

PHILOSOPHY AS NEGATIVE SCIENCE

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ABSTRACT

Starting with Kant’s undeveloped proposal of a “negative science,” the author describes how philosophy may be developed and strengthened by means of a systematic approach that seeks to identify and eliminate a widespread but seldom recognized form of systemic and propagating conceptual error.

The paper builds upon the author’s book, *Critique of Impure Reason: Horizons of Possibility and Meaning* (Studies in Theory and Behavior, 2021). The author’s purpose is twofold: first, to enable us to recognize the boundaries of what is referentially forbidden—the limits beyond which reference becomes meaningless—and second, to avoid falling victims to a certain broad class of conceptual confusions that lie at the heart of many major philosophical problems. By realizing these objectives, the boundaries of *possible meaning* are determined.

KEYWORDS: negative science, metalogic of reference, theory of identification, transcendental argumentation, systemic error, propagating error, metalogical projection

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People often think that scientific progress happens when we learn something new that we didn't know before. Another kind of scientific progress happens when we realize that there is a problem with the way we've been looking at things all along. In those cases, figuring out a different way of looking can lead to seeing things more clearly.

– Kelby Jaakkola (2021, p. 65)

Avoiding errors in philosophy: Kant's notion of “negative science”

Common to perhaps all philosophers is the wish to avoid making mistakes. In this they are no different from scientists. And yet, unlike science, philosophy has not yet developed an autonomous sub-specialty devoted to methods of error detection and error avoidance. Both mathematics and the sciences have incorporated in their methodologies techniques specifically designed to permit self-monitoring and the avoidance of error.

They have been able to accomplish this in part because mathematicians and scientists adhere to rigorous and universally accepted and enforced standards of proof, but especially because they have developed methods to detect errors in advance: Mathematicians expend considerable efforts in checking proofs for errors before publication, sometimes employing computer assistance; software developers run error-checking computer code before software is implemented; physicists and chemists identify possible sources of error before running experiments. In such ways, systematic efforts are made in advance to recognize the possible introduction of errors in proofs, calculations, measurements, proposed procedures and designs, etc. It is because of the reliance upon error-checking in advance that aircraft can be designed that have a high likelihood of not crashing and bridges of not collapsing.

In physics, for example, error analysis is now an established and essential adjunct to the discipline. Such error analysis may study potential sources of statistical errors, uncertainty that arises as a result of the inherent imprecision of instruments, snowballing effects when errors are propagated, and systemic error that may occur when the very design of a system can be anticipated to lead to unsatisfactory results.

Philosophy, too, has its own widely used means of correcting and avoiding certain kinds of errors. Informal logic is most commonly the principal means that philosophers rely upon; usually this is traditional, classical logic, but some philosophers also apply formalized modern logics. Before reading or publishing a paper, a philosopher will usually try to identify sources of error in the form of self-contradictions, statements whose presuppositions cannot be defended, errors of inference and deduction, etc. For millennia, logic has supplied the main tool of error detection, elimination, and avoidance in philosophy. And in addition to logic, philosophy also makes recourse to general and informal standards of plausible reasoning, moral and prudential reasoning, adequacy of evidence, accuracy of scholarly claims concerning the work of other philosophers, etc.

Notwithstanding the central importance of logic as a tool for detecting mistakes, philosophy has yet to develop an autonomous sub-specialty devoted to error analysis and error theory. In parallel with the approaches to error analysis mentioned above, a philosophical theory of error would have as its objective the formulation of a methodology capable of identifying—in advance of actual philosophical argumentation—major sources of potential conceptual errors so that philosophers may avoid them.

This goal was, in a limited sense, only hinted at, suggestively and in passing, by Kant in one of his letters to Johann Heinrich Lambert (1728–1777), a Swiss-German philosopher, physicist, and mathematician. Lambert was the first to prove that π is irrational, one of the first to seek to develop a calculus of logic, and perhaps the first philosopher to employ the term ‘phenomenology’.¹

Lambert described phenomenology as “the doctrine of illusion,” the study of which enables us to recognize illusions [*Scheine*] that seduce us into making erroneous claims about experience. He conceived of phenomenology as a study that makes it possible to avoid the errors resulting from such illusion, and thereby come to recognize what is true. Translated into the terms I use here, phenomenology for Lambert would have as its general purpose the detection and elimination of error arising from sense experience.

Kant thought highly of Lambert and became interested in Lambert’s conception of phenomenology. In a letter to Lambert dated September 2, 1770, Kant proposed what he called a ‘*phaenologia² generalis*’, that is, a general phenomenology that would serve as a propaedeutic discipline which would prevent, in advance, the introduction into metaphysics of errors resulting from the misleading illusions that can beset sense experience. The propaedeutic-preventative purpose of such a general phenomenology led Kant to call it a “*negative science*.” This the way he expressed his suggestion:

The most universal laws of sensibility play a deceptively large role in metaphysics, where, after all, it is merely concepts and principles of pure reason that are at issue. A quite special, though purely *negative science*, general phenomenology (*phaenologia* [sic] *generalis*), seems to me to be presupposed by metaphysics. In it the principles of sensibility, their validity and their limitations, would be determined, so that these principles could not be confusedly applied to objects of pure reason, as has heretofore almost always happened. For space and time, and the axioms for considering all things under these conditions, are, with respect to empirical knowledge and all objects of sense, very real; they are actually the conditions of all appearances and all empirical judgments. But extremely mistaken conclusions emerge if we apply the basic concepts of sensibility to something that is not at all an object of sense, that is, something thought through a universal or pure concept of the understanding as a thing or substance in general, and so on. (Kant, 1997, pp. 108-109, italics added)

As far as I know, Kant was never again to use the expression ‘negative science’ nor did he attempt to develop an error-preventing negative science. A negative science was to

¹ In Lambert (1764, Vol. 1, p. 4).

² This was Kant’s misspelling in his letter; he evidently intended ‘*phaenomenologia generalis*’.

remain a never-to-be-developed embryonic idea. As he imagined it, it would have formed a discipline capable of determining “the principles of sensibility, their validity and their limitations ... so that these principles could not be confusedly applied to objects of pure reason.” If such a negative science were to be developed as Kant suggested, it would ideally provide philosophy with a propaedeutic, an *indispensable preliminary*, or what today we might call a safeguard designed to prevent the introduction of error that can originate from potentially illusory sense experience.

Two and a half centuries have passed since then. In the approach to philosophy as a negative science which I shall turn now to discuss, my development of a negative science should not be equated with Kant’s notion; I don’t seek to develop negative science in order to accomplish Kant’s intentions. Nonetheless, the term ‘negative science’ accords well with the error-eliminative purposes I have in view. Since these purposes are closely allied with certain post-Kantian modern approaches to transcendental argumentation, my use of the term ‘negative science’ may be thought of as a nod of recognition to a paragraph written in a letter centuries ago.

A systematic approach to negative science

Two classes of tools that can help philosophers avoid error should be distinguished: There are the tools provided by logic, as mentioned earlier. When applied by philosophers, these largely involve appeals to individual logical laws, such as non-contradiction or the law of excluded middle, or to principles of inference or deduction, such as *modus ponens*, *reductio ad absurdum*, conditional proof, etc. Let us call these *specific* tools that help us to detect logical errors which involve particular violations of individual logical laws or principles of inference.

There is another class of methods that is less widely recognized. Earlier in this paper, I mentioned two varieties of error which physics has sought to find rigorous ways to recognize and avoid: *systemic error*, which can occur when the very design or structure of a system leads to unacceptable erroneous results, and *errors of propagation* which occur when the effects of errors snowball in a domino-like way, resulting in the spread and escalation of error.

These forms of error, which occur on what a general systems theorist would call a systems-wide level, have interested and concerned me for many years. Philosophers commonly make use of a shared familiar vocabulary of concepts, concepts which have received their meaning both as a result of the uses to which past philosophers have put them, and as a result of the accretion of meaning and criticism which often contribute over long spans of time to the evolution of the meanings of those concepts.

This vocabulary of concepts upon which we philosophers rely in order to communicate with one another itself comprises a system, a system both of linguistic use and conceptual understanding. We are not accustomed to think that the very system of concepts that have become familiar, conventional, and habitual can itself be a source of error.

In much the same systems-based perspective, the thought of individual philosophers often forms a system—and here I do not solely include philosophers who have engaged in “systems building,” but include those philosophers who present us with more limited

accounts of aspects of reality or thought, and whose “system” is not wholly expressed within their work, but by implication extends outward beyond their specialized individually expressed views by relying, again, upon portions of the commonly accepted vocabulary of philosophical concepts.

In both of these ways—in terms of the vocabulary of concepts upon which conventional philosophical discourse is based, and in terms of the system formed by an individual philosopher’s work—both varieties of error—systemic and propagating—can occur. Systemic errors and errors that are propagated in a systems-based way come about when the very set of concepts in question—whether they comprise the commonly accepted vocabulary of a large group, or the individual set of concepts a philosopher uses—is intrinsically and sometimes fatally prone to error.

Let us pause for a moment to consider a rough example of specific versus systemic and propagating error: Nearly all of us are familiar with typographical errors: If we’re using a keyboard, while typing we touch a key inadvertently and then find that what we’ve typed is a mistake. This is a specific error; we correct it by applying familiar rules of spelling, punctuation, or grammar.

Consider, however, a keyboard which itself is malfunctioning. Even though we type accurately, still typographical errors are the result. Perhaps the circuitry of the keyboard or its computer or printer connection has failed. Whatever the reason, as long as the malfunctioning keyboard continues to be used as it stands, typographical errors will continue to occur. What we have here is a systemic source of error, and as long as the same malfunctioning keyboard continues to be used, errors will be propagated.

As far as I know, the work I have published during the past 50-plus years is the main, and again, to my knowledge, the only philosophical effort to date to develop a systematic “negative science” that is capable of detecting, avoiding, and eliminating conceptual errors of the systemic and propagating kinds.

In what follows in this short paper, I cannot of course provide a full and adequate account of this approach; for this purpose, readers are referred to the References where selected, representative publications are listed. The most comprehensive account will be found in my recently published book, *Critique of Impure Reason: Horizons of Possibility and Meaning* (Bartlett, 2021). Due to its length of nearly 900 pages, to assist readers I’ve also published a short *Primer on Bartlett’s Critique of Impure Reason* (Bartlett, 2021a).

My purpose in this paper is to provide readers with an overview so they may have a sense of how philosophy as a negative science may be undertaken, to provide a few suggestive examples of its application, while including a few autobiographical, more personal comments that may help readers acquire an understanding of the in-principle conceptual difficulty of communicating a critique of the very philosophical concepts we commonly rely upon in order to communicate.

Philosophy as negative science by means of a metalogic of reference

One of the most conceptually fundamental levels from which to study the functioning of our concepts is *reference*: We may wish to understand how our concepts refer or fail to refer, what must be presupposed in order for it to be possible for reference to occur, how

meaning and reference are interrelated, and how reference can fail on a systemic level, often without our awareness.

Theory of reference has in the main been studied by philosophers of language. However, although the employment of our concepts often is expressed through language, reference very frequently occurs in non-linguistic contexts: Among many examples, there is simple non-verbal ostensive pointing, as well as the forms of reference involved in the multitude of non-linguistic phenomena with which we're all acquainted in everyday life, whether we attend to body language, recognize natural sounds, experience expressions in art, dance, and music, or simply consider the referential nature of much non-verbal thought in the form, for example, of memories, anticipations, worry, fears, etc.; the list is potentially endless.

Rather than approach reference from the now-traditional perspective of language, instead I've sought to develop a *general theory of identification*. Identification is commonly thought of as individualizing and specific reference, as when a given Social Security number uniquely refers to one and only one person. There also is, however, non-specific reference, which does not single out specifically and singly an individual object of reference, but may instead only identify an object or set of objects vaguely or within a certain degree of imprecision or probability.

The general theory of identification I've developed itself forms a reflexive system, including itself within its own scope of reference. Logician Frederic Brenton Fitch called such a reflexive theory whose scope of application is all frames of reference, its own included, a theory developed on the level of 'maximum theoretical generality'.³ As I have formulated it, such a general theory of identification can be characterized as a *metallogic*. When we establish a superordinate frame of reference that makes it possible to refer to subordinate individual systems of reference or individual theories, the superordinate reference frame is commonly termed a 'metalanguage'. The formal study of the subordinate systems is then routinely called 'metallogic'.⁴ With an interest in its formal and to some extent its formalizable structure, I've therefore called the general theory of identification '*metallogic of reference*'.

The metallogic of reference has a direct transcendental focus and application: It seeks to describe general principles that govern possible reference to any subordinate system of reference; at the same time, these general principles, which come to be recognized as invariant for all reference frames, themselves also govern possible reference to the metallogic of reference itself. The concern throughout is to identify those preconditions of possible reference without which reference and ultimately also meaning become impossible. Very evidently this is a transcendental project.

It is also evidently a highly abstract undertaking—as one would expect of any theory developed on the level of "maximum theoretical generality." It requires on the part of any reader a mind comfortable with high levels of theoretical abstraction, and it also requires certain other mental, and even psychological, predispositions which I've sought to identify elsewhere.⁵

³ Fitch (1952), see also Fitch (1963–64).

⁴ See Bartlett (2021, Chap. 4.8) and also, e.g., Feys and Fitch (1969, ¶ 90.1).

⁵ See Bartlett (2021, Appendix II. "Epistemological Intelligence"; published earlier in an online version, Bartlett, 2017).

The central concern of such a metalogic of reference is *negative* in the sense of a negative science alluded to earlier. The foremost concern is to recognize those constraints upon possible reference which, if transgressed, result in the impossibility of both reference and meaning. To show this requires more than a single paper can accommodate. Instead, let us consider a few examples that may give readers a more intuitive understanding of what can be expected from such a metalogical study of reference.

A few epistemological examples

The metalogic of reference as I've developed it begins with an analysis of reference frames: the systems of reference that are relied upon for reference to be possible to whatever sorts of objects we may have in view. Such an analysis is concerned to identify general and invariant principles that govern reference, principles which, if violated, undermine the possibility of reference and meaning. To succeed in such an undertaking, we require a clear and well-defined concept of reference, as well as definitions of meaning, identification, reference frames, objects of reference, etc. For the purpose of the following examples, we will make do with our everyday intuitive notions of these things.

Discovery or invention

Especially in mathematics and in physics an appealing question has frequently been raised, but never satisfactorily answered. This is the question whether the results that mathematicians and physicists reach are “discovered” or “invented.” Some mathematicians experience a deeply seated conviction that mathematical truths are discovered—that they are, in some perhaps inarticulable way, “out there,” existing independently of the thought processes and analytical abilities of all mathematicians. In much the same way, some physicists express wonder that physical nature is so amenable to mathematical representation, and come to believe that physical laws, once they have been formulated and have repeatedly been confirmed, express underlying structures of the physical universe, structures or principles of order which similarly exist autonomously of all human activity. Physicists who are members of this group tend to think that physical laws are discovered—they are principles that “existed beforehand” and “were always there,” ready to be disclosed to physicists once they had acquired the necessary knowledge and instrumentation.

There are mathematicians and physicists who don't agree with this point of view: They believe that mathematical truths and physical laws are results acquired as a function of the analytical activity of mathematicians and physicists, that such truths and laws are conceptual “constructs” and hence are really “inventions” of the human mind in its efforts to understand the nature of mathematical or physical objects and phenomena. Intuitionist mathematicians are members of this group, as are some quantum theorists today.⁶

The metalogic of reference steps back from this controversy and asks instead, What conditions would need to be satisfied in order for it to be possible to identify

⁶ See Bartlett (2021, Chapters 26, 27).

mathematical truths or physical laws independently of the reference frames by means of which such truths and laws are formulated and can be ascertained? As I have tried to show,⁷ a careful analysis to answer this question leads to an answer that can be demonstrated since its very denial undermines its own possibility of reference and meaning. If we were to undertake such a systematic analysis of the referential preconditions involved in the discovery-or-invention question, we should find neither answer—that mathematical truths are discovered *or* invented, or that physical laws are discovered *or* invented—can possibly be meaningful since the conditions that would need to be satisfied in order to refer to the framework-independence *or* framework-dependence of such truths or laws cannot *possibly* be satisfied.

In brief, the metalogic of reference leads here to the conclusion that the discovery-or-invention question poses an illusory, deceptive question: It is a question that involves what amounts to a conceptual sleight-of-hand that encourages a delusion. That delusion encourages us to search for something which, in principle, is impossible.

The problem of the external world

The problem of the external world, which has attracted the interest and concern of philosophers for millennia, similarly lends itself to a metalogical analysis of the preconditions of reference which this problem, in order *possibly* to refer and to make the sense it intends, must presuppose.

Idealism and realism with respect to the question whether there exists—or does not exist—an independent external reality may be placed in parallel with the question whether mathematical results and physical laws are discovered or invented.

Although the specific steps of referential analysis are different, a metalogical analysis can be undertaken of the referential preconditions that would need to be satisfied in order for the question of the external world *possibly* to be answered. Such an analysis leads to a similar result,⁸ one which cannot be denied without a form of self-referential inconsistency that has not been widely recognized, which I've called '*metalogical projection*'. Stated in necessarily abbreviated form here, such an inconsistency precludes the very possibility of reference and meaning: It is a form of self-referential inconsistency that is transcendental, concerning the preconditions of the possibility of reference and meaning.

In connection with the problem of the external world, the result to which the metalogic of reference leads is a recognition that *both* idealism and realism are philosophical positions which, at their very heart, involve a conceptual sleight-of-hand that encourages a referential delusion of a certain important kind, a variety that encourages a systemic error of the sort pointed to earlier.

The perturbation theory of measurement in quantum theory

There exists a multitude of examples that lend themselves to a metalogical analysis of referential preconditions. In this paper, I've so far outlined two of these: the first expresses an often-asked question by mathematicians and physicists about the ontological

⁷ Bartlett (2021, Chapter 19.1-19.2).

⁸ See Bartlett (2021, Chapter 21).

status of mathematical truths and physical laws, and the second, also an ontological question, is asked by philosophers about the status of the external world. To conclude this short list of examples, let us look briefly at a problem that has come in recent years to concern quantum physicists.

To do this, let us first consider the inhabitants of an imagined world of purely tactile sensation: The inhabitants are, we shall assume, *in principle* limited to the sense of touch; there is no other possible means for them to sense objects in their world. But despite this limitation, they have developed a primitive stage of quantum physics based wholly upon touch. The only way they can therefore make any measurements is by touch. Some of their quantum theorists have come to believe that whenever any quantum phenomenon is touched, it is changed by virtue of the very activity of touching it. Other tactile quantum theorists disagree: They claim that it is fundamentally misleading to suggest that measurement perturbs what is measured. They point out that to detect a change, touch must be used—since touch is the only way for them to make any observation. But how, in principle, can touch be used to detect that the activity of touching changes what is touched? They claim that simple reflection shows that it cannot possibly do this, in principle.

There is, and long has been, a similar disagreement among the quantum theorists of our own multi-sensory world concerning what is called the ‘perturbation theory of measurement’. According to this view, quantum-level measurement inevitably “changes” what is measured. A careful metalogical analysis of the possible referential means of existing quantum theory⁹ shows that two main referential preconditions would need to be satisfied in order for such a “change”—in principle—to be detected: the “act of observation” must exert some kind of perturbing influence upon what is measured, and such an influence must result in a “change” in the phenomenon measured. These two claims are combined in the notion that there exists a relationship of perturbation between the quantum observer, the measuring instruments employed, and the quantum phenomena measured.

In the history of quantum theory, Niels Bohr stands out among the most epistemologically self-conscious quantum physicists. Repeatedly he reminded his fellow physicists of the need for restraint when they make claims about “perturbing interactions” when quantum-level measurements are made. Here is one such warning he published:

[O]ne sometimes speaks of “disturbance of phenomena by observation” or “creation of physical attributes to atomic objects by measurements.” Such phrases, however, are apt to cause confusion, since words like phenomena and observation, just as attributes and measurements, are here used in a way incompatible with common language and practical definition. On the lines of objective description, it is indeed more appropriate to use the word phenomenon to refer only to observations obtained under circumstances whose description includes an account of the whole experimental arrangement. (Bohr, 1958, p. 73)

A metalogical analysis of the referential preconditions that would need to be satisfied in order for quantum theorists to claim that quantum measurements perturb the phenomena

⁹ See Bartlett (2021, Chapters 27–28).

measured shows us, however, that incompatibility with common language and practical definition are not what is at stake as Bohr suggested, but rather referential impossibility.¹⁰

We are able immediately to see that the inhabitants of a world of purely tactile sensation cannot perceive any “change” that their own activity of touching “produces” when a quantum measurement is made: After all, to perceive such a change, they would need to measure (touch) the state of a quantum object before it is touched in order to detect that it has undergone a change as a result of the measurement (touch). But to do this, they would need to touch that object before they touch it, a theoretical impossibility.

Much the same limitative obstacle stands in the way of the perturbation theory of measurement. This is a limitative result of present day quantum theory: As long as quantum theory in its present formulation is accepted, then—in principle—quantum theorists have no possible way to obtain information about any alleged pre-measurement properties of the quantum phenomena studied, properties which are purported to have a pre-existing state that is “changed” as a result of the activity of measurement. This isn’t a matter that can, in principle, be resolved through the creation of more sensitive instruments of detection; it is not a matter of an absence of practical means at this time. Instead, what we encounter is an impossibility in principle. Bohr seems to have been conscious of this impossibility in principle:

[N]o result of an experiment concerning a phenomenon which, in principle, lies outside the range of classical physics can be interpreted as giving information about independent properties of the objects, but is inherently connected with a definite situation in the description of which the measuring instruments interacting with the objects also enter essentially. (Bohr, 1958, p. 26)

If this analysis were to be extended in detail, we should find that the referential impossibility involved here applies not simply to the impossibility of referring to pre-measurement independent states or properties of quantum phenomena, but to the impossibility of reference to any putative “influence” resulting from whatever measuring instruments are employed. We should find that the notion of “perturbation interaction” runs into an impenetrable wall of theoretical impossibility of separately distinguishing quantum-level phenomena from the system formed by the observer, the observer’s measuring apparatus, and the phenomena measured.¹¹

Elsewhere, I have called such impenetrable walls of theoretical impossibility ‘*metalogical horizons*’.¹² They comprise limits beyond which reference becomes not only impossible, but self-undermining on a transcendental level in a way that involves the denial or rejection of the preconditions of possible reference and possible meaning. Unfortunately, there is a deeply rooted human compulsion to transgress beyond such limits.

¹⁰ See the preceding note.

¹¹ For more detailed analysis, see Bartlett (2021, Chapter 27).

¹² Bartlett (2021).

***Delusional reference: The human compulsion
to transgress beyond the limits of possibility***

Within the human mind there is a powerful, perhaps primordial, desire to go beyond the *limits* of human knowledge.... Many, many lay persons and professional thinkers invest significant resources in a lifelong attempt to cross the transcendental horizon of the human situation and live in another world or dimension—and to grasp a sense of meaning and security that are not immediately generated by empirical reality alone....

[T]he human mind, apparently, will go to *any lengths* in order to gratify the need for this particular kind of transcendence. No amount of sophistry, no amount of internal contradiction of methods, and no amount of contradiction of empirical reality seem to function as an effective deterrent. In many cases, the *non-recognition of empirical reality* and the rejection of formal logic are basic methodological instruments in the pursuit of meaning, transcendence—and escape.

– Roy D. Morrison (1994, p. 352)

Delusions and deceptions often require some implicit cooperation on our part in order that we may become victims of them. The systemic conceptual errors with which I have been concerned appear to rely upon such implicit complicity, a complicity that is not forced upon us, but which, when such errors do not merely form part of habits that have become automatic, we often voluntarily, even if not always self-critically, accept.

In the three examples above, relating to the discovery-or-invention, external world, and measurement perturbation controversies, proponents for or against each issue can be observed in their in-person behavior and published writings to be motivated by deeply seated, deeply felt beliefs. These beliefs appear not only to be difficult to engage through direct rational criticism and challenge, but to elicit resistance when those beliefs are questioned. To illustrate this, I briefly describe my own admittedly anecdotal personal experiences that bear this out:

I completed a portion of my graduate work at a leading university in California. I proposed a doctoral dissertation whose objective was to develop a method to detect, eliminate, and when possible to correct malfunctioning philosophical concepts of a sort which today I call ‘systemic’. My proposal claimed that such malfunctioning concepts were pervasive in philosophy, and for this reason their detection, elimination, and, when possible, their correction could potentially have far-reaching consequences when considered in relation to the major questions that have occupied philosophy for millennia.

Such a dissertation proposal was admittedly unconventional, innovative, and bold. Unlike most doctoral dissertations in philosophy, it did not seek to study any one particular philosophical problem, philosopher, or group of philosophers, but instead proposed an original work that was an honest and undisguised potential threat to much of established mainstream philosophy.

My department responded by requiring that my dissertation proposal would first have to be evaluated at an oral examination before a committee of all 19 members of the department, including a specialist flown in from another college and supplemented by an

extra-departmental member from another discipline. Elsewhere I have described this rather unusual experience.¹³ It was the first of other experiences which have made clear to me that critiques which bring critical attention to bear on alleged systemic errors within a discipline are, understandably and predictively, likely to encounter resistance.

The department refused to allow me to proceed with such a dissertation proposal and required that I change to a topic for which the department had a member with the requisite background and training. I was, however, determined to develop the subject I had in view. I decided to re-locate my doctoral work to the Université de Paris. Gabriel Marcel had taken a special interest in my proposed project and surprised me by having already arranged in advance with Paul Ricoeur for him to direct my dissertation.

Ricoeur was not threatened by the nature of my proposal and was comfortable with a young aspirant's wish to critique the main concepts in terms of which many traditional problems of philosophy have been formulated. Ricoeur was at ease with frameworks not his own and possessed a sense of humor: In meetings with him in his Nanterre office, he would admit that the results I had reached were incontrovertible, and yet in public lectures that I attended shortly afterwards, he would sometimes fall back into the very errors he had just admitted were undeniable and ought to be avoided. There was humor in this, for I think we both realized that shifting away from an established and habitual vocabulary of concepts is not only difficult, but can only be made haltingly and with the recognition that old concepts can persist with a tenacity of their own (what I now refer to as "propagating error").

In my subsequent university teaching, I've had many other opportunities to witness the deeply seated reluctance and sometimes the recalcitrance of even the brightest students (a) to give up habitual concepts even though they have come to recognize and admit that these are malfunctioning, and (b) to replace them with reformulated, corrected concepts that comply with the requirements of referential consistency. Some students are of course more successful in doing this than others. My interest in the intellectual dispositions and skills that distinguish such students has comprised a separate, more psychologically-focus study.¹⁴

When these dispositions and skills are lacking, systemic errors of the kind that have concerned me flourish and multiply easily. Earlier in this paper I referred to such errors as involving what metaphorically might be called 'conceptual sleights-of-hand' that encourage delusions. Such delusions seduce us to pose and attempt to answer questions in a search for something which, in principle, is impossible.¹⁵

¹³ This experience, as well as others that similarly illustrate characteristic human responses to intellectual dissent, is described in Bartlett (2017a).

¹⁴ See note 5.

¹⁵ To avoid misunderstanding, it is important to note that such conceptual delusions are not to be equated with assertions of "transcendence." The term 'transcendence' is broad and has been put to a variety of uses. One common use is exemplified by objects in one's visual field which are often thought to be "transcendent" insofar as the perceiver may believe, for example, that by walking around the perceived object, other sides or aspects of the object are likely to be seen; in this sense, the perceived object is thought to "transcend" what is given in the individual's visual field at any one time. Another use is found in claims that objects of a certain kind extend beyond a given means of apprehending them: For example, an object may be said to transcend visual perception insofar as it can also be experienced as an auditory phenomenon. Still further, objects are often believed to transcend anyone's experience, or to transcend everyone's. —All of these uses of the term 'transcendence' relate to what is believed *in fact* to be the case.

The conceptual delusions with which I am concerned in this paper, however, relate to *limits of possibility*. This is essentially a *modal* focus, concerning concepts or claims that undermine their possible reference and meaning. The variety of conceptual delusion at issue involves an attempt to refer to an alleged object of reference, but in such a

In his *Critique of Pure Reason*, Kant expressed his awareness of the human tendency to overstep certain epistemological limits. In talking of “the understanding which is concerned merely with its empirical application,” he commented:

But if it cannot distinguish whether certain questions lie within its *horizon* [*Horizont*] or not, then it will never be sure of its claims and its possessions, but can only count on a variety of shameful rebukes when it oversteps [*überschreitet*] the boundaries [*Grenzen*] of its domain (as is inevitable), and goes astray in *delusion* and *deceptions*. (A238/B297, italics added)¹⁶

Two years after the publication of the first edition of the *Critique*, Kant went on to recognize that underlying the phenomenon of overstepping boundaries is a pervasive human *compulsion* to do this:

[W]ho does not *feel himself compelled* [*fühlt sich nicht notgedrungen*], notwithstanding all interdictions against losing himself in transcendent ideas, to seek rest and contentment beyond all the concepts which he can vindicate by experience...?¹⁷

This inner feeling of being “compelled” leads to transgressions beyond the boundaries of possible knowledge, and motivates us, as Kant recognized, to embrace what is delusional and deceptive.

At this point, I again depart from Kant’s thought, and will translate into different terms his suggestion that there is a pervasive human propensity, and even a compulsion, to overstep rational limitations. Our interest will be focused in a more specialized way on transgressions of the preconditions of reference of the conceptual frameworks we use.

Delusion-inducing concepts and asking the wrong questions

If many of the philosophical concepts that we’ve come habitually to use involve or encourage transgressions of preconditions that must be satisfied in order for reference to be possible, then, to be sure, the discipline of philosophy is in rather deep trouble. I take for granted that for many readers, the ‘if’ that began the previous sentence is a BIG IF! I understand and can sympathize with any reader for whom the antecedent of this conditional may be felt to fall somewhere along a scale running from ridiculous and deserving to be dismissed without further ado, to unsettling and even irritating. If our commonly accepted philosophical conceptual vocabulary is systemically error-producing,

manner that undermines the very conditions of *possible* reference. This is *putative* reference—reference in appearance only, deceptive and illusory.

¹⁶ This is my translation from the second edition. It’s unfortunate that both Norman Kemp Smith and J. M. D. Meiklejohn ignored what I take to be Kant’s fundamentally important word choices here: ‘*Wahn*’ and ‘*Blendwerke*’, which Kemp Smith translates as “opinions that are baseless and misleading,” and Meiklejohn translates as “fanciful opinions and blinding illusions.” On the contrary, *Wahn* and *Blendwerke* mean that *delusions* and *deceptions* are involved; “opinions” are not.

¹⁷ Kant & Beck (1950/1783, §57, italics added).

then by means of what conceptual tools can we know this, and how are we to proceed?! It might seem that we are potentially defeated before we begin.

These are intelligent questions, questions that cannot be answered in this short paper. But yet to communicate to readers an idea of what is at stake and what would be involved in order to offer a solution, below is a partial listing of commonly employed philosophical concepts which, as I've tried to show elsewhere,¹⁸ are precisely of the delusion-inducing, transcendently self-undermining variety. Following each is a reference in braces to the chapter and section in Bartlett (2021) which provides a detailed metalogical analysis of that concept:

The concept of

- discovery {19.1–19.2}
- invention {19.1–19.2}
- the finitude of knowledge {20.2}
- the incompleteness of knowledge {20.3}
- the unlimitedness of our ignorance {20.4}
- thinking beyond the limits of thought {20.5}
- expressing the inexpressible {20.6}
- unknown truths {20.7–20.8}
- unanswerable questions {20.10}
- the external world {21.1}
- things-in-themselves {21.2}.
- other minds {21.3}
- other minds as things-in-themselves {21.3.3}
- general continuity {21.4}
- realism {21.5}
- idealism {21.5}
- the past {22.2.1}
- time-flow {22.2.2}
- the future {22.2.3}
- absolute time {22.2.4}
- temporal constitutive subjective activity {22.2.5}
- absolute space {22.4.1}
- spatial constitutive subjective activity {22.4.2}
- temporal or spatial continuity {22.5}
- space-time {22.6}
- counterfactual causation {23.1.6}
- genetic causation (or causal agency) {23.1.7}

¹⁸ See selected works by the author under References.

framework-transcending causality {23.1.8}
hidden determinants in quantum theory {23.2}
determinism {23.5, 23.7}
free will (23.6, 23.7)
reflection {24.1–24.4}
thinking as entailing a thinker {24.1–24.4}
the self as an existing entity {24.5}
the self as center of experience {24.6}
the self as bearer or owner of its states {24.7}
mental faculties {24.8}
agency {24.9}
spectator consciousness {24.10}
consciousness as a container {24.11}

For each of the above concepts, I've sought to demonstrate that the human propensity to transgress beyond the preconditions of possible reference and possible meaning leads to conceptual errors of the systemic kind described in this paper. The very fact that such a large number of these concepts appears on the above list, many of them basic to so much philosophical inquiry, should make evident the possible existence of a form of error about which we should be concerned. That the same variety of error is identifiable in one central philosophical concept after another would lend support to the idea that an error of the systemic kind is likely to be involved.

The widespread compulsion to overstep the boundaries of reference and meaning is subtle, difficult to resist, and hard to eliminate. Nonetheless, for a great many of the above-listed concepts, as I have tried to show in Bartlett (2021) and other works, it is possible—through the application of a unitary systematic method, which itself cannot be rejected on pain of metalogical self-referential inconsistency—to formulate replacement concepts that salvage much of the putative meaning of the original concepts. But in connection with those concepts for which errors of metalogical transgression cannot be corrected, we have no other rational alternative but to renounce them and leave them behind.

The above results, if successful, would make a significant step in providing a philosophical conceptual vocabulary from which a pervasive systemic and propagating variety of error is eliminated in advance, fulfilling a central objective of a philosophical approach undertaken as negative science.

Policing philosophy?

“The work of the philosophical policeman,” replied the man in blue, “is at once bolder and more subtle than that of the ordinary detective. The ordinary detective goes to pot-houses to arrest thieves; we go to artistic tea-parties to detect pessimists. The ordinary detective discovers from a ledger or a diary that a crime has been committed. We discover from a

book of sonnets that a crime will be committed. We have to trace the origin of those dreadful thoughts that drive men on at last to intellectual fanaticism and intellectual crime....

“We deny the snobbish English assumption that the uneducated are the dangerous criminals.... We say that the dangerous criminal is the educated criminal. We say that the most dangerous criminal now is the entirely lawless modern philosopher.”

– G. K. Chesterton (1908, Chap. IV)

Where there is no enforcement
there are no laws.
Where there are no laws
everything is allowed.
Where everything is allowed
there is nothing certain.
Where nothing is certain
all is mere opinion.

– Teltrab Nevets, unpublished thoughts

If I haven't said enough already to discomfort or rankle many philosophers, the very notion that philosophy may stand in need of “*policing*” is likely to achieve this! We philosophers have come to cherish our unbounded intellectual freedom to question, posit, propose, defend, and make cases for whatever issues that concern us—and to feel and to be at liberty to engage in these things without the imposition of stringent, authoritarian standards of validity and admissibility that would constrain our thought and its expression. We generally bow to the principle of non-contradiction (though not always), and when considering other basic laws of logic, we may not always wish to exclude the middle. There are few if any universal strictures of acceptability that by common consent we agree ought to shackle our minds and their expression.

The discipline of philosophy has come to believe and to claim that it is relevant and applicable to virtually all areas of human thought and behavior, to nearly everything, and most especially in recent times to claim that philosophy is of value in shedding light on such social, political, and educational issues as racism, feminism, the concerns of proliferating gender identities, the teaching of philosophy for children, philosophy for the workplace, philosophical methods appropriate to the teaching of fact-resistant students, etc.—in short, to just about anything that philosophers have a desire to include within the discipline's embrace.

At the same time that the scope of application of philosophy has expanded outward, during the past several decades we increasingly see the telltale signs of the expression of mere opinion: The phrases “I believe,” “I assume,” and their kindred occur, in my tally, ever more frequently in the literature. No invariant and commonly agreed upon set of rigorous objective standards of assessment is by consensus enforced—not by self-policing nor by discipline-wide enforcement. Such a unifying methodological consensus

would offer hope in constraining the human propensity to formulate, propound, and ever-inconclusively argue on behalf of the beliefs a philosopher comes to prefer and favor. If the systemic errors I have worked to bring to light are avoided, some of the principal obstacles that have stood in the way of incremental progress in the discipline might be overcome so that future philosophical work is not saddled by the weight of proliferating error.

As I have suggested, philosophy as a negative science sets as its general task the elimination of conceptual error. When applied to the discipline of philosophy itself, its function—expressed in an overstated but frank fashion—is one of internal disciplinary policing, of identifying forms of conceptual error that occur in the discipline, and then of enforcing rigorous standards of validity and acceptability that avoid such error. In particular, the approach to philosophy as negative science that I’ve outlined would serve the discipline by identifying and eliminating a widespread but generally unrecognized form of systemic and propagating conceptual error. Should this form of error be recognized and admitted, the responsibility then falls upon us to correct and revise many of the commonly accepted concepts that make up much of the central vocabulary of today’s philosophy.

Whether there ought to be boundaries of conceptual acceptability, whether in fact there already exist such boundaries of a systemic kind, but of a sort not as yet commonly recognized, or whether there is any way to enforce such boundaries in order to encourage the development of a discipline so it may become substantially more than an endlessly proliferating and ramifying set of mere opinions, as a number of leading philosophers have complained¹⁹—these are fundamental questions to which philosophy as a negative science seeks to respond and, at least in part, to answer.

Consequences of the human drive to transgress beyond the limits of reference and meaning

The human urge to transgress the boundaries of possible reference and meaning is unfortunately not confined to purely intellectual philosophical discourse. The framework-transcending drive that disregards and seeks to violate the boundaries of metalogical horizons, attempting to breach limits of what is possible and meaningful, has consequences that extend considerably beyond the highly abstract theoretical domain considered in this paper.

The systemic and propagating nature of the errors we have touched upon is responsible for the pervasiveness and the spread of those errors. The compulsion to engage in what I’ve called ‘metalogical projection’ has implications not only for philosophy, but serious consequences of both a psychological and behavioral nature. Among these are those that affect political and religious ideologies, leading people deceptively to posit and situate what they desire in an illusory realm beyond the limits of possible reference and meaning. We see this in our species’ urge to reify horizon-transgressing delusions of many kinds, all-too-often resulting in pathological patterns of

¹⁹ For commentary and an overview of some of the authors who have made this claim, see Bartlett (2021, Part I: “Why Philosophy Has Made No Progress and How It Can”).

thought and behavior that are highly destructive, bringing about much human as well as non-human suffering.²⁰

Due to the systemic and propagating nature of metalogical projection, philosophy undertaken as a negative science may offer error-eliminating benefits not only for the discipline of philosophy itself, but benefits that bring about a better understanding and contribute to the potential resolution of some of humanity's most painful problems.

Readers interested in an examination of the psychological and behavioral consequences of the systemic and propagating errors described in this paper are directed to other publications by the author.²¹

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²⁰ See Bartlett (2002, 2005, 2006).

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