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Scholars and their metaphors: on Language Making in linguistics

Abstract: This article deals with the powerful role of metaphors in the process of Language Making throughout the history of linguistics. It departs from the assumption that metaphors play an essential role both in the formation of scientific theories and in common conceptions of language. We want to illuminate to what extent metaphors are involved in language ideologies, and we investigate their role in linguistic theory formation. After introducing different approaches to metaphor theory, we show how metaphorization in linguistics can lead to biological, territorial and liquid concepts of language. Finally, we discuss the need for a re-evaluation of language concepts within the discipline.

Keywords: concepts of language; discourse metaphor; language maps; language and evolution; language trees

1 Introduction

Within the last decades, linguists and anthropologists have criticized the conception of language understood as a bounded and named system. The concept of Language Making presented in the introduction of this issue is associated with this idea. It is defined as the "conscious or unconscious human processes in which imagined linguistic units are constructed and perceived as 'a language', 'a dialect' or 'a variety'" (see Section 1, this issue). Linguistics is not exempt from such ideas. Makoni and Pennycook (2006) call this view a "linguistics of language(s)" in contrast to "human linguistics", which analyses interpersonal communication. In linguistics of language(s), researchers engage in classification practices, creating a body of a manageable and tangible linguistic variability and thereby achieving a countability of language varieties (Kolehmainen et al. 2022). These linguistic theories often follow essentialist ideas about grammar and integrate change and variation rather as a supplement (von Mengden and Schneider 2021: 2–3).

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Advocates of such essentialist ideas draw on concepts of linguistic varieties that already exist within a community and specify them further.

Linguists contribute to processes of Language Making on several levels that can be characterized by the immediateness of their influence. Entering the public sphere directly, they take on an expert role with an authoritative voice. For instance, linguists concerned with the revitalization or documentation of endangered languages engage in activities like archiving language use, publishing dictionaries and grammars or developing education programs for minority languages. As a result, they may enforce perceptions of languages as distinctive static systems that must be protected from external influences.

Yet, the authority of linguists goes beyond these immediate language policy practices. Therefore, we suggest that there is also a broader definition of Language Making in linguistics: whenever linguists define and restrict their object of investigation, they are involved in the making of a concept of language that forms the basis of their research activity and guides the disciplinary development (see also Taylor 1997). At the same time, these language concepts can find their way into public debates and indirectly shape laypeople's images of a language and their attitudes towards it.

Besides the powerful act of naming linguistic varieties and linking them to certain areas or communities, there are also other important tools that form and limit the concept of languages. Findings from language ideology research convincingly point out that language constructions are based on conceptual metaphors, which are embedded in discursive practices of social groups (Watts 2011: 17).[1] Through metaphorization, we understand and experience "one kind of thing in terms of another" (Lakoff and Johnson 1980: 5). As a consequence, certain components of a concept are hidden or highlighted (Lakoff and Johnson 1980: 10, 193; Studler 2017: 281). The metaphorization of metalinguistic practices is not reduced to lay discourses. Scholars as well often use historically and culturally embedded metaphors to frame or explain their findings (Zinken et al. 2008: 366).

In this article, we will illustrate how metaphors contribute to the process of Language Making in linguistic thinking from the nineteenth century onwards. The article focuses on their scientific potential, but it also shows how they limit ideological constructions of language concepts. We try to elaborate the role of metaphors in different "knowledge cultures" within the field of linguistics. How are metaphors entangled with practices and strategies of constructing and justifying knowledge in different areas and periods of linguistics (Knorr Cetina 2018)?

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1 Cf. "I argue that underlying all myths are commonly shared 'conceptual metaphors' […] and that the myths help to drive forms of ideological discourse about English and to construct 'discourse archives' […] of various kinds" (Watts 2011: 2).

The structure of the article is as follows: first, we give a short introduction to discourse metaphor theory as well as to the functionality of metaphors in scientific research. This is followed by three sections presenting how metaphorization in linguistics leads to biological, territorial, and liquid concepts of language.

2 Discourse metaphors and their application in scientific research

Metaphors play a crucial role in human cognition. They structure and interconnect mental concepts by projecting conceptions of a target domain to a more concrete experience-focused source domain and thereby make them more comprehensible (Kövecses 2015: 2; Lakoff and Johnson 1980: 52; Schwarz-Friesel 2015: 143).

Research associated with critical discourse analysis (CDA) underlines the culture-specific components of metaphors and their ideological embeddedness (Musolff 2016; Zinken et al. 2008). We define discourse in this context as a socially constructed "cluster of context-dependent semiotic practices that are situated within specific fields of social action" (Reisigl and Wodak 2009: 89). In line with the CDA approach, Zinken et al. (2008) introduced the notion of discourse metaphor. They describe it as "a relatively stable metaphorical projection that functions as a key framing device within a particular discourse over a certain period of time" (Zinken et al. 2008: 363). The framing power of metaphors results from their repeated usage as well as from their apparent argumentative plausibility and interactional appeal (Musolff 2016: 133). Metaphors are discursive tools that generate a restricted perspective through their functions of hiding and highlighting (Lakoff and Johnson 1980: 10–13; Schwarz-Friesel and Chur 2004: 114).

In accordance with the CDA approach, Richard Watts recognized the potential of metaphors in the construction of languages and therefore integrated metaphor theory into his research on language ideologies (cf. Watts 2011). He assumes that related conceptual metaphors form the basis of language myths, i.e., "communally shared narratives told in the construction of an ideological set of beliefs about the structure of language and/or the functional uses to which language is put" (Watts 2011: 8). A social group considers this set of beliefs to be naturally given. It bears symbolic power as part of the conceptual inventory of a community (Watts 2011: 3). Watts tries to deconstruct this "taken-for-granted" view on language and hence underlines the ideological foundation of what is referred to as Language Making practices in this article. This is a crucial aspect because it also results in a critical re-evaluation of scholarly findings (Drewer 2003: 64).

Yet, the analysis of metaphors cannot be reduced to this perspective. Instead, several papers point out that they can also be "tools of thought" (Drewer 2003) or "media of knowledge" (Junge 2010) and thus have a heuristic value for scientific research. Metaphorization enables the building of new hypotheses and hence has a theory constitutive effect (Drewer 2003: 64). It offers an opportunity for science to creatively shape conceptions of the world (Hermann 2013: 18; Kittay 1987: 9). The projection from a target domain to a source domain results in new analogies that direct the attention to previously unnoticed relations (Hermann 2013: 59–60).

Metaphors create a high accessibility within and outside academia. Therefore, they bridge the gap between the scientific and the public sphere. This leads to metaphorical language concepts that are constitutive not only of theory but also of reality. In the history of linguistics, discursive metaphors were – and still are – embedded in specific socio-cultural contexts that cannot be reduced to merely discipline-internal discourses. This context-sensitive approach helps to deconstruct the language ideological foundation of Language Making practices and acknowledges their epistemic value at the same time.

3 Biologizing language

This section deals with the integration of biological and particularly evolutionary metaphors in linguistic theories in the past as well as today. It investigates how metaphorical projections lead to new language concepts and their corresponding theoretical framework. Two main examples are employed to illustrate the use of biological metaphors. Firstly, we chose to analyze the metaphorical usage in the work of August Schleicher (1821–1868) because he was one of the first linguists who combined the organicist concept of language with natural science (Koerner 1989).[2] Then we turn to William Croft's evolutionary theory on language change. Croft integrates a theory of language change into a generalized theory of evolutionary change encompassing both biological as well as cultural evolution.

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2 Organicist metaphors and especially tree metaphors describing linguistic phenomena have a long tradition in Western history of knowledge. In the first century BC the poet and grammarian Horaz already used a tree-model to describe lexical language change. Throughout history the idea of linguistic systems in the shape of trees reappeared in different contexts. For a discussion of the organism metaphor in the German history of knowledge see inter alia Ferron (2009: Chapter 4) and Davies Morpurgo (1987).

Within the historiography of linguistics, Schleicher's stem-tree model of languages is a well-established example of metaphorization. He gives a concrete graphic illustration in his paper on *Die ersten Spaltungen des indogermanischen Urvolkes* (1853, see Figure 1; cf. Richards 2002: 34–35). As the title of his essay already suggests, Schleicher puts a language and a people (*Volk*) on the same level:[3]

> Je westlicher eine Sprache (oder Volk) ihren Sitz hat, desto früher riss sie sich von der Ursprache (dem Urvolke) los. Zuerst die Celten, dann die Slawogermanen, dann die Pelasger. Die Arier sind der zurückgebliebene Rest des Urvolkes [...].
>
> [The further west a language (or a people) is located, the earlier it tore itself away from the original language (the original people). First the Celts, then the Slavogermanic, then the Pelasgians. The Aryans are the remainder of the original people.]
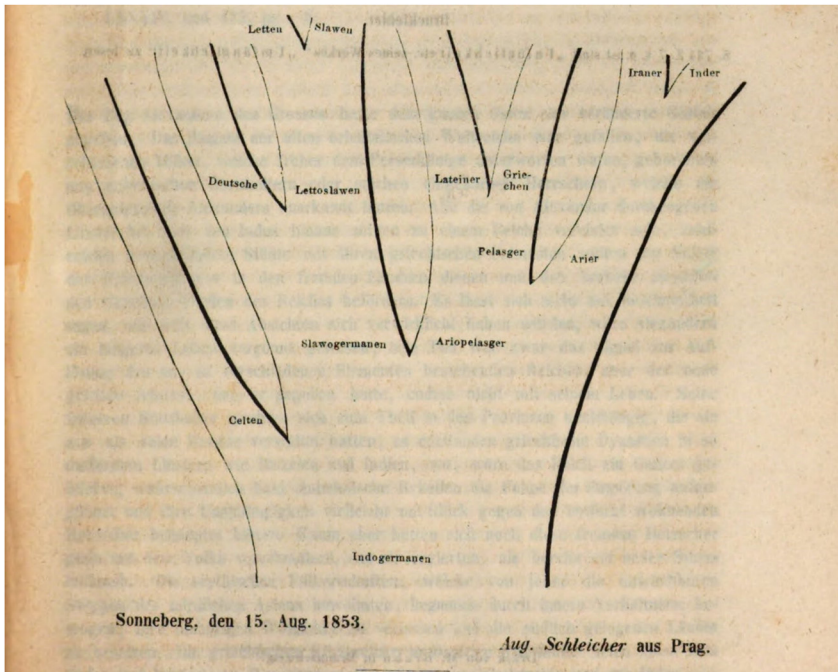>
> (Schleicher 1853: 787)

Figure 1: Family tree (Schleicher 1853: 787).
Source: Bayerische Staatsbibliothek (sig.: Eph.lit. 150 sb-1853, urn:nbn:de:bvb:12-bsb10540032-9).

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3 Direct quotes from a historical source are translated into English by the authors of this article.

According to him, there was "one nation, the primal Indo-German people" that divided up into eight different peoples respectively eight basic languages (Schleicher 1853: 776).[4] This is represented by the ends of the branches of the family tree in Figure 1. In this graphic, Language Making happens both by naming practices as well as by the usage of the tree metaphor. Naming is a crucial categorization practice because it "performatively call[s] languages into being" (Makoni and Pennycook 2006: 10). Instead of a simple allocation it essentializes them and hence turns them into distinguishable entities (Makoni and Pennycook 2006: 10).

Schleicher's parallel use of a name for a people and a language was typical for his time. In the nineteenth century, language studies were often influenced by romantic nationalist thought which conceptualized a language and a nation or tribe as intrinsically linked (Rutten 2019: 19–20). What was new about Schleicher's approach was that he added a phylogenetic classification to delineate languages (Zeige 2013: 55). While naming the language-folk-complex was obviously a fruitful method of differentiation, the graphics exposed an essentialist view on languages. By illustrating the development of languages with the image of the tree, Schleicher conceptualized it as unidirectional. Additionally, the ramification of the language tree was dichotomous and therefore inhibited any contact between branches (Zeige and Krämer 2018: 59).

Around 1800, trees were only one of manifold ways of illustrating the organization of nature (Archibald 2014: 53; Hellström 2012: 237). Nevertheless, they prevailed over other models of conceptualization. This happened not only because of the intellectual impact of scholars such as the French botanist and biologist Jean-Baptiste Lamarck (1744–1829), the German paleontologist Heinrich Bronn (1800–1862), and most importantly Charles Darwin (1809–1882) who all integrated tree models in their theory (Archibald 2014: 53–79). Instead, family trees were also very common in the practice of redrawing lines of ancestry (Hellström 2012: 242). This indicates that the conceptual framework of evolution was not restricted to natural science. Instead, it contributed to the awareness of historicity as a continuous development and the understanding of the past as "the prerequisite for understanding the present" (Hellström 2012: 242). Because of his interest in botany and his exchange with scholars like the German botanist Ernst Haeckel (1834–1919), Schleicher was familiar with the biological literature on trees of descent and evolutionary theories (Bynon 1986: 133; Taub 1993). He understood the existence of

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4 See the original quote in German: "Aus der Art und Weise, wie sämmtliche indogermanische Sprachen unter einander verwandt sind, schloss man nun mit Recht, dass sie aus einer Ursprache entsprungen seien, dass eine Nation, das indogermanische Urvolk, sich mit der Zeit in jene acht Völker getheilt habe […]" (Schleicher 1853: 776).

languages and dialects as a history of separation: the more similar languages were, the more recently they had separated from each other (Schleicher 1863: 16–17). According to him, recently emerged dialects were thus a natural consequence of historical language development (Schleicher 1860: 111). At least theoretically, these dialects could be divided up into sub-dialects (*Untermundarten*) and associated dialects (*Nebenmundarten*). Practically, however, Schleicher only focused on the differentiation between Low German and High German (Schleicher 1860: 114).

It is quite surprising that Schleicher used tribes instead of languages in his first tree illustration in 1853 (Figure 1), since already in the earlier publication *Die Sprachen Europas in Systematischer Übersicht* (1850) he denied that the investigation of a people belongs to the discipline of linguistics:

> Die Wissenschaft nämlich, welche zwar zunächst die Sprache zum Object hat, dieselbe aber doch vorzugsweise nur als Mittel betrachtet um durch sie in das geistige Wesen und Leben eines oder mehrerer Volksstämme einzudringen ist die Philologie und sie gehört wesentlich der Geschichte an. Ihr gegenüber steht die Linguistik […].
> [It is namely philology which originally focuses on language. However, it also considers language as a means to access the intellectual essence and life of one or several tribes. Philology mostly belongs to historiography. Linguistics is opposed to it.]
> (Schleicher 1850: 1)

According to Schleicher, languages are detached from the human will and thus are natural organisms: "They developed according to certain laws, they grew old and died out. They are also subject to that series of phenomena which we embrace under the name 'life' (Schleicher 1863: 7).[5] The linguist acts like a botanist who has to define an unknown plant (Schleicher 1848: 28). This procedure implies that languages exist as organic entities that can be clearly differentiated from one another.

Schleicher's usage of the organism metaphor cannot be reduced to his interest in botany (Bynon 1986: 133). Many scholars of the beginning nineteenth century, like Jacob Grimm and Franz Bopp, considered languages to be a living entity: influenced by imageries of Romanticism, they saw in language a perfectly formed organism that got corrupted over time (Berthele 2004: 723).[6] Schleicher reevaluated the metaphor as a biologically classifiable constant independent from

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5 "die […] nach bestimmten Gesetzen wuchsen und sich entwickelten und wiederum altern und absterben; auch ihnen ist jene Reihe von Erscheinungen eigen, die man unter dem Namen ‚Leben' zu verstehen pflegt" (Schleicher 1863: 7).

6 Of course, predecessors of historical and comparative linguistics like Jacob Grimm (1785–1863) and Franz Bopp (1791–1867) paved the way for Schleicher's organic view on languages (see Wolf 2012: 121–176). On the interrelations of biology and linguistics in the 19th century see Wells (1987). The biologization of language was also strongly connected with racist discourses. See on this topic inter alia Messling and Ette (2013) and Bonfiglio (2007).

human will and thereby supports a view on languages as describable entities (Wells 1987: 47; Wolf 2012: 137, 154). In this sense, the organism-metaphor combined the scholarly field of (historical-comparative) language studies with natural science. Related to this, it served as a "door opener" to the rather biological field of family trees and integrated their genealogical principle into linguistics.

Historicity – understood as evolution – was the crucial element in Schleicher's language concept. His tree model focused on how recent linguistic diversity has come into being rather than on how synchronous variability of different languages was conceptualized. The abilities of a tree like *growing* and *branching out* were seen as symbols of historicity and increased complexity of his genealogy. Additionally, the metaphorical materialization of languages into separate natural organisms is in line with the idea of a countable and classifiable linguistic diversity. Thus, this can be interpreted as an act of Language Making as illustrated in the introduction of this volume (Kolehmainen et al. 2022).

While evolutionary thought in linguistics during the nineteenth century followed a rather "historicist paradigm", linguistic evolutionary theories in the 1990s and 2000s integrated biological metaphors in a quite different way (Lightfood 2002: 410–411). William Croft's monograph *Explaining language change: an evolutionary approach* (2000) is a characteristic example of how evolutionary metaphors still have a crucial impact on Language Making practices. His theory of utterance selection is inspired by Hull's (1988) generalized theory of selection which represents a transmission of biological ideas on evolution to conceptual evolution. Hull's theory can be regarded as an abstraction that functions as a *tertium comparationis*, i.e. the linking conceptual framework for the metaphorical usage of evolutionary thought in areas outside biology.

According to Croft, language is not defined as a discrete system of signs but rather as "the population of utterances in a speech community" (Croft 2000: 26). These utterances, however, are not restricted to their possible generation within a formal grammar. Instead, Croft focuses on their actual production and comprehension in communicative interactions. Speakers are the agents of selection: their communicative actions determine the set of utterances that constitutes a language of a social group. Mechanisms like the production of new forms, their propagation, and the increase in frequency are crucial factors in this selection process and hence decisive in terms of language change.

The produced utterances contain linguistic structures, called "linguemes", that can be replicated (completely or slightly altered) within a population of speakers. In Croft's theory, linguemes form the basic units of replication of utterance selection comparable to genes understood as basic units of heredity in biology.

Even Croft's understanding of a speech community is a metaphorical borrowing from the definition of "population" in evolutionary biology. While the biological definition uses the "possibility of interbreeding" and "reproductive isolation" of organisms as necessary conditions to define a population (Croft 2000: 241), Croft applies these ideas to linguistic theory: he states that the structural divergence of related languages is caused by "communicative isolation" which means "the absence of significant communicative interaction between populations of speakers" (Croft 2000: 234).

This short summary of his theoretical framework as well as the table in Figure 2 suggest that he meticulously makes use of analogies to biology and exhausts the conceptual metaphor "language change is evolution".

Although Croft insists that his theory is not just a metaphor or analogy to biological evolution but an instantiation of the abstract generalized theory of selection (cf. Croft 2006: 77), his theoretical framework can be seen not merely as a stylistic but a conceptual metaphorization of the biological process of evolution. While Schleicher's biological metaphors represent an essentialist view on

(5)	*Generalized theory of selection*	*Paradigm instantiation of selection in biology*	*Paradigm instantion of selection in language*
	replicator	gene	lingueme
	replicators in a population	gene pool	lingueme pool
	structured set of replicators	string of DNA	utterance
	normal replication	reproduction by e.g. interbreeding	utterance production in communication
	altered replication	recombination, mutation of genes	mechanisms for innovation (chs. 5, 6)
	alternative replicators	alleles	variants
	locus for alternative replication	gene locus	linguistic variable
	interactor	organism	speaker (including grammar)
	environment	ecological environment	social-communicative context
	selection	survival and reproduction of organisms	entrenchment of convention by speakers and its propagation in communication

Figure 2: Overview of Croft's terminology (Croft 2000: 38).

language varieties, Croft tries to detach linguistic analysis from essentialist thought by following metaphorically the paradigm of biological evolution. According to him, language can be regarded as the "communicative intercourse" (Croft 2000: 18, 20) of speakers and not as a bounded system of generated rules. Thus, the metaphorical projection does not lead to the 'invention' of a named language (see Makoni and Pennycook 2006). Nevertheless, Language Making happens in a broader sense, namely by "making a concept of a language". This means that the consistent metaphorical usage of evolutionary terminology has a conceptual framing power (see Musolff 2016: 133): The recourse to already existing concepts from biology suggests an increased plausibility of Croft's evolutionary language concept, especially since the presupposed systematicity of the evolutionary approach in biology is projected to language change.

Although Croft's emerging language concept is not comparable to the systemic nature of essentialist models, it is still possible to define language borders. They are determined on the basis of communicative isolation which can be caused by geographical distance as well as by diverging social structures. The heuristic value of Croft's metaphorical usage can be attributed to the fact that it causes a change of perspective on theories of language change. By transferring his theoretical framework to biology – at least terminologically – he can overcome the dichotomy between functionalist and sociolinguistic theories on language change (Croft 2006: 80).

4 Territorializing language

In Schleicher's model, a metaphorical transfer to the field of biology was possible because he consciously detached language from human will, i.e., its speakers. When languages appear in two dimensional maps another form of detachment takes place. In the following section, we illustrate the cartographic language-space-connection by analyzing one of the first language maps of the whole German-speaking area envisioned by Karl Bernhardi (1799–1874). Subsequently, we give a brief outlook on how conceptualizations of language in space were influenced by mapping techniques.

In 1844, the politician and librarian Karl Bernhardi published a small monograph entitled *Sprachkarte von Deutschland*. This book contained a fold-out language map as well as a plethora of linguistic, geographic and historical descriptions of different Germanic language areas and their border regions. Much has been said about national linguistic mapping projects that appeared since the late nineteenth century such as Georg Wenker's *Sprachatlas des Deutschen Reichs* (see Niebaum and Macha 2014; Schrambke 2010; Zeige and Krämer 2018). But only

a few publications deal with the predecessor of these projects (see Dingeldein 2001; Dunlop 2013; Hanson 2015).[7] Bernhardi's work, however, is an iconic example of the early mapping tradition.

Linguists today make a difference between the "geography of language", which is "the fixation of languages on geographic maps", and the so-called "linguistic geography", which is "the fixation of the spatial distribution of linguistic features on geographic maps" (Zeige 2017: 56). Bernhardi's example represents the geography of language perspective. This perspective follows the presupposition that a language has a "natural habitat" in geographic space (Auer 2013: 4).[8] Auer (2013) demonstrates convincingly that this presupposition comes in line with a neglect of the essential role of speakers as the underlying link between language and space in the equation "language = space" (Auer 2013: 5). In his opinion, this reductionist simplification is caused by the dominant concept of a monolingual place-bound speaker (Auer 2013, see also Quist 2010). If varieties are homogeneous, there is no need to talk about individual speakers. Instead, the variety as a whole is the crucial object of investigation (Auer 2013; Watts 2011).

Sprachkarte von Deutschland is a key example of a language map that highlights geographic space while it hides speakers (see Figure 3). Its cartographic system generates absolute spaces with clear boundaries and hence shapes the spatial perception of languages and varieties as geographically differentiable entities (Hanson 2015: 53). Almost incidentally, maps shift the focus away from the speakers to a language in its entirety. Using the medium of the map goes along with a metaphorical transfer: Language becomes space. Languages, unlike lakes or mountains, are not fixed in geographic space. They do not have certain coordinates which mark their geographical extent. However, by mapping languages they become material, fixed entities and thus part of a geographic space.

This metaphorical visualization has its roots in new methods of cartography that developed around 1800 (Dunlop 2013: 253). In line with the increasing territorial definition of rule in the early 19th century, space was conceptualized as homogeneous and linearly bounded (Biggs 1999: 398; Branch 2013: 94–95). These geometric mapping techniques served as a means to construct territorial nation states (Branch 2013: 96). In the nascent discipline of linguistics as well as in public discourse, it was also common to depict the borders of languages in maps. These

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7 For more information about Bernhardi's biography see Dingeldein (2001: 162–165).

8 The linguistic geography perspective is not exempt from essentialist conceptions about languages. Especially earlier works like Georg Wenker's *Sprachatlas des Deutschen Reiches* (1888–1923) tried to define the borders of languages and dialects by the accumulation of mapped linguistic features.

Figure 3: Sprachkarte von Deutschland (Bernhardi 1844).
Source: Bibliothèque nationale de France (https://gallica.bnf.fr/ark:/12148/btv1b8469614m/
f1.item.zoom).

maps visualized cultural differences and contributed to the formation of group
identities (Dunlop 2013: 253, 263).

Bernhardi's mapping project is deeply entrenched in nationalist thought
(Dingeldein 2001: 162). It was linked to his founding membership in the nationalist
Verein für hessische Geschichte und Landeskunde [society for Hessian history and
culture]. During the first meeting of the society in 1834 he stated that the associ-
ation had to contribute to the national mission, namely the design of a language
map of Germany in its entirety as well as the preparation of precise dictionaries of
the various dialects (Bernhardi 1837: VII). The importance of the project drew from
the hitherto supposed fuzziness of the boundaries between German, French,
Italian as well as the Slavic languages. Besides that, he wanted to investigate the
boundaries of High German and Low German (Bernhardi 1837: VII). Typically for
nineteenth century linguistics, he attributed one language to a people and tried to

examine different tribes (*Stämme*) linguistically: "[…] doch ist die Sprache unstreitig eins der untrüglichen Kennzeichen ursprünglicher Stammesverwandt-schaft" [Language is undoubtedly one of the unmistakable signs of original tribal kinship] (Bernhardi 1837: VII). In *Sprachkarte von Deutschland* (1844), the search for this "original tribal kinship" dominated his cartographic approach. According to him, the answer to the historical question was by far easier than investigating the consequences of migration and dialect mixing (Bernhardi 1844: preface).

Right at the beginning of his essay, he maintained that the recent German language borders were more or less congruent with those described in the ancient literature of Caesar, Tacitus and Plinius (Bernhardi 1844: 1–12). For instance, the French-German border was supposedly already specified in the first century BC because Caesar reports in his *Commentarii de Bello Gallico* that the Germanic tribes settled down on the left bank of the Rhine river (Bernhardi 1844: 24–25). Historicity, understood as "geographic truthfulness" of the past, played a crucial role in Bernhardi's concept since recent territorial claims arose from historical facts.

From this follows that Language Making can also be associated with place-making, i.e., an appropriation practice transforming absolute space "which is a point on a map with specific coordinates and a fixed distance from other points" into social space (Thissen 2018: 25; see also Auer 2013: 16). In Bernhardi's book, markers of absolute space are usually "natural borders" like the sea, rivers or mountains. Used to draw language borders, they materialize what is actually considered a social construct (see also François et al. 2007).[9] By imbuing the topographic space with narratives about a mythical Germanic past, Bernhardi lays claim to a bounded territory. The evolving language concept is the iconic representation of a geographic appropriation as well as the historic consequence of the alleged settlement. Speakers might not be directly visible on the language map but they are implicitly present as a homogenized collectivity with one shared language (Watts 2011).

The result of Bernhardi's place-making activities is a broad concept of German that is firmly connected to Pan-Germanic thought: referring to the ideas of the dialectologist Johann Andreas Schmeller (1785–1852), Bernhardi supposed that the "whole purely Germanic language territory is divided up into three main dialects, namely: 1) Low German, 2) Nordic, 3) High German" (Bernhardi 1844: 97). Broad Germanic language concepts which included Scandinavian Languages and Dutch became popular in Romantic nationalist thought. Entire language families were often related to one ethnicity because of their allegedly shared tribal history (Leerssen 2013: 12–14).

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9 On the influence of natural borders on the construction of language borders see also Kiran van Bentum's dissertation project "Das Konzept der imaginierten Sprachgrenze zwischen Deutsch-land, Belgien und den Niederlanden von 1830–1900" (working title), Freie Universität Berlin.

From today's perspective, Bernhardi's mixing of historical source analysis, cartography, ethnographic fieldwork and the use of census data might irritate readers. Studies such as Bernhardi's contribution, however, had a big impact on scholarly discussions of linguistic mapping techniques (Dingeldein 2001: 173). At the end of the nineteenth century, the German school of dialect geography in Marburg and its successor, called cultural morphology, used linguistic mapping techniques to visualize phonological or morphological boundaries between language varieties. Still today, disciplines like geolinguistics, dialectology, and areal typology focus on the conceptual interwovenness of language and horizontal space. Major atlas projects like the *Ethnologue* or the *World Atlas of Language Structures* (WALS) try to connect linguistic diversity to geographic space. Besides that, research fields like folk linguistics and especially perceptual dialectology implement maps in their experimental settings in order to elicit spatial perceptions and the corresponding speaker attitudes. These experiments are based on the assumption that everyone has mental representations of linguistic varieties that are conceptualized spatially or even cartographically.

A new perspective on language and space has recently been developed in sociolinguistics and linguistic anthropology. Advocates of this approach criticize the essentialist concepts of place and space – especially in dialectology and variationist studies – and emphasize the constructionist and interactional character of these concepts (see Auer et al. 2013; Johnstone 2010; Quist 2010). From this perspective, places are not just fixed points in physical space. Instead, speakers can co-construct places interactively by attributing social meaning to them. In this way, the social meaning of places and the way they are conceptualized can vary across time and social groups.

However, even if the aforementioned, "traditional" link between language and space might at first glance seem like a "trivial connection" (Auer 2013: 1), the integrability of this conceptual entanglement cannot be overestimated: the integration of space into the conception of language allows for connections with other cultural models like nation, hegemony, proximity, and distance. These interconnections lead to broader ideological constructs like national standard languages (cf. Gessinger 2018: 95). Language maps perpetuate these interconnections because they use political or physical borders as reference points. This leads to static space concepts that can be seen as effects of ongoing Language Making processes.

5 Liquefying languages

In the last 20 years, the relationship between language and globalization has attracted growing attention among sociolinguists. In this context, the metaphorical field of

liquidity and fluidity has served as a counter-metaphor to essentialist conceptions of language understood as bounded entities. The two notions have highlighted the constant changeability of linguistic repertoires across geographical and social boundaries. Lobin (2018: 151), for example, differentiates between varieties that represent artefacts and a general concept of language comparable to the unrestrained fluidity of water. In this sense, fluidity just applies to speech and communicative interactions whereas the artificial character of varieties is only associated with the conception of language as a bounded system.

In his programmatic book *Liquid modernity* (2000), the sociologist Zygmunt Bauman explains why the history of modernity is best described by the metaphor of fluidity. He states that fluids "neither fix space nor bind time", they are shapeless and ever changing within the temporal flow. Associating liquids with weightlessness and fast movements, he considers them to be adequate metaphors to capture the increased mobilities of modern ages (Bauman 2000: 2). Supporters of the sociolinguistic concepts of liquidity and fluidity also question the static conceptions of social hierarchies, migration patterns and identity constructions. Within this perspective, the increased mobility of people goes hand in hand with a high mobility of linguistic features which move with speakers across spaces (Blommaert and Dong 2010).

Scholars also apply these metaphors to highlight linguistic practices that defy the distinction between monolingual or multilingual interactions (Jaspers and Madsen 2019: 2; Otsuji and Pennycook 2010; Schneider 2019). In this context, the term "translanguaging" occurred in the field of language education and bilingualism. It refers "to both the complex and fluid language practices of bilinguals, as well as the pedagogical approaches that leverage those practices" (García and Lin 2016: 117). Scholars favouring this concept developed a theoretical framework that starts from the actual dynamic linguistic practice of bilingual speakers instead of focusing on discrete systems of named languages (García and Lin 2016: 123). Translanguaging is close to the concept of "metrolingualism" introduced by Otsuji and Pennycook (2010), which also tries to transcend the boundaries of languages as fixed entities. The idea of metrolingualism is yet less focused on bilingual or multilingual education but rather on the interplay of linguistic practices and identity constructions: "Metrolingualism describes the ways in which people of different and mixed backgrounds use, play with and negotiate identities through language; it does not assume connections between language, culture, ethnicity, nationality or geography, but rather seeks to explore how such relations are produced, resisted, defied or rearranged; its focus is not on language systems but on languages as emergent from contexts of interaction" (Otsuji and Pennycook 2010: 246). However, this constructionist and interactional framework does not establish a dichotomy between fixity and fluidity. It rather aims at underlining the co-existence and co-constitutiveness of both terms (Otsuji and Pennycook 2010: 246).

This view is supported by Jaspers and Madsen (2019). They criticize that research on the fluid character of languages tends to overestimate liquidity and opposes it to ideological practices that fixate languages. Instead, they argue that linguistic practices perceived as fluid may be influenced by "mobilized fixed categories" (Jaspers and Madsen 2019: 11–12). By this they mean that when people move across space, they take with them a set of norms or metalinguistic ideas. This metalinguistic repertoire can be implemented in the new community which results in negotiation processes about linguistic normativity (Blommaert 2010: 80, 100).

Even though metalinguistic repertoires like language ideologies are prevalently associated with fixity, at least in Jaspers and Madsen's paper, Schneider (2019) convincingly shows that both speech and metalinguistic categories can be liquid. Instead of being monolithic, ideas about normativity are context-dependent and thus just as fluid as linguistic practices. According to her, fixity can only be attested when there is an actual materialization of language or metalinguistic ideas like in dictionaries or grammars. Yet, this material output is merely a storable snapshot (Schneider 2019: 24–25, 237–240).

Interestingly, the image of liquefying language is not equivalent to the complete dissolution of the notion of a language. Just like water, language has neither a static shape nor a fixed position in time or space. Still, this does not mean that the substance itself does not exist (Schneider 2019: 12). Through its visual power, the metaphor of fluidity supports a change of perspective towards emergent concepts of grammar and repertoire as well as linguistic identity. This might also lead to political implications by questioning the one-nation-one-language ideology. The concept of fluidity is connected to a broader definition of Language Making, understood as "the making of a concept of language". Since a fluid conception of language also consists of a shared set of metalinguistic beliefs guiding research activities it does not pave the way out of an ideology-constrained research. As long as fixity and fluidity belong to a language culture that values the existence of different languages both have to be considered in every linguistic analysis (Jaspers and Madsen 2019: 16). Schneider's work on liquid languages in Belize provides proof for the interplay between the two concepts.

6 Conclusion: re-evaluating the concept of language

Linguists have several methods of producing, justifying and evaluating knowledge that follow different, sometimes diverging strategies to create truth (Knorr Cetina 2018: 31): while psycholinguistic studies focus on experimental and quantifiable evidence, anthropological linguists engage in fieldwork and historical linguistics

relies on source-based analysis. These so-called knowledge cultures (Junge 2010) are united by their search for a concept of language but they diverge regarding their strategies of knowledge production. The diversity of language concepts emerging from these strategies is influenced by theoretical as well as ideological stances (Wei 2018: 17).

Metaphors and knowledge cultures are closely related because researchers can gain information by paraphrasing new issues. Hence, the metaphorical paraphrase can be seen as an essential epistemic process (Junge 2010: 7). Our case studies indicate that the implementation of metaphors often leads to an initialization of new cultures of knowledge and goes in line with a pluralization of language concepts within the discipline of linguistics. The introduction of new metaphors has stimulating effects on the ways in which linguists engage with an object of research. Drewer (2003) sets out this process convincingly with reference to the introduction of the black hole-metaphor that stimulated research in physics (Drewer 2003: 61). Makoni and Pennycook (2006: 17) even consider the usage of new metaphors to be "an important strategy aimed at finding a way in which linguists and applied linguists can avoid being imprisoned by their own semiotic categories". This assertion implies that the emergence of a new metaphor causes a shift in perspective and sometimes even leads to a dissociation from traditional methodologies: the development of tree models made it possible to systematize language diversity in its historical development. The use of language maps helped to visualize that languages and spaces are interconnected. Finally, the concept of fluidity in linguistic theory sheds light on the diversity and emergence of human communication and social relations. Needless to say, some scientific insights resulting from the usage of the presented metaphors were again falsified by subsequent research: to give but a few examples, Johannes Schmidt questioned the boundedness and dichotomous nature of the nineteenth century stem-tree models. As an alternative, he suggested, inter alia, the idea of language continua in the form of waves. This can be considered an early attempt to implement the metaphor of fluidity in linguistics. The static two-dimensional version of language in space was enhanced by a third dimension, i.e., the vertical space of social hierarchies and power relations. Additionally, the implementation of mobility serves as a crucial component in the construction of spaces (Blommaert 2010). While all of the presented metaphors were only "key framing devices for a certain period of time" (Zinken et al. 2008: 363) their emergence stimulated the diversification of the discipline.

Instead of asking if linguistic research actually needs a concept of language it seems more promising to reformulate the question: which concepts of language are necessary to do linguistics? This might at first glance seem like pure relativism but there are three essential ideas lying behind it: Firstly, every time linguists make

sense of languages, they shape them and thus perform an act of Language Making (Taylor 1997). Metaphors foster this process.

Secondly, just as linguists cannot protect themselves from conceptualizations about languages as well as about language as such, there is no way out of an ideology-constrained research even without the concept of languages. If language ideologies are understood in a value-neutral sense as "any sets of beliefs about language articulated by users as a rationalization or justification of the perceived language structure and use" (Silverstein 1979: 193), the rejection of the concept of a language is an ideological stance as well.

Thirdly, linguists engage in processes of selection, systematization and generalization of linguistic phenomena. This applies regardless of whether they define language as a bounded system or whether they understand it as a stylistic repertoire of a social group. It is the level of selection that differentiates these two approaches because in the former it is situated on a structural and in the latter on a speaker-bounded level. However, selection, systematization, and generalization are inherent to research. They lead almost automatically to practices of limitation and thus to conceptualizations of languages.

Rejecting the concept of (different) languages does not seem to be an adequate solution for linguistics. This step would ignore the diverse cultures of knowledge within the discipline as well as public commonsense concepts of languages. The coexistence and the discursive negotiation of different concepts which partially evolve with the help of metaphors have an epistemic value *per se*. These negotiations expand our knowledge about language(s) and, therefore, they are an essential and necessary part of linguistic reasoning. At the same time, they contribute to the process of Language Making in and through linguistics.

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