Jacques Derrida's Deconstruction of Certainty and Its Implications for Epistemology

Kato Gideon
Department of Philosophy
Augustinian Institute Makurdi
kato.de.elder@gmail.com

Abstract

This study examines Jacques Derrida's deconstruction of certainty and its implications for epistemology. The problem of the certainty of knowledge is perennial in epistemology. Derrida attempted to solve the age-old problem by positingthat language plays an essential role in knowledge and that the problem of certainty is that of meaning; we can only know meaning,and meaning has no source to provide us with certainty. Derrida's submission is seen as nihilistic by some thinkers, as the simplistic crises of meaning cannot be said to be an epistemic problem of certainty. Therefore, Derrida's position is not suitable in philosophy. This study intends to show that Derrida's conception of the certainty of knowledge, especially his concept of deconstruction, influenced his philosophy. The study discovers that whatever we see in reality is a text/writing; there is always something hiding behind that which is present. This study argues that Derrida's deconstruction of certainty necessitates a reevaluation of epistemological assumptions, questioning the possibility of objective knowledge and underscoring the importance of contextual, interpretive, and provisional understandings. The study concludes that Derrida's philosophy is not a nihilistic dismantling and destruction of structures; instead, it is writing and the crossing of that writing, so that the old meaning is superimposed by new meaning without necessarily wiping out the old meaning; Derrida's enterprise discourages any doctrinal or dogmatic assertion. Hence, never arriving at certainty!

Keywords: Certainty, Deconstruction, Epistemology, Language, Text

Introduction

Philosophy has produced and directed humanity in many different ways to escape from the age of ignorance and superstition. It has opened up a world of success in the quest for certainty in knowledge. Despite the success, scholars continue to debate what constitutes knowledge. Not just knowing for knowledge's sake, but certainty in human knowledge. Western philosophy has traditionally been characterized by a relentless pursuit of certainty and objective truth. From ancient Greek philosophers such as Plato and Aristotle to modern thinkers like René Descartes and Immanuel Kant. The quest for certain knowledge has been a central concern;[1] this pursuit has led to the development of various epistemological frameworks, such as rationalism and empiricism. These philosophical theories strive to arrive at certainty.

Jacques Derrida questioned the very notion of certainty. Heposits that we make a mistake when we claim to know for certain, for there is always something hiding behind that which is present. Presence for Derrida includes absence.[2] He further holds that humans can know only the meaning of a thing and that meaning has no source to provide us with certainty.[3] Reading Derrida's position will lead to the following questions: if we cannot arrive at certainty, then why should we attempt to know anything? Why this paper, since readers cannot grasp for certain the intention(s) or the point of view of the author or the researcher? Is Derrida's enterprise a nihilistic destruction of extant epistemological

1. Plato, The Republic, trans. Benjamin Jowett (Oxford: Clarendon Press, 1953), 510d-511a.
2. Derrida Jacques, Signature Event Context, trans. Alan Bass (University of Chicago press, 1982).
3. Derrida Jacques, Of Grammatology, trans. Gayatri C. Spivak (Bamitore, MD: Johns Hopkins University Press, 1997), 11-12.

theories or there are positive side to it?

The reception of Derrida's position by Christopher Norris in his text, *Derrida, Science, and the Challenge to Certainty*, offers a compelling examination of Jacques Derrida's philosophy, focusing on its implications for scientific inquiry and the concept of certainty. Norris argues that Derrida's thought challenges traditional notions of scientific objectivity and truth.[4] David Mikicsin *Who was Jacques Derrida,* said Derrida's deconstruction of certainty weakens meaningful discourse, which results in semantic ambiguity and skepticism about knowledge.[5] Robert Brandom asserts that Derrida's dismissal of fixed meanings and traditional truth notions challenges realistic scientific perspectives and cognitivist epistemology.[6] Richard Kearney challenges Derrida's deconstruction of certainty, arguing that its implications of Derrida's assertion that meaning is inherently unstable and deferred undermine traditional notions of presence and identity.[7] Graham Harman maintains that Derrida's linguistic turn overlooks the autonomous reality of objects, reducing being to a mere effect of language.[8] In contrast, Harman's object-oriented philosophy emphasizes the withdrawn, non-relational nature of objects, challenging Derrida's notion that meaning is endlessly deferred.[9] By critiquing Derrida's rejection of metaphysics, Harman seeks to

4. Christopher Norris, Philosophy Outside-In: A Critique of Richard Rorty (Routledge, 2021), 6.
5. David Mikics, Who Was Jacques Derrida? An Intellectual Biography (London: Yale University Press, 2009).
6. Robert Brandom, A Spirit of Trust: A Reading of Hegel's Phenomenology (Harvard University press, 2022), 210-25.
7. Richard Kearney, Touching the Other: Ethics and the Hermeneutic Imagination (Fordham University Press, 2022), 123-24.
8. Jacques, Signature Event Context, 56.
9. Graham Harman, Deconstruction and Object-Oriented Ontology (Bloomsbury, 2024).

reclaim the grounds for ontological speculation and challenge the dominance of language-centered philosophies. A convincing review of Jacques Derrida's criticism of conventional ideas of certainty and its consequences for the university can be found in Michael Naas'*The End of Certainty: Derrida and the Question of the University.* Derrida's ideas, according to Naas, call into question the fundamental premises of scholarly investigation. First, Naas examines Derrida's idea of "university without condition," emphasizing how it relates to the certainty question. He shows how conventional ideas of truth and knowing are undermined by Derrida's criticism of certainty.[10]

The debate presented is trapped in a binary opposition: either accept Derrida's linguistic deconstruction (and risk losing reality, science, and meaning) or reject it to defend realism, objectivity, and stable knowledge (but possibly overlook the critical insights into language and structures). This paper attempts to argue that deconstructing certainty does not lead to nihilism but establishes a new foundation for knowledge. This foundation is not based on metaphysical certainty but on responsible commitment in the face of uncertainty.

Background to Derrida's Deconstruction

Jacques Derrida was born in El Biar in Algeria in 1930-2004. He attended school and attained his baccalaureate there. Derrida first became interested in philosophy at the age of eighteen when he heard a programme on the radio about Albert Camus. He was also inspired by Jean-Paul Sartre's role as a French intellectual and activist. Later, Derrida said that Sartre was a model that he had

10. Michael Naas, The End of Certainty: Derrida and the Question of the University (Fordham University Press, 2022), 30.

judged to be ill-fated and catastrophic, but one he still loves.[11] Derrida's attitude to the term *deconstruction* has varied in his different writings. He has stated in many interviews, letters, and articles that he first took the word into use quite unsystematically, and only later characterised more specifically what he means by the term.[12] In *A Letter to a Japanese Friend,* Derrida tells of the background to the term as follows:

> When I chose this word, or when it imposed itself upon me - I think it was in *Of Grammatology* - I little thought it would be credited with such a central role in the discourse that interested me at the same time. Among other things, I wished to translate and adapt to my own ends the Heideggerian word *Destruktion* or Husserlian *Abbau.*[13]

The term deconstruction was initially a translation of Martin Heidegger's *Destruktion* and Edmund Husserl's *Abbau*. Heidegger critiqued the Western ontological tradition, focusing on the meaning of entities and the traditional content of ancient ontology.[14] Derrida argued that deconstruction destroys concepts conveyed in the tradition of Western metaphysics about Being as presence. The term was also influenced by Edmund Husserl's *Abbau*, which explored the conditions of judgment validity.[15]

11. Christopher Norris, Derrida (Cambridge: Harvard University Press, 1987), 240.
12. Jacques Derrida, Margins of Philosophy, trans. Alan Bass (Brighton: Harvester, 1982), 44.
13. Jacques Derrida, "Letter to a Japanes Friend," in Derrida and Difference, ed. David Wood and Robert Bernasconi. (Evanston: Northwestern University Press, 1988), 1.
14. Martin Heidegger, Being and Time, trans. Dennis J. Schmidt (SUNY Press, 2010), 13.
15. Edmund Husserl, Experience and Judgment: Investigation in a Genealogy of Logic, trans. J.S. Churchchill and K. Ameriks (Evanston, Northwestern University Press, 1973), 112.

Deconstruction, like *Abbau*, is the dismantling of theoretical and scientific idealisations, and is a non-reflective methodological device. It questions original grounds such as life-world or transcendental reflection.

Deconstruction in Derrida

In A *Letter to a Japanese Friend,* Derrida claims that deconstruction has unfortunately been associated with an image of a nihilistic and negative reduction or a mechanical method or reading strategy, because the French word deconstruction (like the English word 'deconstruction') in its grammatical, linguistic and rhetorical senses is bound up with a mechanical sense of disarranging or dismantling of a construction.[16] Therefore, Derrida has emphasised in several writings that deconstruction cannot be reduced to some methodological instrumentality or to a set of rules and transposable procedures. Deconstruction is not a definable and stable method that one could use and apply in whatever text; rather, it takes a shape in relation to the text or context.[17] In *Afterw*.rds Derrida claims:

> As it is never closed into a system, as it is the deconstruction of the systemic totality, it needs some supplementary afterword each time it runs the risk of stabilising or saturating into a formalised discourse (doctrine, method, delimitable and canonised corpus, teachable knowledge, etc.)[18]

Deconstruction has no essence previous to the text. Therefore, one cannot decide when one should start to deconstruct.

16. Derrida, "Letter to a Japanes Friend," 2.
17. Derrida, 3.
18. Jacques Derrida, Afterw.Rds, ed. Nicholas Royle, trans. Geoffrey Bennington (Tampere: Outside Books, 1992), 199.

Deconstruction takes place; it is an event that does not await the deliberation, consciousness, or organisation of a subject, or even of modernity. It deconstructs it-self. It can be deconstructed.[19] The reader need not actively anticipate or perform deconstruction; rather it happens in the text itself. Hence, deconstruction is above all sensitive to the multiple and even contradictory meanings of the words and sentences. It does not conceal the inconsistencies or illogicalities of the text, but rather concentrates on analysing them. In *Positions*, Derrida describes the 'beginning' of deconstruction as following:

> The incision of deconstruction, which is not a voluntary decision or an absolute beginning, does not take place just anywhere, or in an absolute elsewhere. An incision, precisely, can be made only according to lines of force and forces of rupture that are localizable in the discourse to be deconstructed (–) This analysis is made in the general movement of the field, and is never exhausted by the conscious calculation of a 'subject.[20]

Derrida emphasises that one cannot intentionally set the deconstruction in motion, but rather, the deconstructive reading requires a certain attitude or openness to the text, one that could be described with Derrida's expression 'meaning-to-say-nothing',[21]

Deconstructive analysis produces transgressions and displacements by following the points of conjuncture, where the meaning is disseminated, creating many interpretations or gaps.

19. Derrida, "Letter to a Japanes Friend," 4.
20. Jacques Derrida, Positions, trans. Alan Bass (Chicago: university of Chicago press, 1981), 82.
21. Derrida, 14.

Deconstruction dismantles old structures and reveals the limits of prevalent tradition, interpretation, law, or structure. It attempts to point out why the old structure or law does not enclose oneself in a self-identical, present, and total system but instead includes the elements of otherness, which sets it into motion. Deconstruction has no identity, and its questioning of the "is" is evidence of a serious naivety.[22] It happens "on the move in 'things themselves'" and cannot be calculated by any subject. Understanding what deconstruction "is" is best understood through Derrida's writings and their relation to texts and their contexts.

Deconstruction of Certainty

Jacques Derrida in *Of Grammatology* contests traditional conceptions of knowledge, questioning its objectivity, neutrality, and universality. He argues that knowledge is socially constructed, historically contingent, and shaped by power relations. He further posits that writing is the manifestation of knowledge and a condition for the possibility of ideal objects and scientific objectivity. He also believes that writing supplements perception before it even appears to itself.[23] Derrida's claims raise questions about the semantic content outside language and the influence of experience on meaning formation. He criticizes the view of the subject as a metalinguistic substance and the notion of the subject as a pure self-present cogito. Derrida's research aims to challenge the idea that there is nothing certain beyond language, focusing on the search for the 'other' and the 'other of language'.[24] This perspective challenges the notion that knowledge is an objective

22. Jacques Derrida, Dissemination, trans. Barbara Johnson (Chicago: University of Chicago Press, 1981), 18.
23. Jacques, Of Grammatology, 184.
24. Jacques, 145.

reflection of reality, instead emphasizing its context-dependent and subjective nature. This study is an analysis of Derrida's expressions of 'writing'/'text', 'differance', and 'trace' and language to challenge certainty.

Text as Certain

Derrida's concept of text challenges traditional notions of meaning and certainty. In his work, *Writing and Difference*, he argues that all organized epistemic claims are profitably viewed as texts, conforming to the laws governing the process of manufacturing meanings. He refers to this process as "structuring" or "structurality," where text is a system of signs articulated given the experience of one's environment. Derrida's central position is that texts work in close connection with their contexts to produce the illusion of attaining a central meaning, but closer analysis shows that this proposed meaning is never attained and may even be subverted by other meanings clustering in the text.[25] Deconstruction can be understood as unmasking the very manner in which texts set up their system of 'pretense' or 'pretext.' Each text is always an unfulfilled promise, leading Derrida to be suspicious of assertions or conclusions of a generalized form regarding the final meaning of a text. Derrida sees texts as at least purporting to embody a definitive intent, but all such promises of meaning are disrupted from within the texts themselves.[26]

Both Derrida and the structuralists prioritize the notion of the "text" and "textuality," where texts can be any set of codes, from written books to gestures to political acts.[27] Derrida insists that all

25. Derrida, "Letter to a Japanes Friend," 280.
26. Derrida, 289.
27. Jacques, Of Grammatology, 64.

texts are embedded in contexts, and contextualizing is a large part of the deconstructive strategy.

Derrida supports Richard Rorty's reading, saying that deconstruction is deeply concerned with the "other" of language and that there is no theoretical barrier to an endless sequence of recontextualization. He believes philosophical reading must be pursued only by the kind of openings and reversals of meaning made possible by certain contexts. Derrida recognizes the challenge to distinguish his kind of radical textual interrogation from traditional epistemological questioning, as well as the role of questioning itself.[28] He questions the priority of questioning in the traditional philosophical practice.

The Withdrawal of Meaning and the End of Certainty

Derrida posits that the manifestation and existence of meaning require language, and that meaning does not exist without linguistic expression. According to Saussure, language is a social institution based on an agreement approved by members of society. Language is a system of signs, where signs express ideas. The basic concept of Saussurean linguistics is the'sign', which is formed from the 'concept' (or signified) and the'sound image' (or signifier).[29] Derrida believes that language is not mainly expression, material or empirical letters but signs formed from the unity between signifier and signified. The term'meaning' is problematic in philosophy as it refers to subjective, grammatical, and contextual meanings. Theories of meaning vary depending on

28. Jacques Derrida, Limited Inc., a b C..., trans. Samuel Weber (Baltimore, Johns Hopkins University Press, 1977), 126.
29. Ferdinand Saussure, Course in General Linguistics, ed. Charles Bally and Albert Sechehaye with the collaboration of Albert Riedlinger, trans. Roy Harris (London: Duckworth, 1983), 33.

whether one is dealing with the internal or external meaning of the subject. Derrida has analyzed Husserl's view on meaning, referring to the word'sense' as'sense' in the Husserlian connotation of the word.[30]

In Saussure's linguistics, the term'signification' refers to the experiential meaning which requires essentially language in order for it to be formed into meaning.[31] Derrida presents the term'meaning-to-say' or simply as'meaning' as a translation of Husserl's term 'Signification'.A linguistic system requiring meaning is what this work refers to, which is different from the pre-linguistic sense due to the influence of language. This raises the question of whether one can speak at all of meaning on the pre-linguistic level, or whether the contents of the experience on the pre-linguistic level are merely images and associations.[32] Understanding meaning requires interpreting something as something, making the principal difference between the content and meaning of consciousness.

Derrida in *Position* argues that meaning requires language and does not exist without linguistic expression. He refers to the transcendental signified, which exists in consciousness and does not require any linguistic expression. Derrida criticizes the pre-linguistic and pre-semiotic layeredness of meaning, which precedes the signification process. He sees this as a structural delusion produced by language, culture, and time, similar to Kant's view of transcendental illusion. Derrida believes that it is

30. Husserl, Experience and Judgment: Investigation in a Genealogy of Logic, 55.
31. Saussure, Course in General Linguistics, 35.
32. Jacques Derrida, Writing and Difference, trans. Alan Bass (London: Routledge & Kegan Paul, 1978), 16.

impossible to fully detach oneself from this delusion, as language presents itself as an expressive re-presentation.[33] He believes that the signified and signifier are inseparable, and meaning withdraws, and the same expression can receive endlessly new meanings.

Implications for Epistemological Assumptions

The contextualization of knowledge claims profoundly impacts epistemological assumptions, questioning long-held notions of objectivity, truth, and certainty.[34] This perspective underscores the provisional and conditional nature of knowledge, stressing the pivotal roles of interpretation and perspective.[35] As a result, traditional epistemological assumptions must be reassessed to accommodate the intricate, dynamic aspects of knowledge production.[36] Contextualization reveals that knowledge is not absolute or universal but rather shaped by historical, social, and cultural contexts. This challenges the idea of objective truth, instead highlighting the importance of understanding knowledge as a product of specific perspectives and interpretations.

This approach ushers in a fundamentally new understanding of the concept of knowledge. It therefore implies there is nothing we know in an absolutely true sense, but always potentially correctable and thus provisional. Drawing on our own knowledge and the context we are located in, we cannot become totally objective. Therefore, all of the knowledge assertions involve some

33. Derrida, Positions, 121.
34. Jacques, Of Grammatology, 48.
35. Richard Rorty, Philosophy and the Mirror of Nature (Princeton University Press, 1979), 68.
36. Michel Foucault, The Order of Things: An Archaeology of the Human Sciences (New York: Vintage Books, 1970), 18.

built-in uncertainty, and truth is relative under its own particular historical, social, and cultural conditions. We then have to articulate refined versions of the originating assumptions we have regarding knowledge in an attempt to account for these complexities. These would include the role played by perspective and interpretation in knowledge production and the role played by power relations and social structures. Finally, it breeds a more nuanced understanding of knowledge, one that values its complicated and inseparable relationship with context and interpretation.

An Evaluation of Derrida's Position

Having seen Derrida's deconstruction of certainty in the previous sections, this section sets out to evaluate some of his arguments and see how tenable they can be. This involves an examination of the different views by different scholars who attempted to argue both for and against Derrida. It is worth noting at this point that there are opposing positions regarding the interpretation and reception of Derrida's deconstruction; his writing has created a strong negative reaction, yet also raised hope for a new world-view.

Christopher Norris and Michael Naas are important figures here who champion and positively interpret Derrida's challenge to certainty. Norris counterattacks charges of nihilism against Derrida, contending his work does not negate truth but instead provides a more rigorous critique of naive scientific objectivity, compelling inquiry toward deeper self-awareness and critical responsibility.[37] And Michael Naas examines the positive

[37] Norris, Philosophy Outside-In: A Critique of Richard Rorty, 6.

consequences of Derrida's work, especially for institutions such as the university. He demonstrates how Derrida's idea of a "university without condition," a place of free questioning freed from the need for certain truths, does not disable scholarship but instead redraws its first mission around boundless critique and the search for knowledge without guarantees.[38]

By contrast, David Mikics, Robert Brandom, Richard Kearney, and Graham Harman mount key criticisms of the project of Derrida. Mikics and Brandom make pragmatic and epistemological objections, alleging that the undoing of hardened meaning brings semantic vagueness, radical skepticism, and an unsustainable challenge to the firmly established ground needed for scientific speech and coherent understanding.[39] Kearney criticizes the metaphysical implications, finding that meaning's volatility essentially undermines our understanding of presence and self-identity.[40] Most fundamentally, Graham Harman is opposed to the very heart of Derrida's text-centered linguistics, and he argues that by reducing everything in reality to language and textuality, deconstruction looks past the independent lives of things themselves. Harman's object-oriented ontology attempts to recover metaphysics from what he perceives through Derrida as a restrictive language-focused approach.[41]

What is interesting in Derrida's view of knowledge is that he has dealt provocatively with one of the central institutions characterizing the 20th century, according to which language is not

38. Naas, The End of Certainty: Derrida and the Question of the University, 30.
39. Mikics, Who Was Jacques Derrida? An Intellectual Biography.
40. Kearney, Touching the Other: Ethics and the Hermeneutic Imagination, 123-24.
41. Harman, Deconstruction and Object-Oriented Ontology.

just a neutral expression but fundamentally influences how we understand the world. Language enables conceptual thinking and the formation of meaning in such a way that would not be possible without language. Language is a strange supplement that produces a new level of conceptual thinking that would not be possible before language. Thinking without language is not perceived as dealing with concepts but as a vague movement of images.[42] Only language enables the reconstruction of conceptual idealities, creating a relative permanence. Derrida has in a very convincing way, also shown that the communication situation, whether it occurs via discussion or writing, does not in a simple manner convey the intentions of a speaker or writer, but rather it is the breaks in meaning which are fundamentally linked with the communication situation. The intentions of the speaker and actor are not transmittable as such. In the communication situation the question is about a genuine meeting of *othernesses*, where the speaker and listener understand things in their context.

According to Derrida, neither the speaker nor the listener holds a primary position about knowledge. Immediately after the expression, the speaker is in the same position as the listener; in other words, they also s/he has to interpret her/his own earlier statements. Likewise, there is the idea that no contextual closure is interesting because it enables many interpretations: meaning does not close up into a totality. This has very widespread consequences for issues of knowledge control and power. If meaning is seen as being continuously postponed and transformed, nobody can take such a position in which they could control knowledge, but rather each participates from their own viewpoint in this continuous

42. Christopher Norris, Derrida, Science, and the Challenge to Certainty (Palgrave Macmillan, 2022), 22.

process of the formation of meaning.

Conclusion

This study attempts to show that Derrida's epistemology is not a nihilistic dismantling and destruction of structures, rather, it is writing and the crossing of that same writing, so that the old meaning is superimposed by the new without necessarily wiping out the old meaning; Derrida's enterprise discourages any doctrinal or dogmatic assertion but open new frontier in knowledge acquisition; Whatsoever knowledge one holds is only a privilege, therefore, no one should claim absolute certainty in knowing; And again, never arriving at absolute conclusion!

Bibliography

Brandom, Robert. *A Spirit of Trust: A Reading of Hegel's Phenomenology*. Harvard University press, 2022.

Derrida, Jacques. *Afterw. Rds*. Edited by Nicholas Royle. Translated by Geoffrey Bennington. Tampere: Outside Books, 1992.

———. *Dissemination*. Translated by Barbara Johnson. Chicago: University of Chicago Press, 1981.

———. "Letter to a Japanes Friend." In *Derrida and Difference*, edited by David Wood and Robert Bernasconi. Evanston: Northwestern University Press, 1988.

———. *Limited Inc., a b C...* Translated by Samuel Weber. Baltimore, Johns Hopkins University Press, 1977.

———. *Margins of Philosophy*. Translated by Alan Bass. Brighton: Harvester, 1982.

———. *Positions*. Translated by Alan Bass. Chicago: university of Chicago press, 1981.

———. *Writing and Difference*. Translated by Alan Bass. London: Routledge & Kegan Paul, 1978.

Foucault, Michel. *The Order of Things: An Archaeology of the Human Sciences*. New York: Vintage Books, 1970.

Harman, Graham. *Deconstruction and Object-Oriented Ontology*. Bloomsbury, 2024.

Heidegger, Martin. *Being and Time*. Translated by Dennis J. Schmidt. SUNY Press, 2010.

Husserl, Edmund. *Experience and Judgment: Investigation in a Genealogy of Logic*. Translated by J.S. Churchchill and K. Ameriks. Evanston, Northwestern University Press, 1973.

Jacques, Derrida. *Of Grammatology*. Translated by Gayatri C. Spivak. Bamitore, MD: Johns Hopkins University Press, 1997.

———. *Signature Event Context*. Translated by Alan Bass. University of Chicago press, 1982.

Kearney, Richard. *Touching the Other: Ethics and the Hermeneutic Imagination*. Fordham University Press, 2022.

Mikics, David. *Who Was Jacques Derrida? An Intellectual Biography*. London: Yale University Press, 2009.

Naas, Michael. *The End of Certainty: Derrida and the Question of the University*. Fordham University Press, 2022.

Norris, Christopher. *Derrida, Science, and the Challenge to Certainty*. Palgrave Macmillan, 2022.

———. *Derrida*. Cambridge: Harvard University Press, 1987.

———. *Philosophy Outside-In: A Critique of Richard Rorty*. Routledge, 2021.

Plato. *The Republic*. Translated by Benjamin Jowett. Oxford: Clarendon Press, 1953.

Rorty, Richard. *Philosophy and the Mirror of Nature*. Princeton University Press, 1979.

Saussure, Ferdinand. *Course in General Linguistics*. Edited by Charles Bally and Albert Sechehaye with the collaboration of Albert Riedlinger. Translated by Roy Harris. London: Duckworth, 1983