TRANSCENDENCE AND NON-CONTRADICTION

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Abstract: This article is an inquiry into how the relationship between the principle of non-contradiction and the limits of thought has been understood by thinkers as diverse as Hegel, Heidegger, Levinas, and Graham Priest. While Heidegger and Levinas focus on the question of temporality and Priest takes a formal approach, all these philosophers effectively maintain that the principle of non-contradiction imposes a restriction on thought that disables it from adequately accounting for its own limits and thus what lies beyond those limits, the implication being that the violation of the principle is necessary for such an accounting to take place. However, the ultimate argument here is that, contrary to Priest's interpretation, Hegel's philosophy can be convincingly read as supporting the idea that the mind's ability to go beyond any particular limit of thought can actually be said to involve an adherence to a normative demand to locate and dispel the contradictions that emerge through the very setting of determinative limits. This is a non-formal consistency that evinces a "logic" that is unknowingly followed by the Heideggerian and Levinasian phenomenological philosophies of transcendence.

I. INTRODUCTION

The principle of non-contradiction, the principle that a proposition and its negation cannot both be true, has been regarded as fundamental to rational argument since the time of the ancient Greeks. First explicitly formulated by Aristotle, it is implicit in arguments put forward by some of his predecessors, including Plato and Parmenides. Heidegger claims that this principle is integral to what he calls "Western metaphysics." It is integral to the "metaphysical" understanding of time and being in terms of presence and the constancy of entities that *are*. This understanding involves an "oblivion" of the question of the meaning of being, of the *being* of the entities that *are*. For Heidegger, being as such is not a type of entity or fundamental layer of substantial "beingness"; it is "*the transcendens pure and simple*" (Heidegger 1978, 62), the transcendence of entities. The "is" that is not a "what" transcends the "what" of the "what is." Thus, for Heidegger and certain post-Heideggerians, adherence to the principle of non-contradiction prevents thought from going beyond the limits imposed by a metaphysics based on presence and the extant constancy of identity.

The debilitating limitations that the principle of non-contradiction imposes on thought have been diagnosed and decried in various ways by a number of thinkers. The purpose here is to explore the works of Heidegger, Levinas, Hegel, and Graham Priest in order to cast light on the question of whether transcendence necessarily involves an irrational violation of the principle of non-contradiction or whether arguments in favour of transcendence actually appeal, explicitly or implicitly, to a development and radicalization of that very principle. The response to this question will begin with an analysis of the way in which phenomenologists such as Heidegger and Levinas have posited non-contradiction as the basis of the enclosure of immanence and presence, implying that the overcoming of this enclosure violates non-contradiction. This will lead to a discussion of Graham Priest's argument that there are self-referential true contradictions at the limits of thought that produce a structure of "inclosure" that involves transcendence, a structure into which he fits the arguments of Heidegger. Priest utilizes Gödel and Hegel, albeit in very different ways, to reinforce his commitment to paraconsistency. This use will then be discussed with a view to ascertaining whether Priest is right to claim that the incompleteness theorem of Gödel and the dialectic of Hegel suggest models of transcendence that violate the principle of non-contradiction or whether they in some way confirm that principle. The relationship to transcendence and non-contradiction of the Hegelian notion of reason will then be clarified on the basis of the results of the foregoing argument. The ultimate aim is to demonstrate the way in which Hegel's "logic" indicates how a rigorous adherence to a non-formalistic version of the principle of non-contradiction actually leads to transcendence rather than forbids it, and how a similar "logic" can be discerned as surreptitiously at work in Heidegger's and Levinas's notions of transcendence.

II. THE TEMPORALITY OF NON-CONTRADICTION

A number of "phenomenological" thinkers regard the principle of non-contradiction as something that restricts thought to the enclosure of the immanently given and stifles all transcendence. Heidegger and Levinas, despite their differences, share an understanding of non-contradiction as being embroiled in a logic of identity that either eliminates time altogether or involves conceptualizing time on the basis of the presence and constancy of phenomena. They also share a critical stance towards forms of thought that are restricted to the constancy of identity and advocate alternative forms of thought that are open to the transcendent, whether the transcendent be being itself or singular otherness.

For these thinkers, the principle of non-contradiction underlies the temporal fixity of the phenomenal realm of objects present to a detached observing "scientific" consciousness. Thought must transcend this realm if it is to apprehend, in Heidegger's case, the lived experience of being and non-being, or, in Levinas's case, the encounter with the singularity of the other person. Before looking at Priest's attempt at formalizing the violations of the principle of non-contradiction that such transcendence involves, and before looking at Hegel's earlier attempt at conceptualizing similar violations, it is necessary to elucidate the relationship between temporality and non-contradiction in the form of both Heidegger's notion

of the lived existence that transcends objectified presence and Levinas's notion of the communicative act addressed to the other that transcends the realm of objectified "synchrony" in which the communicated content resides.

II.A. HEIDEGGER'S TEMPORALITY OF TRANSCENDENCE

Heidegger claims that his philosophical concern with the question of being necessarily involves violating the principle of non-contradiction (Heidegger 2000, 25–27). It is impossible to talk about the being of entities—which is itself not an entity, being beyond all entities—without doing this. The "nothing" that is beyond all entities cannot be expressed other than in terms of the "something" that it is not. To ask what being is is to treat being as a "what," an entity. The same applies to asking what nothing is. Any talk of what transcends all whatness, all entities, involves paradox and self-contradiction. This entails that to follow the principle of non-contradiction is to be restricted to the immanence of the ontical realm of entities and to be closed-off from ontological transcendence.

For Heidegger, the principle of non-contradiction and its attendant oblivion of being rest on an understanding of time based on the notion of presence (Heidegger 2006, 350). Non-contradiction can only be operative as a principle on the supposition that time is a succession of discrete states of presence. This is an objectified time whose moments are representable to a detached observing consciousness. It underpins the presentation of entities as present-at-hand [*vorhanden*] objects abstracted from their worldly significance and rendered amenable to analysis. It takes the form of an endless series of "nows," representable as a measurable linear spatial ordering. The only residue of non-spatial irreducibly temporal temporality in this conception of time is its directionality and irreversibility. Heidegger argues that the latter can only be explained as a derivation from the originary [*ursprünglich*] temporality of lived existence [*Dasein*] (Heidegger 1978, 478–479). This originary temporality of authentic *Dasein* is not an endless series of states of presence wherein the past is a past present and the future a future present. The temporality of individual existence is inherently futural and finite. The contingent "thrownness" of the situation in which the individual finds itself (the past) yields possibilities (the future) for action (the present) that are bounded and rendered significant by the individual's eventual impossibility, its inevitable death. Time as an endless series of states of presence is the temporality of the merely ontical realm of what is, of entities that are. The temporality appropriate to ontological transcendence, the temporality open to the being as such that is beyond the entities it is the being of, is the finite temporality of lived individual existence. This authentic finite temporality that Heidegger calls "being-towards-death" is the temporal medium in which *Dasein* is confronted with its own being and non-being, a being and a nothing that are the transcendence of ontical immanence.

The temporality of non-contradiction is the spatialized, objectified time that is a measurable sequence of present moments. Such a sequence is akin to what McTaggart calls "the B-series" (McTaggart 1908, 456–473). The events in this series are permanently and unchangingly before or after certain other events. The "B-series" is not as fundamentally temporal as the more primordial "A-series." The

latter is the ordering of events that are constantly shifting in relation to the moment of presence. Future events move steadily closer to the present and past events move steadily further from it. Only the A-series is genuinely temporal, because only it involves an irreducibly temporal becoming. The static B-series is derivative of and dependent on the A-series in order to be temporal at all rather than merely spatial. Talk of "before" and "after," as opposed to spatial categories like "right" and "left," only ultimately makes sense with reference to the ever shifting A-series.

McTaggart argues that the A-series violates the principle of non-contradiction and that, as the A-series is the only irreducibly temporal form of time and as that which is contradictory cannot be real, time is an illusion. The A-series, in which events gradually move from future to past, is contradictory, because any event in it is both present and not-present, future and not-future, past and not-past. The possible objection that there is no contradiction here, as no event in the A-series is present and not-present (i.e., future or past) *at the same time*, is dismissed by McTaggart on the grounds that it involves the circularity of using the A-series to justify the consistency of the A-series. To argue that it is not contradictory to attribute incompatible tenses to an event, because an event *is* present, *was* future and *will be* past, is to rest the non-contradictoriness of the A-series on nothing but the A-series itself. The circularity or infinite regress implicit in the reference to what is effectively a meta-A-series leads McTaggart to regard the "at the same time" proviso as an illegitimate means of eliminating the contradiction at the heart of the concept of time. For McTaggart, what is referred to as "time" can only be conceived in a non-contradictory manner if it is reduced to being an atemporal series (the "C-series"), an ordering that is purged of irreducibly temporal characteristics, such as tense and irreversible directionality.

Although both Heidegger and McTaggart regard the linear succession of untensed moments as a de-temporalized derivation from a genuinely temporal conception of time, their determinations of the nature of the latter are radically different from each other. Where the two conceptions of temporality differ is principally in the fact that the A-series remains a measurable series of discrete moments whereas authentic existential temporality forms a non-sequential unified whole. For Heidegger, the time-series of present-at-hand moments is a de-worlding abstraction from the "world-time" of human significance, which itself ultimately derives from the authentic temporality of individual existence. Heidegger characterizes world-time by what he calls "datability," meaning that its moments can only be appropriately referred to by means of indexical terms, such as "now," "then" and "on that former occasion" (Heidegger 1978, 459), whose referents shift in relation to the singular position of their enunciation. Statements about moments of a tensed time-series or the "datable" significance of world-time rely on the use of indexical terms whose relativity would not be appropriate in statements about the objectively fixed moments of the B-series or a representable present-at-hand temporal ordering. World-time is thus itself a manifestation of the A-series, but, for Heidegger, it ultimately rests on a more fundamental non-sequential existential temporality.

In the non-serial unified whole of authentic individual temporality, the past, present and future are not exclusive determinations through which events conceived as states of presence pass. Authentic *Dasein* is not fixated on the present and is not

a present-at-hand entity; it is the bearer of a temporality that transcends the present and all presence. This temporality that constitutes authentic *Dasein* is an opening out onto entities and ultimately onto being as such. This opening makes possible *Dasein*'s awareness and purposiveness. The present is not the basis of this temporality, but is merely one "dimension" or aspect of it, the other two "tenses" constituting the others. The past, present, and future are referred to as three "dimensions" of temporality rather than as tenses. The ordinary time of a tensed succession is referred to by Kant as one-dimensional (Kant 1993, 56). The three temporal dimensions are not consecutive, but exist together as foundational or "equiprimordial" dimensions of *Dasein*'s unity that affect each other reciprocally. Possibility, action, and the pre-given situation illuminate and reveal each other, forming what Heidegger calls "the ecstatic unity of temporality." The past, present and future as dimensions of authentic temporality, rather than tenses of a shifting time-series, are referred to by Heidegger as "ecstasies," because they each have the characteristic of going beyond themselves. In stepping out of themselves, the future, past, and present open up horizons in the form of a "towards-something," a "back-to-something," and a "being-encountered-by-something" respectively (Heidegger 1978, 377). Despite the purported "equiprimordiality" of the three ecstasies, in the authentic temporality of "being-towards-death" the future is privileged. This is because the future is ultimately closed to *Dasein* and in so being it reveals its finitude as the "possibility of nullity" (Heidegger 1978, 378–379). The possibility of nullity is the revelation of transcendent being. The ecstatic nature of authentic temporality involves not only the transcendence of presence in the narrow sense, but also the transcendence of entities as such. Heidegger echoes his earlier statement, "*Being is the transcendens pure and simple*," when he describes temporality as "the ἐκστατικόν [ekstatikon] pure and simple" (Heidegger 1978, 377).

For Heidegger, the infinitude of an endless series is closed-off from ontological transcendence and restricted to ontical immanence, an immanence that it absolutizes. This "ordinary" conception of time as a series of moments of presence is the temporal basis of the presentation of entities in the form of identity and constancy. It is thus also the temporal basis of propositions that abide by the principle of non-contradiction. Heidegger maintains that the "ordinary" time of present-at-hand [*vorhanden*] moments is an abstracted and objectified derivation from the "world-time" of "ready-to-hand [*zuhanden*]" practical significance. The latter involves a tensed becoming which is not graspable within the non-contradictory terms of an atemporal fixed conceptuality. The world-time of lived significance is ultimately made possible by the temporality of lived existential finitude, a temporality that is an "ecstatic" opening onto entities and onto the transcendent being that underlies them. The being-outside-oneself of ecstasy and the being-beyond-oneself of transcendence violate a principle of non-contradiction that restricts thought to the presence of entities.

According to Heidegger, the original formulation of the principle of non-contradiction lies at the inception of the metaphysical determination of being and time in terms of presence. In ancient Greek philosophy the principle is invoked and wielded against the reality of temporal becoming. Heraclitus is reported to have held that everything is always in flux and that concomitantly everything is and is

not what it is. Hence the reality and ubiquity of temporal becoming leads to the contradictory doctrine of the unity of opposites. In contrast, Parmenides denies the reality of time and change by using a logic that implicitly prohibits contradiction. It is not possible for anything to be anything other than what it is and it is not possible for anything that *is* to not be. Thus what *is* eternally is and cannot have come to be or cease to be, as there is no non-being. Plato's prohibition of contradiction involves an arresting of time in a synchronic presence. He writes: "[N]othing can . . . be in two opposite states, in the same part of itself, at the same time" (Plato 2000, 131). Aristotle is the first philosopher to explicitly formulate and defend the principle of non-contradiction, but his formulation echoes the Platonic invocation of simultaneity and co-presence in the form of the "at the same time" proviso. Aristotle writes that "it is impossible for contradictories to be at the same time true of a given thing" (Aristotle 1960, 83) and that it "is impossible for the same thing at the same time to belong and not to belong to the same thing" (Aristotle 1960, 68). The dependence of the principle of non-contradiction on the arrested temporality of presence is confirmed by Aristotle's invocation of actuality as a key qualification of that principle. Two contradictory attributes cannot be actual at the same time, but they can be potential at the same time (Aristotle 1960, 77). It seems that for the ancient Greeks temporal becoming has to be frozen into a state of presence for the principle of non-contradiction to operate.

The question then arises as to whether the principle of non-contradiction necessarily requires the "at the same time" proviso. For McTaggart to demonstrate the contradictoriness of time he has to utilize a prohibition of contradiction that is bereft of temporal provisions. Temporal conditions assume the reality of that which is in question in McTaggart's argument and are thus inadmissible. If the principle of non-contradiction necessarily involved temporal conditions, then McTaggart would be using a time-dependent rule in order to prohibit the possibility of time. Kant argues that the temporal simultaneity proviso is an unnecessary synthetic addition to the principle of non-contradiction, insofar as that principle is at the basis of all analytically valid propositions (Kant 1993, 149–150). Thus Kant reformulates the principle in terms of the analytic relation between subject and predicate, wherein either the predicate is contained within the subject, which is a sufficient condition for a true analytic statement, or the concept of the subject does not preclude the predicate, which is a necessary condition for a true synthetic statement. As this reformulation restricts the principle of non-contradiction to the subject-predicate relation, it should not apply to cases where two mutually exclusive predicates are synthetically attributed to one and the same subject when that subject does not preclude either of them, yet Kant notes that such cases are indeed contradictory if the exclusive predicates exist in the same subject at the same time. Furthermore, Kant claims that the notion of temporal succession is a precondition for finding change comprehensible and non-contradictory. He writes: "It is only in time that it is possible to meet with two contradictorily opposed determinations in one thing, that is, after each other" (Kant 1993, 55). Thus it appears that Kant is employing two principles of non-contradiction, one concerning the subject-predicate relation, which broaches no temporal conditions, and the other concerning the relation between predicates, which requires the simultaneity proviso in its prohibition of

contradiction. As McTaggart's argument against the reality of time rests on the mutual exclusivity of predicates, i.e., an event cannot be both future and past, his argument employs a version of the principle of non-contradiction that depends on the very notion of temporal succession that he is denying.

II.B. THE PERFORMATIVE AND THE CONSTATIVE IN LEVINAS

For Heidegger, the finite temporality of lived existence can only be thought in a manner that violates the principle of non-contradiction, a principle that lies at the basis of a way of thinking that is restricted to the immanence of the presence of entities and its attendant "ordinary" conception of time as understood in terms of presence. The phenomenological critique of the temporality of non-contradiction is further developed by Levinas, through his distinction between the "diachronic" time of the performative act of communication and the "synchronic" time of the semantic content of what is said. Levinas regards the principle of non-contradiction, and the "formal logic" that it underlies, as restricting thought to the objectified presence of the synchronic realm, a realm in which the singular alterity of the other person is elided.

In his essay on Levinas, "Violence and Metaphysics," Jacques Derrida comments, echoing Heidegger, that the "logos (or the time of logic), which is dominated by the principle of noncontradiction, [is] the cornerstone of all metaphysics or presence" (Derrida 2001, 272–273). Derrida claims that Levinas's philosophy of alterity enacts a "dislocation" of the logic of identity and non-contradiction, of a philosophical thinking restricted to the form of presence as phenomenality (Derrida 2001, 101–102). According to Derrida, "the logic of noncontradiction . . . is contested in its root" by Levinas's notion of the non-phenomenal phenomenon of the radically other (Derrida 2001, 112–113). The radically other is unthinkable to a form of thinking that reduces the thinkable to the form of phenomenal and temporal presence, the form of identity uncontaminated by non-identity.

According to Levinas, the radical alterity and singularity of the other person is effaced whenever the latter is incorporated and domesticated into the realm of the presentable. This realm is the unity of consciousness, the Kantian transcendental unity of apperception, wherein phenomena are gathered together in the identity of the "I think." This enclosed totality of phenomenality is referred to by Levinas as "egological," because all diversity is here reduced to being a collection of representations observed by a Cartesian knowing subject (Levinas 2006, 138–139). Such an enclosure is not necessarily solipsistic; a shared phenomenality in which subjects and their representations coincide in a transparent intersubjective space is no less characterized by immanence and internality (Levinas 2006, 140). The irreducible otherness of the other, an unrepresentable singularity that can never coincide, is transcendent and external; it can only be encountered as a breach in the phenomenal totality and not observed as an object. Such a breach occurs in the face-to-face relation, the communicative act wherein the non-phenomenal living expressive aspects of the face of the other undo its objectified phenomenal form (Levinas 1969, 66). For Levinas, "formal logic," with its principles of identity and non-contradiction, is a means through which a diverse manifold is gathered

together, formulated, and represented to an observing consciousness (Levinas 1969, 289–290). The principle of non-contradiction is part of the formulation of immanence and the prohibition of transcendence. It is violated by the transcendent relationship to the other, a relationship to that which in its uniqueness is absolved from all relations, from all relations between commensurable entities within any phenomenal totality (Levinas 1969, 50–51).

The coherent enclosure of phenomenality involves a temporality that Levinas terms "synchrony." This is the gathering together of diversity into the field of presentability and representability that constitutes a unified consciousness, whether individual or social. It is the time of immanence and the "at the same time" of non-contradiction, an endless succession of unified and punctual states of presence. Even the past and the future are in this form conceived in terms of presence, being brought together and re-presented as what is recollected and predicted respectively.

Synchrony is contrasted with what Levinas terms "diachrony," which is time as a lapse and a flow excessive to any moment of presence it brings about (Levinas 1998, 9). Diachrony is the dimension of time that resists all synchronization and is in this way the time of transcendence rather than immanence. It is the radical dispersal of time such that there can be no contemporaneity or simultaneity. The radical alterity and singularity of the other is temporally incommensurable to the subject and so cannot be present to it (Levinas 1998, 10). The encounter with the other can only occur through the diachrony of transcendence, a diachrony that manifests itself as a disjunctive break in the coherence of the synchrony of immanence.

Levinas claims that every act of linguistic communication involves a disjuncture between the diachrony of the singular act, addressed to the other, and the synchrony of the statement that is produced by that act. This is the distinction between what Levinas calls the "saying" and the "said," between the act of uttering and the completed utterance or proposition. Propositions assemble together the synchronous realm of phenomenal objectivity present to a knowing subject, a realm that covers over their enunciated origins. However, in the communicative encounter, just as the other's expressive life undoes the phenomenal form it presents, the "saying" can undo the synchronous formality of the "said" (Levinas 1998, 155).

Levinas's paradigmatic example of the disjuncture between the saying and the said is the supposed contradictoriness of any argument in favour of scepticism. The familiar refutation of scepticism affirms that it is self-defeating to proclaim the impossibility of knowledge as this impossibility would include the very proclamation itself. In refuting all knowledge scepticism refutes itself. However, the contradiction in this case lies not in the statement itself, but between the statement and the act of making it. It is a performative contradiction, a contradiction between the performative saying and the constative said. The saying is negated by the said. Yet if the saying and the said are not contemporaneous, as Levinas claims, such a performative contradiction does not violate the principle of non-contradiction, insofar as the latter contains the simultaneity proviso.

Levinas suggests that this disjunctive non-contemporaneity between the saying and the said is why scepticism keeps returning unscathed from charges of being contradictory. He writes: "If . . . skepticism has the gall to return . . . it is because in

the contradiction which logic sees in it the 'at the same time' of the contradictories is missing" (Levinas 1998, 7). If the temporalities of the saying and the said are incommensurable there can be no contradiction between them. This means that a performative contradiction is impossible, as the principle of non-contradiction cannot apply to the relationship between the performative and the constative. This would entail that a performative contradiction is not a contradiction unless it is reassembled as a constative contradiction.

The idea that contradictions can only occur in the immanence of constative synchrony may seem to conflict with what Levinas says elsewhere about transcendence violating the principle of non-contradiction. When talking about transcendence Levinas's writings are replete with self-contradictory formulations. This is because, for Levinas, contradictions within the said are a residue of the temporal disjuncture between the saying and the said (Levinas 1998, 7). The breach of totality takes a contradictory form within totality. Contradictions can only occur, and thus can only be normatively prohibited, within a synchronous totality. This idea that the principle of non-contradiction can only apply to the constative realm will here be challenged in a later section dealing with Hegel.

Heidegger and Levinas regard the principle of non-contradiction as being embroiled in a temporality founded on the synchronous unity of presence. They regard transcendence as violating the principle of non-contradiction, or at least as producing contradictions within language when it interrogates its own limits.

III. THE DOUBLING OF TRUTH AT THE LIMIT

Both Heidegger and Levinas maintain that defying the principle of non-contradiction involves defying formal logic as such. In contrast, Graham Priest takes a formal approach to transcending the strictures imposed by that principle. Priest claims that the principle of non-contradiction does not apply universally and that there are many cases of true contradictions, propositions whose affirmation and negation are both true. This is particularly the case with propositions through which thought self-referentially addresses its own limits. In his book *Beyond the Limits of Thought*, Priest proposes boiling down all the paradoxes that occur when thought broaches the theme of its constitutive limits to a formal structure that he calls the "Inclosure Schema," wherein statements that refer to the limits of the system of thought they are part of both enclose and transcend that system (Priest 2002, 133–136). He demonstrates how this schema formalizes some of the arguments put forward in an informal form by Heidegger and Hegel. For Priest, transcendence takes the logical form of a self-referential true contradiction.

The affirmation of scepticism that Levinas mentions is taken by Priest to involve one such self-referential true contradiction. However, he claims that it is merely a form of the well-known liar paradox: "This sentence is false." If the sentence is true it is false and if it is false it is true. The sentence is nonsensical to a logic founded on the principle of non-contradiction, but for Priest it is a case of a true contradiction, a statement that can be simultaneously both affirmed and negated with equal validity. Priest does not accept the substantive arguments in favour of scepticism; he merely holds that the purportedly self-refuting nature of the assertion

of a sceptical position is not a valid argument against scepticism, provided that one accepts that there can be true contradictions (Priest 2002, 53–55).

However, when Priest discusses the sceptical arguments of Sextus Empiricus he is dismissive of the latter's own defence of scepticism from the charge of being self-refuting. Priest accuses Sextus of illegitimately using time to avoid the self-contradiction of asserting scepticism. Sextus claims that the sceptic puts forward a sceptical thesis at one moment and then abolishes it at another moment. Priest argues that Sextus is simply being irrational here, as "the rational force" of an argument "is not a time-dependent matter" (Priest 2002, 47). While the "time" referred to is superficially merely a succession of present moments, the disavowal of the sceptical statement by the very sceptic who made it is redolent of the Levinasian disjuncture between the diachronous temporality of the saying and the synchronous temporality of the said. For temporal reasons both Sextus and Levinas do not regard the assertion of scepticism as involving a contradiction, true or otherwise. As has been argued, Levinas effectively claims that the principle of non-contradiction only applies to the synchronic realm governed by formal logic and that it only makes sense to call something a contradiction if it resides within that realm.

Priest's claim that rationality is independent from time is in this context tantamount to being an assertion that rationality is independent from the position of enunciation of any proposition. This depends on rationality being identified with formal logic. The rationality of an assertion is independent from the act of the assertion. In Levinasian terms it is a merely formal measure within the synchronous immanence of the given, irrespective of the diachronous constitution of the latter. Levinas argues that the rationality of the synchronic realm is derivative of a more fundamental "original rationality," one which names the exposure to the other in the face-to-face relation as lying at the basis of communication and intelligibility (Levinas 2006, 141–142). Priest tacitly recognizes this when he claims that when anyone, sceptic or otherwise, makes an assertion, she commits herself to upholding its rationally justifiable truth, lest the "social significance" of the communicative act be lost (Priest 2002, 47). However, Priest's project is chiefly an intervention within formal logic, and does not aim at exceeding its bounds *qua* formal logic. Anyway, it is here worth recalling Levinas's suggestion that contradictions within the realm of formal logic are often a residue of the disjuncture between the diachronous act of saying and the synchronous said proposition.

While the temporal disjuncture between the performative and the constative is characteristic of any utterance, not all statements evince a contradictory form. In fact, it could be ventured that most actually occurring utterances do not contradict themselves. Nevertheless, of the contradictory utterances that do occur, some are contradictory due to a self-referentiality that amounts to an interrogation of the limits of meaning *qua* constative synchrony. In referring to the constitutive limits of the synchronous totality, such utterances point beyond them to the singular saying addressed to the singular other.

It is reasonable to distinguish these contradictions from contradictions that are nothing more than sheer nonsense. Priest is an advocate of the reformation of formal logic to accommodate a distinction between true and false contradictions. Paradoxes of self-reference are examples of what Priest calls "dialetheias," true contradictions

("double-truths"), propositions whose affirmation and negation are both true. Of course, incorporating dialetheias into formal logic, enabling it to take them into account, involves jettisoning the principle of non-contradiction, or at least its universal applicability. It also requires tweaking the principle of truth-functionality to allow for four possible truth values rather than the two that are allowed in classical logic. Thus a proposition is not restricted to being either true or false; it can be true, false, neither, or both. This requirement is needed in order to circumvent the charge that everything follows from a contradiction. According to the principles of classical logic, the acceptance of a contradiction as true leads to the promiscuous entailment that logicians call an 'explosion.' If both p and not-p are true then p is true, which in turn entails that p or q is true (where q is any proposition), but as not-p is true this means that q must be true ($p \lor q, \neg p \vdash q$); so accepting the truth of both p and not-p entails acceptance of the truth of any sentence q. This principle of explosion only works in a bivalent logic where there are only two possible truth values, true or false, which are exclusive and exhaustive. In a paraconsistent logic, which allows for the evaluation of a proposition as *both* true *and* false, the truth of not-p does not exclude that of p, so the truth of not-p does not entail that the truth of p or q leaves us with the truth of q (Priest 2004, 26). Dialetheism is the view that there are some true contradictions and that they do not lead to explosion.

Priest claims that dialetheias most commonly occur when thought is thinking its own limits. His "Inclosure Schema" is an attempt to assign a formal logical structure to the contradiction that is produced when thought transcends its limits in the very act of determining them. This schema utilizes the method of diagonalization pioneered by Cantor. In general, diagonalization produces from a certain defined totality of elements an element that, though being by definition a member of that totality, differs from each of its actual members and so turns out to be actually not a member of that totality at all. Cantor used the method to show that there are non-denumerable sets, sets whose members cannot all be correlated with a natural number. For example, an infinite square matrix with the columns representing natural numbers and the rows representing a complete denumerably infinite list of denumerably infinite sequences of zeros and ones forms what ought to be a complete system of bijective correlations between the elements of the sequences and the natural numbers, with each sequence itself given a natural number. However, a sequence of zeros and ones that is not one of the list of all sequences of zeros and ones can be constructed by reversing each of the elements (from one to zero and vice versa) that lie on the diagonal of the matrix, such that the reversed diagonal sequence differs from each sequence in the list in the nth element of the nth sequence. As it includes the sequence that is diagonalized out of the list, that differs from every member of the denumerably infinite list, the set of all sequences of ones and zeros is non-denumerable, meaning that it is larger (has greater cardinality) than the denumerably infinite set of natural numbers. The diagonalization method is also used to demonstrate the non-denumerability of real numbers and the power-set (the set of all the subsets) of any infinite set.

The diagonalization method yields a contradiction; the diagonal set is and is not on the list it is by definition a member of. However, this contradiction is not a Priestian true contradiction at the limit of thought; it is a disproof of the supposition

that certain sets are denumerable. This disproof is a proof that such sets are non-denumerable and are thus uncountably infinite. It is a proof by contradiction, which assumes the principle of non-contradiction and assumes that all contradictions are false. The supposition that such sets are denumerable is shown to produce a contradiction and is thereby shown to be false. The transcendence of the denumerable depends on adhering to the principle of non-contradiction, not violating it.

Despite this, Priest's "Inclosure Schema" utilizes diagonalization in order to demonstrate that there are true contradictions in the form of self-referential paradoxes that arise in the thinking of thought's constitutive limits. He regards diagonalization as giving a formal basis for comprehending transcendence. He writes: "[T]he notion of diagonalisation provided the cornerstone of an adequate understanding of boundary-transcendence" (Priest 2002, 127). Diagonalization produces an element that is both inclusively within a totality and exclusively outside it, that both encloses the totality and exposes it. The limit is itself an opening. Priest embraces this contradiction, unlike Cantor, who is impelled by it to define the diagonal set negatively in relation to the totality in question, e.g., as non-denumerable.

Priest's schema shows the conditions under which the output of a diagonalizing function both encloses and transcends a certain totality. He calls such a contradiction an "inclosure contradiction," a neologism utilizing the ambivalence of the English prefix "in-", a prefix that can either mean "within" or that can negate the term it is prefixing (Priest 2002, 134). The "Inclosure Schema" is an elaboration and extension of Russell's schema for formally depicting paradoxes of self-reference such as his own set of all sets that are not members of themselves being and not being a member of itself. In Russell's schema, if all members of x have the property φ, and if there is a function δ such that $\delta(x)$ has the property φ but is not a member of x, then under the assumption that there exists a class Ω of all things that have the property φ, it must be concluded that $\delta(\Omega)$ has and does not have the property φ. Priest assigns the term "Existence" to the supposition that the totality Ω exists, the term "Closure" to the situation in which $\delta(x)$ lies within Ω, and the term "Transcendence" to the situation in which $\delta(\Omega)$ lies outside Ω. The diagonalizing function δ is defined such that its application to any set yields an output that is different from each of the set's members (Priest 2002, 129–130). For Priest, Russell's schema is a formula for the true contradictions involved in many of the paradoxes of self-reference. The schema involves a contradiction only if the conditions within it are accepted; Russell himself claims to have resolved the paradoxes in question by denying the existence of the totality Ω. Priest accepts the conditions and develops his own schema out of Russell's schema through a modification that extends its reach such that it can cover the paradoxes of definability that the original schema does not cover. The modification involves adding to the schema a second property ψ that characterizes both Ω and x, so that the term "Existence" is assigned to the supposition that the totality Ω (of all things that have the property φ) exists *and* that Ω has the property ψ, and that the "Closure" and "Transcendence" situations are conditional upon x not only being a subset of Ω, but also having the property ψ. This modification enables the diagonalizing function δ to operate on only those subsets of Ω that have the property ψ. When Priest's schema applies to the paradoxes covered by Russell's schema all the subsets of Ω (i.e., the power set of Ω) have the property ψ (Priest 2002, 134).

Priest claims that the violations of the principle of non-contradiction to be found in the writings of Heidegger and Hegel can be made to fit the Inclosure Schema. Heidegger's notion of the being of entities that is not itself an entity, that is thereby identical to the nothing it is the opposite of, is inexpressible in propositional language ("the language of metaphysics") and yet is nevertheless expressed by Heidegger in such language. In terms of Priest's schema, Ω is the totality of things that are expressible, i.e., that have the property φ ("is expressible"), $\psi(x)$ is such that $x = \Omega$, and the diagonalizer δ applied to Ω is a Heideggerian statement about being (e.g., "*Being is the transcendens pure and simple*"). Thus the diagonalizing function $\delta(x)$ is and is not a member of Ω, which means that the fact that being is beyond the limits of the expressible ("Transcendence") is itself expressed ("Closure") (Priest 2002, 245).

However, it must here be recalled that Heidegger regards the principle of non-contradiction as foreclosing the thinking of being on the grounds that it formally sets up entities as objects present to an observing consciousness and involves an understanding of time on the basis of presence. He also regards formal logic as being by definition governed by the principle of non-contradiction (Heidegger 2000, 25). The question then arises as to whether the tweaking of formal logic to allow for some true contradictions would enable a Heideggerian embrace of dialetheism. Priest himself suggests that it would (Priest 2002, 248). This suggestion involves the supposition that it is merely the principle of non-contradiction and not formal logic as such that forecloses the thinking of being. Priest does not take into account the temporal dimension of Heidegger's critique of non-contradiction. This is despite the fact that he quotes the following statement in which Heidegger considers the identity of being and nothing in terms of the phenomenology of temporal finitude: "Being itself is essentially finite and reveals itself only in the transcendence of Dasein which is held out into the nothing" (Heidegger 1993, 108). Priest expresses perplexity as to why Heidegger should hold that being and nothing are identical on the basis of this statement, but then goes on to offer his own interpretation of it such that "a being is, and can only be, because it is not a nothing" (Priest 2002, 242). This is a de-temporalized interpretation. The statement in question actually refers to the finite temporality of the being-towards-death of authentic human existence [*Dasein*], a futural ecstasis through which being as such is revealed in the confrontation with eventual non-being. Formal logic involves a de-temporalized synchrony in which time can only be conceived as a succession of synchronous presences, a linear succession that itself can only be conceived in terms of a spatialized synchrony. Priestian dialetheism is not itself a system of logic, but is rather a modification of "classical" formal logic to enable it to account for some very rare cases of veridical contradiction. Dialetheism does not alter the atemporal synchrony of formal logic. While it may be the case, as Levinas suggests, that contradictions within the synchronous realm constitute the residue of the incommensurability between a primordial transcendent temporality and the immanent synchrony of its propositional expression, dialetheism can at best amount to a formalization of the thinking of transcendence and not the thinking of transcendence itself. Formal logic treats propositions as given entities floating in the air Platonically, abstracted from the performative ground of their uttering. For Heidegger, in contrast, it is only

in terms of the singular activity of being-there [*Dasein*] that being, nothing, and transcendence can be conceived.

While Priest has a more formal approach than that of Heidegger and Levinas, all three thinkers concur that transcendence involves a violation of the principle of non-contradiction. The Priestian formalization of transcendence employs Cantorian diagonalization to demonstrate a necessary link between self-referential true contradictions and the breaching of the limits of thought.

IV. CONSISTENT INCOMPLETENESS

One of Priest's arguments in favour of dialetheism utilizes Gödel's first incompleteness theorem. This is despite the fact that Gödel's proof offers a response to certain self-referential paradoxes that involves maintaining the principle of non-contradiction. Instead of a sentence asserting its own falsehood, as in "the liar paradox," Gödel's theorem concerns a sentence that merely asserts its own unprovability within the particular formal system that produced it. This unprovability merely demonstrates the incompleteness of the formal system in question, and not anything paradoxical. By replacing "false" with "unprovable" Gödel effectively replaces inconsistency with incompleteness. Consistency is maintained at the cost of completeness and incompleteness is affirmed at the cost of inconsistency. This would appear to mount a challenge to dialetheism. Priest's use of Gödel's theorem to demonstrate the truth of dialetheism involves a rejection of what he calls the theorem's "limitative results" (Priest 2002, 228n2). However, it is precisely these results, the affirmation of the incompletion of certain types of formal system, that suggest an alternative model of transcendence to that provided by the notion of true inconsistency.

Gödel's first incompleteness theorem states that any particular consistent formal system in which elementary arithmetic can be performed is incomplete on the grounds that it includes propositions that are undecidable, that can be neither proved nor disproved, within the system. The proof proceeds by assigning a number to represent each of the statements in the system, constructing a provability predicate that would apply to all such "Gödel numbers" if the system were consistent and complete, and utilizing the technique of diagonalization to generate out of the system a Gödel number that is not a member of the set of Gödel numbers that have the provability predicate and whose corresponding statement, the system's "Gödel sentence," is a self-referential assertion of its own unprovability. The system cannot prove whether this Gödel sentence is indeed unprovable or not. Hence the system can be said to contain a true statement that it cannot prove, "true" according to the informal extra-systemic argument that the statement that asserts that it is unprovable within the system is indeed unprovable in that system.

Gödel's second incompleteness theorem states that any particular consistent formal system in which elementary arithmetic can be performed is incomplete on the grounds that it cannot prove its own consistency. There is a statement, expressible within the formal system in question, that asserts the system's consistency, but that cannot be proved by the system if the system is indeed consistent. This statement states, in the form of a chain of the relevant Gödel numbers, that there

is no sentence *A* for which there is a proof in the system for both *A* and not-*A*. As the first incompleteness theorem demonstrated the provability of the proposition "if *S* (the formal system in question) is consistent then *G* (its Gödel sentence is the case)," then the unprovability within the system of its Gödel sentence *G* implies the unprovability within the system *S* of the consistency of the system *S* (Franzén 2005, 48). The consistency of the system cannot be proved from within the system, but it may be proved by another stronger system that itself would then in turn not be able to prove its own consistency. While a system's consistency statement may be unprovable within that system provided that the system is in fact consistent, the "truth" of the system's consistency can be recognized through the extra-systemic informal observation that all the system's axioms are true.

Priest uses Gödel's incompleteness theorem to support dialetheism both by applying the theorem to the extra-systemic informal arguments that rely on what he calls "the naive notion of proof," a notion implicit in the procedures that characterize the workings of the conscious mind of the human mathematician, and by showing how the application of the incompleteness theorem to naive proof reveals such proof to be inconsistent (Priest 2006, 40). As has been mentioned, it is these informal procedures that determine whether a systemic statement is true or not, rather than merely provable within the system at hand. Priest argues that the naive informal proof procedures can actually be formalized and that such a formalized system would meet the conditions required for Gödel's theorem to apply to it. These conditions are that the system in question is one that "can represent all recursive functions and whose proof relation is recursive" (Priest 2006, 39), which effectively means that a certain amount of elementary arithmetic can be performed within it. In the formal system that formalizes the naive proof procedures and that fulfils the conditions for Gödel's theorem to be applicable, there is a Gödel sentence, a sentence that is unprovable in the system, but which, as it asserts its own intra-systemic unprovability, is true. As we have seen, the "truth" of the Gödel sentence is arrived at through extra-systemic informal naive proof procedures. However, in this case the system in question is precisely a formalization of those naive proof procedures such that their extra-systemic informality is converted into intra-systemic formality. This means that the informal "truth" of the Gödel sentence here is nothing other than its formal provability within the system that is the formalization of informal naive proof procedures. If the system is consistent then its Gödel sentence is unprovable within the system, but as this sentence is true according to naive proof, it actually *is* provable within the system that formalizes naive proof. The sentence is both unprovable and provable within the system. Priest takes this to imply that the naive proof procedures are inconsistent and that, as these procedures are the very deductive methods through which the truth of something is determined, there *are* some true contradictions and dialetheism is correct (Priest 2006, 44).

Priest thus claims that dialetheic inconsistency ensures the semantic closure of the naive notion of proof and "any (expressively) complete proof theory" (Priest 2006, 47). Gödel's theorem shows that semantic closure is impossible for consistent theories. The inherent limitedness of such theories can be transcended by informal "naive" semantic reasoning. Priest writes: "semantic reasoning about the theory (which . . . always allows us to transcend any consistent theory) cannot be represented

in the theory" (Priest 2006, 47). This semantic reasoning, whether in its informal or formalized form, is inconsistent and complete. This inconsistency allows the human mind to transcend the limits of consistent incompletion. Once again, the violation of the principle of non-contradiction seems to be on the side of transcendence.

However, it could be argued that dialetheic inconsistency disables the transcendence that Gödelian incompleteness promises, by re-importing closure and completeness back into the realm of the formally and recursively systematizable. Anti-mechanist interpretations of the implications of Gödel's theorem involve the idea that it shows that the human mind can go beyond what a recursive system can formalize. Priest points out that anti-mechanists, such as Lucas, rely on denying that the naive proof procedures of semantic reasoning can be formalized in a manner that renders them recursive, a denial based on the claim that as naive proof goes beyond the limitations of the incompletion of consistent recursive systems it must itself be inherently non-recursive in order to maintain its own consistency. Priest thus argues that this notion of the non-recursiveness of naive proof depends on a dogmatic axiomatic insistence on consistency; if dialetheic inconsistency were to be allowed there is no reason why naive proof could not be recursive. For anti-mechanists, the non-recursiveness of human conscious reasoning means that the mind transcends computability and is not a Turing machine, but Priest suggests that dialetheism, in making the recursiveness of such human reasoning possible, supports a mechanist understanding of the mind, one in which the mind is ultimately a sophisticated computer that is programmed to be able to process dialetheias when appropriate (Priest 2006, 42).

While Priest may claim that the post-Gödelian anti-mechanist insistence on the non-recursiveness of human thought depends on a dogmatic adherence to the principle of non-contradiction, it is certainly the case that such a reading of the implications of Gödel's theorem suggests a notion of transcendence that involves following the principle of non-contradiction rather than violating it, unlike the other notions of transcendence that have been discussed so far. The recognition in the informal consciousness of the human mathematician of a formal system's consistency involves transcending the limits of what the formal system can prove. A. W. Moore writes: "The upshot of Gödel's theorem is . . . this: given any sound axiomatic base for arithmetic, our very recognition that that *is* what it is . . . propels us beyond it, and enables us to recognize the truth of arithmetical statements that it cannot itself be used to prove" (Moore 2001, 177–178). Gödel's theorem implies that the conscious recognition of the limits of a formal system already involves transcending those limits.

V. INFINITY AS ACT:
RESOLVING PERFORMATIVE CONTRADICTION

The suggestion that one implication of Gödel's incompleteness theorem is that the human mind can transcend the limits of a formal system by consciously recognizing them recalls Hegel's critique of Kant, in which it is argued that consciousness of the limits of the knowable is already a move beyond those limits. Hegel claims that the very determining of a limit implies its transcendence. A limit can only be

determined in terms of its relation to "that which is *free from the limitation*" (Hegel 1989, 134). For the determinacy of a limit to be conceived, its own beyond must also be conceptualized within the same consciousness.

Hegel criticizes Kant for the self-refuting incoherence of claiming there to be a transcendent realm that exceeds the limits of human knowledge (Hegel 1991, 105). Kant's transcendental philosophy claims to outline the conceptual framework that constitutes the conditions of possibility of knowledge, restricting knowledge to objects of possible experience, the realm of phenomena, and rendering the transcendent realm of the noumenal thing-in-itself unknowable. When the faculty of reason [*Vernunft*] attempts to go beyond the limits of possible experience, beyond the strictures imposed by the merely analytical reason of the understanding [*Verstand*], it ties itself up in irresolvable contradictions, including those that Kant lists as the "four antinomies" of pure reason. It appears that for Kant transcendence leads to the defiance of the principle of non-contradiction, but unlike the other philosophers, from Heidegger to Priest, who make the same claim, Kant regards this as meaning that transcendence leads to error. Hegel finds Kant's project of determining the constitutive limits of knowledge that cannot be breached to be ultimately incoherent, not only because a limit of cognition must co-exist with its beyond, but also because the transcendental philosophy is embroiled in the vicious circle of a performative contradiction in not critically demarcating its own conditions of possibility, something it would not be able to do anyway without implicitly descending into an infinite regress of criticisms of criticisms, of meta-knowledge of meta-knowledge. In the "Introduction" to the *Phenomenology of Spirit*, Hegel advocates an immanently self-critical and self-referential methodology as a way of evading such a performative contradiction (Hegel 1977, 52–54).

While Kant argues that transcendent reason [*Vernunft*] leads thought to the erroneous contradictions of the "antinomies," Hegel reverses the valuation of the *Vernunft/Verstand* distinction in claiming that the contradictions that transcendent reason encounters are only erroneous from the point of view of an analytical understanding [*Verstand*] that is unable to consciously comprehend its own limits and in so doing transcend them. The understanding may consciously determine its own limits, as it does in the form of Kant's critical philosophy, but it cannot consciously comprehend that its own conscious comprehension of its own limits actually transcends them. For Hegel, the understanding is trapped in the false abstraction of the "one-sided" finitude of a way of thinking that cannot conceive of determinacy in terms of an interrelated whole, a one-sidedness that can be demonstrated to be ultimately incoherent and false by employing the dialectical method, which reveals any particular determination to contain its excluded opposite within itself. While for Kant the dialectic constitutes the logical structure of the "illusion" that reason enters into when attempting to apprehend the transcendent, for Hegel the dialectic is the logical method of revealing the truth *as* the transcendence of all the boundaries of the atomistic, unmediated, abstracted determinations that the understanding deals in.

Hegel's view is that the contradictions that transcendent reason gets itself tangled up in are a sign of its strength rather than its weakness. He criticizes Kant for claiming that the contradictoriness of the antinomies of pure reason is a product

of mere illusion. Kant assumes that when contradictions occur they can only be in the mind and not in the world, whereas Hegel maintains that contradictions are real (Hegel 1991, 91–92). The antinomies are presented by Kant as cosmological speculations in which the argument for either side of a dilemma entails the opposite side. While they may ostensibly raise the questions of whether the universe is endless in time and space or not, whether matter is infinitely divisible or not, whether there can be a free causality or not, and whether there is a necessary being or not, Priest argues that they all have the same fundamental structure, that of the self-referential paradox that occurs whenever thought tries to think the infinite (Priest 2002, 87). Each of the antinomies involves a particular condition that can be applied repeatedly, an "infinity generator" that ultimately generates an unconditioned limit that it both can and cannot be applied to.

Hegel regards the supposed insolubility of the Kantian antinomies as symptomatic of the blind-alley that thought is ultimately led into when employing the merely analytical reason of the understanding. This way of thinking, in which concepts are conceived as separable merely positive entities, leads to a spurious understanding of both finitude and infinity. When considered as something one-sided, as something abstracted and isolated from the finitude it is opposed to, the infinite takes the form of both an endless progress or regress towards the unreachable and of something that is bounded by its excluded opposite, the finite. This infinite is a spurious infinite, because it is actually finite. It never goes beyond the bounds of finitude and is itself bounded by the finitude it excludes, a binding that renders it finite, a finite infinite. The true infinite, the infinite that is actually infinite, is the dialectical mediation of the finite and the infinite that overcomes the abstract one-sidedness of each. It is not limited by its other as it includes the whole process of opposition and determining limitation within itself. The Hegelian dialectic is the methodological presentation of the true infinite. This infinite is the infinite within the finite, the truth of all finite determinations, the immanent self-transcendence of what is finite in the very act of its determination, the constitution of an identity through the incorporation of its opposite. This dialectical union of something with its opposite, the mediation of the same with its other, Hegel describes as "the relation to self which is not immediate but infinite" (Hegel 1989, 152). The true infinite as the infinite within the finite is an actual infinite, as opposed to the merely potential infinite of the endless progress. As it is the immanent overcoming of the limit determining any totality, the limit that itself entails its own transcendence, the true infinite is a limit that is also not a limit, in contrast to the mere unlimitedness that characterizes the spurious infinite. The setting of a limit in the act of determination is essential to the transcendence of any limit; the limit makes possible the unlimited. This aspect of Hegelianism is succinctly articulated by Priest when he writes: "one can apply the generator iff there is a determinate totality to which to apply it, but to be determinate is precisely to be bounded" (2002, 108). The true infinite is the true nature of each finite determination in that determinacy involves the same constituting itself through the other, or as Hegel puts it: "the genuine Infinite . . . consists . . . in remaining at home with itself in its other, or (when it is expressed as a process) in coming to itself in its other" (Hegel 1991, 149). While the true infinite manifests itself locally as the self-transcendence of each finite determination, at the global level of the infinite totality of all finite

determinations the true infinite manifests itself as itself, as the absolute idea that is the self-transcendence of the absolute totality, the absolute as its own transcendence. In terms of Priest's Inclosure Schema, this is the dialetheia at the limits of the thinkable, the diagonalizing function applied to the absolute totality ($\delta(\Omega)$).

Hegel's infinitist monism is presented as a response to the impasses of Kant's finitist dualism. Kant uses his distinction between phenomena and noumena to suggest a way of resolving the antinomies (Kant 1993, 362–364). He claims that the antinomies are the result of erroneously conflating the knowable but non-totalizable world of phenomenal appearances with the unknowable but supposedly totalized world of noumenal things-in-themselves. As an example, the antinomy that there is and is not a free causality can be supposedly resolved by the idea that there is a free causality in the noumenal world but not in the phenomenal world. Hegel criticizes the notion of the unknowable thing-in-itself in his methodological introduction to the *Phenomenology of Spirit*. Here Hegel discusses the problem of what criterion should be employed when consciousness submits itself to critical investigation (Hegel 1977, 52–55). As has been mentioned, the Kantian critical philosophy, with its external standpoint of meta-knowledge, is unwittingly embroiled in the performative contradiction of not applying itself to itself. Hegel's aim is to avoid the presuppositions, vicious circles, and infinite regresses that a foundational position of meta-knowledge implies. The criterion of validity emerges from within the development of conscious knowledge itself, a criterion that itself develops and alters with the shifting shapes of the very consciousness that produces it. Consciousness initially distinguishes itself from its object, but its knowledge of the object is itself distinguished from the object as it is in itself, the latter being regarded as the criterion of the truth of the former. However, this distinction between the object-for-consciousness and the object-in-itself reveals itself to be a distinction that lies wholly *within* consciousness. The object-in-itself is shown to be an object-in-itself-for-consciousness. What appears to be a nullification of the in-itself, which would be the "abstract negation" that characterizes mere scepticism, Hegel gives a positive spin to by presenting it as the content of a "determinate negation" in which a new object emerges as the truth and nullity of the previous object. With the new object, in this case the in-itself-for-consciousness, a new "pattern of consciousness" comes about that shifts the goal-posts of the criterion of adequacy. The way of knowing about the object of consciousness becomes itself the new object of consciousness. The inadequacy to itself of a particular pattern of consciousness engenders a transcendence of its limits rather than the dead-end of scepticism. For Hegel, such self-transcendence is the very nature of consciousness. He writes: "Consciousness . . . is explicitly the *Notion* of itself. Hence it is something that goes beyond limits, and since these limits are its own, it is something that goes beyond itself" (Hegel 1977, 51). Consciousness is that which in its very act of self-determination goes beyond itself, which in determining its own limits has already transcended them. It is a case of the actuality of infinity. In the *Science of Logic* Hegel writes: "Self-consciousness is . . . the nearest example of the presence of infinity" (Hegel 1989, 158).

The problem of the criterion addressed in Hegel's introduction to the *Phenomenology of Spirit* was first formulated explicitly by Sextus Empiricus. Sextus puts it

forward as an irresolvable problem and thus as grist to the mill of his advocacy of scepticism. Hegel's "resolution" of the problem, the self-referential refocusing of consciousness on the conditions of its own way of knowing, is really just an elaboration of the traditional response to scepticism, the argument that the sceptic unwittingly renounces scepticism in the very act of enunciating its truth. In Hegelian terms, this is the self-overcoming of scepticism. In the introduction to the *Phenomenology*, what is at issue is the partial scepticism of the Kantian setting of limits to knowledge. Scepticism itself is explicitly dealt with by Hegel as a form of consciousness later in the *Phenomenology*, in the section on the "Freedom of Self-Consciousness." The dialectical overcoming of scepticism is enacted through the contradiction between its performative and constative aspects. Hegel writes: "[Scepticism] pronounces an absolute vanishing, but the pronouncement *is*, and this consciousness is the vanishing that is pronounced" (Hegel 1977, 125). The very act of enunciating the impossibility of knowledge contradicts the enunciated message, a message whose content precludes its own enunciation. Scepticism does not involve awareness of its own contradictoriness. When scepticism becomes aware of this it ceases to be mere scepticism; scepticism is supplanted by a new form of consciousness. The latter is what Hegel calls the "unhappy consciousness," a consciousness that subsists in the awareness of its own self-contradictoriness and self-division, the determinacy of the consciousness of indeterminacy. The pattern of a new higher shape of consciousness forming itself out of a contradiction between the conditions of the act of enunciation and the implications of the enunciated content is not merely a particular localized dialectic, but is rather a feature of the logic of the Hegelian system as a whole. The fact that this pattern can be discerned in the short methodological introduction to the *Phenomenology* is testament to this. Slavoj Žižek effectively claims that the procedure of the entire *Phenomenology* follows this pattern when he writes: "The passage from one 'figure of consciousness' to the next occurs when the subject takes cognizance of this gap separating his 'enunciated' (his theoretical position) from his position of enunciation and assumes thereby what he unknowingly staged as his new explicit theoretical position" (Žižek 1991, 143). The emergence within consciousness of an awareness of the performative contradiction it has just entered into, of a contradiction between its position of enunciation and its enunciated content, is itself the raising of consciousness to a higher level.

While Hegel affirms the reality and ubiquity of contradictions, they are always presented as engendering new conceptions and forms of consciousness rather than remaining as static dialetheias. The restlessness of Hegelian contradictions suggests that they cannot be maintained and must, in a certain sense, be resolved. Despite this, Hegel explicitly relegates the principle that prohibits the maintenance of contradictions to the realm of the formal and analytical understanding [*Verstand*] (Hegel 1991, 185–186), a mechanical and conceptless [*begrifflose*] way of thinking that deals with determinations in terms of their isolated and fixed abstraction rather than in terms of their living and developing interrelatedness (Hegel 1989, 52). However, it is far from clear that a formal acceptance of contradictions, a formal dialetheism, would be in any way compatible with Hegelianism.

Hegel's claims that contradictions are real and that "*everything is inherently contradictory*" (Hegel 1989, 439) would initially seem to suggest that he rejects

the principle of non-contradiction and affirms a form of dialetheism. Indeed, Priest himself regards Hegel as the prominent proto-dialetheist in the history of philosophy (Priest 2002, 7). In his article "Dialectic and Dialetheic," Priest accuses the many Hegel interpreters who deny that he is denying the principle of non-contradiction of not taking Hegel at his word out of fear of the sheer radicalism of what he is claiming (Priest 1989, 391–392). Although the dialectical procedure may involve the *resolution* of contradictions, Priest points out that the Hegelian "resolution," the *Aufhebung*, maintains a contradiction while transcending it at the same time (Priest 1989, 402).

Nevertheless, there are Hegel interpreters who insist that not only is Hegel innocent of violating the principle of non-contradiction, but that his system could even be said to be founded on it. McTaggart puts forward this position, arguing both that an "unresolved contradiction" is always a "sign of error" in Hegel's philosophy, and that the key Hegelian notion of determination through negation depends on the principle of non-contradiction (McTaggart 2000, 15). The latter point is reprised by Robert Brandom and lies behind his assertion that "far from rejecting the law of noncontradiction . . . Hegel radicalizes it, and places it at the very center of his thought" (Brandom 2002, 179). The claim here is that any particular determination depends on the exclusion of that which is incompatible with it. Without the principle of non-contradiction, without the prohibition of a determination including that which contradicts it, there could be no determinacy at all. Brandom claims that such relations of mutual exclusion are the basis of Hegel's holism (Brandom 2002, 182–183). The mutually excluding elements depend on each other for their determinacy. For Hegel, determinacy is mediated, in contradistinction to the immediacy characteristic of more atomistic accounts. Brandom notes that Hegel rejects the *formal* principle of non-contradiction on the grounds that the faculty of the understanding [*Verstand*] that it underpins involves an implicit positivism that cannot adequately account for the concrete dynamic process of mediation and negation involved in the configuration and reconfiguration of that which is determinate (Brandom 2002, 381n3). As has been discussed, the formal principle of non-contradiction assumes the fixed identity and temporal constancy of the contents of thought, a fixity and a constancy that are at odds with Hegel's depiction of the dynamic process of determining and re-determining. The Hegelian radicalization of the principle of non-contradiction consists in the principle being displaced from the merely formal realm into the realm of the temporal praxis of the institution, application, and transformation of configurations of conceptuality. Within this praxis contradictions occur as mere moments to be superseded, the radicalized principle of non-contradiction impelling such supersession.

According to Brandom, such impulsion is normative, and such normativity indicates that the pragmatic practice of assertion, of the formation and application of concepts in judgement and action, implicitly presupposes a commitment to consistency, including consistency between the preconditions of an instituting act of determining and its instituted determinate content. Brandom writes: "[T]he genus of which both judgment and action are species is understood as the activity of *applying concepts*: producing acts the correctness or incorrectness of which is determined by the rule or norm by which one has implicitly bound oneself in performing that act"

(Brandom 2002, 212). Performative consistency involves the act being consistent with what it enacts. As with Žižek's reading of the Hegelian dialectic as a process of the resolution of the contradiction between the contextual position of the act of enunciation and the enunciated content produced by that act, the recognition of the contradiction between the performative and constative aspects of a shape of consciousness leads to a new conception that takes this disjuncture into account.

This resolution of a performative contradiction through the raising [*Aufhebung*] of consciousness to a new conception that neutralizes it appears to contrast with the Levinasian notion of an insurmountable disjuncture between the saying and the said. While this disjuncture may be surmountable for Hegel, the surmounting amounts to the supplanting of the performatively inconsistent conception with a new conception that neutralizes the initial inconsistency, but which embroils itself in a performative contradiction of its own. The progressive supplanting does not end, except in the conception of the progressive supplanting itself, a conception that is nothing other than the Hegelian philosophy. The "absolute idea" manifests itself as the dialectical method of the overcoming of all finite determinations.

All finite determinations are inherently contradictory, the non-formal principle of non-contradiction impelling their immanent restlessness and ultimately their transcendence. For Hegel, it is only the absolute that is actually non-contradictory. This absolute is a true infinity that transcends all finite determinations. It cannot be grasped in a positive proposition, as this would render it determinate and finite. It can only be manifested through the dialectical presentation of the dissolution of all finite determinations. In Wittgensteinian terms, the absolute cannot be *said*, it can only be *shown*. Hegel identifies contradictoriness with finitude when he writes: "The thing['s] . . . entire sphere is . . . *determinate*, *different*; it is thus a finite sphere and this means a *contradictory* one. . . . Finite things . . . are simply this, to be contradictory and *disrupted within themselves*" (Hegel 1989, 442–443). The absolute cannot be presented as anything other than the dissolution of finitude, or, as Hegel writes, "the non-being of the finite is the being of the absolute" (Hegel 1989, 443).

Despite all this, Priest claims that the Hegelian absolute itself is contradictory (Priest 1989, 402). It may be the case that the non-formal principle of non-contradiction operative within the logic of determination impels finite determinations beyond themselves, which is to say that the act of setting a limit is inconsistent with the limit being a limit, but at some point, the point of the absolute totality (Ω), the overcoming of such inconsistency, the impulsion beyond the ultimate limit, raises its own inconsistency, the contradictoriness of the absolute. As has been mentioned, this dialetheia at the limit of the thinkable can be formalized as the diagonalizing function applied to the absolute totality ($\delta(\Omega)$). To say that the absolute *is* its own transcendence is itself contradictory, the equation of the absolute with its own diagonalization ($\Omega = (\delta(\Omega))$).

However, such formalizations concern the propositional realm, the realm of saying rather than showing. The Hegelian absolute could certainly be framed in propositional terms, could certainly be *said*, provided that dialetheias are considered to be possible and that the principle of non-contradiction is flouted. The fact that Hegel himself does not do this, the fact that he insists that the absolute can only be adequately apprehended through the methodical presentation of the process of

the formation and dissolution of determinacies, suggests that he would not accept the existence of formal dialetheias.

The Hegelian resolution of performative contradiction, the resolution of the contradiction between the "saying" and the "said," is the consciousness of the particular contradiction in question, a form of consciousness that transcends the contradictory limit by being aware of it, a form of consciousness thus raised above the lesser form of consciousness that got embroiled in the contradiction in the first place. The forms of transcendence to be found in the philosophies of Heidegger and Levinas, forms which involve violating the principle of non-contradiction, are not conceived by either of these two philosophers as leading to a higher form of consciousness. This in effect means that they do not self-reflectively conceive of the form of consciousness that makes possible their statements about transcendent being or alterity. Unlike Hegel, they do not account for the standpoint of their own philosophical utterances. Necessarily paradoxical propositions that interrogate the limits of the thinkable are qualitatively different from the self-contradictoriness of mere nonsense, even if they may be formally indistinguishable. The thinking of transcendence supersedes and sublates the limits that determine and enclose the totality of mere immanence. This ascending movement of thought is implicit in the possibility of the position of enunciation of the Heideggerian and Levinasian philosophies of transcendence, but it is only explicitly thematized and systematized in the philosophy of Hegel.

VI. REASON AS TRANSCENDENCE

Thus the Hegelian rationality of transcendence is implicit, though not acknowledged, in the phenomenological philosophies of transcendence, a rationality that involves a tacit normative commitment to the prohibition of performative contradiction, irrespective of whether the formal principle of non-contradiction is violated at a superficial merely propositional level. According to the reading of Hegel suggested by McTaggart and Brandom, the transcendence enacted by dialectical reason involves following a radicalized version of the principle of non-contradiction. Dialectical reason is a way of showing how consciousness can transcend the limits imposed by any particular form of consciousness.

Hegel's valuation of the self-conscious transcendence of *Vernunft* [reason] over the mechanistic immanence of *Verstand* ["the understanding"] resembles in some way anti-mechanist interpretations of the significance of Gödel's theorem for the philosophy of mind. As we have seen, the theorem establishes that any recursive formal system cannot be complete if it is consistent. The fact that the human mind can produce and understand Gödel's theorem implies that the mind cannot be reduced to a recursive formal system, however sophisticated. While the theorem itself merely establishes the limitedness and incompletion of any recursive formal system, the ability to see that that is what it does puts the mind above and beyond any such formal system, implying that conscious reasoning is something different from the operations of a mechanistic recursive system, that the mind is not a form of computer, however advanced. A limitative theory transcends the limits it is the theory of, as, in Hegelian terms, the *conscious* establishment of a limit is simultaneously

the establishment of the beyond of that limit, which, as we have seen, is in essence Hegel's critique of Kant. The Kantian critical philosophy is a limitative theory that establishes the constitutive limits of knowledge while being unaware that in doing so it inhabits a position above and beyond those limits. *Vernunft* is unwittingly deployed to venerate *Verstand*.

Anti-mechanist arguments that make use of Gödel's theorem have been put forward by Gödel himself, J. R. Lucas, and Roger Penrose. Gödel's position is that the non-mechanical conscious conceptual understanding of abstract entities enables the mind to potentially resolve or decide mathematical problems that remain undecidable for any recursive formal system that could govern the operations of an unconscious mechanism (Tieszen 2011, 178–184). Lucas argues that the human mind surpasses any mechanistic system in that it can recognize the truth of the Gödel sentence (that it is indeed unprovable in S) of any relevant formal system (Lucas 1961, 112–127). Similarly, what Penrose essentially argues is that the mind surpasses any mechanistic system in that it can recognize the truth of the Gödel sentence of any formal system F that is assumed to encapsulate human reasoning powers, which, as such recognition cannot be done within F, indicates that any formal system F that is assumed to encapsulate human reasoning powers actually does not encapsulate human reasoning powers (Penrose 1996). Therefore the reasoning abilities of the human mind cannot be reduced to any such system.

Such anti-mechanist uses of Gödel's theorem depend on the assumption that human reasoning powers are consistent. The Gödel sentence that proclaims its own unprovability within a certain system is only actually unprovable in that system if the system is consistent and does not prove contradictory statements. An inconsistent recursive formal system would be able to prove its own Gödel sentence. The ability of the human mind to perceive the truth of the Gödel sentence of any recursive formal system, including that of a formal system that is assumed to encapsulate human powers of reasoning, may not indicate that the mind transcends any such formal system, but rather that the workings of the mind can be encapsulated by a recursive formal system that happens to be inconsistent. As we have seen, Priest essentially argues that Gödel's theorem indicates *both* that consistent formal systems are incomplete and that complete formal systems, such as one that could formalize human powers of reasoning, are inconsistent.

Thus the idea that one of the implications of Gödel's theorem is that the conscious thinking mind transcends mechanistic recursive functioning presupposes the consistency of human conscious reasoning. This is a transcendence occasioned by following the principle of non-contradiction. While for the Platonist Gödel it is the mind's ability to comprehend abstract concepts that enables the human mathematician to transcend mere mechanism, for Hegel the mind's ability to transcend a limit through the very recognition of that limit enables the holistic comprehension that inheres in *Vernunft* to transcend the analytical and mechanical [*begrifflose*] nature of *Verstand*. For Heidegger it is the awareness of finitude, and thus of being and non-being, that enables human existence to transcend the mere presence of the immanent ontical world of entities, the world amenable to scientific objectification. For Levinas it is the encounter with the other person in non-intentional consciousness that enables a human to transcend the world of mere

objects. Heidegger claims that the objectifying "scientific" approach to entities rests on an observing consciousness whose way of thinking is bound by the principle of non-contradiction. Thus, for him, expressing what lies behind or beyond this realm of present-at-hand objects involves violating that principle. However, the "rationality" that lies behind this objectifying approach is the merely analytical reason of *Verstand*, which Hegel himself agrees is based on the formal principle of non-contradiction. The transcendence inexpressibly expressed by the likes of Heidegger and Levinas may involve breaking this merely formal principle, but the possibility of this "expression" depends on a limit being superseded by coming to consciousness, which is the very operation of Hegelian reason as *Vernunft*. As we have seen, this logic of the conscious self-overcoming of delimiting determination involves a radicalized non-formal prohibition of contradiction.

The viewpoint of Heidegger and Levinas is effectively that the principle of non-contradiction anchors thought within the immanence of the presence of entities, the immanence of the understanding of time on the basis of presence, and that for thought to transcend this realm it is compelled to contradict itself. Priest argues that thought embroils itself in veridical contradictions when it interrogates its own limits and that the setting of those limits also involves their transcendence, a phenomenon he calls "inclosure" and which he claims is exemplified in the paradoxical philosophies of Heidegger and Hegel. However, elsewhere Priest invokes Gödel's theorem in order to show that human powers of reasoning achieve completion and semantic closure through being veridically contradictory and inconsistent, despite the fact that for Gödel and others it is the very consistency of a certain type of formal system that ensures the system's incompleteness, a consistent incompleteness that points beyond the confines of the system and whose comprehensibility to the human mind indicates that the mind transcends recursive mechanistic formalism. The idea that the consciousness of a limit of thought is at the same time the transcendence of that limit lies at the basis of Hegel's notion of reason as *Vernunft*, which comprehends and overcomes the limits of the mechanistic merely analytical reason of *Verstand*. Although Hegel dismisses the merely formal principle of non-contradiction as something that restricts thought to *Verstand*, dialectical reason [*Vernunft*] is not ultimately inconsistent. This is because it charts the perpetual overcoming of the contradictions, both formal and pragmatic, inherent in finite conceptualizations, "resolving" the contradictions by comprehending and re-conceptualizing them. Transcendence, including the transcendence referred to by the likes of Levinas and Heidegger, can be reasonably regarded as reason itself, the conscious comprehension of the limits of thought, a transcendence that involves the maintenance of consistency and not its abandonment.

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