

THE LOGICAL PRINCIPLES OF HERMENEUTICS

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Abstract. This article constitutes the first part of a more extensive work on hermeneutics and existential philosophy. It's articulated as an analysis of some central statements of *Truth and Method* of Gadamer and both *Being and Time* and *Contributions to Philosophy* of Heidegger, conducted alternating five different points of view: metaphilosophy, epistemology, philosophy of logic, bio- and cognitive linguistics, and philosophy of language. In the present article I focus on philosophy of logic, with some excursions into philosophy of language. The main objective of the work consists in demonstrating what follows. A general impredicative structure is variously described and commented on in *Truth and Method*; I argue that it 1) corresponds logically to the intensional Liar-paradox; 2) derives exegetically from Heidegger's differentiation between ἀλήθεια and truth in λόγος; 3) should be interpreted philosophically as the Hegelian *Identity in Difference*, despite Gadamer's intention to avoid dialectic conclusions. Priest showed that the concept of *Identity in Difference* and the *Law of Dialectical Contradiction* describe the same structures, imposing a dialethic lecture. Along this line, I argue, Gadamer's followers should better present their argument as paraconsistent.

Keywords: philosophy of logic • hermeneutics • dialectics • paradox • paraconsistency

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Introduction

It's easy to recognize in *Truth and Method* an unsolved paradoxical tension between two concepts — also because Gadamer, in some passages, tries in vain to get rid of it. Although expressed and declined in different ways in the *Magnus Opus*, these two concepts are fundamentally those of “universality” (*Universalität*) and “conditionedness/determinateness” (*Bedingtheit*). We can compare, for example, these two opposite statements, one at the beginning and the other almost at the end of the book: 1) “I believe that the *universality of the hermeneutic viewpoint cannot be restricted* even with respect to the multitude of historical concerns and interests subsumed under the science of history” and 2) “Even if [...] we are fundamentally aware that all human thought about the world is historically conditioned, and thus are aware that our own thought is conditioned too, *we still have not assumed an unconditional standpoint*” (1975, p.xxviii and p.445, my italics).



To build a model better representing the situation,¹ take different historic-anthropological paradigms as different logical domains, as constituted by proper objects, essentially culture-relative (in Gadamer's language, we can differentiate them as depending on different "prejudices", *Vorurteile*). Universal assertions about the elements of an infinite series of these domains seem to presuppose logically the existence of their union, or of a hierarchically superior one. So presented, this problem is somehow similar to the question of *absolute generality* in philosophy of logic.² But Gadamer affirms explicitly, and auto-referentially, that every domain is historically determined and limited; without further logical constraints, to affirm the universality of hermeneutical understanding could then lead to an all-embracing contradiction, and with it to triviality.

(...) the present investigations do not fulfill the demand for a reflexive self-grounding made from the viewpoint of the speculative transcendental philosophy (...). But is the dialogue with the whole of our philosophical tradition—a dialogue in which we stand and which as philosophers, we are—groundless? Does what has always supported us need to be grounded?

This raises a final question, which concerns less the method than the contents of the hermeneutic universalism I have outlined. Does not the universality of understanding involve a one-sidedness in its contents, since it lacks a critical principle in relation to tradition and, as it were, espouses a universal optimism? (1975, p.xxxiii)

It sounds like: "*all* traditionary contents convey an intrinsic value and permit an experience of truth because they are determined by the whole of tradition, that they contribute to determining. Is this too acritical?" Gadamer never answered the question with something more than a bland justification of this "one-sidedness" as a corrective to the dominant scientific interpretation of the world. But what should mean such a presupposition, without a definition of "locality" ("context", "historical situation", etc.) in terms of *assertability conditions over a domain* and without *explicit norms governing actual meaning relations* inside of the general theory, if the statement suspends, as it seems, the validity of the natural realist conception of how the former and the latter supervene on objectively describable facts? The logic of constitutive *Vorurteile* proves insufficient for this task: questioning our common linguistic uses, which are *per default* referential,³ leaves the problem of absolute generality open.

As it happens in the case of metalogic, which must have its own logic in describing and analyzing one or more logics, a theory of meaning must have its meaning constraints. An informal theory of meaning admits no distinction between language and metalanguage, so these constraints bind it (maybe only implicitly) to self-applicability. The other way around, if the validity of the syntactical, semantical, and pragmatical constraints of the theory is itself discussed, these ought to be made explicit in *another theory*. This should result quite obvious after Gödel, Turing, and

Tarski; maybe it's less obvious that it's *equivalent* to affirm that there should be a certain quantity of world knowledge *taken for granted* at the basis of all theories (including metatheories of theoretical validity) and that the questioning *a priori* of this knowledge provokes their collapse. Logical constraints and ground knowledge are the two faces of the same coin, following the best available solutions of the famous criticism of Quine to scientific linguistics's presuppositions. This assumption grounds most actual models of *linguistic understanding*.⁴

Anyway, also maintaining the old frame of a way of philosophizing unaware of the cognitive revolutions, the problem of accepting contradictions remains. We can choose a paradigmatic assertion of Gadamer, and call it A(1) ("assumption 1"), trying to obtain a sense-schema:

(...) there is no possible consciousness, however infinite, in which any traditionary "subject matter" would appear in the light of eternity. (...) Every appropriation of tradition is historically different (...) The paradox that is true of all traditionary material, namely of being one and the same and yet of being different, proves that all interpretation is, in fact, speculative. (1975, p.468)⁵

Following the standard English translation, Gadamer affirms that "the paradox (...) of being one and the same and yet of being different / is true of all traditionary material". It would be better to avoid mass terms and evidence instead the individual essence of these elusive referents, translating *jede[r] Überlieferungsinhalt* with "every traditionary content". It's quite central, given that the author, in the first part of *Truth and Method*, describes "conceptual content" (*Inhalt/Gehalt*) and "linguistic meaning" (*Bedeutung*) as equivalent specifications of "meaning" intended in a broad existential sense (*Bedeutung*, too), inferring the philosophical primacy on both concepts of that of "experience" (with different connotations: *Erlebnis*, (*sprachliche*) *Welterfahrung*). In contemporary terms, we would say that Gadamer proposes a *foundational theory of meaning*.⁶ So the theoretical reach of the statement can stand out: *being one and different is meaning's ontological condition*, over and above the rhetorical interpretation of the phrase as a hyperbolic expression hinting to the diachronic changes of semantic/pragmatic nature (extensions and implicatures) which constitute the usual matter of philology.

Logically reasoning, the predicate is explicitly introduced as paradoxical and nonetheless as truthfully applied to all the items of a domain of quantification (*Überlieferung*, "tradition") whose extension includes, following Gadamer's stances, the same sentence expressing this fact.

There are many passages in Gadamer's text about logic, contradictions and self-contradictions, and the chosen quotation expresses no isolated argument; it's just paradigmatic because it resumes the historical conditionedness of assertion and in-

stantiates both the historicist paradox⁷ and what we can call “the circular definition of truth”.

In *Truth and Method* Heidegger’s anti-transcendentalism is explicitly assumed, and with it the centrality of concepts such as *Gewissenserfahrung* and *Zeiterfahrung* (“experience of knowledge”, “experience of time”). At the beginning of the book, Gadamer uses similar concepts to criticize the universalist character of scientific statements and to frame all linguistic acts in experiential contexts, where, in his opinion, they assume full meaning.

The semantical import of these philosophical reflections is particularly evident in the introduction in *Truth and Method* of the already quoted concepts of phenomenological origin *Welterfahrung* and *Erlebnis* (“experience of the world”, “lived/living experience”). Following Gadamer’s historical exposition, Heidegger transposed in *Being and Time* the Husserlian transcendental constitution of subjectivity in the domain of facticity. This reframe, which could lead to contradictory formulations analogous to the historicist paradox, seems to be held by Gadamer also in those passages of his work more inclined to assume the later writings of Heidegger as a basis. In conformity with the expressed principles, atemporal (classical) logical statements must undergo radical criticism. For example, against logical interpretations of relativism/skepticism as leading to trivialism/self-contradiction, Gadamer writes:

However clearly one demonstrates the inner contradictions of all relativist views, it is as Heidegger has said: all these victorious arguments have something of the attempt to bowl one over. However cogent they may seem, they still miss the main point. In making use of them one is proved right, and yet they do not express any superior insight of value. [...] In particular, he [Plato] shows in his Seventh Letter that *the formal refutability of a proposition does not necessarily exclude its being true*. (1975, pp.339-340, my italics)

But it’s evident, at the same time, that some kind of logical reasoning guides (and must guide) the arguments against logical interpretations. It’s the difference between the logic we presuppose in structuring arguments about the world and the logic we discuss as an object in a metalogical discourse. In conformity with this quite obvious argumentative necessity, Gadamer does not accept contradictions in general; his problem would then consist in neutralizing or excluding contradictions only in some particular domains. Talking about the universality of historical determinateness, which is nonetheless experienced and conceived in a determined historical moment, he writes:

It is one of the prejudices of reflective philosophy that it understands matters that are not at all on the same logical level as standing in propositional relationships. Thus the reflective argument is out of place here. For we are not dealing with relationships between judgments which have to be kept free from contradictions but with life relationships. (1975, p.445)

Most probably, for “propositional relations” Gadamer intends those explained in the logic of Aristotle, leading to certain semantic conclusions (syllogistic). He doesn’t affirm that life relationships are propositionally inexpressible; what he probably means is that there is a fundamental difference between talking about life relationships and talking about the sentences expressing them; but this would only amount to state, that the logic we follow in talking (as said: from the point of view of logically structured arguments) is not the same that we express formally and can discuss meta-logically. And this, in its turn, is just saying that the considered (formal) logic does not capture the meaning of our inferences, and in particular the meaning of the connectives, as we really and coherently use them. Maybe no logic can do it. This last option could correspond to the Heideggerian mention of “another logic” as a “logic of *Erschweigung*” (we could translate *erschweigen* as “to achieve through silence”).

We can’t say/express Being (Event) immediately, nor mediately in the sense of the higher ‘logic’ of dialectics. Every expression speaks already from the Truth of Being, and can never immediately skip over itself to Being as such. *Achieving through Silence* has higher laws as any logic. [...] But in the end, *Achieving through Silence* is not a a-logic, because it is properly logic and would like to be it, but just can’t. (1989, p.79, my translation, my italics)⁸

But that no single logic can capture our inferential practices does not mean that we don’t follow general patterns, and that can’t be anyway very useful to sketch a system of limited validity (always revisable). In some passages, as seen, Gadamer seems in fact to maintain at the same time the unacceptability of (classical) logical constraints and the *importance of logically out-ruling* possible contradictory interpretations leading to triviality and non-sense.

So we can ponder the possibility of suspending the *law of non-contradiction* — in this way, *some but not all* contradictions will turn out acceptable. If this suspension works, circular definitions (self-referential truth-predications) are also possible: the suspension of this law is indeed the condition to treat in a possible satisfactory way Liar-like sentences (such as “this sentence is false”). Following this line of reasoning, adopting a particular logic and/or theory of truth to save Gadamer’s assertions from triviality seems possible. Belnap and Gupta’s truth definition, so as paraconsistent and paracomplete logics are possible candidates.

- In Belnap and Gupta we find the full acceptance of a circular definitions of truth, including “pathological” (Liar-like) cases.
- In paraconsistency we have: $a, \neg a \not\vdash b$ (and obviously $a, \neg a \not\vdash \neg b$)
- And in paracompleteness: $a \not\vdash b, \neg b$ (and obviously $a \not\vdash b, \neg \neg b$)

Identity

First, Gadamer talks of identity, one of the most controversial philosophical problems in the philosophy of language, linguistics, and logic due to its absolute basicness. *Prima facie*, there seems to be a certain difference between a hermeneutical and a logical concept of identity. Given the interdependence of parts and whole in the hermeneutic circle, it can be held that individuals are always relationally determined, not only in the case of given texts but also in that of diachronic meaning-relations among historically stratified interpretations.

The specific case of Gadamer can be described and follows. He insists on the experiential and historical nature of this complex context of understanding. Inside of it, the content of the utterances is defined as a fundamentally discursive entity (linguistic “thing”, *Sache*, as opposed to material “thing”, *Ding*), detached from both the objects of reference (*Dinge*, indeed) and the syntactical structure of the sentences used to express it (this last aspect leads his confrontation with Hegel’s logic). In this way, instead of interpreting historical transformations of meaning in terms of extensional changes and varying connotations of classes of objects, as in philology, *Truth and Method* brackets from the beginning the objectivity of reference: “*Being that can be understood is language*” (1975, p.470). The constitution of meaning is due to a “dialogue” (*Gespräch*), intended as a fusion of historical horizons (*Horizontverschmelzung*). No local content exists outside of this interchange, and the connection of the different events of reception (we could call them “narrow contexts”) in the open-ended dialogue (“broad context”) assures the permanence and the identity of the one *general content* (“one and the same and yet [...] different”). All the same, this dialogical content is irreducible to any local context (due to specific prejudices, *Vorurteile*) and any “external”, global, or objective determination. We could call these conditions of meaning “broad contextualism”, structured as a hermeneutical circle.

But it’s easy to note, as Gadamer does, that the logical problem with the identity of content would emerge also relatively to the general formal principles, as the one exposed here: their validity always turns out to be local (historically determined). Which criteria of conceptual identity are the right ones for “dialogue” and “understanding”? On this ground, Gadamer affirms the necessity of starting with a *transcendental interpretation* of these concepts, to proceed subsequently with its criticism, in Heidegger’s style. “The problem of hermeneutics becomes universal in scope, even attaining a new dimension, through his transcendental interpretation of understanding” (1975, pp.245–54). His not-dialectical not-synthetic solution of this typical Hegelian contraposition seems to reside in the “absolute openness of the event of meaning” (p.468). On this basis, every new determination extends the *same* meaning; every new form of understanding adds to the *same* essence of understanding. The theory seems in this way self-applicable, but the problem of identity persists in the

necessary differentiation between the all-encompassing meaning and the local determinations in the intended (= represented) domains. The one “traditionary content”, indeed, must be “yet (...) different”.

We should first of all distinguish between absolute (numerical) self-identity and relative identity; the first, if acceptable at all,⁹ is fully compatible with the existence of *bare particulars*, with no typological specification (no essential property) required for the individuals; the second, on the contrary, can convey sortal criteria and similar (x and y being the same S). The “traditionary contents” of Gadamer seem to fit in the second kind by definition, and with this premise, they can be considered subject to *Leibniz’s Law for Sortals*.¹⁰ But it could be objected that these identity criteria, held valid in a simple extensional context, are themselves historically variable, depending on specific world-knowledge, so that none of them could be apt to identify the contents outside of given contexts. So the supposed preserved identity would be *absolute and indefinable*, as in Geach’s model. From this first point of view the question seems undecidable.

We could frame the problem in terms of transworld-identity, given the evident analogy of possible worlds with historical contexts. Although *Leibniz’s Law* (including both principles: the *Identity of Indiscernibles* and the *Indiscernibility of Identicals*) can be consistent in each world, the same notion of possible worlds implies variations in propositional truth-values. Accommodating the *Indiscernibility of the Identicals* with possible worlds (i.e.: 1 - limiting it to single-world-domains for every pair of identicals or 2 - indexing all properties as relative to a world) means anyway to accept identity over time combined with change of properties (Mackie and Jago 2022).

In any case, *Leibniz’s Law’s* applicability gives us no reason to prefer an absolute transworld notion to a relative one. If self-identity is questioned and not assumed as obvious,¹¹ as in Gadamer’s case, then some additional criteria are somehow required: *Leibniz’s Law* can be useful to establish if two different presentations pick out the same object, not to individuate “internal differences” in one and the same object.

Considering different receptions of a text as implying different contents, Gadamer seems *prima facie* to imply a kind of hyper-contextualism, with identity completely dependent on local predications and no possible transworld identity. The last seems just presupposed, with no epistemological argument in favor. But we can try to define Gadamer’s concepts of identity and difference on some milder grounds, to test if it’s possible to conceive their coexistence in a consistent way.

In the case that definite transworld-criteria are held to be unavoidable (if there’s no *presupposition* of identity), modal cases *de re* imply distinctions between predications of contingent vs. necessary (transworldly valid) properties, and with this a reducibility of the modality *de re* to a modality *de dicto* relative to what can be called “individual forms” (Koslicki 2020); these forms most probably imply relative-identity results. The correspondent criteria would not be subject, as in the previous non-modal

case, to historical variation: linked to forms, they are held to be necessary by definition insofar as they depend on the epistemology of metaphysical modality, not of contingent truth. In this option, Gadamer should accept absolutely general assertions, revising his position in favor of moderate atemporal principles: a part of the traditional content must be transhistorical, the “rest” historically determined; maybe adding that no clear-cut criterion is epistemically accessible. This strategy could be faithful to his claim of universality: differently from the extensional case, the modal frame *imposes* an all-encompassing metaphysics, together with local variations defined in terms of possibilities. But the described procedure seems not to be always possible¹² and also leaving aside the specific metaphysical difficulties, Gadamer provides no clue in this direction. Given the complexity and centrality of the argument, it can't be only entailed implicitly in *Truth and Method* as its “natural” extension. From this point of view, it could be more appropriate to take identity somehow anti-descriptively, in conformity with an influent tradition in intensional semantics. But if this anti-descriptivity forces us, as it seems, to *postulate* rigid designations, cultural items would result independent from local receptions, rendering the definition of self-difference impossible.

Gadamer's notion of self-difference seems to require exclusive intra-world applications of *Leibniz's Law* (without “accommodations”), explaining the transworld discrepancies as deviations from the superficial (“low-level”, intraworld-) identities. On the other hand, Gadamer's self-identity seems to be absolute, free from criteria, and a priori postulated. Examined through a logic-metaphysical lens, the attempt to resume both conceptions of identity is always impossible, and from this derives the paradoxical nature of his assertion.

We can add that accepting a paradoxical truth is not absurd in itself; but the logic-metaphysical tensions will always produce problems for the philosophical argumentation, menacing circularity, and regress. Contrary to the intentions of Gadamer, a self-reflexive foundation of his project avoiding triviality could be necessary.

At the end, it's evident that Gadamer needs criteria of identity to introduce his concept of self-differentiation, but makes no distinction between identity internal to a world (implying self-difference) and transworld identity (implying self-identity). It seems that the difference between the two options collapses, so that we are given no clear concept of identity. Our best strategy is then to consider “identity” as an undefinable, not fully consistent primitive notion. This condition will offer the basis for possible further Leibnizian specification of identity as implying indiscernibility, and *vice-versa*. Reconstructing the articulation of the relevant philosophical arguments, these applications will prove somehow needed, the inconsistencies will become manifest, and philosophical treatment will be necessary. This means, that we decide to adopt a local and *non-aprioristic* way to face the problem.

We can add, that maybe we should always consider identity as an undefinable

primitive, not only in the case of Gadamer. It is interesting that in Second-Order-Logic a Leibnizian definition is given, and in the opinion of many logicians, it presupposes the same (absolute) identity that it should define (Freund 2019, p.13).

Formalizations

With these preliminary observations, we can start with our models. In a simple way, we can take “content” (*Inhalt*) to mean “proposition” (propositions are what can be true or false, the main “truth-bearers”). Quantifying over a domain of propositions P we can express the assumption A(1) relatively to the subdomain T (tradition) of propositions p', p'' , etc. in P ; we can use p, q, \dots as variables ranging over the domain (Grover 1972). In propositional logic identity is not defined nor introduced, in FOL is assumed as a primitive instead. If we have to deal with both self-identity and self-difference, it is clear that the axiomatic assumption that $a \neq a$ would immediately lead to total inconsistency (triviality). But we can simply accept an inconsistent object $a \neq a$, and make an informal intuitive detour in Second-Order: in a Leibnizian fashion, if there is an internal difference in the object a , there must exist some property F such that $F(a)$ is true, but also false. The same holds for properties: if $F(x) \neq F(x)$, then there exists some y such that $F(y)$ is true but also false. Returning to propositional logic, we can say that if a proposition is different from itself, then there is at least an aspect under which its semantics does change (an object, property, or relation); then at least for one semantic precondition, p must have truth-values different in some context from those of p . So we can interpret a proposition p as different from itself through the semantic notion of material equivalence, remembering that “plane difference” (simple not-identity) implies a difference in truth-values, but the sameness of truth-values does not imply identity.

As Williamson (2020) notes, truth-functional interpretations are not plainly “natural”; nonetheless they can guide pretty good our understanding. For this reason, we will concentrate on compositionality and momentarily suspend the treatment of specific content and context. It's evident that the context concurs to determine meaning, but if context (Gadamer would say: “prejudices”, *Vorurteile*) is necessary for understanding, meaning is not reducible to any particular context — as we saw in the first chapter, and as Gadamer, for different reasons, would concede. So we can try to express the difference of something from itself through the double conditional $\neg p \leftrightarrow (\equiv)p$. Analogously we can write down the affirmations of self-identity as $p \leftrightarrow (\equiv)p$. Deriving equivalents in both directions of the conditionals (maintaining the rules of material implication)¹³ we obtain: $(\neg p \vee \neg p) \wedge (p \vee p)$ (equivalent to $p \leftrightarrow (\equiv)\neg p$) in the first case (self-difference) and $(p \vee \neg p) \wedge (p \vee \neg p)$ in the second (self-identity). Eliminating tautologies, we remain with: $p \wedge \neg p$ and $p \vee \neg p$. We

can use T , meaning *traditionary* (being an element of T), as a sentence operator for propositions (assuming that they aren't reducible to objects (Grover 1972)). Applying conjunction, distribution, and again tautology, we obtain:

- 1) $A(1) : \forall p\{Tp \rightarrow [(p \wedge \neg p) \wedge (p \vee \neg p)]\}$
- 2) $A(1) : \forall p\{Tp \rightarrow [(p \wedge \neg p \wedge p) \vee (p \wedge \neg p \wedge \neg p)]\}$
- 3) $A(1) : \forall p\{Tp \rightarrow [(p \wedge \neg p) \vee (p \wedge \neg p)]\}$
- 4) $A(1) : \forall p[Tp \rightarrow (p \wedge \neg p)]$

We should now include the impredicative instantiation, affirming that $T(4)$, then $A(1) \wedge \neg A(1)$. If we apply the classical rules of quantification over propositions, calling “a sentence B free for a propositional variable p in A iff no free occurrences of p lies within the scope of a quantification on q , where q is a propositional variable which occurs in B ” (Uzquiano 2022), we can take $A : Tp \rightarrow (p \wedge \neg p)$ (simplifying a little, interpreting $A(1)$ as $\forall pA$)¹⁴ and $B : p \wedge \neg p$; then substitute: $T(p \wedge \neg p \rightarrow [(p \wedge \neg p) \wedge \neg(p \wedge \neg p)])$, then again, as in the sequence 1 – 4 : $T(p \wedge \neg p) \rightarrow (p \wedge \neg p)$.

Since the context in which $A(1)$ obtains impedes us to conclude that we should refuse all the propositions in T , we should take it as expressing a condition (being in T) that makes (locally) invalid the *law of non-contradiction*. In terms of formulas, we have then $A, \neg A \not\models B$, avoiding explosion. Generalizing the extended version we have:

- 5) $\forall p\{[Tp \rightarrow (p \wedge \neg p)] \rightarrow [T(p \wedge \neg p) \rightarrow (p \wedge \neg p)]\}$

Then to a contradiction C follows the extended contradiction C^* (paradox) between C and its negation, which is the same contradiction from the point of view of truth-functional semantics. Explicitly: we don't only express a dialetheia, but our statement is also a dialetheia in itself; or: there's not only a represented inconsistency but also an inconsistency in the representation. Of course, Gadamer doesn't want to express triviality (all theories of meaning and interpretation contested and refused in *Truth and Method*, due to the same principles expressed in the book would be evaluated as also true). But *Truth and Method* can be saved, although by refusing classicality (and consistency).

A Liar-like expression is a kind of Janus-double-headed statement; if we formalize our statement $A(1)$ by applying the sentential operator T to the whole formula 4, we obtain something similar to the intensional *Liar paradox* of Prior. The comprehension schema $\exists p(p \leftrightarrow A)$ (with A as a formula) is entailed by all the rules of quantification. Taking the *T-operator* Priors (“It's said by a Cretan that x ”) to mean “it's a traditionary proposition that x ”, we can derive:

- 6) $T\forall p[Tp \rightarrow (p \wedge \neg p)] \rightarrow \{\{\exists p(Tp \wedge p) \wedge \exists p[Tp \wedge (p \wedge \neg p)]\}$

where the last p in $\exists p(Tp \wedge p)$ should be interpreted, traditionally, as implying non-contradiction ($\neg(p \wedge \neg p)$). Evidently, and surprisingly enough, the formula gives us two *traditional* propositions with two different truth-values, not just the one expressing that all traditional propositions imply their own negation.¹⁵ Liar-like expressions will be the focus of our tentatives of formalization; we will not only consider them as irreducible ambiguities, but also as the coexistence of two different propositions with opposite truth-values.

Following Gupta and Belnap, truth itself is circular.¹⁶ They derive this conclusion by analyzing the difference between what can be called the *Simple Liar* (the usual Eubulides version: “The statement I am now making is a lie”) and the *Contingent* (we called it *intensional*) *Liar*, attributed to Epimenides and reported in Paul’s *Epistle to Titus*. It says: “All Cretans are liars”. Against the necessary paradoxical nature of the first version, this expression is a paradox only under some contingent conditions, namely that Cretans are truly all liars. If they’re not, the statement can be considered simply false. This case is different also from that of the *Strengthened Liar*:

$$7) B \Leftrightarrow (\neg T['B'] \vee \neg A['B']),$$

where $A('X')$ is the definition of X in given language L , determining the necessary and sufficient conditions for $X \vee \neg X$ in L . That can’t be false. But the Contingent Liar does. It is precisely what happens in Prior’s, and, if we are correct, also in Gadamer’s case: to affirm a dialetheia is not per se a paradox, implying infinite regress; in principle, $T \forall p [Tp \rightarrow (p \wedge \neg p)]$ could be simply false. Following Gupta and Belnap, from similar cases it is possible to deduce the circular nature of truth in general, considering truth-predicates in an “anti-Tarskian” way, i.e. expressed and evaluated as biconditionals inside of the same language, as it happens in natural languages.

We propose that also for Gadamer truth must be circular. This would be in accordance with his assumption of the constitutive circularity of understanding proposed by Heidegger in *Being and Time* by describing hermeneutics. Given these central premises, we can model Gadamer’s argument extensionally (*Simple Liar* argument).

We could then accept $A(1)$ as a *revisable truth-assertion*, without considering its inclusion in T ; it seems to correspond to some reflections of Gadamer, wanting to maintain both universality and historical determinateness for his own assertions. We could stop arbitrarily an infinite regressive deductive chain adopting explicitly the *revision theory of truth*. This theory introduces a *monotone operator* τM applied at each level $L1$ of a language L , mapping its subsets (containing truth predicates) into its subsets. Then $L2$ derives from this application and can be subjected to the same treatment; in a finite domain, some truth-evaluations would converge till stabilization. The totally interpreted languages form a hierarchy in L , with $L\Omega$ containing all truth-predications derived from all mappings till $L\Omega - 1$. Passing to transfinite hierarchical levels:

- A. if we take a transfinite successor ordinal $\alpha + 1$, then $L\alpha + 1 = \tau(L\alpha)$
- B. for any transfinite limit ordinal σ and any sentence ϕ , if ϕ stabilizes on the value true (false) in the sequence $(L\alpha)\alpha < \sigma$, then ϕ is true (false) in $L\sigma$. (Bolander 2017)

In Belnap's and Gupta's theory (born explicitly to handle self-representation), the monotone operator is employed to suspend the truth value of the accepted paradoxes, impeding their extension. The expression "a paradox is true of" is acceptable but does not receive definite (*T* or *F*) interpretation in successive steps (we can see them as successive historical moments / anthropological paradigms). This possible solution conforms to the idea that philosophical theories assume historically their meaning as a part of a larger context in which they are interpreted. But the adoption of such truth theory would also render *Truth and Method* and every interpretation of it normative (corresponding to the application of the operator τ at a level $LTaM + n$, with $n \in \mathbb{N}$, interpreting the truth-conditions of all lower levels) and not-universal (at a higher level, $n + 1$, the truth-conditions of some "suspended" sentences would be evaluated).

Till now, we are taking into account truth-values of paradoxes in languages including self-applied truth-predicates, as stated at the beginning of the paragraph. But what about taking into account not just possible changes in the logical interpretations (variations in the attribution of truth-values) but a different concept of interpretation for every domain? How could one of these *concepts* be universal if everyone is supposed to be differently reinterpretable at each level? If we consider our tradition an *indefinitely extensible* domain of contents, where at each level there is a particular but perfectly valid way of interpreting, results that "understanding" itself would have a (maybe just slightly) different meaning for any given level of the extension: as seen, in the case of some terms subject to a transcendental definition, a certain tension emerges between general form and specific contents.

As Williamson stated, "[t]he nature of a concept is to be graspable, and therefore limited. In the paradoxes, we use a limit to grasp a concept that transcends that limit, a concept with a new limit of its own. Indefinite extensibility is a way of generating new concepts, not something internal to a single concept. The limitless possibility of new concepts never yields to limitless concepts". (Williamson 1998, p.22) We could accommodate this case through a creative modification of the model, but it seems that the universal principle of hermeneutics, presenting all the features of an indefinitely extensible notion of understanding, would collapse nonetheless. In the end, with Gupta and Belnap's multilevel dynamics we could gain strong support for some assertions, but at the same time, some tenets of *Truth and Method* would lose completely their validity.

We can try with other models, heuristically preceding. Let's take the paraconsistent ones — which I consider to be the best way to save some philosophical as-

sumptions from triviality (Priest 2014, Casati 2022). As seen, although suspending the local validity of non-contradiction as a logical rule, we can maintain classical conjunction/simplification, material (strict) implication, the rules for distribution, tautologies, and De Morgan. We need some rules permitting glut-and/or gap-values for example Kleene’s strong logic (two non-designed values), or — maybe better — Priest’s LP (two designed ones). We have in general, for the usual connectives:

	f_{\neg}	f_{\wedge}	1	i	0	f_{\vee}	1	i	0	f_{\supset}	1	i	0
1	0	1	1	i	0	1	1	1	1	1	1	i	0
i	i	i	i	i	0	i	1	i	i	i	1	i	i
0	1	0	0	0	0	0	1	i	0	0	1	1	1

It is clear that also the *principle of bivalence* is suspended, given that it implies the *law of non-contradiction* (but not the converse); but the *law of excluded middle*, being a purely syntactic notion, could be maintained (as in LP, but not in Kleene’s *strong*). Being the negation of a proposition p with truth evaluation $v(p) = i$ itself evaluated as i , and the conjunction of two propositions p and q with both $v(p) = i$ and $v(q) = i$ itself evaluated $v(p \wedge q) = i$, it’s clear that in our application $p \wedge \neg p \equiv \neg(p \vee \neg p)$ for all $p \in T$ with T meaning “Tradition”. This is evidently valid for i in both cases, i. e. if it means both true and false (LP) and if means neither (Kleene’s strong). This informal proof of validity for the material equivalence (semantics) corresponds to the syntactic validity of distribution and De Morgan laws assumed in (1-4). Taking into account:

$$8) \quad \forall p \{ [Tp \rightarrow (p \wedge \neg p)] \leftrightarrow \{ T(p \wedge \neg p) \rightarrow [(p \vee \neg p) \wedge (p \wedge \neg p)] \} \} (1-4; 5)$$

we can add some philosophical considerations. The left-hand conjunct of the broad right-hand part of the biconditional $(p \vee \neg p)$ expresses a proposition that *apparently* differs from the right-hand one $(p \wedge \neg p)$ because it seems to reestablish the well-known law. But we are not interpreting the conjunction as introducing a locally valid law. It is just an acceptable result derived from the first assertion, which expresses a contradiction too. The paradox is extended, in the same way as two propositions emerged from one in *Prior’s paradox*. So $A(1)$ is not a simply true contradiction, but a true and false one instead. The expression of this last fact (the extended paradox) is double-valued too. The loop is “neutralized” by the provable equivalence $\alpha \wedge \neg \alpha \equiv (\alpha \wedge \neg \alpha) \wedge \neg(\alpha \wedge \neg \alpha)$ (and so on by recursion): the two conjuncts have the same truth value, being substitutable *salva veritate*. So these logics are fully compositional, respecting the semantic requisites expressed in the first chapter. Compositionality is a necessary condition for philosophy: if the same locution would not contribute in the same way to determining the truth-value of two different expressions in which it recurs, the domain of valid arguments would be significantly restricted; similar considerations can be made relatively to *reverse compositionality* (Szabó 2020).

As mentioned at the beginning of the chapter, material equivalence is not identity; based on what is investigated till here, we can try to pass to Second- and Third-Order logics, where identity, if it's not properly defined, as mentioned, can be made explicit in quasi-Leibnizian fashion (Identity of Indiscernibles). The identity of individuals can be expressed in SOL quantifying over unary relations:

$$t = t' =_{def} \forall X[X(t) \leftrightarrow X(t')]$$

In the same way, but quantifying over individuals, we can express in SOL the identity between relations:

$$X = X' =_{def} \forall t[X(t) \leftrightarrow X'(t)]$$

This could be an acceptable way to make explicit the identity of traditional contents if we interpret them as n -ary relations with $n \geq 1$. Otherwise, we can pass to TOL, considering that “0-ary relation variables are essentially propositions” (Väänänen 2019):

$$X = X' =_{def} \forall \Pi[\Pi(X) \leftrightarrow \Pi(X')]$$

But these definitions would obviously present the same problems mentioned at the beginning of our formalization, involving the difference between absolute and relative identity and the intraworld vs transworld interpretation of *Leibniz's Law*. It would remain unclear, what should be intended for an individual being different from itself, in both cases of undefined (FOL) and defined (SOL, TOL) identity. What is it supposed to be, maybe an inconsistent object? In LP we meet objects (*individuals*) to which *opposite predications* are applied. The self-identity of the object appears not in question. If we pass to Higher-Order Paraconsistency, then “[I]t would seem preferable [...] to include identity of individuals as an additional primitive rather than defining it as can be done in Second-order classical logic”, due to the problems deriving from the intransitivity of identity in LP

$$a = b =_{def} \forall X[X(a) \equiv X(b)]$$

Since the transitivity of identity is derivable from its reflexivity and symmetry by use of the Rule of Substitution of Identicals, this rule will also not be valid when identity is defined in this way. For, using this definition, and the facts that \equiv is reflexive and symmetric in LP, Priest concludes that identity will likewise be reflexive and symmetric, i.e., that the following are semantically valid:

$$\models a = a \quad \models a = b \supset b = a$$

However, Priest notes that if A is True and B is Both then $A \equiv B$ is Both in LP; and if in addition C is False, then $B \equiv C$ is Both in LP. However, $A \equiv C$ will be False in LP

Or in other words, \equiv is not an equivalence relation in LP because it is not transitive. From this Priest concludes that identity is not transitive, using Definition (1).

$$\not\models (a = b \wedge b = c) \supset (a = c)$$

Much of Priest's view concerning the various manifestations of the "problem of unity and oneness" in (2014) derives from this foundation. (Hazen and Pelletier 2018, pp.551–552)

Our problem is not the transitivity of identity, but its conditions, i. e. the sufficient and necessary criteria to attribute it — given that its presupposition as a primitive does not result totally consistent. For these reasons, the passage to higher-order definitions of identity seems not to help us, presupposing, as they do also in the case of paraconsistent logics, some conditions that Gadamer radically questions.

Trying to make explicit Gadamer's presuppositions and intentions, we seem to reach a quasi trivial result, if A (1) is supposed to constitute one of the central predicaments of a theory. Let's indeed postulate T = the set of Theoretical principles. Given that Heidegger and Gadamer apply classical inferences also in criticizing Aristotle and logic in general, we can state that they question classicality almost always at a metalevel. At the object-language level, instead, they follow almost straightforwardly identical principles (we will deepen this central question in the next chapter and in the second part of the present article). Then the formula $\neg(T \wedge \neg T)$ should express a fundamental requisite for such a theory, in which the dialetheias should constitute the exception, not the rule. If the general attitude in front of classicality would be explicitly determined, the formula could turn out fundamentally acceptable — but this is not the case. So the compatibility of Gadamer's intentions with LP is questionable: *in this system classical truth and inconsistency-tolerant truth are not distinguished in principle.*

Furthermore, if something should logically follow from the contradiction ("The paradox that is true (...) *proves* that all interpretation is, in fact, speculative"), Priest's system would present for Gadamer the problem of not fully validating *modus ponens*. Modifying the conditional operator to permit quasi-validity, by restricting the codomain to classical bivalence, would probably be just a partial solution, given that Gadamer seems to presuppose a strong (classical) concept of validity.¹⁷ Indeed, there is a certain correspondence between Gadamer's paradoxical notion of identity and his need for both a paraconsistent and a classical notion of logical validity and consequence.

Truth and Method is incompatible with perspectives in which it's impossible to distinguish dialetheias from consistent assertions in a provable way (*a priori*); in particular, when Gadamer states the universality of the hermeneutical principles, he specifies that these should be taken absolutely, not relatively. It is equally important

for him to avoid the dialectical concept of *identity in difference*, which, we will see, is fundamentally *dialetheic*. The author strives to obtain at the same time acceptable paradoxes and univocal conditions of philosophical assertability, so he seems to need some incompatible fundamental conditions.

We could try to give another non-classical interpretation of Gadamer's paradox, internalizing metarules in the object-language to introduce classicality at a certain point, and trying somehow to overcome these incompatibilities. In this intent we should, first of all, forget the old image of a natural language taken as a whole and then translated into a formal one. In conformity with the hypotheses about natural language introduced in the last chapter, things work differently. Modern speakers first discuss logical principles possibly governing the language as a kind of proto-logic, triggering a series of reflections that can modify not only the general interpretation of linguistic functioning but also the actual linguistic practices. In other words, theories of language are a broad part of the phenomenon of natural language itself, insofar as this last does not presuppose meta-languages to talk about its truth-conditions. This consideration is consistent with a theory of logic beyond the opposition description-prescription.¹⁸ In conformity with these intentions, we should ponder how the informal discussion is related to the expression of the rules inside of the logical system, and which aspects of continuity and difference are conveyed by this relation; we will focalize these topics interpreting some iconic assertions of Gadamer.¹⁹ Presently, we could limit ourselves to modeling his discourse through da Costa's or Marcos' logics, with strong negations and/or classicality operators norming the limits of non-triviality from the inside. Differently from LP, the dialetheias are here the rule, not the exception.

To accomplish the intentions of Gadamer, we should stop the possible loop of equivalent dialetheias, generated by the recursive inclusion of extensions of the paradox in the domain T , with a classical non-contradictory assertion. In principle, we should introduce an unsatisfiable condition of paraconsistency: the impredicative reading of $A(1)$ should validate a *Liar-like paradox with strong negation*. So that $T[A(1)]$ would not simply mean:

α) This sentence implies its negation, $\vdash \alpha \wedge \neg\alpha$

but indeed:

β) This sentence implies its strong negation, $\vdash \beta \wedge \neg^*\beta$

Where the (*) symbol applied to the negation operator signifies that it behaves conforming to classical consistency inside of a (not trivial) system, in which generally the *ex contradictione* doesn't obtain (take $\neg^* =_{def} \{\neg A \wedge A^\circ\}$ and $A^\circ =_{def} \{\neg(A \wedge \neg A)\}$). In this system $\beta \wedge \neg\beta$ and $\beta \wedge \neg^*\beta$ should not be explosive, although not equivalent. The

hypothesis is a da Costa's system with cardinality $C > 1$ (da Costa: 1974), being β antinomic (trivializing) in $C1$. It would be weaker than $C1$, at its turn strictly weaker than classical calculus, and could be trivialized by a higher version of the *Liar*.

δ) *This sentence implies its strong negation*^o: $\not\vdash (\delta \wedge \neg^* \delta)^o$,

a supposedly weaker condition than both $\not\vdash (\delta \wedge \neg \delta)^o$ and $\not\vdash \delta \wedge \neg^* \delta$. β could be translated as *There is at least a traditional sentence, which is both true and classically (univocally) false: this one*. And δ : *Classically asserted, there is at least a traditional sentence, which is both true and classically (univocally) false: this one*.

But of course, in pain of triviality, no kind of negation can be given an intermediate semantic value between paraconsistent and classical one (D'Ottaviano and de Castro 2006, Marcos 2004). Expressions like $\neg A \wedge \neg A$ and $\neg(\neg A \wedge A)$ or $\neg(A \wedge (A \wedge \neg A))$ could be not equivalent in some da Costa-like systems, due to the general non-substitutability of proved equivalent expressions.²⁰ But a negation behaving classically and admitting the contemporaneous truth of the negated sentence is anyway not possible by definition, having the classical negation necessarily the same unique function, inside of a system, of impeding to derive the falsum \perp , a “bottom particle” generating full triviality (everything follows from it). In these terms, the classical negation symbol introduced in a paraconsistent system means informally: “no contradiction to this negative statement is acceptable without trivializing the system itself”.

This would also run against the basis of natural deduction, the general rule for hypotheses, which should reflect the nature of hypothetical judgments in a fundamental way. It's easy to see, that in the hypothetical case of β , there are just two possibilities: 1) $\beta \wedge \neg^* \beta$ is indeed explosive because the classical negation presupposes that $Tr\langle \neg \beta \rangle \leftrightarrow \neg Tr\langle \beta \rangle$, with a consequent collapse of the affirmed dialetheia in a pure antinomy; it would follow that $\beta, \neg^* \beta \models \alpha$ while $\beta, \neg \beta \not\models \alpha$; 2) $\beta \wedge \neg^* \beta$ is a dialetheia, so does not conflate $Tr\langle \neg \beta \rangle$ and $\neg Tr\langle \beta \rangle$, and admits just the first truth predicate (Priest 2006, pp.43–55, pp.103–15); but in this case, no difference would be traceable between \neg , the paraconsistent negation, and \neg^* , the strong negation, because the given distinction is necessary and sufficient to accept a contradiction as true, so to negate classicality.

Gadamer seems to require contradictory linguistic norms, which can't be held without implying full inconsistency. Such a position is unacceptable also from a purely naturalistic point of view, insofar as meaning requires heuristic functions to exist. In particular, we can recognize no adaptive function to trivialism: outside of full compositional predicative semantics, our *core cognition* or *proto-logic* (Carey 2009, Hanna 2006) presupposes basic forms of consistency, although it is not obvious that they should be classical.²¹

The mistake of Gadamer is his conception of meaning. Continuities and differences between historical and social contexts are for sure cognitively relevant, but they do not necessarily have to do with the semantics of words and with propositional content, although, in particular cases, they do. This means, that usually extensions and contextual implicatures are not questions of *meaning* precisely intended. A little more problematic is the case of conventional implicatures, where a description is supposed to fix meaning. But this is not Gadamer's case.

It's true that in general *understanding and knowledge ought not to be equated with sound conceptual representations*. The linguistic cognition derived from the capacity of operating recursion (*Merge*) permits one to accede to full predicative linguistic meaning: to understand (process) meaning and concepts, and (re)conceptualize, generating new concepts. In this sense, and only in this sense, linguistic understanding is relatively separable from the broader scope of *full cognition*. In particular, full "cognitive significance does not supervene on semantic properties" (Williamson 2021, p.19): there can be changes in the former without changes in the latter.

This stance turns very important in philosophical contexts. After the *Tractatus*, it became almost commonsensical among philosophers to accept that given a corpus of logic-philosophical principles of representation, some metaphysical assertions expressed in it must result in tautological or contradictory, consisting in stating or negating the *same* conditions presupposed for their understanding. What can't be explained inside this conception is the cognitive relevance of the form of presentation, which can vary substantively from context to context and is *not reducible to semantics*. We can call it "meta-metaphysical *scolio*", driving us to a not-just-semantical reading of metaphysics itself: "even metaphysics is a kind of embodied cognition" (Williamson 2021, p.23).

Linking cognition to experience, Gadamer *de facto* presupposes an embodied mind and a phenomenal consciousness to make explicit the cognitive significance of how the traditionary contents are transmitted. This significance does not vary only in relation to the (material) forms of expressions, but also in relation to the different contexts of reception of the same expressions. For this reason, inferentialist insights in interpreting idiolects are not to exclude from cognitive sciences — a point that Ned Block clearly expressed already in the 80': they should just be properly reformulated.²² Today propositional content is largely analyzed adopting an externalist frame (meaning depends *also and mainly* on facts of the world), but the study of "internal" conceptual roles proves very useful to determine the probability attributed to inferences by single subjects and/or to groups, proceeding from the connotations and associations of expressions and topics. But it remains extremely important not to forget, that these "internal" connotative and associative determinations *do not coincide with meaning*. Also if distinct people attribute different and even incompatible properties to the same classes of objects, this does not imply a different meaning of

the correspondent concept (although its extension could change, in accordance with intensional semantics). It is so evident that the social determinant of meaning can't be descriptive, that descriptive conceptions of meaning became historically obsolete (Gomez-Torrente 2019).

The studies on idiolects and “internal” connotations lead also to recent proposals of introducing *social qualia* (Mizuno; Kato; Mutoh; Itoh 2005, Bouten; Pantecouteau; Debrulle 2018; *qualia* are a kind of entities lacking completely propositional content; Block 2007). Non-semantic components of understanding can be indeed postulated in a very broad sense (in terms of epochs and similars).

Conclusions

Both systems, da Costa's *C* and Priest's LP, do not include the principle of *ex contradictione* nor that of *ex falso* among their postulates, at the same time avoiding triviality through the introduction of a strong negation (da Costa, Marcos) or the use of the *falsum*-particle (\perp , Priest). What Gadamer needs is nothing less than a set of alternative rules and meta-rules at the core of logical thought, on which basis we could first admit contradiction, non-bivalence, and/or further truth-values at different levels without falling into triviality, and at a second time make univocal assertions (maybe just in terms of *quasi-validity*). But to *derive* the pure (classical) assertion of a conjunct from a true-held contradiction results anyway impossible. We should interpret A (1) paraconsistently as expressed inside of a philosophical argument, which could be considered as already structured following a tacitly accepted logic. But in this sense it would implement a *local norm*, not trivializing the system, which shouldn't admit *falsum*. To embrace at this point an intratheoretic logical pluralism would impede to establish consequence relations between T-statements and TaM (*Truth and Method*)-statements (“the paradox [...] proves that...”); any collapse argument would show it.

In the end, the best solution for Gadamer would be to intend *Truth and Method* either classically or as simply true, but accepting anyway a dialethic interpretation of some expressions (maybe in a calculus C_n where n is the number of contents, i. e. formulas with primitive components, not satisfying classical validity; da Costa 1974, Theorem 4).

When applied to the paradoxes of self-reference, paraconsistency can indeed dispense with the object-language/metalanguage distinction, permitting us to “extend the expressive power of our language by encoding the metatheoretical notions of consistency (and inconsistency) in the object language” (Priest; Tanaka; Weber 1996, 2022). But classical consistency, in this case, is postulated — not *derived*, as Gadamer seems to require.

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Notes

¹Interpreting complex statements, we can build up models switching our analysis from the linguistically conveyed meaning to the possible states of affairs, that a sentence or a set of sentences is intended to express. I conceive this kind of methodological detour through models as the best way to determine the specific meaning of ambiguous texts of all kinds.

²(Rayo and Uzquiano 2006). Kit Fine (2006) was probably the first to sustain that on some kinds of statements we don't impose any domain-restriction. The editors comment: "Such utterances would not be absolutely general since the quantifiers would not range over an all-inclusive domain, but they would nonetheless be unrestricted. (It is an interesting question, however, what the truth-conditions of an unrestricted but non-absolutely general utterance would consist in)". (p.2)

³See (Carey 2009, pp.55–64). Referential uses, inseparable from realist interpretations of the environment, constitute the basis of human acquisition of language; it's a scientific result based on both behavioral statistic investigations and neurobiological studies. The importance of inferential intralinguistic structures, possibly giving rise to *reverse compositionality* and *conceptual role semantics* (called "sideways theories") is underscored in a connectionist frame by (Thagard 2019, pp.209–15. In this case too, referentiality and objective representation in a realistic frame are necessary preconditions ("downwards theory"). At the same level of generality, Block interprets the basic realism grounding the layman's evaluation of her cognitive successes as offering the basis for a more complex representation of cognition, involving limits and peculiarities of internal conceptualizations: "I will distinguish between the cognitive mode of presentation (CMoP) and the metaphysical mode of presentation (MMoP). The CMoP is (...) a constellation of mental (cognitive or experiential) or semantic features of a term or mental representation that plays a role in determining its reference (...) The importantly different (...) and less familiar mode of presentation, the MMoP, is a property of the referent. There are different notions of MMoP corresponding to different notions of CMoP. Thus if the defining feature of the CMoP is taken to be its role in determining reference, then the MMoP is the property of the referent in virtue of which the CMoP plays this role in determining reference. If the defining feature of the CMoP is taken to be explaining cognitive significance, then the MMoP is the property of the referent in virtue of which cognitive

significance is to be explained” (Block 2007, pp.446–7).

⁴In the first two chapters of my work I try to determine a general concept of understanding, according to some well-accepted scientific (biolinguistic) and epistemological principles. Admitting a core-knowledge relative to pure recursion, for a defined representation all single items to which the *Merge*-operation is applied are required to be in some important sense already “lexicalized”, so that it’s not *a priori* impossible that a certain opacity in content-definition and arbitrariness of meaning-relations contaminates also the structure of the computational operations (the “parameters” and “labels” of the I-language). The fact is, as Quine showed, that in natural languages the knowledge of meaning can’t be completely separated from the world-knowledge; this last includes the acceptance of some partially arbitrary meaning-schemata such as sorts, concepts, categories, kinds, etc. A core fundamental knowledge will be preserved, and used to contrast the idea of instability of meaning. (Quine 1960, pp.73–82)

⁵“(. . .) es gibt kein mögliches Bewußtsein, und wäre es noch so sehr ein unendliches, in dem die, Sache, die überliefert wird, im Lichte der Ewigkeit erschiene. (. . .) Jede Aneignung der Überlieferung ist eine geschichtlich andere —(. . .) Eines und dasselbe und doch ein anderes zu sein, dieses Paradox, das von jedem Überlieferungsinhalt gilt, erweist alle Auslegung als in Wahrheit spekulativ”. (Gadamer 1990, p.477)

⁶Speaks (2019): “The first sort of theory—a semantic theory—is a theory which assigns semantic contents to expressions of a language. The second sort of theory—a foundational theory of meaning—is a theory which states the facts in virtue of which expressions have the semantic contents that they have”.

⁷Reconnecting the historicist aporia with its late rationalist origins just displaces the paradox. Since inferences are immanent to all forms of linguistic truth-seeking, no ideological reframing can make it disappear. (Gadamer 1975, p.272): “The recognition that all understanding inevitably involves some prejudice gives the hermeneutical problem its real thrust. In light of this insight it appears that *historicism, despite its critique of rationalism and of natural law philosophy, is based on the modern Enlightenment and unwittingly shares its prejudices.*”

⁸“Wir können das Seyn (Ereignis) nie unmittelbar sagen, deshalb auch nicht mittelbar im Sinne der gesteigerten “Logik” der Dialektik. Jede Sage spricht schon aus der Wahrheit des Seyns und kann sich nie unmittelbar bis zum Seyn selbst überspringen. Die Erschweigung hat höhere Gesetze als jede Logik. (. . .) Vollends aber ist die Erschweigung keine A-Logik, die ja erst recht Logik ist und sein mochte und nur nicht kann”.

⁹See (Geach 1972) for the original argument.

¹⁰(Freund 2019, pp.15–17). Self-identity is directly characterized by the law, since it trivially implies and is implied by self-indiscernibility beyond any constable property change.

¹¹Kripke’s critic to the transworld identity problem as a pseudo-problem is well known. We don’t need any criterion, sustains Kripke, because we already presuppose the individuals being the same actual ones (1980, pp.42–53).

¹²This would be obviously incompatible with Kripke’s convincing and influent argument of necessity *a posteriori* (Kripke 1980).

¹³Material equivalence between conditional and disjunction remains valid in the paraconsistent domain of LP; (Priest 2008, p. 124 and following).

¹⁴We follow the rules given by Grover (1972, 1973). We could employ a substitutional interpretation of the propositional quantifiers and the quantificational apparatus itself in and

out of quotes, as shown in (Belnap, Grover and Camp, 1975).

¹⁵Prior (1961, p.17): "... if it is said by a Cretan that whatever is said by a Cretan is not the case, then something said by a Cretan is the case, and something said by a Cretan is not the case". Take indeed the Cretan proposition to be false: it's because something else said by a Cretan is true, so we have both. Take it to be true: so it must be false (and so true, etc.). In the original notation: $C(dUpCdpNp)K(EpKdpp)(EpKdpNp)$, where d is the proposition-forming operator, E and U the quantifiers. C and K are the sentential operators indexed here as T .

¹⁶"[...] circularity does not make the definitions illegitimate or wrong or senseless. One does not have to eliminate the circularity of truth (say, via a hierarchy of truth predicates or by invocation of new semantic values) to make sense of the biconditionals. The biconditionals make sense on their own. Indeed, the roots of both the ordinary nonpathological behavior of the concept of truth and its perplex-ing pathological behavior lie in their circularity. (Gupta and Belnap 1993, p.200).

¹⁷(Marcos 2005, p.xi): "Priest wants his logic to somehow recapture classical logic and recover classical reasoning simply by avoiding paradoxical sentences. The logic is, however, just not expressive enough to that end: It is impossible to say in LP that a certain sentence is provably 'non-paradoxical'."

¹⁸(Van Benthem 2008, p.82): "(...) since abstract theory influences actual behaviour, not just by being right about the cognitive status quo, but also through the design of new intelligent practices allowing for 'successful insertions' of behaviour into human lives, the interface between logic and human cognitive practice is much more diverse than the usual normative/descriptive distinction would ever allow us to see". See also (Stenning and van Lambalgen 2008) for a general theory.

¹⁹In the fourth chapter of my work I try to offer some metalinguistic reflections on the relations between logical rules and common use in general, and between formal rule-making-up and natural rule-following in particular, guided by some indications of Gadamer.

²⁰(Marcos 2005, p.xxxvii): "While $\neg(A\&\neg A)$ indicates good behavior, seemingly harmless variants such as $\neg(\neg A\&A)$ or $\neg(A\&(A\&\neg A))$ do not. In that case, the mentioned logic reveals itself to be, in a certain sense, strongly asymmetric and too dependent on accidental syntactical formulations".

²¹As implicit in note (3), the passage from *proto-logic* to logic corresponds to the interface between purely syntactic lexical values (basic features strictly necessary for *Merge*) to full predicative semantics.

²²The evolution of Block's positions on externalism and internalism is evident comparing his (1986) and (2007).