The aim of this book is to develop several interrelated problems about logic, sense, truth, and time. These problems are “ontological” in that they are implicated in what Martin Heidegger specified as the questions of the sense and the truth of being. For this reason, I have engaged closely here with Heidegger’s thought and work. Nevertheless, this book is not intended primarily as an exegetical or secondary book on Heidegger, but rather an investigation into problems that, as I will argue, already posed themselves to Plato and Aristotle and are shown again, in a different light, in Heidegger’s texts as well as other philosophical discourses of the twentieth century, including especially “analytic” philosophy. In developing these problems as they figure in contemporary philosophy, I also do not attempt to solve or resolve them in any final way; the aim is just to clarify and illuminate them as they give themselves to be thought today.

The most central problem taken up here is that of the relationship of thought to time whereby both being and becoming are given to be thought and understood within the life of a being that is itself temporally situated. This problem already motivated Plato’s research, in the Sophist, into the specific sense of being and non-being and led him, therein, to formulate the first logical theory of the articulate predicative unity of a sentence, thereby allowing change and non-being, against Parmenides’ strictures, truly to be thought and said. Not only Heidegger’s ontological questioning, but also the analytic tradition’s investigations into the nature of linguistic meaning and the problematic results of formal meta-logical investigation into the structure and limits of rules and processes illuminate, renew, and deepen this problem, as I shall argue, under contemporary conditions. In the investigations to follow, I accordingly consider the implications of all three contemporary approaches for the basic problems of the sense of being as it is given to thought and of the phenomenon of truth in its specific relationship to time.

The main results of this investigation are, first, that the question of being, if it is to be taken up anew today, must be posed in relation to the specific structures of the infinite and transfinite as these are also determined in contemporary logical and mathematical thought; and second, that this understanding itself motivates a realist doctrine of given time that overcomes any conception of time as determined by the constitutive capacities or activities of a thinking subject. This realism about given time is also, as I argue, the necessary condition for an ontological realism in general which illuminates the relationship between being and time without subjecting either to the condition of their thinkability in finite or human forms. In line with this realism, as I argue, the structural basis of sense and time can be thought as indicated in a reflexive structure of ontico-ontological difference without, thereby, necessarily being thought in limitative terms as necessarily constrained by determining forms of possible representation or finitely determined capability. This structure is, in particular, that of the relationship of Dasein as a being marked by a constitutive concern with being, grounded in a pre-determining understanding of it, to the possible explicit retrieval of this understanding in thought. As indicated in this reflexive structure,

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1 An interpretation of the ontological implications of the infinite as it is unfolded and thought in contemporary mathematics is attempted, along partially similar lines, by Alain Badiou in Being and Event (Badiou 1988).
sense and thinkable time are not (as I argue) determined by any figure of human finitude or limitation, but are nevertheless illuminated on the basis of their particular relationship with the specific structure of truth.

This reflexive ontological structure of sense and given time does not simply liberate both from the limitative strictures of finitude, but also indicates the specific structure of the infinite that insists in both as the thinkable point of their contact with the real. This is not the real of the infinite-absolute (as thought, for instance, theologically), but rather the structure of the mathematical infinite, already implicit in the unlimited iterability of ordinal number, which Cantor’s groundbreaking innovations delivered to rigorous mathematical thought. As I argue, that the givenness of time is co-determined as infinite in the sense of this infinite does not mean that it is given as the eternal permanence of objects, beings, or phenomena, or of any one or subset of them. Rather, in accordance with the constitutive paradoxes and aporias of infinite totality, it is structurally given as what can never be gathered into the unitary form of a total and noncontradictory presence. The infinite, as thought this way, can, as I suggest, become the paradoxical principle of a formally motivated overcoming of the metaphysics that links the thought of being to that of presence or to the form of presence in general. This possibility of this critical overcoming is further confirmed, and given specific shape in relation to the forms of technology and dominant praxis most characteristic of global life today, by considering the extended ontological implications of “metalogical” reflection on the meaning and limits of formalism. For the dominance and pervasiveness of informational and computational technology that is so characteristic of contemporary life around the planet today is itself conceptually and substantively based on “mathematical” logic and on the constitutive reflection on the scope and limits of its computational powers that itself originally gave rise (in particular in the work of Alan Turing) to the idea of an algorithmic, programmable computer. As a result, the internal implications of this reflection, ontologically viewed, can provide further rigorous terms for the ontologically based critique and possible conceptual transformation of this dominant contemporary situation.

The methodological guideline followed throughout the book is that of reflection on the consequences of formalism. In particular, formalism and the possibility of formalization are employed both as objects of reflection and as privileged indicative resources with respect to the structure of truth, being, and time. This does not mean, however, that claims or expressions are analyzed in terms of one particular formal language, or that the correctness of any specific formal calculus is either argued for or simply presupposed. Rather, what provides the decisive methodological guideline are those results of logic and metalogic, actually paradoxical or nearly so, in which formalism itself encounters and demonstrates the inherent limits of its own scope of application and sense. In taking these results as demonstrative in this way, I have made an extended application of a formal methodology that Heidegger himself describes and employs, namely that of formal indication. Formalization, in this sense, is to be sharply distinguished from generalization or the demonstration of the formally universal. It is rather the indicative methodology by means of which the singular phenomena are shown in their own proper self-givenness in each case.

In The Politics of Logic (2011), employing a similar guideline of reflection on the consequences of formalism, I distinguished among four formally possible orientations of thought, each determined by the
specific way it conceives of the constitution and limits of the totality of thinkable beings as a whole.² Because of the way each orientation constitutively involves a specific conception of the possibility or impossibility of thinking beings as a whole, the problematic developed there was already essentially related to that of what Heidegger calls the ontological difference, although I did not treat Heidegger specifically or in detail there. The critique of the onto-theological orientation of thought on the basis of the two post-Cantorian orientations, in particular, essentially parallels Heidegger’s critique of metaphysics as constituted onto-theologically by the forgetting or erasure of this difference. But as I argued there, the metalogical terms and results that allow for the critique of ontotheology also equally provide grounds for the rigorous critique of the constructivist orientation that, by contrast to ontotheology, understands the totality of thinkable beings as constituted and limited by what is specifies as the finite powers of specifically human thought. In this book, I further develop the implications of formalism in overcoming both of the “pre-Cantorian” orientations of onto-theology and constructivism. The result is to suggest terms for overcoming not only the theological dispensation that assigns beings as a whole to a transcendent infinite-absolute, but also the anthropologism that seeks to constrain them within a constitutive analytic of human finitude.

More specifically, the point at which both pre-Cantorian orientations are overcome, as I argue here, is that of the insistence of difference at the level of the real of being, over against its repression or dissimulation in thought under the form of identity. The idea of a development of the ontological problematic as involving such an ontological insistence of difference prior to identity and identification is familiar from recent French thought, particularly that of Deleuze and Derrida. But what will perhaps be less familiar is the suggestion of its communication with the conceptions of logical and linguistic structure whose theoretical development is broadly characteristic of the analytic tradition. In 2003, I published an article, “Thinking and Being: Heidegger and Wittgenstein on Machination and Lived-Experience,” in which I suggested some connections between the later Heidegger’s critique of technology and Wittgenstein’s own critique of rule-following in the Philosophical Investigations.³ The decisive consideration in each case, as I suggested there, was the way in which the idea of thinkable difference overcomes a formally determined configuration that itself pre-determines the sense of beings and the possibility of their representation in terms of the general form of identity or in terms of the rule, conceived as the infinite repetition of the same. In Wittgenstein in particular, the point at which the insistence of difference can be positively demonstrated is that of the indication of the paradox whereby every rule, in order to be applied, would seemingly call for another one to show how to interpret it. The recognition of this underlying paradox shows how the determined thought of the linguistic rule as the formal repetition of the same necessarily communicates with a deeper thought and experience of difference at the formal basis of interpretation and truth. Here, I argue that such a prior and insistent paradoxical difference is also decisive in the logical and formal innovations that represent the best innovations of analytic thought, including Frege’s argument for the distinction between sense and reference, and Davidson’s development of the semantics of natural languages on the formal basis of the structure of Tarskian truth theories.

² Livingston (2012), chapter 1.
³ Livingston (2003).
It has been said, insightfully,⁴ that one can see clearly the methodological difference between “analytic” and “continental” philosophy by considering the contrast in the titles of two books written by leading practitioners of each: Michael Dummett’s *The Logical Basis of Metaphysics* and Heidegger’s *Metaphysical Foundations of Logic*. It is true that the difference in the relative prioritization of logical and metaphysical thought shown in the contrast between the two titles points to an important difference, significant in both traditions’ conceptions of themselves, between their characteristic senses and methods of “grounding”, basis, or founding. But the distinction leaves open the methodological possibility of a twofold formal-hermeneutical investigation into the factically given phenomena themselves. In this investigation, on the one hand, specifically logical structures and results are interpreted with a view to their “metaphysical” (or actually ontological) implications, while on the other, the foundations of “logic” (in a broad sense) are interrogated in relation to the formally indicated questions of the sense and truth of being. This method, I suggest here, captures one way in which the best thematic and methodological insights of both traditions can be accommodated within a unified theoretical framework and thereby further developed.

This twofold hermeneutics of the facticity of the phenomena of sense, truth, and time yields, in part I of the book, a twofold interpretation of the structure of (specifically) linguistic truth. On this interpretation, the truth of sentences is doubly founded, both ontologically in the deeper underlying sense of the being of beings as given, and formally-logically in the specific logical structure of a language that is shown through a formal consideration of the phenomenon of linguistic truth. Chapter 4 pursues the broader basis of this logical structure in the ontological problematic by means of an ontological interpretation of the sense of (logical) negation, which is shown to depend on an original difference that cannot be thought in terms of representation, identity, or presence in general. Part II attempts to deepen the formal-indicative hermeneutical investigation in order to bring into view the relationship of sense and given time. Chapter 6 takes up the question of the determination of this relationship in terms of the finite and the infinite, while chapter 7 considers the temporal character of natural or “historical” languages as they change over historical time. In chapter 8, the question of the original sense of time, as co-given with number, is pursued by reinterpreting, under the condition of contemporary mathematical and formal results, the thematic and methodological linkage drawn, from Aristotle to Kant, between the sense of time and the givenness of number as its measure. Finally, I suggest that such a rereading offers to illuminate and evince the problems most pervasively characteristic of our technological present, in its institution and enforcement of the global regime of the total calculability and manipulation of beings in the abstract forms of capital, technological determinacy, and effectivity. With such a development of the problematic in its contemporary form, I argue, one may also find clarified ontological terms in which to expose this contemporary configuration to grounds for its radical and internal formal critique.

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⁴ By Mark Wrathall; see Wrathall (2011), p. 41 (from an article first published in 1999).