier 2006: 158).

Sauvageot was also active in the Institut de Linguistique, which held monthly lectures by the linguistic aristocracy, many of them aimed at surveying the structures of non-Indo-European languages. In 1946 Sauvageot published his *Esquisse de la langue finnoise* (Sketch of the Finnish language) in a series called "L'Homme

[27] "'Mais c'est simple, parce que vous êtes né à Constantinople, que vous avez parlé le turc et que vous savez encore pas mal de turc, voilà, et que le turc est une langue dont le mécanisme est très semblable à celui des langues finno-ougriennes'."

et Son Langage" (Man and his language) put out by La Nouvelle Édition in Paris. Three years later, the same book was published by Klincksieck, as the first volume in a new series that Sauvageot started called "Les langues et leurs structures" (Languages and their structures).[28] The 1949 Avertissement (Preface) announces three other volumes as forthcoming in the series, on Modern Greek, Tamil and Berber, and explains that the aim is to create "a series of descriptive studies bearing on idioms as diverse as possible, each envisaged in isolation, taken in itself" (Sauvageot 1946: 7).[29] Each book will "extricate through an appropriate analysis the characteristics inherent to a given language, grasped at a given moment of its evolution, and reveal the mechanism of the system of functions of which it is constituted" (Sauvageot 1946: 7).[30]

That sounds quite structural — but "mechanism" is a loose concept. Used as a metaphor in linguistic work since the nineteenth century (see Joseph 2018a), it seems to have meant something rather specific to Sauvageot, and perhaps idiosyncratic to him. Sauvageot's life's work had been determined because, as Meillet said, "Turkish is a language whose mechanism is very similar to that of the Finno-Ugric languages". The Preface continues:

> Up to now it has often been affirmed that a language is an ensemble in which all the parts fit together and the categories that supposedly form the foundation of the structure of a language have been much evoked. Only there has been a negligence in adding to the debate the concrete testimony that must be brought in by the descriptive study of a given state of language. (Sauvageot 1946: 7)[31]

What has been affirmed "up to now" is the Saussurean conception of the language system. The *toutes les parties se tiennent* is a slight rewording of the famous

[28] Not only were the title and text unchanged, but they bear the copyright and printing date 1946, so apparently the unsold copies were simply given a new cover with the fresher date of 1949. Curiously, the cover and copyright page both give the year 1949, and yet the legally required final page gives the date of printing 24 August 1946, and the legal deposition as the third trimester of 1946 ("Achevé d'imprimer […] le 24 août 1946. Dépôt légal: 3^{e} trimestre 1946"). The book must therefore have been completed by mid-1946.

[29] "[…] une série d'études descriptives portant sur des idiomes aussi divers que possible, envisagés chacun isolément, pris en soi."

[30] "Il s'agit de dégager par une analyse appropriée les caractères inhérents à une langue donnée, saisie à un moment donné de son évolution et d'exposer le mécanisme du système de fonctions dont elle est constitutée."

[31] "Jusqu'à présent il a été souvent affirmé qu'une langue est un ensemble où toutes les parties se tiennent et l'on a beaucoup évoqué les catégories qui formeraient le fondement de la structure d'une langue. Seulement on a négligé de verser au débat le témoignage concret que doit apporter l'étude descriptive d'un état de langue donné."

motto *tout se tient* (everything supports everything else), attributed to Saussure though first used in print by Meillet (1903: 407). It is probably fair to say that structural linguistics does indeed make "categories" the foundation of the structure of a language, if categories are put into a binary contrast with "concrete testimony", and if that testimony means actual sounds and utterances: phonetics as opposed to phonology, and *parole* as opposed to *langue*. By taking up Saussure's *état de langue*, state of language, as the place where this concrete testimony is to be found, Sauvageot hints that it is not against Saussure that he is positioning himself, but against later structuralists who claim to be following Saussure's programme but are perhaps instead betraying it.

Sauvageot specifies that by "descriptive study" he does not mean simply enumerating grammatical processes or inventorying the most used paradigms, but rather "a prospecting effort to penetrate beyond simple grammatical analysis into the domain of expression of which grammar is so to speak only the more or less schematic skeleton" (Sauvageot 1946: 7).[32] This domain of expression includes "syntax, semantics and vocabulary", all of which are, he rightly notes, neglected in structural grammars. He wants to get to them through "sufficiently detailed analytic descriptions of concrete examples of the behaviour of a certain number of linguistic structures" (Sauvageot 1946: 7).[33] Here nearly every word is charged with potentially polemical meaning: Sauvageot is implicitly accusing structural linguistics of being insufficiently detailed in its analysis of individual linguistic structures, of failing to use concrete examples, of taking a broad-brush approach rather than focussing on "a certain number" of structures in depth, and of neglecting the "behaviour" of the structures, in favour of simple inventories. What he means by behaviour is expanded upon at the start of the book proper:

> What makes the originality of an idiom is not the presence of this or that particular structural feature but how the structure as a whole is arranged, the use that is made of it and the performance that is obtained from it for the needs of the expression of thought. (Sauvageot 1946: 13)[34]

The concern with "arrangement" is an embrace of the core principle of Saussurean linguistics, which Sauvageot thought however had not been adequately

[32] "[…] un effort de prospection pour pénétrer par delà la simple analyse grammaticale dans le domaine de l'expression dont la grammaire n'est pour ainsi dire que le squelette plus ou moins schématique."

[33] "[…] des descriptions analytiques suffisamment poussées, des exemples concrets du comportement d'un certain nombre de structures linguistiques."

[34] "Ce qui fait l'originalité d'un idiome, ce n'est pas la présence de tel ou tel trait particulier de structure mais la façon dont l'ensemble de cette structure est agencée, l'usage qui en est fait et le rendement qui en est obtenu pour les besoins de l'expression de la pensée."

buttressed with attention to particular features. The concern with "performance" may again be his embrace of Saussure's all-but-forgotten call for a linguistics of *parole*. The concern with expression of thought reveals a tension within Sauvageot himself, in that he will often insist that language must be understood as a tool of communication, the traditional alternative to representation or self-expression as the primal and formative purpose of language.

The strongest evidence that Sauvageot is taking a polemical stance comes when he claims to be "observation" personified: "In doing this, we have not the least intention of diffusing the theories of a school. We are focussed above all on describing the facts as they present themselves to observation, by disregarding any preconceptions" (Sauvageot 1946: 7–8).[35] But the language he has used up to this point already belongs to a school, that of structural linguistics, and its underlying theory is not immediately dissociable from that language, even when he is positioning himself against aspects of that theory. That positioning is itself a theory, and since this Preface is for a whole series of books by different authors, it looks as though Sauvageot is trying to form a school and to diffuse its theories.

How his treatment of Finnish is distinct from a structural one can be seen from the opening sentence.

> To the ear, Finnish seems "loud", a bit hoarse and abrupt, the whole spouted rapidly in a rhythm with rather close beats, modulated according to a musical phrasing with rather sharp but descending notes that appear to follow an almost unvarying curve. Finnish discourse knows only a few melodic deviations between the peaks and troughs of modulation. The monotonous repetition of these modulations makes one think right away that the language modulates not in order to express, but only to mark out the elements of the flow.
>
> The vowels "mark"; they burst joyfully on speakers' lips, whereas the consonants are muffled sometimes to the point of being whispered. (Sauvageot 1946: 15)[36]

[35] "Ce faisant, nous n'avons aucunement l'intention de diffuser les théories d'une école. Nous nous attachons avant tout à décrire les faits tels qu'ils se présentent à l'observation, en faisant abstraction de toute idée préconçue."

[36] "A l'oreille, le finnois fait 'sonore', un peu rauque et saccadé, le tout débité rapidement sur un rythme aux alternances assez rapprochées, modulées selon une phrase musicale aux notes plutôt aiguës mais descendantes, qui semble suivre une courbe à peu près invariable. Le discours finnois ne connaît que peu d'écarts mélodiques entre les sommets et les creux de modulation. La répétition monotone de ces modulations fait tout de suite penser que la langue ne module pas pour exprimer, mais seulement, pour démarquer les éléments du débit. Les voyelles 'marquent' ; elles éclatent joyeusement sur les lèvres des sujets parlants, tandis que les consonnes sont assourdies parfois jusqu'au chuintement."

To his French colleagues this impressionism would have sounded like a throwback to the nineteenth century, maybe even to Rousseau (1782 [written 1755–1761]). In some respects it is — one way to resist the mainstream is to hark back to an earlier age and represent its discourse as a lost truth, as Chomsky would do with his "Cartesian linguistics" (2009 [1966]). Sauvageot is rescuing a musicality in linguistic analysis that in fact had not been absent in twentieth-century French linguistics, but was always a minority concern and was marginalized with the rise of structural linguistics, until its re-emergence with Meschonnic.[37]

But by the late 1940s, Sauvageot found himself unable actually to get the promised books on Tamil and Berber out of their signed-up authors, let alone sign up any further authors.[38] In his Klincksieck series there finally appeared only his own "Sketches" of Finnish and Hungarian (1951). Given the eccentricity of Sauvageot's vision, one can imagine that other authors may have felt themselves caught between maintaining their standing among more conventional linguists and producing what he wanted from them, which perhaps could only be managed by someone with his rare "auditory memory", plus his double saturation in structuralism and the Finnish and Hungarian philological traditions of Setälä and Gombocz.

The Canadian philosopher Charles Taylor (2016) contrasts what he terms the H-L-C and the H-H-H, where the H-L-C is the Enlightenment outlook inherited by analytic philosphers from Hobbes, Locke and Condillac. The H-H-H is the Counter-Enlightenment "Romantic" outlook of Hamann, Herder and Humboldt to which Taylor strives to draw philosophers' attention. These two perspectives are present in modern linguistics, mainly as a result of Saussure's inclusion in his lectures of both semiology, an Enlightenment inheritance from the *grammaire générale* tradition, and the self-contained language system impervious to change by any individual, an inheritance from German linguists, most directly the Neogrammarians. Their conception of sound laws that followed an exceptionless path "insofar as they are mechanical", which is to say physical, represented a neo-Romantic Counter-Enlightenment tradition in which language is something extra-rational, that follows its own organic path, even though the Neogrammarians and Saussure did not go the full naturalist route of Max Müller and others. They however also opened up a breach to allow in some Enlightenment through the role that they allotted to analogy as the only admissible explanation for ap-

[37] Saussy (2016) revives the history of this alternative tradition, in which Meillet figures as, among other things, supervisor of the doctoral thesis of Milman Parry (1902–1935), whose studies of contemporary oral recitation in the Balkans would revolutionize the understanding of Homeric epic.

[38] The books announced were *Esquisse de la langue tamoule* by Pierre Meile (1911–1963) and *Esquisse de la langue berbère* by André Basset (1895–1956).

parent exceptions to the sound laws. Analogy is a mental rather than a physical process, and rational in nature.

On the theoretical level, Meillet's structuralism was universalist. He argued that small European languages such as Finnish and Hungarian were doomed by a sort of natural selection that would limit the number of "languages of civilization" in Europe (Meillet 1918: 279; see also Sauvageot 2013: 209–210). That was an Enlightenment position. But unlike Meillet, Sauvageot was H-H-H to the bone. His personal experiences in Finland and Hungary had proved to him that what really determined the present and future vitality of a language was its expressive power. In a book manuscript published posthumously in 1992, he wrote, "If a language succumbs, it is because it failed in its expressive task" (*Si une langue succombe, c'est qu'elle faillit à sa tâche expressive*) (Sauvageot 1992: 160). Sauvageot was torn between loyalty to the man to whom he owed everything in career terms, and the Finnish and Hungarian philologists whose view of their language was so much more in accord with his own.

Hence his embracing and resisting of a structural linguistics that, in France, saw Meillet as its head. But outside France, it was developing in various directions, above all in Prague, where the terms "structural" and "structuralism" were being explicitly proclaimed by the start of the 1930s. In the English and French speaking worlds, 1940 is the year when "structural linguistics" starts to appear regularly (see Joseph 2015). Martinet was the one French linguist in regular contact with the Prague Linguistic Circle, as well as with Copenhagen, where Louis Hjelmslev (1899–1965) and Viggo Brøndal (1887–1942) were laying the ground for glossematics. Perhaps it was Meillet's death in 1936 that licensed French linguists to be more directly critical of, even hostile to structuralism, particularly as it was being developed in Prague. Meillet's successor, Benveniste, was himself ambivalent towards it, as became apparent with the article on the arbitrariness of the sign that he contributed to the first issue of Hjelmslev's *Acta Linguistica* in 1939.

What exactly about structuralism was repellent to Sauvageot? We got some clues earlier in the Avertissement to the *Esquisse de la langue finnoise*, when he wrote about "a negligence in adding to the debate the concrete testimony that must be brought in by the descriptive study of a given state of language", and the neglect of syntax, semantics and vocabulary in favour of inventories of phonemes and morphemes. More generally, he objected to the "dogmatism" of the structuralists, as his student and later colleague Jean Perrot would report that

> Sauvageot was not indulgent towards his colleagues and his hostility to dogmatism led him to severe judgements about these dogmatic theoreticians whom he readily called "these gentlemen", and whom he readily mal-

> treated with irony, for example denouncing a manifest error as "a simple blunder". In particular he was rather hard with regard to the "phonologists", for instance reproaching Lazicius for behaving as a "disciple of Trubetzkoy and the Prague phonologists, whose excesses and dogmatism he espoused". (Perrot 2009: 16)[39]

French linguists from 1925 to 1950 seem on the one hand to want to claim that they are, along with the Geneva School, the keepers of the Saussurean structuralist flame, while on the other hand acting as if structuralism is a foreign perversion. This aspect of linguistic history has to be read in the context of how nationalist feeling was developing in the inter-war period, and again with the anti-imperial wars in Indochina and Algeria in the 1950s, when the Cold War is also central to the plot; as is the ambivalence of linguists to the massive increase in attention and status they gained starting with the success of Lévi-Strauss's *Tristes tropiques* in 1955, and the continuing rise of structuralism as the master science informing the work of Lacan, Merleau-Ponty, Barthes, Greimas and soon the next generation of French intellectuals who became prominent in the 1960s. Among the linguists themselves new tensions arose when Martinet returned in 1955 from his self-imposed exile, distancing himself from structuralism in favour of a "functionalism" that combined an ultra-structuralist analytical method with genuine challenges to the how structuralists dealt with dialects, bilingualism and social differentiation, challenges that were being pushed further by Martinet's American student Uriel Weinreich (1926–1967) (see, e.g., Weinreich 1954 and Joseph 2016).

But Weinreich also had strong allegiances to Jakobson, who had been the first to use the word structuralism in print in the 1920s, and had gone on to redefine it, in conjunction with Trubetzkoy and the Prague School, in ways that directly contradicted some of Saussure's core principles. This is what made French linguists resistant to structuralism as redefined by Prague — partly on intellectual grounds, partly on nationalist ones, in which some degree of jealousy at the success of Jakobson and the Prague School in other parts of Europe and America cannot be ruled out. Sauvageot, and to a lesser degree Benveniste, were more

[39] "Sauvageot n'était pas indulgent à l'égard de ses confrères et son hostilité au dogmatisme lui inspirait des jugements sévères sur ces théoriciens dogmatiques qu'il appelait volontiers 'ces messieurs', et qu'il malmenait volontiers ironiquement, dénonçant par exemple comme 'une simple bévue' une erreur manifeste. Il était en particulier assez dur à l'égard des 'phonologistes', reprochant par exemple à Lazicius son comportement de 'disciple de Troubetzkoï et des phonologistes de Prague, dont il a épousé les outrances et le dogmatisme'." Perrot does not indicate sources for the citations which he indicates. On the Hungarian phonologist Gyula Lazicius (1896–1957), see Voigt (1986: 288).

forthright about their resistance to structuralism than others of their contemporaries in France, who may have feared being even more marginalized internationally if they overtly challenged Prague, Jakobson, Trubetzkoy, Hjelmslev et al.

But it was not just the formalism, the "structural" part of structural linguistics, that Sauvageot resisted. It was also "linguistics", insofar as it had pushed philology out from the forefront of academic enquiry, to become yesterday's dusty, antiquarian pursuit. With it went attention to the fine details of a language, including how individual writers discovered and exploited its potential resources. *Phil*ology — the *love* of language. Linguistics — its cold, clinical study.

It was a loss that Sauvageot, with his heritage from the philologists who taught him Finnish and Hungarian, sought to rectify — above all in his last major work (Sauvageot 1973), by which time he no longer needed to be concerned with his position within the French linguistic establishment. Even so, he had the reputation of his students to think of; and that may explain why he never published the book manuscript he entitled *La structure du langage* (The structure of language) that appeared in 1992, four years after his death. This book seems determined to subvert some of the basic principles of Saussurean structuralism, let alone its later variants, and offer in their place a vision of language grounded in his long experience of Finnish and Hungarian language and culture, including the ideas of Setälä and Gombocz and the other great linguists and literary figures whose individual impact on the languages he had witnessed. Yet Sauvageot can never escape the shadow of his first linguistics teacher, Meillet, nor does he want to. In this book he aims at a reconciliation in which we find a rare trace of his apparently avowed Marxism. He distinguishes the "invariants" of a language, which are its "structure", from the "variants" which he calls its "superstructure" (Sauvageot 1992: 18).

Sauvageot's encounter with Finno-Ugric philology would limit his embrace of structuralism — a doctrine whose historical nuances we, starting with me, have glossed over. We assume that embracing and resisting are either/or options. History is more complicated than that, which is what makes it interesting. The resisting embrace can have strategic force: someone who only embraces will not push the science forward; someone who only resists will struggle to get a hearing. The resisting embrace can give one an audience for resistant innovations that are heard as progress within the status quo, even if, in his heart, the innovator is committed to overturning it.

6 Benveniste's later work: enunciation

Normand (1986) traces the development of "enunciation" in Benveniste's work back to papers he published in 1946 and 1949, and notes in particular that his 1954 paper on current trends in linguistics defines a linguist's three principal tasks as being to identify what is described using the word language (*langue*), how to describe this object (linguistic methodology), and thirdly, to confront "the problem of signification". Quoting Benveniste, "Language (*langage*) has as its function to say something. What exactly is this something in view of which language is articulated and how do we delimit it in relation to language itself? The problem of signification is posed" (Benveniste 1966 [1954]: 7).[40]

Signification — essentially, meaning — is implicitly conceived here as lying outside the language system (*langue*), while being its *raison d'être*. Signification and enunciation occupy a "semantic" realm, distinct from the "semiotic" one of the language (see the Editors' Introduction to Benveniste 2012: 49–51). Understanding the semantic is the linguist's third task. The wording makes clear that signification lies outside language not just as a *langue* but as the more general *langage* as well, being the something that it is the "function" of language and languages to say. The challenge is to identify and delimit meaning with relation to language, which is made difficult because language is itself articulated with this function in view.

Benveniste's initial presentation of his approach incorporates a question which it provoked in the minds of other structural linguists, as to whether enunciation, as use, was not what Saussure meant by *parole*, speech. He does not directly answer the question, but indicates how his focus is a different one.

> Enunciation is putting the language to work through an individual act of use.
>
> But isn't this manifestation of enunciation simply *parole*, the discourse which is produced each time one speaks? — We must take care to focus on the specific condition of enunciation: it is the act itself of producing an utterance, and not the text of the utterance, that is our object. This act is the fact of the

[40] "Le langage a pour fonction de dire quelque chose. Qu'est exactement ce quelque chose en vue de quoi le langage est articulé et comment le délimiter par rapport au langage lui-même? Le problème de la signification est posé." Ono (2007: 27–57) has shown how in Benveniste's writings from 1945 until the definitive formulations in 1974 [1969] and 1974 [1970](a), the meaning of *énonciation* is often ambiguous, or even indicates quite clearly what he will eventually refer to as *énoncé*. See also Coquet (1987) and Joseph (In Press).

> speaker who mobilizes the language on his or her own behalf. The relationship of the speaker to the language determines the linguistic features of the enunciation. (Benveniste 1974 [1970][a]: 80)[41]

The speaker is not "speaker" before the act of enunciation. With enunciation, speaker becomes both speaker and subject; the enunciation positions him or her vis-à-vis the language, while at the same time that relationship shapes the enunciation.

In presenting enunciation not as an alternative to structuralist analysis, but as a parallel track, Benveniste can be said to fulfil a wish expressed by the Neogrammarians Hermann Osthoff (1847–1909) and Karl Brugmann (1849–1919), when they remarked that, in the past, "Languages were indeed investigated most eagerly, but people speaking, much too little" (*Man erforschte zwar eifrigst die* sprachen*, aber viel zu wenig* den sprechenden menschen.) (Osthoff & Brugmann 1878: iii). But more striking is how far forward looking the approach is, anticipating ideas of decades later on stance, voice, identity, indexicality, in addition to the direct continuations of enunciation in the work of Antoine Culioli and others in France. Pierre Bourdieu's (1930–2002) conceptions of language and symbolic power are also grounded in Benveniste, and in fact it was Bourdieu who in 1969 coordinated the assembling and publication of perhaps Benveniste's most influential book, the *Vocabulaire des institutions indo-européennes*. It provides the context for understanding what Benveniste means when he says that "the language contains the society" (see above, p. 58). When he traces the history of a social institution such as "personal loyalty" back through each of the branches of the Indo-European language family, adducing precise etymological evidence to show the very different ways in which loyalty was conceived among Celtic, Germanic, Baltic, Slavic, Italo-Roman, Greek and Persian tribes and peoples, the conclusion seems inescapable that the institutional differences among them are historically bound to the language of their enunciation, so deeply as to be "contained" not just in the sense of residing within, but in the stronger sense of being prevented from escaping.

Benveniste's third task of 1966 [1954] can be read as an attempt at responding to the problematizing of meaning that was at the heart of behaviourism, the same

[41] "L'énonciation est cette mise en fonction de la langue par un acte individuel d'utilisation. Le discours, dira-t-on, qui est produit chaque fois qu'on parle, cette manifestation de l'énonciation, n'est-ce pas simplement la 'parole'? — Il faut prendre garde à la condition spécifique de l'énonciation : c'est l'acte même de produire un énoncé et non le texte de l'énoncé qui est notre objet. Cet acte est le fait du locuteur qui mobilise la langue pour son compte. La relation du locuteur à la langue détermine les caractères linguistiques de l'énonciation."

problem that motivated Bloomfield to de-psychologize his linguistics, though Benveniste attacks the problem with a different strategy. The insight particular to Benveniste is that the language system and the speaking person occupy different conceptual spheres that nevertheless intersect with one another. He explores this initially, and in greatest detail, in his papers on person and deixis.[42] Benveniste's semiology as laid out in the second half of his 1974 [1969] paper and the lectures of late 1968 and early 1969 combines the systematicity of a *langue* as conceived by Saussure with the *inter*systematicity assumed by Charles Sanders Peirce (1839–1914). "There is no trans-systematic sign", Benveniste (1974 [1969]: 53) writes;[43] the value of each sign "is defined solely within the system which integrates it", which is perfectly Saussurean. Nevertheless, every signifying system other than a language must be interpreted through a language. "Every semiology of a non-linguistic system must make use of a language to translate it; thus it can exist only through and in the semiology of a language, […] which is the interpretant of all other systems, linguistic and non-linguistic" (Benveniste 1974 [1969]: 60).[44] And from his last lectures: "It is the language as system of expression that is the interpretant of all institutions and of all culture" (Benveniste 2012: 83).[45] One could argue that this core Benvenistean axiom is implicit in both Saussure and Peirce, but Peirce in particular might have resisted it. It reflects the way a linguist thinks, rather than a psychologist.

The turn the lectures then take, which the article did not, is one that Saussure would certainly have resisted. To say as I have done that Benveniste's semiology combines the systematicity of a *langue* as conceived by Saussure with the inter-systematicity assumed by Peirce is potentially deceptive, because systematicity must be understood in a strong sense for Saussure, and in a weaker sense for Peirce, who places the stress on the "inter-". Benveniste criticizes Peirce for "mis-

[42] These include, following on from the 1966 [1946] and 1966 [1949] papers cited above, Benveniste (1966 [1956][a]) and Benveniste (1966 [1958]). It is surprising that, in his review of Benveniste (1966), Winfred P. Lehmann (1916–2007) categorized these papers as "psycholinguistics" (Lehmann 1968). Equally surprising is Lehmann's view that "If in any of his essays Benveniste discusses linguistic theory as such, it is in the first three, which treat the development of linguistics". In other words, for Lehmann, what Benveniste is doing is not linguistic theory at all, which was a compliment from the pen of a non-Chomskyan American linguist like Lehmann in 1968.

[43] "Il n'y a pas de signe trans-systématique."

[44] "Toute sémiologie d'un système non-linguistique doit emprunter le truchement de la langue, ne peut donc exister que par et dans la sémiologie de la langue […] ; la langue est l'interprétant de tous les autres systèmes, linguistiques et non-linguistiques."

[45] "C'est la langue comme système d'expression qui est l'interprétant de toutes les institutions et de toute la culture."

taking" words for being the whole of language. It is not words, not lexicon, not semantics or even syntax that is the foundation of structural linguistics, but phonology and morphology. And yet, when Saussure is teaching semiology, words are what he uses to exemplify the sign; he brings in morphology in his discussion of the associative axis and relative motivation, but sounds hardly figure. Phonemes do not appear to be signs, just constituents of signifiers, even though the differences between phonemes are the ultimate source of signification, and that poses a puzzle: what differentiates a phoneme from a non-speech sound is some sort of signification that this is a signifying sound.

Here Peirce's idea of "interpretance" offers a valuable insight: that the very first meaning of every sign is: "I am a sign. Interpret me". And even if Benveniste is right that Peirce only thinks about signification at the level of words, nothing in principle prevents us from extending this insight to the level of phonemes.

Regarding his critique of Peirce for reducing languages to words, it is worth noting how widely known Benveniste's revered teacher Meillet was for his Latin etymological work, and that Benveniste himself had his broadest impact through his 1969 *Vocabulaire*, which is word-based. Its focus is on the semantic, and it can be seen as his major practical achievement in the linguistics of enunciation. Yet it shows on every page how understanding the semantic at a deep level requires detailed examination of the semiotic, and how such semantic understanding is in turn what allows us to weigh up alternative analyses of phonological and morphological facts in the semiotic system. Benveniste underscores in his lecture notes "*the impossibility of reaching the semantic in language without passing through the semiotic plus the grammar*" (Benveniste 1969: 114).[46] Peirce tried to reach the semantic through words alone, without signs, without the language system. Saussure did not deny the self-evident link between the semiotic and the semantic, but observed methodological scruples whereby he, as a grammarian (the term he usually applied to himself), could only pronounce on the semiotic, the semantic being the realm of expertise of psychologists and philosophers.

Saussure and Peirce are for Benveniste the key innovative thinkers of two orders of language and signification. With Peirce, Benveniste folds in the later phenomenology of Edmund Husserl (1859–1938) and of the Husserlian linguist Hendrik Joseph Pos (1898–1955). Saussure stands at the head of the tradition of modern linguistics in which Benveniste himself was trained. For Benveniste,

[46] "*l'impossibilité d'atteindre le sémantique en langue sans passer par le sémiotique plus la grammaire.*"

Peirce and phenomenology represent the order	Saussure and structural linguistics represent the order
semantic	semiotic
intention/intended	signifier/signified
enunciation	language system
utterance	speech
words and things in the world	signs and social structure

Structural linguistics is based on the Saussurean order, which excludes consideration of writing. The new linguistics of enunciation envisioned by Benveniste would combine the two orders, and one of the main aims of his last lectures is to understand how they are bridged by writing.

Insofar as the marginalization of writing is an aspect of structuralism, Benveniste's last lectures pass unhesitatingly beyond it. The fundamentally philological nature of his etymological work makes it pre-structuralist, though in his explanations of the history of individual words the spirit and basic approach of structural method come through. And if the central roles he accords to writing and enunciation make him a post-structuralist, that is certainly not a flag he wanted to wave. Benveniste strove to reconcile his vision of the future path of linguistics with its present and past. Or, more precisely, its pasts.

7 Conclusion

This study has focused on a small set of linguists whom histories of linguistics place in the structuralist period, and who embraced formalist principles to a greater or lesser extent while also resisting them. It has examined some of the motives for their resistance, which include a perceived abandonment of attention to phonological and philological detail (Benveniste and Sauvageot), as well as to speakers (the same two, plus Martinet), along with a proclivity towards atomism and discontinuity (Meschonnic). Interpersonal relations, political affiliations and national identity have also come into the picture.

There are other chapters to be added to this story, including the polemic between Bloomfield and Leo Spitzer (1887–1960), with Spitzer (1944) calling out Bloomfield's mechanism for the reductionism it entailed; C. K. Ogden and the associated figures studied by McElvenny (2018); Hjelmslev, who never renounced his early Saussurean commitments but moved progressively away from what he

saw as the prioritizing of form over function and meaning (Joseph 2018a); and of course Chomsky, who did battle with the methodological and epistemological commitments of the older generation of linguists who are generally classed as "American structuralists", but where Chomsky attacked from a more deeply structuralist position.

My aim may seem counter-structuralist in trying to undo the paradigm. Yet, deep down, what is this enterprise if not a search for the Order which governs the movement of the stars of the modern science of language, and which is the foundation of our society as its practitioners? Without this principle, everything would revert to chaos.

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Name index

Subject index

Form and formalism in linguistics

"Form" and "formalism" are a pair of highly productive and polysemous terms that occupy a central place in much linguistic scholarship. Diverse notions of "form" – embedded in biological, cognitive and aesthetic discourses – have been employed in accounts of language structure and relationship, while "formalism" harbours a family of senses referring to particular approaches to the study of language as well as representations of linguistic phenomena. This volume brings together a series of contributions from historians of science and philosophers of language that explore some of the key meanings and uses that these multifaceted terms and their derivatives have found in linguistics, and what these reveal about the mindset, temperament and daily practice of linguists, from the nineteenth century up to the present day.

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