

On the history of generative grammar:
Four perspectives

(1) Noam Chomsky (b. 1928)

Cartesian linguistics 1966

Generative grammar revives classical 'rationalist' linguistic theory

17cen. Port-Royal grammarians; Herbert of Cherbury; Cordemoy; Harris; Beauzée; Humboldt

Rationalism opposes 'empiricist' linguistic theory

?Locke; ?Vaugelas; Leonard Bloomfield (1887–1949) & American structuralists; modern connectionists

Parallels between 17cen & 20cen rationalism

Acknowledges the creativity entailed in everyday language use & language learning

Distinguishes 'deep' versus 'surface' levels of grammatical structure

Prioritizes explanation of grammatical structure over description

Asserts that language learning is *not* entirely input-driven, but entails contribution from learner

20cen advances in psychology, math, philosophy rejected empiricist/behaviorist analysis of language, gave birth to cognitive science, & revived rationalism in linguistic theory

Fundamental insights of generative grammar are continuous since 1950s

(2) Generative linguists

Generally accept Chomsky's 'Cartesian linguistics' without engaging in it

Evidence: 50 years of textbooks / introductions to generativism that communicate the theme of *Cartesian linguistics*, unretouched

1960s Bolinger 1968; Langacker 1968

1970s Fromkin & Rodman 2nd–10th eds. 1972–2014

1980s van Riemsdijk & Williams 1986

1990s Haegeman 1991; Freidin 1992; Ouhalla 1994; Pinker 1994

2000s Hudson 2000; Jackendoff 2002; Larson 2010

Cf. generativist historiography: McGilvray 2009; Otero 1991, 1995; Newmeyer 1986, 1996a

Consider Chomsky's linguistics 'revolutionary' in various senses of word

Newmeyer 1996b; *cf.* Joseph 2010

Divide Chomsky's linguistics into stages; sometimes identify each as a 'revolution'

Transformational generative grammar: Chomsky 1957, 1964, 1965, 1966

Principles & parameters / Government & binding: Chomsky 1984, 1986a, 1986b

Minimalism; biolinguistics: Chomsky 1995, 2000, 2005, 2017; Berwick & Chomsky 2011; Boeckx 2013

(3) Historians of linguistics

Extensively criticize Chomsky's 'Cartesian linguistics' & rationalist/empiricist dichotomy

Chomsky misconstrued 17cen scholarship

Harman 1968; Percival 1968, 1972; Zimmer 1968; Danto 1975; Joly 1977; Behme 2009, 2014

Cf. Fellman 1976; Sullivan 1980; Bracken 1984

17cen & 20cen scholarship are incommensurable

Aarsleff 1970, 1971; Foucault 1971; Cooper 1972; Searle 1972; Brekle 1975; Simone 1998
Cf. Biltman 2010

Chomsky mis-identified historical basis of 'Cartesian linguistics'

R. Lakoff 1969; Miel 1969; Salmon 1969; Salus 1969; G. Lakoff 1973; Bрева-Claramonte 1977; Padley 1985; cf. Harlan 1989

Evince skepticism over Chomsky's dissociation of generative grammar from 20cen American descriptivism / behaviorism

? Continuity between Chomsky and descriptivists: Nevin 2010
? Adequacy of Chomsky's rejection of behaviorism: Radick 2016

(4) Disciplinary outsiders' perspectives on history of generative grammar

Cold War socio-political context stimulated investment in language learning / teaching & machine translation, raising general profile of linguistics, including generative grammar
Martin-Nielsen 2010; 2011; 2012

Ideals of open-mindedness, rationality, and the scientific mindset were promoted in 1950s politics, education, and social sciences as antidotes to authoritarianism, boosting acceptance of Chomsky's linguistics
Cohen-Cole 2005; 2014

U.S. military support for Chomsky's research drove him to increasingly abstract theorizing, to ensure that his linguistics would be incompatible with military applications
Knight 2004; 2016; cf. Harris 2018; Newmeyer 2018

References

- Aarsleff, Hans. (1970). 'The history of linguistics and Professor Chomsky'. *Language* 56: 570–585.
- Aarsleff, Hans. (1971). "'Cartesian linguistics': History or fantasy?' *Language Sciences* 17: 1–12.
- Andrews, Ilse. (1979). 'Some critics of Chomskyan theory reviewed'. *Studies in Language* 3: 439–452.
- Behme, Christina. (2009). [Review of the book *Cartesian linguistics* (3rd ed.)]. *Metapsychology Online Reviews* 13.36. Accessed 20 Nov. 2019 at http://metapsychology.mentalhelp.net/poc/view_doc.php?type=book&id=5110&cn=394
- Behme, Christina. (2014). *Evaluating Cartesian linguistics: From historical antecedents to computational modeling*. Frankfurt am Main: Peter Lang.
- Berwick, Robert C. & Noam Chomsky. (2011). 'The biolinguistic program: Current state of its development'. In Anna Maria di Sciullo & Cedric Boeckx (Eds.), *The biolinguistics enterprise*, 19–41. Oxford: Oxford University.
- Biltman, Delphine. (2010). 'Chomsky et l'empirisme: de la critique de l'empirisme au sens de l'innéisme et du rationalisme chomskyens'. *Histoire Épistémologie Langage* 32: 139–167.
- Bloomfield, Leonard. (1933). *Language*. New York: Holt.
- Boeckx, Cedric. (2013). 'Biolinguistics: Fact, fiction, and forecast'. *Biolinguistics* 7: 316–328.
- Bolinger, Dwight. (1968). *Aspects of language*. New York: Harcourt, Brace and World.
- Bracken, Harry M. (1972). 'Chomsky's Cartesianism'. *Language Sciences* 22: 11–17.
- Brekle, Herbert E. (1975). 'The seventeenth century'. In Thomas A. Sebeok (Ed.), *Current trends in linguistics: Vol. 13. Historiography of linguistics*, 277–382. The Hague: Mouton.
- Bрева-Claramonte, Manuel. (1977). 'Sanctius's antecedents: The beginnings of transformational grammar' (Parts 1 & 2). *Language Sciences* 44: 10–18; 45: 6–20.
- Chomsky, Noam. (1957). *Syntactic structures*. The Hague: Mouton.
- Chomsky, Noam. (1959). [Review of the book *Verbal behavior*]. *Language* 35: 26–57.
- Chomsky, Noam. (1964). 'The logical basis of linguistic theory'. In Horace G. Lunt (Ed.), *Proceedings of the Ninth International Congress of Linguists, Cambridge, MA, August 27–31, 1962*, 914–978; Discussion, 978–1008. The Hague: Mouton.

- Chomsky, Noam. (1965). *Aspects of the theory of syntax*. Cambridge, MA: MIT.
- Chomsky, Noam. (1966). *Cartesian linguistics: A chapter in the history of rationalist thought*. New York: Harper and Row. (2nd ed. 2002, New Zealand: Cybereditions Corporation; 3rd ed. 2009, Cambridge: Cambridge University)
- Chomsky, Noam. (1984). *Lectures on government and binding*. Dordrecht: Foris.
- Chomsky, Noam. (1986a). *Knowledge of language*. New York: Prager.
- Chomsky, Noam. (1986b). *Barriers*. Cambridge, MA: MIT.
- Chomsky, Noam. (1995). *The Minimalist Program*. Cambridge, MA: MIT.
- Chomsky, Noam. (2000). *New horizons in the study of language and mind*. Cambridge: Cambridge University.
- Chomsky, Noam. (2005). 'Three factors in language design'. *Linguistic Inquiry* 36.10: 1–22.
- Chomsky, Noam. (2004). *The generative enterprise revisited: Discussions with Riny Huybregts, Henk van Riemsdijk, Naoki Fukui & Mihoko Zushi*. Berlin: Mouton de Gruyter.
- Chomsky, Noam. (2004). 'The Biolinguistic perspective after 50 Years'. *Quaderni del Dipartimento di Linguistica, Università di Firenze* 14: 3–12.
- Chomsky, Noam. (2017). 'The Galilean challenge'. *Inference: International Review of Science* 3.1. Accessed 20 Nov. 2019 at <http://inference-review.com/article/the-galilean-challenge>.
- Chomsky, Noam, Olson, & G. A., Faigley, L. (1991). 'Language, politics, and composition: A conversation with Noam Chomsky'. *Journal of Advanced Composition*, 1-35.
- Cohen-Cole, Jamie. (2005). 'The reflexivity of cognitive science: The scientist as a model of human nature'. *History of the Human Sciences* 18.4: 107–139.
- Cohen-Cole, Jamie. (2014). *The open mind: Cold War politics and the sciences of human nature*. Chicago: University of Chicago.
- Cooper, David E. (1972). 'Innateness: Old and new'. *The Philosophical Review* 81: 465–483.
- Danto, Arthur C. (1975). 'Preface'. In Antoine Arnauld & Claude Lancelot, *General and rational grammar: The Port-Royal grammar* (Jacques Rieus & Bernard E. Rollin, Eds. & Trans.), 11–17. The Hague: Mouton.
- Di Sciullo, Anna & Boeckx Cedric (Eds.). (2011). *The biolinguistic enterprise: New perspectives on the evolution and nature of the human language faculty*. New York: Oxford University.
- Fellman, Jack. (1976). 'Concerning the validity of the term "Cartesian linguistics."'. *Linguistics* 182: 35–37.
- Foucault, Michel. (1971). 'Human nature: Justice versus power'. In Noam Chomsky & Michel Foucault, *The Chomsky-Foucault debate*, 1–67. New York: The New Press.
- Freidin, Robert. (1992). *Foundations of generative syntax*. Cambridge, MA: MIT.
- Fromkin, Victoria & Rodman, Robert. (1972). *An introduction to language* (2nd–10th eds., up to 2014). New York: Holt, Rinehart, and Winston.
- Golumbia, David. (2015). 'The language of science and the science of language: Chomsky's Cartesianism'. *diacritics* 43.1: 38–62.
- Haegeman, Liliane. (1991). *Introduction to government and binding theory*. Oxford, UK: Blackwell Publishers.
- Hall, Robert A., Jr. (1969b). 'Some recent studies on Port-Royal and Vaugelas'. *Acta Linguistica Hafniensia* 12(2): 207–233.
- Harlan, David. (1989). *The degradation of American history*. Chicago: University of Chicago.
- Harman, Gilbert. (1968). [Review of the book *Cartesian linguistics*]. *The Philosophical Review* 77.2: 229–235.
- Harris, Randy. (2018, 9 May). 'The history of science: Unreliable narrators and how science moves on'. Retrieved 20 November 2019 from *openDemocracy* at <https://www.opendemocracy.net/en/history-of-science-unreliable-narrators-and-how-science-moves-on/>
- Hockett, Charles. (1965). 'Sound change'. *Language* 41: 185–204.
- Hudson, Grover. (2000). *Essential introductory linguistics*. Oxford, UK: Blackwell.
- Jackendoff, Ray. (2002). *Foundations of Language: Brain, meaning, grammar, evolution*. New York: Oxford University.
- Joly, André. (1977). 'La linguistique cartésienne: Une erreur mémorable'. In André Joly & Jean Stéfani (Eds.), *La grammaire générale: Des Modistes aux Ideologues*, 165–199. Lille, France: Université de Lille III.
- Joseph, John. (2010). 'Chomsky's atavistic revolution (with a little help from his enemies)'. In Douglas A. Kibbee (Ed.), *Chomskyan (r)evolutions*, 103–168. Amsterdam / Philadelphia: John Benjamins.
- Kertész, András. (2010). 'From 'scientific revolution' to 'unscientific revolution': An analysis of approaches to the history of generative linguistics'. *Language Sciences* 32: 507–527.
- Knight, Chris. (2004). 'Decoding Chomsky'. *European Review* 12.4: 581–603.
- Knight, Chris. (2016). *Decoding Chomsky: Science and revolutionary politics*. New Haven: Yale University.
- Lakoff, George. (1973, February 8). 'Deep Language' [Letter to the editor]. *The New York Review of Books* 19.
- Lakoff, Robin. (1969). [Review of book *Grammaire générale et raisonnée, ou la grammaire du Port-Royal*]. *Language* 45: 343–364.

- Langacker, Ronald W. (1968). *Language and its structure: Some fundamental linguistic concepts*. New York: Harcourt, Brace and World.
- Larson, Richard K. (2010). *Grammar as science*. Cambridge, MA: MIT.
- Martin-Nielsen, Janet. (2010). "This war for men's minds": The birth of human science in the Cold War'. *History of the Human Sciences* 23.5: 131–155.
- Martin-Nielsen, Janet. (2011). 'A forgotten social science? Creating a place for linguistics in the historical dialogue'. *Journal of the History of the Behavioral Sciences* 47.2: 147–172.
- Martin-Nielsen, Janet. (2012). "It was all connected": Computers and linguistics in early Cold War America'. In Mark Solovey & Hamilton Cravens (Eds.), *Cold War social science: Knowledge production, liberal democracy, and human nature*, 63–78. New York: Palgrave Macmillan.
- McGilvrary, James. (2009). 'Introduction to the third edition'. In Noam Chomsky, *Cartesian linguistics* (3rd Ed.), 1–52. Cambridge: Cambridge University.
- Miel, Jan. (1969). 'Pascal, Port-Royal, and Cartesian linguistics'. *Journal of the History of Ideas* 30: 261–271.
- Nevin, Bruce. (2010). 'Noam and Zellig'. In Douglas A. Kibbee (Ed.), *Chomskyan (R)evolutions*, 103–168. Amsterdam / Philadelphia: John Benjamins.
- Newmeyer, Frederick J. (1986). *Linguistic theory in America* (2nd Ed.). Orlando, FL: Academic Press.
- Newmeyer, Frederick J. (1996a). *Generative linguistics: A historical perspective*. London: Routledge.
- Newmeyer, Frederick J. (1996b). 'Has there been a Chomskyan revolution in linguistics?' In Frederick J. Newmeyer, *Generative linguistics: A historical perspective*, 23–38. London: Routledge.
- Newmeyer, Frederick J. (2018, 15 April). 'Chomsky's linguistics and military funding: A non-issue'. Retrieved 20 November 2019 from *openDemocracy* at <https://www.opendemocracy.net/en/chomsky-and-needless-controversy-over-internalist-and-military-approaches-to-la/>
- Otero, Carlos P. (1991). 'The cognitive revolution in the study of language: Looking back to see ahead'. In Héctor Campos & Fernando Matínez-Gil (Eds.), *Current studies in Spanish linguistics*, 3–69. Washington DC: Georgetown University.
- Otero, Carlos. (1994). *Noam Chomsky: Critical assessments* (Vols. I–IV). New York: Routledge.
- Otero, Carlos. (1995). 'From Lebrixa's grammar to Cartesian language theory: A retrospective view'. In Jon Amastae, Grant Goodall, Mario Montalbetti, & Marianne Phinney (Eds.), *Contemporary research in Romance linguistics: Papers from the 22nd Linguistic Symposium on Romance Languages, El Paso / Cd. Juárez, February 1992*, 135–166. Amsterdam / Philadelphia: John Benjamins.
- Ouhalla, Jamal. (1994). *Introducing transformational grammar*. London: Arnold.
- Padley, G. A. (1985). *Grammatical theory in western Europe 1500–1700: Trends in vernacular grammar I*. Cambridge: Cambridge University.
- Percival, W. Keith. (1968). 'The notion of usage in Vaugelas and in the Port Royal grammar'. *Papers from the Fourth Regional Meeting of the Chicago Linguistics Society*, 165–176.
- Percival, W. Keith. (1972). 'On the non-existence of Cartesian linguistics'. In R. J. Butler (Ed.), *Cartesian studies*, 137–145. Oxford: Blackwell.
- Pinker, Steven. (1994). *The language instinct*. New York: William Morrow.
- Radick, Gregory. (2016). 'The unmasking of a modern synthesis: Noam Chomsky, Charles Hockett, and the politics of behaviorism, 1955–1965'. *Isis* 107.1: 49–73.
- Salmon, Vivian. (1969). 'Pre-Cartesian linguistics'. *Journal of Linguistics* 5: 165–187.
- Salus, Peter H. (1969). 'PRE-pre-Cartesian linguistics'. *Papers from the Fifth Regional Meeting of the Chicago Linguistics Society*, 429–434.
- Searle, John R. (1972, June 29). 'Chomsky's revolution in linguistics'. *The New York Review of Books* 18: 12–29.
- Simone, Raffaele. (1998). 'The early modern period'. In Giulio Lepschy (Ed.), *History of linguistics: Vol. 3. Renaissance and early modern linguistics*, 149–236. London: Longman.
- Sullivan, John J. (1980). 'Noam Chomsky and Cartesian linguistics'. In R. W. Rieber (Ed.), *Psychology of language and thought: Essays on the theory and history of psycholinguistics*, 197–220. New York: Plenum.
- Tavoni, Mirko. (1998). 'Renaissance linguistics'. In Giulio Lepschy (Ed.), *History of linguistics: Vol. 3. Renaissance and early modern linguistics*, 1–108. London: Longman.
- van Riemsdijk, Henk & Williams, Edwin. (1986). *Introduction to the theory of grammar*. Cambridge, MA: MIT.
- Verhaar, John W. M. (1971). 'Philosophy and linguistic theory'. *Language Sciences* 14: 1–11.
- Zimmer, Karl. (1968). [Review of the book *Cartesian linguistics*]. *Journal of American Linguistics* 34: 290–303.