# Chomsky in search of a pedigree

Camiel Hamans<sup>1</sup> & Pieter A.M. Seuren<sup>2</sup>
<sup>1</sup>Dutch Delegation PES-group, European Parliament, Belgium/France/
<sup>2</sup>Max Planck Institute for Psycholinguistics, The Netherlands

This paper follows the changing fortunes of Chomsky's search for a pedigree in the history of Western thought during the late 1960s. Having achieved a unique position of supremacy in the theory of syntax and having exploited that position far beyond the narrow circles of professional syntacticians, he felt the need to shore up his theory with the authority of history. It is shown that this attempt, resulting mainly in his *Cartesian Linguistics* of 1966, was widely, and rightly, judged to be a radical failure, even though it led to a sudden revival of interest in the history of linguistics. Ironically, the very upswing in historical studies caused by *Cartesian Linguistics* ended up showing that the real pedigree belongs to Generative Semantics, developed by the same 'angry young men' Chomsky was so bent on destroying.

### ı. "Bitter"

Before we engage in a discussion of Chomsky's (b. 1928) historical vagaries, a few words must be said about the other great dispute Chomsky was involved in during the late 1960s and early 1970s: the vexed question of 'lexicalism' versus 'transformationalism', intricately mixed up with the debate between interpretive and generative semanticists.

In his 1976 book on word formation, Mark Aronoff, who was perhaps the first but in any case the most important linguist to restore to morphology its rightful place in generative linguistics, makes a central reference to Chomsky's 'Remarks on Nominalization' of 1967 (published in Chomsky 1972a). This study, he says, heralded the rebirth of morphology in the new paradigm. Yet not everybody was equally enthusiastic (Harris 1993: 139). Aronoff writes (1976: 6): "'Remarks on Nominalization' was long and bitterly opposed, mainly, I believe, on esthetic grounds." And a few lines further down he speaks again of the "critics of the new esthetic."

Aronoff was not the only one who spoke of bitter strife. The same word "bitter" is used by Huck & Goldsmith (1995: viii–ix):

Among these [academic arguments], Chomsky's dispute with the Generative Semanticists in the late 1960s particularly stands out. The dispute was notable not simply because it became so bitter, but also because it involved a goodly proportion of the theoretical linguistics community of the time and represented what has clearly been the most serious organized challenge to Chomsky's vies to date.

The qualification "bitter" is also found in Seuren (1998: 520): "What followed was a bitter and personal conflict between the so-called 'lexicalists', who sided with Chomsky, and the generative semanticists' school of 'transformationalists." In this connection, it is hardly surprising that Randy Harris (1993) qualifies this episode as a "linguistics war."

As it was, the opposition between the lexicalists and the transformationalists was just one aspect of the wider, and even more bitter, conflict between the advocates of *Autonomous Syntax*, commanded by Chomsky, and those of what came to be called *Generative Semantics*, mainly George Lakoff (b. 1941), James D. McCawley (1938–1999), Paul M. Postal (b. 1936) and John R. (Haj) Ross (b. 1938). For the Chomskyans, syntax was "autonomous and independent of meaning" (Chomsky 1957: 17). Any semantics for natural language had to be grafted upon already given syntactic structures, be they surface structures or deep structures or both. Autonomous syntax was thus closely associated with what became known as *interpretive semantics*. By contrast, the generative semanticists gave primacy to meaning and regarded language as an intermediary device to convert semantic representations into surface structures according to well-defined grammatical processes. In Koerner & Asher (1995), an encyclopedic survey of the history of linguistics, ample attention is paid to the 'war' between Autonomous Syntax and Generative Semantics, as can be seen from the fact that two sizeable articles are devoted to this issue (Harlow 1995; McCawley 1995).

In this context, it is at least remarkable that so little is said about this issue in Barsky (1997), which is partly based on extensive correspondence between that author and Chomsky. Two pages, from page 149 to page 151, is all Barsky spends on the question, while ten pages are devoted to this subject in Chomsky & Ronat (1979). What is most striking is that Chomsky minimizes his own role in this respect and dismisses the whole issue as a quarrel between two groups of his students or followers. In a letter to Barsky of April 3rd 1995, Chomsky writes:

The 'discussion' between, say, Jackendoff and others (many of them not any student: Lakoff, Postal, etc.) was from about 1966 or so. I was never really part of it. [...] My own participation in the debate was in 1969, at a conference in Texas, where I flew in and flew out immediately at the impassioned request of a former student there, Stanley Peters, who wanted me to make some public response to the by then rather hysterical tone of the generative semanticists, all pretty childish in my opinion, and in 1969 I had quite different things on my mind.

These "quite different things" were, of course, his anti-war activity with regard to the Vietnam War, which was raging at the time. "Therefore," Chomsky wrote on August 14th 1995 (Barsky 1997: 151) "I hardly would have had time for 'power struggles', even if I had been interested." Yet Huck & Goldsmith (1995) quote extensively from the

private correspondence conducted during the period concerned between Chomsky on the one hand and McCawley and Ross on the other. Some of these letters, which deal explicitly with the different views of the authors concerned, have the length of a publishable paper. Moreover, the last two papers, of a total of three, in Chomsky (1972) specifically aim to destroy Generative Semantics — despite the Vietnam War. All this lends little credibility to what Chomsky wrote about the matter to Barsky.

#### "Remarks on Nominalization"

Of course, everyone is entitled to their own memories and everyone will no doubt be inclined to bend their own history in their own favor. Yet one may say with equal validity that others are entitled to a correction of such subjective memories, especially when the record is there. And the record says that Chomsky's 1967 M.I.T. lectures, prepared during his sabbatical leave at Berkeley in 1966–1967 and issuing in his paper 'Remarks on Nominalization', were widely perceived as a counterattack by Chomsky against the burgeoning Generative Semantics ideas that were being developed (Harris 1993: 139):

> There was no puzzlement about where these lectures — the 'Remarks' lectures, named after the famous paper that came out of them [...] — were aimed. Everyone immediately perceived them as an attack on generative semantics, a reactionary attempt to cut the abstract legs out from underneath the upstart model. The best term for the lectures is Newmeyer's. He calls them a "counteroffensive" (1980: 114; 1986: 107), which captures the air of reaction, assault, and upping-the-ante in which they were received. Chomsky, though — here the story gets particularly bizarre says he wasn't much interested in generative semantics or in abstract syntax at the time, that he knew "virtually nothing about" either, that he barely noticed the work that Postal, Lakoff, Ross, and McCawley were up to. His 1967 lectures, he says, were just a delayed reaction to Lees' Grammar of English Nominalizations (written in the very late fifties with considerable input from Chomsky).

That Chomsky's 1967 'Remarks' lectures should merely be a "delayed reaction" to Lees' 1960 book is highly implausible. In the feverish climate of M.I.T. linguistics of the day, reactions were never delayed. And Chomsky had already reacted to Lees' views on nominalization in Aspects (1965: 184-192). Moreover, the 'Remarks' paper was published in Chomsky (1972), a collection of three papers, two of which were explicitly directed at Generative Semantics. It would hardly make sense to include the 'Remarks' paper if it were not meant to serve the same purpose.

There can be little doubt that those who saw these lectures as an "attack on generative semantics" did so because Chomsky's lexicalism would reduce the 'depth' and the abstractness of grammars compared with those envisaged by the 'transformationalists', who were at the same time generative semanticists.

Curiously, however, this 'attack' missed the central issue, as the question of lexical-ism versus transformationalism is, in fact, independent of whether one prefers Autonomous Syntax or Generative Semantics. Even though 'transformationalism' implied greater abstractness, one could, at the time, perfectly well be a generative semanticist and accept Chomsky's lexicalism, or be an autonomous syntactician and accept the transformationalism of Ross, Lakoff, McCawley and Postal.

What Chomsky implicitly attacked, in his 'Remarks' paper, was the general movement in the direction of what was perceived at the time as greater 'abstractness,' but was, in fact, the still mysterious, closed gate of semantics — a movement that had already become apparent in Bach & Harms (1968), a collection of four papers from a symposium held at the University of Texas in April 1967 on 'Universals in Linguistic Theory'.

Meanwhile, Chomsky's following had dwindled, as most of his followers had moved over to Generative Semantics. In 1972, the Berkeley philosopher Searle wrote (Searle 1972):

It is one of the ironies of the Chomsky revolution that the author of the revolution now occupies a minority position in the movement he created. Most of the active people in generative grammar regard Chomsky's position as having been rendered obsolete by the various arguments concerning the interaction between syntax and semantics.

This movement away from Chomsky and towards Generative Semantics had started some four or five years earlier. In 1968, Lakoff, McCawley and Ross gave very successful courses during the Linguistic Institute summer course at Illinois, organized by the prestigious Linguistic Society of America, which provided Generative Semantics with wide publicity throughout the world of linguistics. This was followed, in 1969, by a meeting of the Chicago Linguistics Society dominated by the ideas developed in the now publicly recognized Generative Semantics movement. Seuren concludes (1998: 503): "By 1969 virtually the whole world of theoretical linguistics was agreed that Generative Semantics was the word." At that moment the ominous second Texas Conference took place, where Chomsky clashed publicly and with great bitterness with the generative semanticists, whose "by then rather hysterical tone" he found "pretty childish."

Huck & Goldsmith (1995: 115, 125, 134, 162) quote Lakoff, Ross and Postal in regard to an incident that happened during this meeting. After Chomsky had presented his paper, Ross stepped forward during question time presenting counterexamples (no doubt in the brilliant and playful fashion that those who know Ross are well-acquainted with). Chomsky, however, cut him short saying that "no individual linguistic examples could possibly be counterexamples to his proposals" (Huck & Goldsmith 1995: 115), upon which Ross turned round and walked away. "We saw this treatment of Ross as scandalous and aggressive behavior" (ibid.). Postal concluded (Huck & Goldsmith

1995: 162) that "disagreeing with Chomsky, even then the most renowned and influential person in the field, would have a high price."

# **Appointments**

In the same letter to Barsky as has been quoted from above (Barsky 149-151), Chomsky depicts himself as an impartial figure standing above the warring factions. This, Chomsky says, appears from the fact that not one of his own associates was appointed at the M.I.T. linguistics department, while all departmental vacancies were systematically filled with generative semanticists. Again, this is more than a little disingenuous. Jim McCawley accepted an appointment at the University of Chicago as early as 1964. Paul Postal left for New York in 1965 — that is, before Chomsky's sabbatical year at Berkeley. George Lakoff was never formally associated with M.I.T. in any way whatsoever. After he obtained his Ph.D. at Indiana in 1967, he had a brief spell at Harvard, exchanged for an appointment at the University of Michigan in Ann Arbor, after which he moved to Berkeley. The only one among the generative semanticists to have full-time employment at the M.I.T. linguistics department was Haj Ross. Ross was appointed in 1966, while he was still working under Chomsky, who supervised his brilliant 1967 dissertation Constraints on Variables in Syntax. He was dismissed from M.I.T. in 1985 on charges of corruption of minors, because he had allegedly brought some wine or pot to a student party.

## "Gutter"

The debate between transformationalists and lexicalists, or between generative and interpretive semanticists, was not the only one that Chomsky was involved in at the time. In 1966 he published Cartesian Linguistics, his view of the history of linguistics and of his intellectual predecessors, followed by a few pages in Language and Mind (Chomsky 1968: 5-20) on the same subject. In 1962, at the International Congress of Linguists held at Harvard, Chomsky had given one of five plenary lectures (Koerner 1989: 116-117). Here, he professed, for the first time, his intellectual debt to De Saussure, Humboldt and Port-Royal, in particular the Grammaire générale et raisonnée (1660), written by Arnault and Lancelot (see Seuren 1998: 47-48). Cartesian Linguistics elaborates on that first plenary lecture. It was written for a lecture course at Princeton, preceded by a sabbatical period. Barsky (1997: 104) writes that the lectures were well received. Yet this cannot be said of the reception of Cartesian Linguistics in the world at large.

Apart from the over-enthusiastic Kampf (1967), written by one of those who had attended the lectures and published in a Princeton in-house publication, and from "the nearly hysterical reception that has greeted *Cartesian Linguistics*" among non-specialists (Aarsleff 1970: 583), its reception among those who were better informed was highly critical (cp. Miel 1969; Salmon 1969; Aarsleff 1970, 1971). Chomsky never replied in public to his critics. According to a letter he wrote to Barsky on March 31st, 1995 (Barsky 1997: 105):

I've never bothered to respond, because [...] my contempt for the intellectual world reaches such heights that I have no interest in pursuing them into their gutter, unless there are serious human interests involved.

Yet in the same letter he does present a response, of sorts (Barsky, ibid.). Referring to Aarsleff (constantly mis-spelt "Aarslef" by both Chomsky and Barsky), and acknowledging that Aarsleff's critique had by then been widely accepted, Chomsky writes (Barsky, ibid.):

Aarslef[f] wrote savage denunciations of *Cartesian Linguistics* (in *Language*, and elsewhere), claiming that I had made this idiotic error, which he did make a year after *Cartesian Linguistics*, and which is explicitly and unambiguously rejected in *Cartesian Linguistics*.

This "idiotic error" would have been that, in his monumental work *The Study of Language in England*, 1780–1860 of 1967, Aarsleff "described traditional universal grammar as solely 'Cartesian' in origin, completely ignoring the quite obvious Renaissance and earlier origins that are emphasized in *Cartesian Linguistics*" (Barsky, ibid.).

Chomsky was not the only one to react negatively with regard to Aarsleff's critique of *Cartesian Linguistics* (further discussed below). Harry Bracken (1984: xi) describes Aarsleff in terms that one would use for a charlatan: "The kind of scholarship manifested by Aarsleff differs in quantity but not in quality from that recently displayed by Trevor-Roper in identifying the Hitler 'diaries'" (which as one remembers, turned out to be a forgery). Bracken's book contains two essays "dealing with propaganda directed against Chomsky" (Bracken 1984: x). In the book, he argues that the opposition to Chomsky, especially that coming from Aarsleff, is politically motivated, as Chomsky's stance, both academically and politically, is a menace for the powers that be. We read (Bracken 1984: 123):

Aarsleff is not really engaged in a dispute over scholarship. He correctly sees that Chomsky's efforts threaten liberalism itself. He correctly sees that Chomsky is seeking to 'corrupt the youth'. [...] [H]e is responding as a guardian of one of our ideological heroes. To that end he has produced two papers calculated to intimidate those who challenge the accepted version of our intellectual history.

It will be obvious to any impartial beholder that this kind of 'exegesis' has nothing whatsoever to do with academic argument and is more akin to what Chomsky (2002b: 18) describes as "manufacture of consent," something the established order is said to be guilty of. Yet Chomsky does not dissociate himself from Bracken, as he should have

done if he really preferred not to "pursue [the intellectual world] into [its] gutter" (Chomsky 1998: 92-93):

> There has been some interesting work in the past few years, for example, on the philosophical origins of racism, particularly by Harry Bracken, which suggests a much more complex history. [...] I think it is not an exaggeration to see in Cartesian doctrine a conceptual barrier — a modest one, as Bracken carefully explains - against racism.

#### "Professor"

Let us now have a closer look at Aarsleff's influential critiques (1970, 1971). First, however, it must be mentioned that there is an, again bitter, emotional side to the story: Chomsky was extremely angry at Aarsleff's critiques. This is perhaps understandable, in that Aarsleff's style of writing shows his irritation at Chomsky's cheek in writing with apparent authority on matters Aarsleff felt he didn't know the first thing about. The title alone of his 1970 article in Language shows his temper: 'The history of linguistics and Professor Chomsky' (italics added).

Aarsleff formulates two requirements for adequate historiography (Aarsleff 1970: 571): "adequate scholarship; and the over-all coherence of the entire history that is presented, without omission or neglect of material that is relevant, either by the writer's own standards or by those of the figures he deals with and cites." In the eyes of Aarsleff, Chomsky failed dismally on both counts. Chomsky's references and quotes are highly selective. Thus, in his discussion of the encyclopédiste Du Marsais (1676-1756) — an essential figure in Chomsky's story — Chomsky cites a memorial article by D'Alembert. Yet, in doing so, he (no doubt on purpose, in Aarsleff's view) omits the passage immediately preceding his quote, in which Du Marsais is described as an anti-mentalist and an opponent of Cartesian ideas. According to Aarsleff, Chomsky used antiquated and thus inferior secondary sources, and had not read the essential primary texts. The lineage Chomsky sees in the history of universal grammar from Descartes, via the British Platonists, Leibniz, Kant, the Von Schlegel brothers, to Humboldt is, therefore, basically flawed.

As regards the history preceding the great works of Port-Royal and their alleged indebtedness to Descartes, Aarsleff merely summarizes (1970: 572-573) the critiques by Karl Zimmer (1968), Robin Lakoff (1969), Vivian Salmon (1969) and Jan Miel (1969), all of whom point out that the idea of a universal theory of language and of universal grammar does not go back to Descartes or to the Port-Royal educationalists but to a much older tradition that was still very much alive in the seventeenth century.

Moreover, Aarsleff points out that there is a clear historical line from Port-Royal to Locke, so debunked by Chomsky as a die-hard adherent of empiricism — a label Chomsky apparently confuses with 'positivism', the much later philosophy according to which all reality is matter and all knowledge is based on observables. In fact, however, Locke was much more of a rationalist than nineteenth-century scholarship had him be. Chomsky should have seen this in the literature cited by him (Aarsleff 1970: 572–573):

> Locke was very sympathetic to the Jansenists of Port-Royal; he owned their works and read them. His political philosophy would seem to have received significant impulses from Pierre Nicole, who with Arnauld was responsible for the Port-Royal logic, which is so closely related to the Grammar that it must be called its twin. Apart from the last point about Locke, this could all quite easily have been learned from the relevant secondary sources, most of it in fact from Sainte-Beuve's Port-Royal, now one hundred and ten years old, to which Chomsky makes some convenient references (e.g. 1966: 75, 104, 105). It would also seem potentially dangerous to ignore the fact that the Port-Royalists had significant disagreements with Descartes — Arnauld, for instance, over innateness.

The opposition between rationalism and empiricism, during the eighteenth and nineteenth centuries, was not nearly as deep and fundamental as claimed by Chomsky in Cartesian Linguistics. In fact, as Aarsleff tries to make clear, Locke felt that he was building on and elaborating Descartes' work.

Aarsleff clearly shows that Du Marsais, far from being the staunch supporter of Descartes that Chomsky describes him as, differed considerably with Descartes on the issue of innate ideas and was more in agreement with a Lockean version of rationalism, also expressing his indebtedness to Sanctius (see Seuren 1998: 67-69). Needless to say, Aarsleff is keen to point out that Chomsky would have found all that in the sources cited by him, had he been more diligent in reading them.

By far the most important figure, however, in the tradition of universal grammar was Condillac, whose Essai sur l'origine des connoissances of 1746 appeared ten years later in an English translation with the subtitle "A Supplement to Mr. Locke's 'Essay on the Human Understanding". Aarsleff (1974) describes in detail the enormous influence of this work on several generations of philosophers not only in France, in particular the 'Idéologues', but also in Germany. It cannot be denied, therefore, that Locke had a considerable influence on eighteenth-century linguistic theory. One can thus only conclude that Chomsky badly underestimated the place and role of Locke in the debates on universal grammar that took place in the seventeenth and eighteenth centuries.

The next milestone in Chomsky's pilgrimage, Johann Gottfried Herder, was no more an heir to Descartes than Du Marsais or Condillac were. In fact, Herder leans heavily on Condillac in his famous and prize-winning treatise Abhandlung über den Ursprung der Sprache of 1772. It is fair to say that, through Condillac, who, though rather misrepresented by Herder, still influences him throughout, Herder lands in the non-Cartesian camp rather than anywhere else. Or, as Aarsleff puts it (1970: 579), his work is "simply a reflection of Locke's rationalism through Condillac."

Not even the last of Chomsky's chosen forbears, Wilhelm von Humboldt, was a Cartesian. The traditional view (Salus 1976: 96) has it that Humboldt was strongly influenced by Herder. Aarsleff (1982: 335-353) disagrees. According to him, the traditional view goes back to two nineteenth-century biographies by Rudolf Haym, one about Humboldt and one about Herder. Aarsleff places von Humboldt in the tradition of Condillac and the Idéologues, whom he met and frequented personally in the Parisian salons towards the close of the eighteenth century, as he conducted his studies. Seuren (1998: 108-120) devotes an extensive section to von Humboldt, in which he stresses his lack of theoretical consistency. In any case, no matter how or to what extent Herder, Condillac, the Idéologues or Madame de Staël and her guests may have influenced him, von Humboldt's lineage must be traced back to Locke, not to Descartes.

#### "Cartesian"?

Other commentators on Cartesian Linguistics were equally critical. In his (1972) article, Keith Percival takes a dim view of Chomsky's interpretation of what Descartes said about language. Then, in Percival (1976), he concludes, having compared the method applied by Vaugelas (1647) with that employed in the Grammaire Générale et Raisonnée (1660) (Percival 1976: 381-382):

> [T]he Grammaire Générale was not a reaction against a previously held linguistic theory. Arnauld and Lancelot did not repudiate Vaugelas — they transcended him completely and in the process incorporated many of his ideas. The term 'pure descriptivism' does not seem particularly apt as a characterization of Vaugelas' attitude to usage, and if Vaugelas is to be described as a pure descriptive, then so must the authors of the Grammaire Générale, for they too accepted the classical view of the role of usage in grammatical description.

This makes one wonder if the Grammaire Générale itself does indeed have to be reckoned to be part of the tradition of universal grammar. Seuren (1998: 47) brands the Grammaire Générale, apart from a few passages that are reminiscent of Sanctius, the great Spanish innovator of linguistic theory discussed further below, as a more or less conventional work, written along the lines of current grammar books of the period.

Another critic was Peter Salus in his (1976) survey of theories of universal grammar between the years 1000 and 1850. Salus shows that universalist theories of grammar do not originate with Descartes and Port Royal, and perhaps a few early isolated Medieval or Renaissance harbingers, as is suggested in Chomsky (1966, 1968), but can boast an age-old tradition that can be traced back to the Athenian Academy as it developed after Plato. From there, it found its way to the Alexandrian grammarians (in particular the world's first syntactician Apollonius Dyscolus, who lived and worked in Alexandria during the second century CE), to the Neo-Platonists Philo ( ± 25 BCE- ±

50CE) and Plotinus (205–270) with his school, till it found its final formulation in Antiquity in Priscian's *Institutiones Grammaticae* (early sixth century). Similar views are found in the writings of leading Medieval authors and Church Fathers, such as Anselm of Canterbury (1033–1109), Abelard (1079–1142), Bonaventure (1217–1274), Thomas Aquinas (1225–1294) or Roger Bacon ( $\pm$  1214–  $\pm$  1293).

The highly influential school of the Modists ( $\pm$  1250–  $\pm$  1320) likewise held a universalist theory of grammar. Salus writes (1976: 86–87):

The Modistae, who follow close on the heels of Kilwardby and Bacon, attempt to derive their grammatical formulations from formal logic and from metaphysics. Unfortunately, the Modistae used Latin as their metalanguage — in fact, they seem to have seen Latin as the ideal underlying the other (European) languages or at least as the most perfect shadow of the ideal (underlying) form. "Latin became for them the specification of the general grammar, the word-classes and syntax of the perfect language" (Bursill-Hall 1972: 19). [...] [W]e can consider the Modistae, with their many treatises and conflicting views, as the 'second wave' of speculative grammarians and view Bacon, Kilwardby, et al. as the 'première vague'. [...] The Modistae framed their theory within the system of Donatus and Priscian, but they restated the definitions of the word-classes and their accidents in semantic terms, deriving their terminology from the logical theories of the two Englishmen mentioned so often (Bacon and Kilwardby), Petrus Hispanus (1205-1377), and St. Anselm. [...] Modistic grammatical theory depended upon a relationship of the closest type between the operation of the mind and the structure of reality and the central concerns of the Modistae were those of universals, adequacy, deep structure, and the incorporation of meaning into general grammatical statements.

By about the middle of the fourteenth century the Modistae had lost out to the nominalists. Yet, as observed by Covington (1982: 40–41), the nominalists had no grammatical theory to replace Modistic doctrine, as a result of which "Modistic grammar kept being taught in the schools, in less philosophical and more practical versions, as late as the 16th century" (Seuren 1998: 31–32).

# "Misleading survey"

Later commentators tend to reject the historical claims made by Chomsky in *Cartesian Linguistics*. In a study on the Dutch grammarian Vossius, Rademaker writes (1992: 121–122):

In his preface to the *Nouvelle Méthode*, Lancelot declared explicitly his indebtedness to Sanctius and his imitators Scioppius (1576–1649) and Vossius. [...] Very important is the treatment of ellipsis in the *Nouvelle Méthode*, and it is clear that Lancelot owed much to the treatment of ellipsis in Sanctius and Vossius.

In the *Grammaire Générale* of 1660 we do not find explicit reference to the work of Vossius, but here, too, we can find traces of his influence. The authors of this

famous book made the claim to write a general or universal grammar enunciating principles applicable to all languages, but they used as their sources the studies on the Latin language of precursors such as Scaliger, Sanctius, Scioppius and Vossius. In fact, the Grammaire Générale is following an impressive amount of Humanist and 17th-century practice.

A further comment that is typical of the way Cartesian Linguistics has been received is Subbiondo (1995: 176):

> The critics of Chomsky's Cartesian Linguistics attacked the interpretation of the history of seventeenth-century linguistics for giving too much credit to Descartes for advancing rational grammar in the seventeenth century. For example, Vivian Salmon (1969: 178) convincingly argued "The essential features of the theory, however, were derived from a logical and grammatical tradition which had been developing, without any real interruption, since the early Middle Ages." Salmon's review, as well as that of [Robin] Lakoff (1969), sketched a rich and diverse panorama of grammarians who had connected theories of language with those of mind long before Descartes and who influenced seventeenth-century linguistics.

Sharbani Banerji, who is generally appreciative of Cartesian Linguistics, frankly admits its weak points. In particular, he is of the opinion that the book does not deserve the qualification "survey", even though Chomsky (2002a: 104) calls it that, though Chomsky admits that this "survey is very fragmentary and therefore in some ways a misleading one." One of the reasons why Cartesian Linguistics cannot be called a "survey" is, according to Banerji (2003), that:

> [...] many of the thinkers, scholars, philosophers, etc., whom Chomsky quotes profusely in this book, were not at all engaged in linguistic or grammatical studies. For example, Descartes hardly paid any attention to language. [...] Several of them were even antagonistic to the 'Cartesian Doctrine' that Chomsky draws out from their works. For example, Vaugelas, de la Mettrie, J.G. Herder etc., were more of empiricists.

James McGilvray, who wrote the well-nigh jubilant Introduction to the second edition of Cartesian Linguistics, goes even further, commenting (2002a: 15-16): "Descartes did little more than put a label on the problem."1

<sup>1.</sup> During 1973 there was an, again extremely bitter, exchange between George Lakoff and Chomsky in The New York Review of Books (George Lakoff 1973; Chomsky 1973), brought on by a letter that George Lakoff wrote in response to John Searle's lengthy article in the same New York Review of Books (Searle 1972). The main bone of contention was Chomsky's search for a pedigree in Cartesian philosophy. Although this exchange attracted a great deal of public attention at the time, both authors are guilty of such notional, terminological, textual, and historical confusions, both being driven by a personal animosity of such proportions, that a detailed analysis would reveal more about their personalities than about the issues at hand.

#### 8. Minerva

At the University of Salamanca, the Spaniard Franciscus Sanctius or Sánchez de las Brozas (1523–1600), already referred to earlier, went his own universalist way. Sanctius was a converted Christian, of Jewish or Muslim extraction, which made him politically suspect and an obvious prey for the savage officers of the Holy Inquisition who badly harassed him for extended periods. His principal work *Minerva*, *seu de causis linguae Latinae* (Lyon 1562; Salamanca 1587) leaves no doubt that for Sanctius all languages are essentially 'logical' in their universal underlying structure but not, or much less, in their manifold external manifestations. This makes it necessary to postulate rule systems to fill the gap between, on the one hand, the underlying universal 'logical language' and, on the other, the less 'logical' vernaculars found in the world at large. Sanctius is particularly impressed by the fact that the underlying 'logical language' must be taken to contain elements that do not appear in actual spoken languages and must thus have been lost on the way from the depths of thoughts to the surface sounds of the words spoken. This led him to posit an essentially transformational theory of grammar, in which ellipsis plays a central role, along with other transformational processes (see Seuren 1998: 41–46).

Around the year 1650, Sanctius was discovered and then carefully studied by the Frenchman Lancelot, who was so impressed with Sanctius that he radically rewrote, and quadrupled the size of, his textbook *Nouvelle Méthode pour facilement et en peu de temps comprendre la language latine* for its third edition of 1653 (see Robin Lakoff 1969). Lancelot subsequently tried to incorporate Sanctius' ideas into the *Grammaire générale et raisonnée* of 1660, only to find that this would have provoked the displeasure of king Louis XIV, who, in his policy of imposing strict Roman-Catholic orthodoxy, was set to eradicate Jansenism and Port Royal with it, and who would have looked on any 'promotion' of Sanctius' ideas with considerable suspicion, given that Sanctius had been targeted by the Inquisition (see Seuren 1998: 46–48). As a result, whatever of Sanctius' radically universalist concept of grammar found its way into the *Grammaire générale et raisonnée* turned out, in the end, to be precious little.

Before Robin Lakoff published, in 1969, her masterful review of Brekle's edition of the *Grammaire générale et raisonnée*, she had had occasion to discuss its contents with Chomsky and others, which explains how and why Chomsky reacts to her views in Chomsky (1968), before the review had appeared. There we read (Chomsky 1968: 15–16):

It seems, however, that the concept of ellipsis is intended by Sanctius merely as a device for the interpretation of texts. Thus, to determine the true meaning of an actual literary passage, one must very often, according to Sanctius, regard it as an elliptical variant of a more elaborate paraphrase. But the Port-Royal theory and its later development, particularly at the hands of the encyclopedist Du Marsais, gave a rather different interpretation to ellipsis. The clear intent of

philosophical grammar was to develop a psychological theory, not a technique of textual interpretation.

Robin Lakoff's reply to this sad misconception was as simple as it was lethal (Robin Lakoff 1969: 367-368):

> Sanctius, Chomsky would say, was an applied linguist, not a theorist. But since the Minerva is inaccessible to anyone who does not read Latin, Chomsky has been forced to rely on the judgments of writers like Sahlin (1928), some of whose comments on S[anctius] demonstrate an amazing lack of perception, much like her lack of perception that Chomsky derides with reference to the G/rammaire] G[énérale] R[aisonnée]. But no one who takes the trouble to read S[anctius] carefully could think of him as primarily a textual critic. The first passage Sahlin cites [...] should be sufficient evidence that he is not.

In addition to rubbing in that Chomsky lacks the scholarly preparation necessary for independent historical work, Lakoff then stresses, correctly, that Sanctius, and, accordingly, the third edition of Lancelot's Nouvelle Méthode, cannot be regarded as precursors of the ideas Chomsky held around 1969 but are a clear prelude to the school of Generative Semantics that Chomsky had just begun to attack so savagely.

In this connection, it must be mentioned that the debate between Chomsky with his autonomous syntax theory on the one hand and the angry young generative semanticists on the other had focused on the question of whether or not one should assume the reality of an underlying purely syntactic deep structure. The generative semanticists maintained that whatever 'deep structure' is reasonably assumed should count as both an underlying syntactic and an underlying semantic structure. In their view, 'deep structure' is both syntactically and semantically relevant and explanatory. Chomskyan 'autonomous syntax', by contrast, maintained that the notion of 'deep structure' made sense only in the context of syntax, whereas any semantic interpretation should be considered a totally independent matter (one that did not really interest him).

Despite the numerous notional and terminological equivocations in the debates that went on during that period, it was clear that this was the real issue (see Seuren 1972). It is the question of whether language as a whole and grammar in particular should be considered 'mediational' (Seuren 2004) between thought and sound, which is the traditional view implicitly held by all philosophers of language during the ages, or should be taken to constitute a separate, essentially syntactic, system that happens to be used for the expression of meanings but could conceivably equally well be used for quite different purposes, the view held by Chomsky and his followers but by no-one else in the history of mankind. What Robin Lakoff showed in her 1969 review was (a) that Descartes has little to do with the whole issue but that Sanctius is the relevant historical source to go to, and (b) that Chomskyan autonomous syntax has no roots at all in history, while Generative Semantics does, being of a piece with the whole of tradition and with Sanctius' theory of language in particular, that being the first more or less explicit account of the traditional view.

Peter Salus was another early critic drawing attention to the pivotal role played by Sanctius in shaping the notion of 'deep structure' (Salus 1969, 1971). In his much longer article in Parret (1976), he concludes (Salus 1976: 89):

> That this, plus the Cartesian notions of innateness, gave rise to the universalist, rationalist notions of language of Du Marsais and many others from the late seventeenth century on is beyond question.

In dealing with Leibniz and Locke, Salus follows Aarsleff. According to Salus (1976: 91):

[Locke] is not the hard-nosed empiricist he is frequently set up to be. Further, Locke seems to see ideas as mediated to the mind through language. [...] Descartes, Locke, and Leibniz [are] closer than one would think them to be from a reading of nineteenth- and twentieth-century scholarship. [...] Schools and opinions are not as easily separated as people would like them to be.

The same point can be made regarding James Harris (1709-1780), whom Chomsky describes as a fervent anti-Cartesian although Harris, in his Hermes of 1751, never mentions the names of Descartes, Arnauld, Lancelot or Port Royal, while often respectfully referring to Sanctius. Salus comments (1976: 93) that this shows "how deep the roots of English philosophical grammar lie."

#### Conclusion

In general, one cannot but come to the conclusion that history lends no support to Chomsky's claim that the ideas he put forward in his 'Remarks on Nominalization' of 1967 are to be traced back in any sense whatsoever to Descartes. On the contrary, there is overwhelming evidence that the entire tradition of philosophical grammar led up to the ideas propagated by his enemies, the generative semanticists. American structuralism and early, strictly syntactically oriented, generative grammar were no more than temporary deviations in the history of linguistic ideas.

By 1965, Chomsky could rightly have the feeling that he had won over those parts of the world of linguistics that mattered. After the explosive publication of Syntactic Structures (1957), which was, however, very limited in scope, and after the ensuing crusade carried out with all means at his disposal (see Koerner 1989), the publication of Aspects in 1965 appeared to have settled the issue, at least as far as the theory of syntax was concerned. This is how John Joseph describes the situation of that moment (Joseph 2002: 62–63):

> Chomsky attracted talented disciples from various fields and was enormously successful in getting both publicity and government funding. Despite the begrudging stance of many senior structuralists against its leading ideas,

transformational-generative grammar became mainstream linguistics in America around the mid-1960s and was on its way to having this status world-wide, the first unified paradigm since the Neogrammarians to do so.

The time had now come for further expansion. The first priority was phonology, which could do with a generative shot. This materialized in the long delayed publication of The Sound Pattern of English in 1968, written with the help of his associate Morris Halle. Excursions into philosophy became more and more frequent, though the philosophers proved less obliging than the phonologist Morris Halle in shoring up his, on the whole insubstantial or at any rate unoriginal philosophical ideas.

Semantics was obviously another urgent priority, but here he only found enemies. The Californian logician Richard Montague, in particular, was extremely hostile to Chomsky's approach, which he considered basically misguided. He begins his 'English as a formal language' of 1966 as follows (Thomason 1974: 188):

> I reject the contention that an important theoretical difference exists between formal and natural languages. On the other hand, I do not regard as successful the formal treatments of natural language attempted by certain contemporary linguists. Like Donald Davidson, I regard the construction of a theory of truth or rather, of the more general notion of truth under an arbitrary interpretation as the basic goal of serious syntax and semantics; and the developments emanating from the Massachusetts Institute of Technology offer little promise towards that end.

Not being at all a 'semantic animal' himself, Chomsky understandably refrained from further attempts at developing a semantics for his grammar, preferring, in the end, to stick to what he had learned from logicians in his earlier years, that formally defined languages should be 'interpreted upon' a model. And he left it at that, contenting himself with the half-baked notions of his 'interpretive semantics'.

To make things worse, some of his own students and colleagues went their own way in broaching semantic themes — a development that Chomsky saw as little less than treason, especially because he was rapidly losing his formerly numerous audience to Ross (McCawley and Postal had already left M.I.T. and Lakoff never was there). Joseph comments (Joseph 2002: 63):

> Within a short time, however, dissent erupted within the generative ranks, led by some of Chomsky's most talented followers. The central issue was Chomsky's insistence upon the radical autonomy of syntax. [...] This radical version of the structuralist priority of form over meaning conflicted with the common intuition that meaning perhaps need not, but can, determine syntax to a degree sufficient to render the 'autonomy' of syntax virtually non-existent.

In his interview with John Goldsmith, Jackendoff says (Huck & Goldsmith 1995: 100): "What was significant about that time was it was the first time that generative grammarians

had broken rank. [...] That period was the first time that there was disagreement." It all looked very much like revolt in an army that is about to win the battle, and it put an end to any hopes Chomsky may have had of launching a semantics campaign.

What remained was the consolidation of what he desired to see as his supremacy by means of a historical pedigree. Hence his Cartesian Linguistics (1966), and to some extent also his Language and Mind (1968). But here, too, he was thwarted by an overwhelming majority of critics, all showing, politely or harshly, his lack of expertise and his partisan quasi-scholarship. Yet, owing to the position Chomsky had meanwhile managed to acquire in the media, the publication of Cartesian Linguistics did lead to a general upswing in studies on the history of linguistics and related subjects. Ironically, however, this upswing in historical studies ended up showing that the real pedigree belongs to the school of Generative Semantics, formed by the very same bunch of 'angry young men' he was so bent on destroying.

#### References

Aarsleff, Hans. 1967. The study of language in England, 1780-1860. Princeton, N.J.: Princeton University Press.

Aarsleff, Hans. 1970. "The History of Linguistics and Professor Chomsky". Language: Journal of the Linguistic Society of America 46: 3. 570-585.

Aarsleff, Hans. 1971. "'Cartesian Linguistics': History or Fantasy?" Language Sciences 17. 1-12. Aarsleff, Hans. 1974. "The tradition of Condillac. The problem of the origin of language in the eighteenth century and the debate in the Berlin Academy before Herder". Studies in the history of linguistics: traditions and paradigms, ed. by Dell H. Hymes, 93-156. Bloomington/

Aarsleff, Hans. 1982. From Locke to Saussure: essays on the study of language and intellectual history. Minneapolis: University of Minnesota Press.

Aronoff, Mark. 1976. Word formation in generative grammar. Cambridge, Mass.: M.I.T. Press.

Bach, Emmon & Robert T. Harms. 1968. *Universals in linguistic theory*. S.l.: Harcourt Inc College.

Banerji, Sharbani 2003. "Review of Noam Chomsky, Cartesian Linguistics. A Chapter in the History of Rationalist Thought. Second edition, edited, with an Introduction by James McGilvray" [July 3rd 2003]. Linguist List 14: 2061.

Barsky, Robert F. 1997. Noam Chomsky: a life of dissent. Toronto: ECW Press.

Bracken, Harry M. 1984. Mind and language: essays on Descartes and Chomsky. Dordrecht; Cinnaminson, N.J.: Foris Publications.

Bursill-Hall, Geoffrey L. 1971. Speculative grammars of the Middle Ages: the doctrine of partes orationis of the Modistae. The Hague: Mouton.

Chomsky, Noam. 1957. Syntactic structures. The Hague: Mouton.

London: Indiana University Press.

Chomsky, Noam. 1965. Aspects of the theory of syntax. Cambridge: M.I.T. Press.

Chomsky, Noam. 1966. Cartesian linguistics: a chapter in the history of rationalist thought. New York: Harper & Row.

Chomsky, Noam. 1967. "Remarks on nominalization". Studies on semantics in generative grammar, ed. by Noam Chomsky, 11-61. The Hague: Mouton.

- Chomsky, Noam. 1968. Language and mind. New York: Harcourt Brace & World.
- Chomsky, Noam. 1972. Studies on semantics in generative grammar. The Hague: Mouton.
- Chomsky, Noam. 1973. "In response to "Deep language" [July 19, 1973]. The New York Review of Books.
- Chomsky, Noam. 1998. On language: Chomsky's classic works 'Language and responsibility' and 'reflections on language' in one volume. New York: The New Press.
- Chomsky, Noam. 2002a. Cartesian Linguistics: A Chapter in the History of Rationalist Thought. 2nd ed. Christchurch, New Zealand: Cybereditions.
- Chomsky, Noam. 2002b. Media control: the spectacular achievements of propaganda. New York: Seven Stories Press.
- Chomsky, Noam & Morris Halle. 1968. The sound pattern of English. New York: Harper & Row.
- Chomsky, Noam & Mitsou Ronat. 1979. Language and responsibility: based on conversations with Mitsou Ronat. New York: Pantheon Books.
- Covington, Michael A. 1982. Syntactic Theory in the High Middle Ages. Modistic Models of Sentence Structure. Ph.D. Thesis, Yale University.
- Harlow, Stephen J. 1995. "Evolution of Transformational Grammar". Concise history of the language sciences: from the Sumerians to the cognitivists, ed. by E.F.K. Koerner & R.E. Asher. New York: Pergamon.
- Harris, Randy Allen. 1993. The linguistics wars. New York: Oxford University Press.
- Huck, Geoffrey J. & John A. Goldsmith. 1995. Ideology and linguistic theory: Noam Chomsky and the deep structure debates. London; New York: Routledge.
- Joseph, John Earl. 2002. From Whitney to Chomsky: essays in the history of American linguistics. Amsterdam/Philadelphia: John Benjamins.
- Kampf, Louis 1967. "Review of Cartesian Linguistics, by N. Chomsky". College English 28. 403-408.
- Koerner, E.F.K. 1989. "The Chomskyan 'revolution' and its historiography. Observations of a bystander". Practicing linguistic historiography: selected essays, ed. by E.F.K. Koerner, 101-146. Amsterdam/Philadelphia: John Benjamins.
- Koerner, E.F.K. & R.E. Asher. 1995. Concise history of the language sciences: from the Sumerians to the cognitivists. New York: Pergamon.
- Lakoff, George. 1973. "Deep language" [February 8, 1973]. The New York Review of Books.
- Lakoff, Robin. 1969. "Review of Grammaire generale et raisonnee, ou La grammaire du Port Royal. (By C. Lancelot & A. Arnauld.) Ed. Herbert H. Brekle. 2 vols. Stuttgart-Bad Cannstatt, Friedrick Fromann Verlag. 1966". Language 45, 343-364.
- McCawley, James D. 1995. "Generative Semantics". Concise history of the language sciences: from the Sumerians to the cognitivists, ed. by E.F.K. Koerner and R.E. Asher. New York: Pergamon.
- Miel, Jan 1969. "Pascal, Port-Royal, & Cartesian linguistics". Journal of the History of Ideas 30. 261-271.
- Newmeyer, Frederick J. 1986[1980]. Linguistics in America: The first quarter-century of transformational-generative grammar. New York: Academic Press.
- Parret, Herman. 1976. History of linguistic thought and contemporary linguistics. Berlin; New York: Mouton de Gruyter.
- Percival, W. Keith 1972. "History of Linguistic Thought and Contemporary Linguistics". Cartesian studies, ed. by R.J. Butler, Oxford: B. Blackwell.
- Percival, W. Keith 1976. "On the non-existence of Cartesian linguistics". History of linguistic thought and contemporary linguistics, ed. by Herman Parret. Berlin; New York: de Gruyter.

- Rademaker, Cornelis S.M. . 1992. "Gerardus Joannes Vossius (1577-1649) and the study of Latin grammar". The History of linguistics in the Low Countries, ed. by J. Noordegraaf, C.H.M. Versteegh & E.F.K. Koerner. Amsterdam/Philadelphia: John Benjamins.
- Sahlin, Gunvor. 1928. César Chesneau du Marsais et son rôle dans l'évolution de la grammaire générale. Paris: Presses Universitaires.
- Salmon, Vivian 1969. "Review of Cartesian Linguistics (Chomsky 1966)". Journal of Linguistics 5. 165-187.
- Salus, Peter H., Robert I. Binnick, Alice Davison, Georgia M. Green & Jerry L. Morgan. 1969. "PRE-Pre-Cartesian Linguistics". Papers from the Fifth Regional Meeting of the Chicago Linguistic Society, April 18-19, 1969, 429-434. Chicago: U. of Chicago, Dept. of Ling.
- Salus, Peter H. 1971. "The Modistae as Proto-Generativists". Papers from the Seventh Regional Meeting, Chicago Linguistic Society, April 16–18, 1971, 530–534, Chicago; Chicago Ling, Soc.
- Salus, Peter H. 1976. "Universal grammar 1000-1850". History of linguistic thought and contemporary linguistics, ed. by Herman Parret, 85-101. Berlin; New York: de Gruyter.
- Searle, John R. 1972. "Chomsky's revolution in linguistics" [June 29, 1972]. The New York Review of Books.
- Seuren, Pieter A.M. 1972. "Autonomous Versus Semantic Syntax". Foundations of Language 8.
- Seuren, Pieter A.M. 1998. Western linguistics. An historical introduction. Oxford; Malden, Mass.: Blackwell.
- Seuren, Pieter A.M. 2004. Chomsky's minimalism. New York: Oxford University Press.
- Subbiondo, Joseph L. 1995. "Universal language schemes and seventeenth-century Britain". Concise history of the language sciences: from the Sumerians to the cognitivists, ed. by E.F.K. Koerner & R.E. Asher. New York: Pergamon.
- Thomason, Richard H. (ed.). 1974. Selected Papers of Richard Montague. Newhaven-London: Yale University Press.
- Zimmer, Karl E. 1968. "Review of Cartesian Linguistics, by N. Chomsky". International Journal of American Linguistics 34. 290-303.