Otto Jespersen, one more broken leg in the historical stool of generative linguistics

#### Abstract

Over the years, Noam Chomsky has constructed a historiographic narrative according to which Generative Grammar is the outcome of a mix comprising the early awareness of creativity by Galileo, the Cartesians, and Humboldt, the formalization of recursive functions by computational theorists, and an incipient internalist 'language' concept foreshadowed by Otto Jespersen. This paper tries to show that the latter ingredient is to be removed from the historical recipe for Chomskyan linguistics. More specifically, the paper claims that the almost ritual repetition of the name of the Danish linguist belongs to a 'non-rational' component of the generativist rhetoric, which is part and parcel of most ground-breaking theories.

# Keywords 10

Generative grammar; linguistic internalism; Noam Chomsky; Otto Jespersen

The interest of autobiography is not that it reveals self-knowledge — it does r

## **1** Introduction

Noam Chomsky has recently stressed that the historical rationale of his own views on language is a three-legged stool, based on the early recognition of the creativity of thought and language (in the tradition of 'Cartesian linguistics,' Wilhelm von Humboldt and even... Galileo), the mathematical foundations of the idea of computation in the first half of the 20th Century, and the mentalism of the prominent Danish linguist Otto Jespersen (Chomsky 2020). The aim of this paper is to refute the thesis that Otto Jespersen is to be credited with such a role, for the simple reason that the Danish linguist was not the kind of internalist that Chomsky claims he was. If anything, Chomsky's historical underpinnings could be likened to a twolegged bench, an issue that I will not be concerned with in all its breadth in this paper.

The article is organized into two main sections. Section 2 is devoted to Jespersen's kind of psychologism, and, above all, to showing that, contrary to the claims made by Chomsky, Jespersen held positivistic views regarding the relation of language and mind which were not very different from those supported by the less radical forms of behaviorism. Section 3 offers an interpretation, in the spirit of some aspects of Paul Feyerabend's philosophy and historiography of science (namely, Feyerabend 1975) of the motives that might have moved Chomsky to appropriate the name of Otto Jespersen as a piece of authoritative support to his own views. A Conclusions section closes the paper.

#### 2 On Jespersen's psychologism

According to his own historical recollections, Chomsky found in the Danish linguist Otto Jespersen – chiefly in Jespersen (1924) – a referent for the idea that language is to be envisioned as a mental structure. Otto Jespersen is a protean figure in the history of linguistics in the 20th century, who appears to have exerted some influence on both sides of the structural/generative divide in American linguistics (Falk 1992). As for Chomsky, leaving aside some previous references concerning aspects of the syntax of English (Chomsky 1962), his theoretical interest in Jespersen's contributions started in the mid-seventies (Chomsky 1975), was confirmed in the eighties (Chomsky 1986) and continues to this day (Chomsky 2020). Throughout all these periods, Chomsky has consistently underscored Jespersen's (1924) ideas concerning the mind-internal dimension of grammars.

In 1974, coinciding with the 50th anniversary of both the Linguistic Society of America (LSA) and the publication of *The Philosophy of Grammar*, Chomsky's address to the LSA Symposium started with some motives taken from Jespersen's book, which served Chomsky as a way of illustrating the contrast at that time between American linguists, too concerned "with the actual linguistic facts" (Chomsky 1975:166), and the Danish linguist, much more ready to admit that the nuances and specificities of each particular language system (i.e. such actual linguistic facts) were to some extent linked to a background of universal notional categories. Such a departure from the positivist strictures of American structuralism was, likely, the reason why Chomsky appears to have seen in Jespersen a forerunner of his own ideas in the early years of the 20th century. It may also explain, as suggested by Jean-Michel Fortis (p.c.), why Chomsky, contrary to fact, states in his 2020 paper that Bloomfield largely ignored Jespersen (in contradiction to Falk 1992, which he mentions). Chomsky obviously intends to sever all tie

linking Jespersen to the father of American structuralism. As usual he is overplaying the opposition between American structuralism and anything he sees as foreshadowing his own ideas. In the same 1974 address, Chomsky claimed that it was but a little step from Jespersen's assumption of a background of thought-related universal notions and his own research program based on the working hypothesis that a set of grammar-specific universals are put into use in language acquisition and that they pave the way for the construction of a steady linguistic structure in the speaker's mind (Chomsky 1975:167; see Stuurman 1987 for some critical claims). If we add Jespersen's alleged interest in the issue of creativity, we may understand why Chomsky adopted Jespersen as the third leg that supports the historical stool of generative grammar that he makes explicit in his 2020 publication.

According to behaviorist standards, Jespersen exhibited all the hallmarks of mentalism, such as a notional approach to analysis (i.e. based on a priori, purportedly universal categories), a meaning-centered identification of categories, and the reference to such folk mentalistic notions as 'wishes' or 'intents' for explanatory purposes. Even if such a departure from a strict adherence to "the actual linguistic facts" may be said to be responsible for Jespersen's post-structuralist revival in generative quarters (but see Stuurman 1987), these hallmarks do not suffice to make a bona fide mentalist of him. Quite the opposite. An attentive reading of the same pages on which Chomsky bases his vindication demonstrates that Jespersen's mentalism was real, but trivial: indeed, rather akin to the naturalist take on psychology of contemporary behaviorists.

Jespersen touched on the creativity issue in the first chapter of *The Philosophy of Grammar*, where he asserts that free expressions, like sentences, "have to be created in each case anew by the speaker" (Jespersen 1924:19). On the same page, he asserts as well that "the sentence he thus creates may, or may not, be different in some one or more respects from anything he has ever heard or uttered before," which is but a nice characterization of Chomsky's subsequent identification of creativity as the quintessential aspect of language use, for example, in Chomsky (1966). It is also true that Jespersen related free expressions to a certain special "kind of mental activity" (Jespersen 1924:19), if compared to invariable words and other fixed formulas, clearly transgressing the behaviorist taboo. However, as soon as Jespersen observes that sentences may or may not conform to previously uttered ones, he also inserts an intriguing comment, somehow unexpected for those familiar with the centrality of the property in Chomsky's frame: "that [i.e. that sentences may be different in some one or more respects from

anything the speaker has ever heard or uttered before] *is of no importance for our inquiry*" (Jespersen 1924:19; emphasis is mine).

There is no need to speculate about the reasons why Jespersen downplayed creativity in the very same pages to which Chomsky routinely resorts to endorse Jespersen's views. In a nutshell, Jespersen explicitly argues in that chapter that the creative aspect of language use is but deceptive, for the abstract patterns ('types') that underlie 'free' expressions are as fixed as the so-called 'fixed' components of utterances. In both cases, Jespersen's argument goes, 'free' and 'fixed' units are part and parcel of an inventory of acquired 'habits' (a recurrent word in Jespersen's reasoning), "which has come to existence in the speaker's subconsciousness as a result of his having heard many sentences possessing some trait or traits in common" (Jespersen 1924:20). Moreover, as did other supporters of acquired habits as the roots of language, he contended that whilst the speaker is not "a mere slave to habits" (Jespersen 1924:29), the "actual speech-instinct" (Jespersen 1924:24) relies but on extending "these habits to account to meet a new situation, to express what has not been expressed previously in every minute detail," varying them "to suit varying needs" (Jespersen 1924,29). Interestingly, Jespersen does not endorse at any point of the book the idea that the "speech-instinct" is inherently creative, but rather that the speaker's actions "are determined by what he has done previously in similar situations, and that again was determined chiefly by what he had habitually heard from others" (Jespersen 1924:29). In the end, genuine creativity is only to be observed in the introduction of new stocks of habits (i.e. "new grammatical forms and usages;" Jespersen 1924:29), independently of the speaker's will, as a side-effect of the mismatch between repetitive habits and the varying needs of ever-changing situations. In other words, creativity was for Jespersen more a historical than an individual trait of language.

Interestingly, Jespersen also considered the issue of creativity from the perspective of how children accomplished the task of acquiring their mother tongues, one of the central concerns of Book II in Jespersen (1922). For example, Jespersen adhered to the idea of some contemporaries that "children are capable of large [...] amounts of linguistic improvisation" (McCawley 1999:99). Indeed, he was a forerunner of the thesis of the role of children's 'errors' in language change (Jespersen 1922:ch.9-10), albeit for reasons different from those of

Chomskyans (see, for example, Crain et al. 2006)<sup>1</sup>. For Jespersen, children's 'errors' were plain mistakes, as he claims in fragments like the following, taken from *Progress in Language* (1894):

If anyone will listen attentively to children talking, he will soon perceive that they make a great number of mistakes, not only in inflecting strong verbs like regular verbs, etc., etc., but also in arranging the words of a sentence in a wrong order, giving unusual significations to words, using the wrong prepositions, and, in fact, violating usage in every possible way. In all this I see evidence of the labour involved in learning a language, a labour that is not to be underrated even when the language is learnt under the most favourable circumstances possible. (Jespersen 1894: 22-23)

In no place did Jespersen assume that a certain kind of mental structure eases early language acquisition, nor that the mistakes of children reflect mismatches between their grammatical expectations, on the one hand, and a noisy and ambiguous incoming of data, on the other hand. On the contrary, he claimed that children's success in overcoming such difficulties, inherent to the task, was due but to "exertion" (Jespersen 1894:22). Notice that it was Jespersen's conviction as well that the relative complexity of the forms of a language is what affects its acquisition by children; consequently, it can't be merely a matter of maturation of the 'speech-instinct' (Jespersen 1922). Convergence with the adult model is never fully accomplished, and this fact, for Jespersen, was the putative source of new kinds of uses feeding the pool of verbal habits, with the potential of becoming thoroughly representative of the corresponding speaking community. Jespersen had the opportunity of studying a case of (quasi) feral twins first-hand, concluding that children can make virtue out of necessity, constructing a new semi-linguistic system out of the blue from their own erroneous productions (Jespersen 1909). However, nothing in any way similar to (e.g.) Bickerton's (1984) 'language bioprogram'

<sup>&</sup>lt;sup>1</sup> In a nutshell, Crain et al. (2006)'s main contention is that an innately specified space of hypothesis constraints the convergence of child and adult grammars. Thus, children may anticipate options that, transiently or lastingly, do not match the incoming input, paving the way to large-scale linguistic change. In this sense, child language can differ from the language spoken by adults in ways that adult languages can differ from each other, both in space and time.

hypothesis (a true 'mental structure,' in Chomsky's sense) can be inferred from Jespersen's pages.

It is worth remembering that Leonard Bloomfield's conception of "language as a matter of training and habit, extended by analogy" (Chomsky 2021:2) was one of Chomsky's motives for rejecting the "working consensus" in linguistics, philosophy, and psychology in the mid-20th century. Jespersen was but a representative of the same trend, perhaps a sophisticated one, but a representative of it at any rate. The fact that he used to resort to such tabued words as "subconsciousness," to cite one which appears in an aforementioned quote, was very likely nothing more than an expedient way of speaking. Nevertheless, Jespersen participated in the same positivistic environment, and behavior and habit-oriented kind of psychology which Bloomfield supported with an almost religious zeal and Chomsky rejected with a similarly strong commitment. All in all, Jespersen was clearly not the kind of internalist that Chomsky recurrently depicts in his historiographic notes.

This does not entail that Jespersen had nothing to contribute to Chomsky's theories. For example, also in the initial chapter of *The Philosophy of Grammar*, Jespersen refers to the construction process of sentences, taken as the epitome of free expressions, in terms that echo aspects of Chomsky's 'performance' concept (Chomsky 1965). There, Jespersen first observes that "a sentence does not spring into a speaker's mind all at once, but it is framed gradually as he goes on speaking" (Jespersen 1924:26), and then he accompanies this observation with the following claim:

Anyone who will listen carefully to ordinary conversation will come across abundant evidence of the way in which sentences are built up gradually by the speaker, who will often in the course of the same sentence or period modify his original plan of presenting his ideas, hesitate, break off, and shunt on to a different track. On written and printed language this phenomenon, anakoluthia, is of course much rarer than in speech, though instances are well known to scholars. (Jespersen 1924:28)

To be sure, in passages like this one, Jespersen locates linguistic phenomena in the psychological arena, where language is put to use by resorting to different psychological specializations (memory, attention, and so on) with limited resources and subject to many distracting factors – i.e. 'performance' as usual. It seems to be also the case that such a psychological arena is the site where Jespersen appears to identify the true creative involvement of the speaker in verbal affairs. Therefore, Jespersen's 'performance' is not performance *tout* 

court (or in Chomsky's sense), as, for Chomsky, performance limitations are deemed responsible for the lessening of the unlimited creative potential that resides in 'competence,' the conceptual counterpart of which is utterly absent in Jespersen's framework.

To conclude, one may perhaps agree with Chomsky in crediting Jespersen with the idea that the 'grammar' concept corresponds to a certain 'mental structure' attributable to the individual mind. However, Jespersen's mentalist leanings were of a radically different type from Chomsky's. For Jespersen, the mental underpinnings of language are merely the distillation of what comes to the encounter of the speaker in the course of experience, "a matter of training and habit," using Chomsky's recurrent (anti) mantra. Besides, the creative aspect of language (remember: "of no importance for our inquiry") amounts to adjusting linguistic acquired habits to new situations and needs, "extending" these habits "by analogy," as an aspect of practical intelligence. Jespersen was not a forerunner of linguistic internalism. He was not a behaviorist either. He was an empiricist/positivist scientist - a self-declared Darwinian (McCawley 1999) - who was convinced that grammatical patterns are imprinted in the speaker's mind due to experience alone -i.e. habitual exposure to the use of utterances and other verbal means of expression and generalizations to analogous use conditions. withe

## 3 Why Jespersen?

Chomsky has frequently vindicated Galileo Galilei as one of his intellectual heroes. In fact, Galileo is perhaps the authority most frequently referred to by Chomsky in his historiographic and epistemological recollections of the last few years. On the one hand, Chomsky pinpoints Galileo's theme regarding the capacity of the alphabet to accommodate the infinitude of human thoughts as foreshadowing the idea of a Turing Machine capable of providing the formal comprehension of the core property of language (Chomsky 2020:8). Thus, Galileo is recruited and integrated into the "tradition of rational and universal grammar," to the point that Chomsky now speaks of a "general program that culminates say roughly from Galileo to Jespersen" (Chomsky 2020:10).<sup>2</sup> On the other hand, and above all, the centrality of Galileo in Chomsky's scientific ideology has mostly to do with the role of the former in adumbrating the modern scientific worldview, one in which a new kind of theory-internal intelligibility, supported by

<sup>&</sup>lt;sup>2</sup> For an updated examination of this so-called 'Cartesian tradition' in linguistics, see Thomas (2020).

replicable experimentation, replaces a prior one dominated by direct observation, agreement with common sense and authority (Chomsky 2012, 2017).<sup>3</sup>

Admittedly, Galileo was a champion of the modern scientific worldview. However, Galileo also had to use some 'non-rational' argumentative strategies on the way (Feyerabend 1975). My main point in this section is that some of Chomsky's historiographic claims similarly belong to a 'non-rational' strategic component regarding his own enterprise. In the following paragraphs, I shall try to apply something akin to Paul Feyerabend's musings regarding the Galilean turn to Chomsky's breakthrough in modern linguistics. Notice that I do not claim that these kinds of 'non-rational' means are to be ranked higher in importance relative to other better-known strategies of a scientific or socio-academic character, but that they need to be added to the whole list.<sup>4</sup>

In a nutshell, Feyerabend's claim is that old well-established theories – e.g. the geocentric worldview – are difficult to overcome regardless of their cumulative amount of putative anomalies, both for epistemological and sociological reasons. On the one hand, they may work in association with across-the-board commonsensical conceptions long adapted to them, or they may be congruous with firsthand observations and sensations, or they may be supported by institutions and authorities, etc. In addition, and perhaps above all, they may still work in relevant domains of application. As a consequence, for new theories to become generally accepted, they need something more than just their capacity to persuade rationally. In other words, they must also resort to "irrational means," such as "propaganda, emotion, ad hoc hypothesis, and appeal to prejudices of all kinds" (Feyerabend 1975:114):

<sup>3</sup> The extent to which Generative Grammar really meets the principles and expectations of the Galilean scientific style has been the target of several critical approaches to Chomsky's work. See, for example, the insightful comments in Behme (2014), Kertész (2012) and Riemer (2009).

<sup>4</sup> See Nielsen (2010), for a comprehensive treatment of the progression of Chomskyan linguistics in the postwar academic context of America, as well as Newmeyer's (2014) response. The strategies for support and the grounds for the success of generative grammar have been a recurrent subject matter of the debates on Chomsky's 'revolution,' as in Koerner (1989, 2004), or Newmeyer (1986). See Kibbee (2010), for an overall view.

Knowledge may arise in a very disorderly way and the origin of a particular point of view may depend on class prejudice, passion, personal idiosyncrasies, questions of style, and *even on error, pure and simple*. (Feyerabend 1975:116; the emphasis is mine)

I am convinced that this whole set of 'non-rational' factors has played a role in the transformation of generative grammar into a dominant trend in contemporary linguistics. These factors comprise Chomsky's scientific style and personality, the passion of many of his coworkers, etc., but also plain but persuasive errors. Of course, I am convinced that these kinds of factors are to be ranked as secondary relative to other, more strong factors, of a sociological and, in this case, even political character, which have been the subject matter of some of the most relevant historiographic approaches to generative grammar (see, particularly, Koerner 1989, Newmeyer 2014, and Nielsen 2010). Nevertheless, I believe that it is important to single out and to stress the interest of this 'non-rational' parameter. According to my interpretation, Chomsky's recruitment of Jespersen belongs to this latter kind of "irrational means."

Feyerabend generically posited the problem like this:

How can we persuade people from a well-defined, sophisticated and empirically successful system and make them transfer their allegiance to an unfinished and absurd hypothesis? [...] How can we convince them that the success of the status quo is only apparent? [...] It is clear that allegiance to new ideas will have to be brought about by means other than arguments (Feyerabend 1975:114)

My point is that, in the case concerned, Chomsky 'edited' a favorable (but misleading) interpretation about a venerable, almost contemporary authority, as a part of the strategy to neutralize his early lack of support in general academic circles (Andresen 1991).<sup>5</sup>

The claim that Chomsky 'edits,' rather than interprets, Jespersen is out of the question (see Stuurman 1987:210; fn4). Chomsky's (2020) exegesis of Jespersen, for example, is mostly based on a single "quote" (Chomsky's word), which is actually the result of a radical editing operation. It may be instructive to compare Chomsky's edited compound with Jespersen's original claim.

<sup>&</sup>lt;sup>5</sup> This claim deserves to be tempered, for, as pointed out by an anonymous reviewer, Chomsky had the support of, at least, Bernard Bloch, who opened *Language*, the official organ of the LSA, to the work of young generativists. See Koerner (1989).

#### • Chomsky (2020:4):

For Jespersen in his Philosophy of Grammar, I'll quote him, a particular language is a system that "come[s] into existence in the mind of a speaker" on the basis of "innumerable sentences heard and understood". This internal system in the mind yields a "notion of their structure which is definite enough to guide him in framing sentences of his own", crucially "free expressions" that are typically new to the speaker and hearer.

• Jespersen (1924: 19):

The words that make up the sentences are variable, but the type is fixed. Now, how do such types come into existence in the mind of a speaker? An infant is not taught the grammatical rule that the subject is to be placed first, or that the indirect object regularly precedes the direct object; and yet, without any grammatical instruction, from innumerable sentences heard and understood he will abstract some notion of their structure which is definite enough to guide him in framing sentences of his own.

Crucially, mentions to 'language as an internal system in the mind' are utterly absent in Jespersen's passage, which is aimed at a very different target.

Chomsky has repeatedly stressed the success of American structuralists in their routine application of methods that were well-defined, sophisticated and empirically suited to their limited descriptive aims. Chomsky thus confronted a task that entailed persuading the linguistic community that it was possible to produce a kind of theory that was no less promising in terms of explicitness, sophistication and descriptive success, yet more wide-open in explanatory scope. The obvious problem was that such a theory was still to be built and that it might take decades to accomplish it. Thus, persuasion would require more than arguments, including an attractive narrative.

Julie Andresen has argued that one of Chomsky's worries about behaviorism was that it disconnected language from the traditional marks of humanism – namely, human will and agency (Andresen 1991). It is my opinion that Chomsky had reasons to feel similar worries regarding his alliance with the theory of formal languages, a branch of mathematics. The likes of Galileo, Descartes or Humboldt were venerable peaks of humanistic culture, but too distant in time as to be able grant Chomsky the kind of credit he needed in the traditional milieu of linguistics. The recruitment of Jespersen might have served – and continues to serve – in Chomsky's narrative to fill in both gaps, the historical one and the disciplinary one. Otto Jespersen was a sophisticated and open-minded linguist, not reluctant to comment on aspects of his ideas that went beyond philological practice, yet one who was well-connected with the traditional manners of philology - or, in Stuurman's (1987) words, 'Old Grammar.' Moreover, as stressed by Julia Falk, he was not particularly appreciated by mainstream structuralists (Falk 1992). Thus, he was a perfect figure to be erected as the epitome of the idea that linguistics was at the crossroads of the scientific and the humanistic cultures, in ways different to dominant structural linguistics.

Otto Jespersen was a brilliant historical partner to have on one's side. However, Chomsky's appropriation of the Danish linguist relies on a partial and ultimately wrong reading of a few paragraphs of *The Philosophy of Grammar*. These kinds of errors, if persistently repeated, may acquire the statute of a received true and work as an effective rhetorical lure. I believe that it is the task of linguistic historiography to unmask these kinds of errors, preventing ditor, not the perpetuation of baseless historiographic commonplaces.

### **6** Conclusions

The purpose of this paper may seem presumptuous to some readers, for its aim is to reject a historical claim stressed by the protagonist of the claims himself. Some other readers may have perhaps been dismayed by the fact that the paper was concerned with a piece of that kind of history "written expressly pro domo and with a view of supporting one's own theory," using the apt expression of Konrad Koerner (Koerner 1972:255). However, I believe that historical narratives put forward by actively involved first-hand observers have a specific interest. Too much proximity to the facts may induce distortions into their narratives, which may nevertheless deserve a historiographic attention akin to the one routinely given to (e.g.) lapsus linguae in the case of psychology (Mackert 1993). Errors are a valuable source of information. Attending to his omnipresence in the development of the study of cognition and language along the 20th and 21st centuries, "Chomsky's 'history' matters" (Boden 2006:594), despite, but also because of, his own inaccuracies.

The most referred to piece of literature throughout this paper has been Chomsky (2020). The first part of that piece (Lecture #1. April 29, 2019) contains the distillation of different historiographic sketches with which Chomsky has sparsely seasoned some of his major works, as well as a plethora of minor pieces. Taken together, they compound a narrative according to which Generative Grammar was the fortunate outcome of a mix comprising the early awareness of creativity by Galileo, Descartes, and Humboldt, the computational reduction of discrete infinity/recursion, and certain precursors of an internalist 'language' concept like, prominently, Otto Jespersen. This paper has tried to show that the latter ingredient, at least, is to be removed from Chomsky's recipe, for it just belongs to the 'non-rational' component of the rhetoric that is part and parcel of particularly ground-breaking theories.

To be sure, this is a negative assessment of Chomsky's historiographic efforts. I indeed believe that Chomsky's narrative is wrong. However, I would like to stress that I have been moved by the constructive aim of contributing to the project of setting up a more solid narrative and better epistemological underpinnings for a project that is still alive and kicking after more than half a century of very challenging activity.

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