Linguistics as a biased discipline

Identifications and interventions

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1 Biases as assumptions that inhibit progress

In Language Sciences 41, Steffensen & Fill (2014:6) claim: "The language scientist in the early 21st century is in a situation similar to that of hikers lost in the wasteland. The idea of science as a uni-directional movement towards more coherent theories, better methods, deeper insights, grander visions and human progress is largely a myth." This issue has a less skeptical point of departure. We believe that language sciences can make and have made progress. Not in all areas, not in one direction and not all the time, but in some areas, in different directions, from time to time: Some theories have become more coherent, some methods have improved, some hypotheses have been supported and some disconfirmed, and some descriptions and explanations have become more accurate and informative relative to the solution of problems in the human niche.

When such small steps are made, they are made on the basis of a set of assumptions. Assumptions serve to define and organize a scientific area and determine priorities; they imply methodological constraints and enable descriptions, explanations and predictions. In short, they give research a direction. Whereas such assumptions are a prerequisite for progress, they can also inhibit progress (Rosen 2017:3). A set of assumptions works like a *frame* (Bateson 1987:192). They determine what is inside and what is outside the focus of attention, and the differentiation and understanding of what is inside the focus of attention. Thus, there is a risk that what's outside is significant and that the differentiation and understanding of the subject area can be insufficient and erroneous. This duality is characteristic of scientific assumptions. To paraphrase Reason (1990:2), correct descriptions and systematic errors are two sides of the same coin. And while there is awareness in science that we should question our assumptions, it is something we tend to forget or even avoid. That is, assumptions can inhibit the development of better descriptions.

The word *bias* is used in a variety of ways. It can suggest an "inclination or prejudice for or against one person or group, especially in a way considered to be unfair" (Oxford Living Dictionaries 2018). And as Anderson et al (1981:11) notes, it is used "as a general insult to impugn any study that disagrees with one's own opinions". In this issue, we will refrain from such uses. Here, the word is used to question assumptions with the purpose of identifying obstacles that prevent the development of more accurate and informative descriptions of language and language use. It includes three aspects of meaning: a normative aspect that a bias is an error, a causal aspect that the error is systematic, and a socio-cognitive aspect that the systematic error has become

commonplace in a scientific community. This use of the word is in part related to the uses of the word within statistics and within the cognitive psychological bias research (Tversky & Kahneman 1974), but as the following comparison will show it also differs from these uses.

The term *bias* refers to a normative concept: A bias is an error and therefore something to be avoided. Within statistics the bias of an estimator is "the difference between the average value of the estimates obtained in many repetitions of the study and the true value of what it is estimating" (Anderson et al 1981:11). A bias is thus mathematically defined and can be expressed mathematically. The normative aspect is that the difference indicated by the mathematical expression is a distance to something that is valuable and strived for. In the above definition, the valuable and strived for is a true value. In the cognitive psychological bias research (Tversky & Kahneman 1974) a bias is a deviation from a rational, i.e. statistically and/or logically, way to reach an estimate or to make a decision. It is, thus, a deviation from a way of thinking. Certainly, there are some disagreement about the normative use of the term (Gigerenzer 1996, Gigerenzer & Todd 1999, Kahneman 2011, Klein 2009, 2015), but the main efforts in cognitive psychological bias research have been made to show that biases lead to bad estimates and poor decisions. The assumed norm in these studies is logical, statistically-based reasoning. In this issue the term is also signifying a deviation, but it is the deviation of a description, and the standards deviated from are that the description is *accurate*, that is, as a structural and functional characterization of occurrences and their causal relations, and *informative*, that is, able to differentiate differences that make a difference in human's understanding of everyday language use.

The causal aspect implies that the error is systematic. Within statistics it simply means that the error is repeating itself. Whereas a random error would approximately cancel out if repeated measurements were taken and averaged (Anderson et al 1981:11), systematic errors do not disappear if the number of measurements increases. This is due to the fact that these errors derive from shortcomings of research design, implementation, and analysis (Weisberg 2010:3). Thus, a bias is an error that is caused by something beyond the statistical analysis, and unlike random errors it cannot be assessed without external knowledge of the world. Hence, biases are outside statistics. In cognitive psychological bias research, biases are also characterized by being systematic. Here, it is explained by heuristics, that is, rules of thumb that serve as mental shortcuts to conclusions (Tversky & Kahneman 1974; Kahneman, Slovic & Tversky 1982) and often are successful, for example the representativeness heuristics in which the probability that object A belongs to class B is evaluated by the degree to which A resembles B. That is, a bias is not just a deviation from a way

of thinking; it is in itself a way of thinking. In this issue, we will also use the word *bias* to signify a systematic error, but here, the cause is traced back to a set of assumptions that forms the basis of a scientific description.

The socio-cognitive aspect implies that the assumptions resulting in systematic errors have become commonplace in science. This use of the word is not related to the use within statistics or cognitive psychological bias research. Within statistics, biases are methodological errors related to the individual study; within the cognitive psychological bias research, biases are mental phenomena. Kahneman and Tversky (1974) do note that researchers are also prone to biases. Thus, Kahneman & Tversky (1971) and Tversky & Kahneman (1973) observe the tendency to predict the outcome that best represents the data, with insufficient regard for prior probability in the intuitive judgments of individuals who have had extensive training in statistics. In other studies, confirmation and disconfirmation biases have been observed in peer reviews (Hergovich et al 2010, Koehler 1993, Mahooney 1977). However, these biases are associated with cognition as a mental phenomenon. In this issue, the term is primarily, but not exclusively (see Sloos et al this issue), applied to cognition as a sociohistorical process. This use is in line with Linell's use of the word in *The Written Language Bias* (1982, 2005). In this theory a bias is a generalization of a conceptualization based on a particular part of linguistic behavior, for example, describing spoken language by means of concepts, models and methods taken from the tradition of describing and explaining written language. The distinctive feature of Linell's use of the word is that it is applied to linguistics as a whole. Locating a bias on this level implies that one may refer to a number of societal factors when one explains why a particular set of assumptions have become commonplace. Now, one major reason is undoubtedly that the set of assumptions has resulted in accurate descriptions of, at least, some parts of language and language use. But several other factors prevail; Linell (2005) mentions technology, the societal status of the linguistic object, the linguistic object's relation to religion, law, authorities and institutions, the description's relation to practical and political tasks and to projects of nation-making and state-building. Particularly, the latter two factors' influence are discussed in Schneider (this issue) and Saraceni & Jacobs (this issue). However, not all the contributions deal with such explanations. The primary aim of the issue is to identify sets of assumptions that inhibit the development of more accurate and informative descriptions of language and language use and have become commonplace in linguistics.

What we call a *set of assumptions* include everything ranging from a single, simple proposition to a large number of coherent, complex propositions that guide language studies. The status as

assumptions entail that the propositions are accepted as true without question, and that they can be tacit. It is this status that constitutes a risk, and it is this status that motivates the endeavor of this issue. To quote Boas (1938): "My whole outlook upon life is determined by one question: How can we recognise the shackles that tradition has laid upon us? For when we recognise them, we are also able to break them."

As is evident from the outline above, our use of the word *bias* is restricted. First of all, it cannot be used for processes, hypotheses and preliminary results. Its target area is well-established and widespread assumptions – assumptions that apparently have survived the scientific community's control, testing and criticism. This is important because intuitions and bold conjectures undoubtedly play an essential role in acquiring knowledge and should not be considered as deviations or errors. Secondly, the term must be used according to the claims of the scientific description. For example, a description that confines itself to English semantics cannot be deemed as biased with reference to the semantics of other languages; a description that explicitly confines itself to information structure in expository prose cannot be deemed as biased with reference to other types of sequential organization. Hence, the bias concept outlined here is primarily aimed at descriptions of general features of language and language use.

When one uses a critical term like *bias* to characterize a scientific description and points out an alternative description, there is a considerable risk of applying double standards. To avoid this risk and enable the detection of such inconsistencies it must be explicated what the use of the outlined bias concept implies. The use presupposes that some descriptions are more accurate and informative than others. This assumption is closely related to two other assumptions, namely a) that there is a world that operates independently of our consciousness and knowledge of it, for example, the length of vowels (Sloos et al this issue), the distribution of English semantics (Levisen this issue) or the dynamics of multilingualism (Schneider this issue), and b) that it is our encounters with this world that serves as a yardstick for the accuracy and informativeness of the descriptions of it.

Now, encounters with the world are situated. This implies that the standards of accuracy are historical, contingent and changing, and, surely, any standard of informativity is relative to a purpose or problem. In this overall abstract sense, no description is unbiased. However, a balanced, general description of aspects of linguistic behavior is an epistemological goal that unites many linguists. With the use, thus, one endorses language sciences as joint efforts to develop more coherent theories, better methods, and more accurate and informative descriptions. This also means that one cannot just claim that a description is biased – by identifying a bias you commit yourself to

point out a way to circumvent it, and the alternative is subject to the same epistemological standards as the criticized description has been subjected to and judged by.

On the abovementioned points, the bias concept differs from the concept of myth and other competing critical terms, be that *prejudice*, *chauvinism*, *injustice*, or *illusion*. It is clear that these terms would lead to different studies, conclusions, and metadiscussions. In our view, the bias concept has a special place in the landscape of metacriticism, which makes it more attractive than other tools of critique.

2 Identifying biases

Having explored the aspects, limitations, and implications of the bias concept, we add a few comments on how the concept can be applied as a metalinguistic and metatheoretical tool of critique. Within the discourse of linguistics and its many subdisciplines, the *bias* concept seems to have not only a broad appeal, but also, there is a certain kind of resonance: Ask any linguist in any field, about the current biases of his or her field, and they will talk. While some of that talk might at first be intertwined with both emotional and (inter)personal narratives of the hardships of modern academic life, there is often a fundamental critique and an axiologically defined core question that remains, and it is this type of questions that we have sought to address in the process of writing this collaborative volume. Bias identification seems to spring out of mix of engagement and deep knowledge. The deeper the engagement within a field or subfield, the more likely it is that "biased" ways of thinking will bother the researcher, and the stronger is also the wish to set things right, or to call for a reform. But in order to do so deep knowledge is important. In this issue, we have brought together linguists of different persuasions and fields of interest: experts in phonetics, morphosyntax, lexical semantics, information structure, and pragmatics, and many different theoretical orientations are represented, ranging from cognitive, cultural, ecological, and sociolinguistic, to historical and postcolonial.

"Naming it" is a key aspect in bias identification. By giving the bias a name, the unsaid and the unnoticed will be brought to light, and at the same time this name will enable a new discourse. One of the historically most powerful examples of this is Linnell's coinage of the "Written Language Bias" (Linell 2005). In many ways, Linell's criticism in this piece was not entirely new, and many linguists had said similar things. But the name, *Written Language Bias*, led to a new discourse of criticism and a new lens through which problematic assumptions and discourses could be studied and criticized. In this volume, we see several new attempts to name biases – for example,

Borchmann's "spectator bias" or Ye's "politeness bias". But *bias* names do not have to be new. For instance, in Schneider's paper on 'methodological nationalism in linguistics', or Levisen's on 'Anglocentrism in linguistics', the author's use bias-identifying names that have emerged in the border disciplines of linguistics (i.e. sociology, anthropology, etc.) and apply them in a linguist context. Through these new names and new application of names, the authors hope to enable new metalinguistic discourses and criticism that eventually will lead to more precise ways of doing linguistic analysis.

3 The biases in linguistics

In this issue, Linell sets the scene by sketching out the sociohistorical development of a written language bias in linguistics. Linell takes a starting point in a close relation already seen in the Roman empire between theories of language structure, on the one hand, and practical tasks, especially those of learning to read and write, on the other. This focus on practical tasks dominated in studies of language for a long time. So when the perspective shifted from abstract language systems to situated actions and interactions in the 20th centuries, linguistics ended up in a paradox: Linguistics claimed the primacy of speech and spoken language but stuck to the traditional methods and models developed for the study of written language. Linell updates the theory by making some notes on the research on the written language bias and its development within language sciences, and by discussing Borchmann's claim of a bias that cuts across the distinction between spoken and written language.

Borchmann argues that there is a spectator bias in the linguistic descriptions of information structure. The argument starts from the observation of a systematic discrepancy that appears when descriptions of information structure are applied to language use embedded in practical activities. The discrepancy is traced back to a small set of common assumptions that forms the basis of the established descriptions of information structure. Some of these assumptions correspond to assumptions that Linell indicates as examples of a written language bias. However, Borchmann observes that the discrepancy also appears when the descriptions of information structure are applied to written language use embedded in practical activities. In line with this he argues that the *Written Language Bias* is based on a narrow standard of written language and that there is a need for a supplementary explanation if we are to point out a way to resolve the discrepancy. The supplementary explanation is that the linguistic descriptions of information structure are characterized by a spectator bias. This bias is basically constituted by the view that language use is separated from the activity that the speaker/writer refers to and can be analyzed as an independent

activity with its own purposes, functions and structures. The alternative suggested by Borchmann is that language use is embedded in extra-communicative courses of actions and that natural language information structure must be analyzed as a contribution to such courses of actions.

Sloos, García, Andersson and Neijmeijer offer methods to statistically detect accent-induced bias in linguistic transcriptions. They show that *perceived* accent among transcribers is a stronger predictor for transcribed sounds than the actual native language of the speakers, and that *informed* transcribers perceive more lax vowels in Canadian but more tense vowels in Standard European French than transcribers who were uninformed about the speakers' varieties. This demonstrates that *a priori* conceptualisations of social categories can crucially influence linguistic method and documentation.

Schneider discusses that many forms of linguistics take for granted particular kinds of social community, namely national communities. The author elaborates the concept of *methodological nationalism* that has gained ground in recent decades in sociology as well as cultural anthropology. After introducing the debate on language as discursive entity as related to the critique of methodological nationalism, she examines several examples from the realm of sociolinguistics that display this bias. In order to demonstrate the problems arising from it, she explores language use that cannot be explained by reference to nation or ethnicity but is based on belonging to non-national social contexts. This shows that the study of language is always and necessarily intertwined with formations of social community, albeit not necessarily with *national* social communities (which, however, continue to play an important role in contemporary social settings). The two central realizations of this article are therefore that a) an imagination of the world as ordered along national lines – that is, monocultural and territorially grounded social entities – should be questioned or at least be made transparent in research but that b) an entirely 'bias-free' linguistics that does not consider the social grounding of language use is neither feasible nor desirable.

Saraceni and Jacobs scrutinize the relevance of named languages in postcolonial settings. They firstly revisit the critical account of *translingualism*, which deconstructs the notion of 'languages' as discrete and separate entities and regards language as social practice, emphasizing fluidity and dynamism. Yet, while the translingualism paradigm treats one kind of bias – a bias tied to monolingual ideologies of 19th century nationalism – the authors argue that there may be another bias implied in this relatively new and deconstructive paradigm. Based on discussions of the language situations in Malaysia and Algeria, the authors show that named languages, typically conceptualized as entities by their speakers, can play a crucial role in political and cultural de-

colonization and in the development of local identity and emancipation. Thus, the critique of *languages* as named entities, as a critique of a linguistic bias, may develop its own bias if not recognizing the potential political and social benefits of languages as entities.

Levisen explores Anglocentrism as a bias in linguistics and cognitive sciences. The paper deals with the fact that English, increasingly, has become not only the global language, but the global metalanguage. This tacit belief in English words as culturally neutral and semantically valid metalinguistic terms leads to one-sided Anglo representation, but also, it inevitably leads to the imposition of Anglo norms and views of the world. Levisen documents what he calls "hubristic Anglocentrism" in the areas of personhood (the discourse of the mind), values (the discourse of happiness) and social life (the discourse of community).

Ye argues that there is a "politeness bias" in contemporary linguistic pragmatics, in which norms of social interaction that were originally conceived on the basis of a particular culture-historical environment have been universally imposed on norms of interaction. Equipped with a mounting criticism from Japanese and Chinese scholarship, and with her own studies on Chinese interactive style, Ye points to *politeness* as a problem term that appears to frame interaction from the point of view of the "society of strangers", rather than a society of intimates.

Taken together, and without making any claims to comprehensiveness, these contributions aim to give insight into the diverse kinds of biases that have developed in the study of language and by its collective presentation, we hope to encourage critical discussions on the epistemological foundations of our field.

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