ON EMPLACING:
REFERENCE, COHERENCE, TRUTH, AND PARADOXES
(IF THEY BE PARADOXES) [1]

by

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‘Tis filausofers & logishons wot bedde down wyth paradoxyes.
--Fanebius Perlyng (from *Erly Warnyngs*)

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THE FIRST DAY

Reference Becomes Emplacement.

Names live in eternity, are set there like stars…tiny
points in human consciousness.
H. D. (Hilda Doolittle), *Pausanias*

THELMA FACTIVA (THELMA): What should we do tonight, Tom? A movie?
TOMASSO PARADOSSO (TOM): No. Let's stay here and play Paradox.
THELMA: Show me how.
TOM: My statement is false.
THELMA: A new come on, Tom? So, OKAY, what statement is false? To what are you referring with quote My statement unquote? (Tom and Thelma's spoken quotat-

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[1] This essay corrects some of Russell’s “On Denoting” and Strawson’s “On Referring”. It does so by replacing “denoting and “referring” with “emplacing”, which is a feature of a conceptual/coherence logic, an ur, basement logical to statement/truth logic This new logic is informally introduced during the discussion about paradoxes, which is a test case for the utility of the new logic. A more extended formal presentation of conceptual logic appears in *The Logic of Conceptual Coherence 3.0* that includes a brief symbolic abstract of it.

With this essay, I intend to wash away a decent portion of the clotted, academic blood shed by analytic philosophers in the 20th Century, to refresh the survivors of the 20th Century analytic wars, to free young philosophers and other intellectuals from the oppression of accumulated orthodoxies, and to suggest that the introduction of a new canon may open new prospects for fledgling philosophic alternatives, fun, games, and joy. Special thanks to Nino Cocchiarella, Roy Mash, and Don Gieschen for reading drafts of this essay and for their advice.

ion conventions (quote...unquote) will be replaced with written quotation marks ("..."); other kinds of quotation marks Thelma thinks are useful await you down the line (p. 7f).

TOM: I referred to what I just said.

THELMA: To "This statement is false"?

TOM: Yes, "This statement is false" is self-referential.

THELMA: Tom, I'm surprised at you. Referring is something people do. Statements can't refer any more than they can infer. Statements may imply or entail; but it's incoherent to say they infer or refer.

We don't use statements to designate anything, including itself. We do use their subjects to designate objects and their predicates to designate properties they have.

TOM: I intended "This statement" to designate "This statement is false".

THELMA: You know, don't you, that, in interpreting somebody's singular declarative sentence, we substitute for its subject what we believe is the intended designee?

TOM: Substitute a referent! That's bizarre.

THELMA: It's neither bizarre nor unfamiliar. We do this all the time. Actually, it's more accurate to say we **emplace** rather than substitute objects for subjects. We substitute "2" for "two" or vice versa, but that's different from emplacing one in the other. Emplacing is how we go from a declarative sentence's grammatical subject to its referential subject. Frege understood this. "The reference of a proper name is the object itself which we designate by its means ...".[2] For me, the same goes for any linguistic technique we use to pick out single objects, such as definite descriptions, pronouns, and pointing propped up with a common name, "That pan …". If you say "That is hot", the sentence's grammatical subject is "that". If you point to a pan, that helps me identify your intended referent of "that". The pan would be the sentence's referential subject, and so, the subject of the statement "That pan is hot". Do you agree?

TOM: That's obvious--I think.

THELMA: Your pointing instructs me to emplace the pan in "that".

TOM: Emplace?

THELMA: If you're to verify or disverify, agree or disagree on the basis of evidence, rationally believe or doubt that the pan is hot, you have to get past "that" to the pan. Yes?[3]

TOM: Sure.

THELMA: To get past "that" you have to emplace the pan-piece-of-reality in the sentence's place where "that" is. [THELMA addresses a predicate's referential property later. She rejects the notion that predicates are functions. She thinks they're operations that persons, not sentence predicates, carry out. And if properties, such as bloated versus

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[2] Frege, G., "On Sense and Reference", Trans. M. Black, *Translations from the Philosophical Writing of Gottlob Frege*, p. 60, eds. P. Geach and M. Black; Oxford, Basil Blackwell, 1952.

[3] "The theorems of arithmetic are never about symbols, but about the things they represent". Frege, G., "The Whole Number", Mind, p. 482, Vol. LXXIX, No. 316 (Oct. 1970)

long, aren't emplaced in predicates as objects' features, she wonders why anyone bothers looking at Falstaff's face to see if it's really bloated or at a nail to see if it's truly long? She distinguishes objects from properties, but she also knows both need to be emplaced to verify and falsify statements' truth value. She explains why later.]

TOM: Emplace?

THELMA: You are persistent! If I claimed that a pan is hot, you'd check out the designated pan and its temperature to verify my statement. It would be incoherent to emplace a wig in "pan". That leads to the absurdity of checking its temperature to verify that the pan is hot. It's coherent to emplace a wig in "wig" and a pan in "pan" but incoherent to emplace a wig in "pan" and a pan in "wig".

TOM: Incoherent?

THELMA: Conceptually absurd. Our tribe differentiates words' referents. Not just anything can be a word's referent. Why do you think we use different words for different kinds of objects and differing properties? Only Plump Jack could get away with "It's all one", and he only when in his cups.

TOM: Who's Plump Jack?

THELMA: Falstaff's predecessor. Don't you think I'd be a bit daft if I used "wig" to refer to a pan, and vice versa? Or speaking in tongues, or code?

TOM: There must be more to incoherence than that.

THELMA: There's lots more and all good, but that's all you need to know now. Haven't you noted how popular "coherent" and "incoherent" are, especially the latter, in the Anglo-American philosophic lexicon. "Incoherent" is like a blurry curse you can pin on an indefinite target. My cardinal philosophical task is to make coherence a serviceable concept, as basic as truth is, to distinguish the two, and initiate a logic for conceptual coherence value inferences distinct from a logic serving statements' truth value inferences. That's not done in a one-liner, Tom. For starters, it takes the whole of this essay, its Appendix, and the latter's appendix. And work on the coherence value of evaluations.

Allora. Let's call whatever we emplace in a declarative sentence's singular grammatical subject a "statement subject", which is short for "an interpreted sentence's referential subject". It's a short way to help us keep sentences' grammatical and referential subjects distinct. I use the phrase "statement subject", because the concepts of reference, statement, and truth value are bound together. When I utter a sentence, intending to make a statement with it, I must intend, or an auditor must believe I intend, that it's terms coherently refer to something I or an auditor believes contributes to its truth or falsity.

So, the indicated pan would be the statement subject of "That is hot".

TOM: If I say "Thelma is daft", and you're the intended referent of "Thelma", are you really saying you are really the statement subject of "Thelma is daft"?

THELMA: Yes, I am saying so, and I am. Really, and really. The referential content of a sentence can't be the sentence's referring words themselves. If they were, you'd never get beyond the sentence.

TOM: I've always thought the contents of statements had to be platonic-like thoughts, if you favored Frege. Or psychic events or states, if you were a conceptual naturalist.

THELMA: Don't confuse a referent with such metaphysical or psychological tools to explain the referential process. If you want a hands-on explanation, I'm offering what I call emplacing objects and properties in sentences subject and predicate tokens in a serial order from subject to predicate, what's needed for verification. I'll explain that later.

TOM: The confusion between a referential process and a referent never sullied my mind.

THELMA: I hope not. Hot pans and I, Thelma, are neither Fregean concepts nor functions, nor are we mental events, but we are referential contents. If referents weren't the 'contents' of our statements, we couldn't reach beyond sentences to objects and properties in the world, which, after all, is what the truth value of statements finally depends on. The truth value of the statement "Tom doubts" depends on whether or not you doubt. Emplaced referents are the pay-off contents of statements; only they make them true or false. Notice I didn't say truth value depends on 'states of affairs'. The story's more complicated, but it's better to let its elaborations flow out of our conversation. I'd love the gift of patience from you. Lord knows, I need it.

TOM: Whatever I have is yours, Thelma. And thanks for asking.

THELMA: A sentence's referential content varies with the lexical interpretations of its subject and predicate tokens. We all know that one and the same sentence type may be interpreted coherently in different ways. There's often--maybe more often than not--a one-many relation between a sentence terms' and its lexical interpretations, which for me are naught but rewritten sentence tokens. For example, "The car is hot" might be interpreted-rewritten as "The car is fast" or "The car is stolen", or as...

TOM: I know, I know.

THELMA: Also, promise: For logical purposes you won't confuse token rewrites with thought contents, whether yours or the cosmos', because these rewrites are from sentence to sentence, not from sentence to thought nor from thought to sentence! They're just token rewrites!

TOM: You're a bit preemptory, aren't you?

THELMA: I an. Getting back to statement contents and sentences' interpretations, think about "That is hot", and suppose "hot" is interpreted as "high temperature". Different referential contents that we can emplace in "that"--a pan, a meatball, the sun—are variant truth value factors for the statement "That is hot". "That" is a place-holder yearning for emplacements, just as "x" in "X is hot" yearns for the emplacement of an object.

TOM: But "x" is a variable.

THELMA: And so is "that". Tarski exploited emplaced referents into statement's subjects: The "satisfaction of a given function by given objects" "leads us directly to the

concept of truth".[4] Tarski said "objects". He didn't say "signs" or "words" or "names". Objects enter functions in a logical way by...

TOM: Back to coherent emplacement?

THELMA: Think about the function in "x taught Aristotle", "Taught Aristotle (x)", or "f(x)". If we apply Tarski's satisfaction notion to natural languages, and treat their predicates as functions, by putting Tarski into the space held by "x" he doesn't satisfy that function, unlike Plato who would.

TOM: But satisfaction isn't the same as truth. "Taught Aristotle (x)" is true if we emplace the name "Plato" for "x", and is satisfied if we emplace Plato in "x".

THELMA: Emplacing objects is more basic than substituting names, if that's how you want to distinguish satisfaction and truth: Statements aren't true unless functions are satisfied. To verify the truth of "Taught Aristotle (Plato)", we have to emplace Plato in (Plato), because it was he, not his name, who taught Aristotle, and it is he and what he did that makes that sentence true.

TOM: How can you emplace people who aren't even cadavers anymore into subject and variable argument places?

THELMA: Don't give me a hard time, Tom. Just think of them as being Eternally Present, or Sempiternal as Nino Cocchiarella puts it, for logical purposes.

TOM: Surely you're joking.

THELMA: Eternally Present you can take lightly, but not what's behind it. Names in statements that are not or were not underwritten by emplaced persons or objects are pretenders, like play-money in Monopoly. Let's agree that 'Once upon a time' if you could have emplaced Plato in "Plato", and if he did teach Aristotle, "Plato taught Aristotle" would have been true. Historian's have real jobs, Tom. It's up to them to keep past coherent emplacements for names Historically, if not Eternally, Present. The 'forgotten many' will have to rely on their headstone in a cypress-dressed marble farm.

And, by the way, it would be just as incoherent to emplace Socrates in "Plato" as to emplace a wig in "pan". Socrates is the coherent referential subject of "Socrates taught Aristotle", making it coherent, although it's false. However, it's incoherent to emplace Socrates in "Plato". Would you expect your auditor to think you're referring to Plato if you did that? (Beat) I doubt it.

TOM: If Socrates rather than Plato had taught Aristotle, wouldn't emplacing Socrates in "Plato" of "Plato taught Aristotle" make it true?

THELMA: No. Emplacing Socrates in the subject of either "This man/he/x taught Aristotle" could make any of the possible statements true, but emplacing Socrates in "Plato taught Aristotle" could not. Like I just told you, it's incoherent to emplace Socrates in "Plato". "This man", "he", and "x" are variables, "Plato" is not a variable; you

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[4] Tarski, Alfred, "The Concept of Truth in Formalized Languages", *Logic, Semantics, Metamathematics*, p. 189; Oxford, Oxford University Press, 1956; translated by J. H. Woodger.

can coherently emplace any person into the variables, including yourself, but not into "Plato". There is a one - one relation between "Plato" and Plato, if you mean "Plato" to be a proper name, from the Latin *propius*.

TOM: It sounds as if you're saying proper names like "Plato" have meaning.

THELMA: In standard theories, “have meaning" is too gross to capture anything certifiable. Don't load more weight on that unreliable, tired, old ass than it can bear.

TOM: I suppose you think you've antiquated those theories!

THELMA: Yes, but this isn't the place to go into that. Maybe later.

Look, if you emplace Socrates for "Plato", you've made a mistake about "Plato"'s referential content as normally intended, while, if you substitute Plato for "Plato", you have not. Obviously, you shouldn't say you've made a "false" reference in the first case and a "true" one in the second, because "false" and "true" should be reserved for statements' truth values. We need other evaluative terms for emplacements. I suggest "coherent’and ‘incoherent". "I haf my rhyeesons, beleef me". [What Thelma has in mind is her coherence logic in the Appendix to these conversations. There she asserts that reference is emplacement in lexical space at the lowest level of conceptual subsumption. The concept ^fruit^ subsumes ^apple^ as ^apple^ subsumes ^winesap^, and all subsume the actual ^winesap^ in my hand. Since the apple in my hand subsumes nothing, it’s at the lowest subsumption level, a bottom-dweller. Thelma transforms old speak “reference”, used non-logically above, as usual, into lexical 'meaning' via conceptual subsumption, which trusses up the lamentable, untreated 'cleavage' between 'meaning' and ‘reference'.]

You look skeptical.

TOM: It's a privilege I exercise and enjoy in the absence of sufficient explanation.

THELMA: More on that later. As to our present exigency, if my linguistic practice is to emplace Plato in "Plato" and yours is not, our practices are at odds. On the basis of our tribe’s emplacing practice, "Plato taught Aristotle" becomes a true statement, while your atribal incoherent emplacement of Socrates for "Plato" turns “Plato taught Aristotle” into a false statement. Coherent versus incoherent emplacements turn the same sentence into incompatible statements. We must pay attention.

If we couldn't coherently emplace the identical star for "The Morning Star" and the "The Evening Star", how could we designate the same thing with those two names? And how could we confidently agree that two sentences, differing only in that one sentence has "The Evening Star" for its grammatical subject where the other has "The Morning Star", express extensionally equivalent statements if we don't agree they have identical referential subjects?

TOM: But how do we know when we're coherently emplacing?

THELMA: Read a little of the huge literature about reference and the arguments for and against 'direct' reference. It has lots, an apparently endless number, of explanations of how you can do this in the most imaginably various situations. It may even take,

heaven forbid, information to identify a coherent referent, even astronomical information, as in the case of the Evening and Morning Star.

TOM: I've read some of the literature, and the more I read the more confused I become--I don't have time to keep up with the endless stream of personal neologisms trotted out by people who discuss reference. Don't publishers and journals have editors? I DON'T WANT to read anymore. Scholasticism exceeds my patience.

THELMA: In my opinion, you're impatient because you think you have to take sides but don't have time to evaluate them. Get pluralistic, Tom! Most 'theories' of reference explain grounds for coherent substitution into grammatical subjects. You don't have to choose. Use whichever one you need in the circumstances to identify the coherent subsitution. They aren't philosophical/logical alternatives, just spruced up explanations of how we figure out what somebody's 'talking about'; they're philosophers' ways of 'improving' on common sense, and on empirical linguistics and psychology.

TOM: You seem pretty cavalier.

THELMA: Not at all. I'm grateful. Pick out whatever method of identifying emplacements you need. Use whatever works. OKAY? It might even be a bit bizarre, such as "Do you know the gal who always crosses her eyes when she sees me crossing mine? (Yes) Well, she's getting rid of her millstone." "Divorce?" "Ummm." Bizarre's not so bad, since it's likely to be unique enough for identifying purposes.

And, in trying to see if "My statement is false" is really a paradox, we don't have to get involved in opposing solutions to logical problems with oblique or indirect discourse; nor causal theories of rigid designation nor the nature of natural kinds. Nor of the virtues and vices of definite descriptions of existing or non-existing things or persons such as the "The present king of France". There's plenty of virtues and vices to go around.

TOM: I'll reserve judgment. By the way, whatever happened to our Paradox game?

THELMA: Oh, I thought we were playing it. I've been trying to explain why we have to identify and emplace the referential content of statements into sentences, including "This statement is false", in order to determine their truth value. So far, I've distinguished grammatical from statement subjects, and I argued that we have to put the latter's referents, say Plato, into "Plato" in order to determine the truth value of statements, including the so-called Liar paradox 'statement'.

Moving on, then. To keep us from confusing grammatical and statement subjects, may I suggest we use different marks around written expressions when we refer to them? And that we use their verbal equivalents in spoken speech?

TOM: Sure, providing they're relevant to the Paradox Game.

THELMA: You'll see they are.

Up to this point in our conversation, we've been relying on ridiculously inadequate quotation marks. There are more distinctions we have to observe if we're to make progress in thinking, writing, and talking about 'meaning', 'reference', 'truth and falsity', 'co-

herence and incoherence', and 'paradox'. Here are my additions to current quotational devices to indicate what kind of referents we're talking or writing about. These and the "Components" of propositions listed below these quotation marks are explained extensively and utilized fully in this essay's Appendix where I develop conceptual logic, symbolize it, and show its philosophical importance and applications beyond its dissolution of the Liar and other paradoxes. I identify these other applications in the introduction to this essay.

Quotation Marks

/…/	Use slash marks, /…/, around a token word or sentence, /Tom/ or /Tom is curious/ to indicate a specific word or sentence token.
"…"	Use double quotes to indicate a type word or sentence, "Tom" or "Tom is curious". I give types a nominalistic explanation in terms of tokens. A type is a way of counting tokens. *Any* token satisfying a description is counted as ONE and the SAME type as any other token satisfying that description. A type isn't an entity, just a token count result. I forgo [all] in favor of [any].
^…^	A concept, a word's interpretation; or a proposition, a sentence's interpretation. ^Stolen^ is an interpretation of /hot/, a concept; ^the car is stolen^ is a proposition, an interpretation of /The car is hot/. Interpretations don't give us 'meaning'; they're rewrite tokens as above.
<…>	A statement; a claim made with the use of an interpreted sentence.

Medieval logicians called ^…^ and <…> material supposition.

E…E	An object is emplaced in an S token, EballE @ /ball/; a trope is emplaced in a P token, EredE @ /red/.

Medieval logicians called E…E formal supposition.

[F]	Braces distinguish functors from other components of sentences, propositions, and statements. Functors are interpretations of the copulas "to be" and "to have". /Red is a color/ is interpreted as: ^[Subsume] ^colored^ ^red^^ or ^^colored^ [Subsumes] ^red^^. Functors invite us to perform linguistic acts; lexical functors invite us to perform lexical acts.
{C…Cn}	A range of incompatible concepts, {red blue yellow …}, subsumed by an adjacent concept. A subsuming concept is adjacent if it does not subsume any concepts intermediate between it and its range.

^Color^ is adjacent to ^red^, ^blue^, ^yellow^…^. ^Red^ is adjacent to ^scarlet^, ^color^ is not.

[A…An] A congery of property concepts. They are bonded to an object, kind concept, as ^winged^ is bonded to ^bird^, or soothed to an emplaced object as ^young^ or ^old^ are soothed to ^robin^. ^Definition^ is the illegitimate child of congeries of property concepts bonded to object concepts.

Components of Subject-predicate Propositions[5]

^S^ - A substantive concept in the subject place, ^S^, of a proposition. Objects, events, acts, …are emplacements for /S/s in a sentence.

^P^ - A property concept in the predicate place, ^P^, of a proposition. Property tropes are emplacements for /P/s in a sentence.

[F] - A functor; an interpretation of a copula. It's a lexical act advisory, for example, [Subsume], in the via attiva mode; in the via passive mode [Subsumes] reports a lexical relation between concepts.

^C^ - A concept; resident in propositions first, then in statements; each has a unique place in lexical space. Here, I do not present conceptual inference forms for propositions, but do so in its Appendix.

TOM: May we talk? That's a lot to take in one gulp.

THELMA: I'll be using them often. You'll pick them up as quickly as a child masters "mama". But you might like to print them out for easy reference.

TOM: You're using right leaning slash marks, /…/, to indicate you're referring to a token instead of to a type.

THELMA: Right. Token /…/ and type "…" marks respect the multivocality of the ways we use "word". In his introductory logic class at U. of Michigan, Professor (C. H.) Langford used an analogy. He asked us how many books were in the University's library, inviting we neophytes to distinguish the number of book titles from the number of their copies. "Oh, yeah, the number of Plato's titles is less than the number of their copies."[5]

TOM: Do slash marks do what pointing to a written word does, indicate that a specific token is the intended referent?

THELMA: Yes, but pointing doesn't always distinguish between a type and a token, because "word" is pregnant with ambiguity. If I point to the grammatical subject of /That is hot/, my interlocutor will likely pick out /That/, the token beginning with /T/, but

[5] Thelma distinguishes sentence tokens, /…/, from sentence types, "…", and from propositions ^….^, which are interpretations of sentences. Interpretations are token rewrites of token words and token sentences. She distinguishes propositions from statements, <…>, which are interpreted sentence/token rewrites that speakers use to make truth value claims.

my pointing doesn't disambiguate whether I intend that word in that sentence to refer to a type or a token.

A reporter who writes, /King Edward VIII said today, 'I will abdicate'/, may count her dispatched token as one along with other such tokens issuing from the pens of reporters writing their separate token reports of what King Edward said. However, a reader who points to a reporter's /I will abdicate/ while saying /King Edward VIII said today/ can't by itself indicate that the reporter is referring to King Edward's or a reporter's token of that type.

TOM: If reporters can't avoid using a sentence type, because using any other token of "I will abdicate" than King Edward's can't be King Edward's own token, why bother with slash marks for tokens?

THELMA: Here's an example that shows why. If you say, "This is the first sentence Frege wrote about Russell", pointing to Frege's handwritten note, /Bertrand Russell ist jung/, you're pointing to Frege's token. Using slashes along with pointing indicates that you're emplacing only Frege's German sentence token into the grammatical subject place of "This is the first sentence Frege wrote about Russell".

TOM: Frege's handwritten sentence is the statement's subject. No other token will serve.

THELMA: Yes. I keep coming back to statement subjects because they're central to detect what's gone wrong in claiming <This statement is false> is a paradox.

Note that when designated expressions are substituted for expressions within quotation and slash marks, they aren't being used to refer or to make statements; they are the referents. The referent of /Bertrand Russell ist jung/ isn't being used to refer, because it's the referent. Consequently, the designee of a sentence within slashes, or within quotation marks, isn't an assertion, and as such can be neither true nor false. It's just a set of physical marks. If it's a designee of a slashed expression, it's a singular token; if it's a designnee of a quoted expression, it's a type, that is, any token that fits a specified description.

TOM: But I understand the meaning of /Bertrand Russell ist jung/; so, it can't be just a physical object.

THELMA: Every sentence is physical--an inscription, a sound, a flurry of flags, or finger and hand dances--yet you understand them. Why should you think it's objectionable to treat Frege's sentence, /Bertrand Russell ist jung/, as an object and also be understood? Frege, not you, asserted it, and you can understand what he asserted. When you only refer to it, it's truth or falsity's not for sale; it's only a statement subject. What's for sale is the truth or falsity of it's being the first sentence Frege ever wrote about Russell.

TOM: If I intended to make a statement with the sentence inside the slash marks...

THELMA: Then you could. But if they're inside slash, or quote marks, they show you don't so intend. They show you intend them to be only statement subjects.

TOM: Type versus token reference seems to be a distinction without an important difference for dealing with paradoxes.

THELMA: /Dieser Satz ist falsch/ is not a token of the type "This sentence is false", if the latter type description specifies that tokens must be in English. That's an important difference. You couldn't rightly claim <<Dieser Satz ist falsch> is a paradox> on the sole basis of having shown <<This statement is false> is a paradox>. You could claim that, however, if you counted the English and the German sentence tokens as ONE type, counting them as ONE because they're coherent rewrites of each other.

TOM: What about this? In <"Wig" has three letters>, we have a type inside the quotation marks. Is that type the statement subject of that statement?

THELMA: No, the double quotes show its referent is a type, which is *any* token that's counted as one type, as "Wig" or "wig". So, any token, /Wig/wig/, of those types could be the statement subject if it satisfies the same description as other such tokens, any of which have those three letters.

But notice that the statement subject of </Bertrand Russell ist jung/ is the first sentence Frege wrote about Russell> has to be the single token Frege himself wrote if we interpret /sentence/ in /first sentence/ as /first token/. The token Frege wrote is not the one I wrote between the slash marks in my specimen statement. If the one I wrote were the statement's subject rather than what Frege himself wrote, the statement's truth value would be unknown. (See Row 9, ~S P+, of the Emplacement Chart, p. 42). So, except for Frege's original token, no token buried in slash marks are subjects of *that* statement. But, if we interpret /sentence/ in /first sentence/ as the type "sentence", then *any* token of that type, including Frege's, is the statement subject of that sentence type.

TOM: Having a specific token as a statement subject is very restricted versus any type's token. OK. But Frege thought embedded expressions referred to themselves, according to Alonzo Church according to Donald Davidson. "And Church also, in the passage just discussed, toys with the notion that on Frege's theory '...a word enclosed in single quotation marks is to be treated as a different word' in that it is used 'autonomously', that is, to name itself."[6]

THELMA: Well, I've just shown that view, whether or not it's Frege's, is wrong. And quite differently from the way Davidson did.

The grammatical subject of <//Wig// has three letters> is a token with double slash marks; its statement subject is a token designated by /Wig/, maybe the token your nephew wrote in his spelling book. The statement subject is the token designee of /Wig/ and may have to be identified as the statement subject of <This token has three letters> has to be identified by your nephew, say, by putting his finger on the token he wrote. When the identified token is substituted for /Wig/ or for /This token/ from <This token has three letters>, that token becomes the identical statement subject of <//Wig// has three letters> and of <This token has three letters>.

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[6] Davidson, Donald, "Quotation", p. 84, in *Inquiries into Truth and Interpretation*; Oxford, Oxford Univ. Press, 1984. For a clarifying article on various theories of quotation and a critique of Davidson's theory, see Reimer, Marga, "Quotation marks: demonstratives or demonstrations?"; *Analysis*, pp. 131 - 141, Vol 56, No. 3, July 1996..

Of course, word tokens that aren't contained within slash marks in statements may refer. I could refer to you with /Tom/ in <Tom is handsome>, if I wanted to, my beauty.

TOM: That would be nice. So, despite Church's suggested reading of Frege, a token inside slash marks doesn't refer to itself?

THELMA: No. It's used to refer to any token of the type "wig", which, as I said, is just a physical object, as a wig is just a physical designee of /This wig/ as in <This wig is messy>. Those objects, the wig and /wig/ are where the referential bus stops; they designate nothing, including not designating themselves--autonomously. Tarski recognized this. He claimed that when a sentence is put in quotation marks its parts lose their syntactical role.[7] They also lose their lexical role.

Nor can we use a word to refer to itself when it's inside Frege's single quotes that he uses as I use my double quotes to refer to realist types, because what's inside his single quotes isn't a token but a type.

TOM: What's the point of the slashes around /wig/? Why not just use a token of "wig" itself, minus the slash marks, as the statement subject?

THELMA: As in <This wig has three letters>?

TOM: I see. You want slash marks to differentiate token linguistic referents from non-linguistic referents, such as hair wigs, because,

"<This /wig/ has three letters>
is true, whereas if /This wig/ in

<This wig has three letters>,
designates a hair wig, the statement is either nonsensical or metaphorical.

THELMA: Or literal and possibly true or false in some situations, such as, <This wig has three letters (hidden in it)>.

TOM: But I'd guess context would usually protect us just as well as slash marks. Besides what other token of "wig" doesn't have three letters?

THELMA: In everyday commerce, I think context mostly suffices. But what about those folks who find themselves in contextless philosophic discourse and writing? Or the curious who get caught up in playing Paradox? They may be in very needful, troubling situations where slashes come to the rescue, Tonto.

To play it even safer, I propose using tokens of "E" around words (introduced on p. 8) to indicate I've emplaced, and invite you to emplace, non-linguistic or linguistic referents into a sentence's grammatical subject. If I've emplaced a person's hair wig for "wig" in /Her wig has letters in it/, I could write, /Her EwigE has letters in it/. Then when I write that to my dad for money, he'd know I'd emplaced a person's hair wig in the grammatical subject's place and that the woman's wig was the statement subject of my <Her EwigE has letters in it>.

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[7] "...An expression enclosed in quotes must be treated grammatically as a single word having no syntactical parts." *Scientific American*, June, 1969.

TOM: Emplaced.

* * * *

> I believe that in spite of all its snowfields Mont Blanc is a component part of what is actually asserted in the proposition "Mont Blanc is more than 4000 metres high."
>
> --Bertrand Russell (Letter to Gottlob Frege)

* * * *

THELMA: Yes, as I said in my list of quotation marks (pp. 8–9), I use [E…E], [Emplace], to provide world contents for the singular subjects and predicates of, for example, /Jacob's pillow is soft/:

(s) object contents for the subject, ^E(jacob's)pillowE @ /pillow/^, and

(p) trope contents for the predicate, ^E(jacob's pillow's)softnessE @ /soft/^.

These emplacement expressions may be rewritten as the subsumptive propositions,

(sp) ^^pillow^ [Subsumes] E(jacob's) pillowE^

(ss) ^^soft^ [Subsumes] E(jacob's pillow's)softnessE^.

Consider this series of conceptual subsumptions from general to specific, which I call a subsumption pathway. And, please, don't confuse subsumption with class inclusion. ^Animal^ [Subsumes] ^bird^,

^bird^ [Subsumes] ^robin^,

^robin^ [Subsumes] ^Cock Robin^,

^Cock Robin^ [Subsumes] Ecock robinE^.

```
^animal^
    \
  ^bird^                          ^colored^
     \                                \
   ^robin^                          ^red breasted^
      \                                \
  ^Cock Robin^                       ^scarlet breasted^
        \                                \
     ^Ecock robinE^                     ^Escarlet breastedE^
```

This subsumption pathway of concepts shows that an emplaced object occupies the lowest level of a subsumption pathway and, because it (partially) locates an object in lexical space, it shows that the bird subsumed in this pathway turns into a concept qua subsumed. This is why I use "coherent and incoherent emplacement" as evaluation terms for correct and mistaken reference; ^Cock Robin [Subsumes] EJane's pigletE is incoherent; piglets aren't birds, because ^piglet^ can't be coherently subsumed under ^robin^ nor can Jane's piglet be emplaced coherently in /Cock Robin/. In old speak, if you think Jane's piglet is the referent of /Cock Robin/, you're sorely mistaken. Pigs don't fly.

If I were to point at a robin when uttering /Cock Robin flies/, I'm coherently emplacing that very bird in /Cock Robin flies/'s grammatical subject, /Cock Robin/.

TOM: So, you think the bird named "Cock Robin" is the statement subject of

<Ecock robinE flies>?

THELMA: Perfect. The same holds for emplaced tropes in the property subsumption pathway above. The scarlet trope of Cardinal Riuni's robe is the statement predicate of

<Cardinal Ruini's robe is EscarletE>.

Emplaced entities are at the bottom of subsumption pathways, because nothing may be substituted for them. They're at the end of the line, but because they're located in a conceptual pathway, they're concepts..

TOM: This time you've gone too far, Thelma! Cock Robin isn't a concept, it's a bird! /Ecock robinE EfliesE/ isn't even grammatical! You've got a bird for the subject and a motion for the predicate!

THELMA: Don't give me your old, tired dualism: Language versus reality/world/things. Words are physical things. What do you think tokens of "Cock Robin" are? Come on, tell me! Are they physical 'things' or not? Piles of ink or graphite? (Beat) Of course they are. Since you think such tokens can be 'proper' grammatical subjects, why can't my favorite robin be one--if it's in the subject place?

TOM: /Cock Robin/ can be used to refer, it's a sign. But you just said, Ecock robinE can't be used to refer; hence, it's not a sign. That's contradictory!

THELMA: A lot of words, such as /and/, can't be used to refer but you still count them as words. When Cock Robin is put in a sentence's subject place, it becomes an argument of a 'propositional function' a la Russell; and Tarski says it satisfies the function 'flies'. That's enough to qualify a designee as a properly grammatical part of a sentence.

I think we should theorize about meaning, reference, truth, and interpretation by limiting ourselves to four means cryptographers use to do their work. If anybody addresses language with minimum but adequate means, they do. Now, if emplacement is one of the four moves, the emplaced entity should be considered a linguistic, a lexical, entity.

The four moves are (1) transposing (changing inscriptions' order); (2) substituting ("z" for "a"); (3) adding/introducing inscriptions; and (4) eliminating inscriptions. These are the only means a cryptographer has of rewriting a scrambled set of inscriptions into a familiar, recognizable one, and for determining what message was encrypted. A cryptographer trying to break a code aims to reveal familiar relations between inscriptions or sounds. Once he's done that, he may have revealed the likely interpretation/rewrite of those scrambled inscriptions.[8]

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[8] In the Appendix and modestly here, Thelma sketches how to use some relations in a lexical system that enable us to draw valid inferences about the coherence value of combinations of its subject and predicate tokens. It's a theory of coherent combinations that allows us to avoid postulating meanings and concepts as extra entities over and above tokens and their lexical relations.

And, by the way, these four limits are similar to those G. Gentzen imposed on his natural deduction system for logic.

TOM: That may be, but they seem awfully thin for explaining meaning in complicated natural languages.

THELMA: Depends on how we should think about words' meanings. For me, a concept, the 'meaning' of a linguistic categorematic token, and any other physical thing in its place, is grasped when we know the coherent relations it has to other tokens in a lexical system. Tokens of "bird" have coherent relations, as do tokens of "robin", and "Cock Robin". Cock Robin inherits them when he's emplaced in /Cock Robin/.[9]

Cock Robin gets his coherent relations in a lexical system when someone emplaces him in a /Cock Robin/ token, which may be accomplished by pointing at that bird while uttering "That's Cock Robin". After that it would be incoherent for the pointer to emplace Polly Parrot for "Cock Robin".[10]

Of the four possible cryptographic moves, reference is obviously substitution/emplacement rather than either of the other three; therefore, in order to understand ^meaning^, ^interpretation^, and ^truth^, we should conceive of reference as emplacement. Since that makes Cock Robin a part of the lexical system, there's nothing strange--except to hardened dualists--about accepting objects and tropes as parts of sentences.

TOM: That's absurd on its face. Maybe I'm one of your hardened dualists, but you've just turned semantics into syntax! Or logic, if you're right about Gentzen.

THELMA: Good! More ill-defined dualisms bite the dust. (Pause) Oooh, you think I'm being snide when I should be seriously challenged.

TOM: Most definitely.

THELMA: Perhaps I can put you at ease by using the fashionable terms, "internal" and "external". I'm simply proposing a combination of an 'internalist' and 'externalist' theory of semantics. Think of grammar as syntax for well-formed sentences and semantics as syntax for coherent sentences and coherent emplacements.

OKAY, here's some other balm. I allow that Cock Robin never stops being a bird. I also allow, however, that he acquires 'meaning', in my relational sense, although only after we emplace that unsuspecting bird in a specific place in a lexical system.

TOM: Frankly, this sounds like Poppy Cock nominalism by way of vague notions of emplacement.

THELMA: Time to get down and dirty, is it? Well, at least time to get down and concrete. But I do want you to know I appreciate these frank challenges, Tom.

The base exemplar of emplacing referential contents is literally, physically putting them where the word tokens are. It's the simplest way we can determine the truth or fals-

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[9] ("...An expression enclosed in quotes must be treated grammatically as a single word having no syntactical parts." "Truth and Proof"; *Scientific American*, p. 64, mid-column, June, 1969

[10] In the Appendix, Thelma sketches how to use some relations in a lexical system that enable us to draw valid inferences about the coherence value of combinations of its subject and predicate tokens. It's a theory of coherent combinations that allows us to avoid postulating meanings and concepts as extra entities over and above tokens and their lexical relations.

ity of statements. Suppose I nod at the coin in my hand and say "This coin is copper-colored". How would you decide whether what I said was true or false?

TOM: I'd look at it to see if it's copper-colored or not.

THELMA: And after that, what? How does what you see make "This coin is copper-colored" true? Or false? Tell me how looking and seeing are part of verifying a statement. (Long pause) Using what sensible Aristotle said, what would lead you to say from what you saw that my claim was true? Or false?

TOM: Aristotle wrote quite a lot, Thelma.

THELMA: Sorry. I'm thinking of this passage in his Metaphysics.

> "To say of what is that it is not, or of what is not that it is, is false,
> while to say of what is that it is, and of what is not that it is not, is true".[11]

TOM: Well, then, since your statement is positive, if you said of what is that it is, and it is, it's true. So, if I see that the coin is copper-colored, I'd know <This coin is copper-colored> is true.

But if you said of what is not that it is, it's false. So, having said <This coin is copper-colored>, if I see the coin is silver-colored, I'd see it's not what you said it is, and I'd know your statement is false.

That's what I'd call a correspondence theory of truth: What you say either does or doesn't correspond to a fact or state of affairs that is or isn't.

THELMA: I'm going to ignore part of what you've just said--"to a fact or state of affairs that...isn't"--because that leaves an opening for the existence of negative facts.

TOM: If I left an opening, so did Aristotle, because I just put his words into mine.

THELMA: That depends on how you interpret his "what is not".

I don't like "corresponds" in truth talk. People get fancy and start talking about a 'relation' between a statement, a proposition, or what-have-you and a fact, or a state of affairs. Or they talk about ‘pictures' or 'representations' of facts. That hasn't worked out too well. It’s an invitation to another unnecessary dualism.

Instead of foisting a 'correspondence' account of truth on Aristotle, let's credit him with an emplacement account. I think it fits better with what we do when we verify or falsify statements. I'm thinking about singular statements for whose subjects and predicates we emplace their object and trope contents. Literal, physical emplacement is the base model for this mode of verification.

TOM: Up to now, we've talked only about the emplacement contents of subject words. Now suddenly predicate words also have such contents!

THELMA: I was hoping you'd notice. The penny's copper-color is indeed the referential content of my statement's /copper-colored/. Of course, objects and properties have different requirements for coherent emplacement. I know that. It would be a gross mistake to accuse me of violating Frege’s sacred stricture: A sentence’s subject and

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[11] (Trans.) W. D. Ross; New York, Random House, 1941

predicate can't both be names of objects. Of course, properties aren't objects; who doesn't know there's a difference between an apple and its color? But I'm totally mystified how anyone thinks they could verify <My apple is red> without checking the apple's color. I'll say more about the difference between objects and properties later.

The sentence /This coin is copper-colored/ is physical. So is the coin in my hand. For Aristotle, these two things are, respectively, something said and something "that is" or "that is not". If my emplacements of a penny and its color for the subject and predicate tokens are coherent emplacements for the grammatical subject and predicate tokens, the statement is true. The emplaced contents have made a statement true.

By a convention I introduced earlier, I indicate statements with angle brackets, <...>, around a sentence token. Statements are not, however, 'abstract' entities over and above a sentence. <…> only indicates what someone has done, namely, made a truth-value claim with a sentence token. A statement is no more an 'abstract' entity than a sentence type is. Several persons may make the same statement with any token sentence that satisfies a specified type description or is a justifiable rewrite of such tokens.

"Any sentence token" differs from "all sentence tokens". [Any] is nominalists' best friend, [All] their meanest foe. [Any] provides [All]'s generality without the encumbrance of classes. Note the square brackets. They show I treat determiners as functors; different functors invite us to perform different kinds of lexical acts.

Think of the grammatical subject and predicate of /This coin is copper-colored/ as providing locations where we may coherently emplace their referents. Treat them as you would variables into which we may emplace arguments--this or that coin, any coin; this or that copper-colored trope, any copper-colored trope.

```
<This    coin     is    copper-colored>
            |                  |
 This  ________    is   __________
```

To verify that statement, first emplace (abbreviated by "@)" the penny, the one you designate with /This/, in the space provided by /coin/, which result I write this way:

^EcoinE @ /coin/^.

Next move the penny from the subject space and emplace it in the predicate space provided by the /copper-colored/ token; we have to move the coin there because we can't detach a color from its bearer. I write the result of this predicate emplacement as:

^E(coin)copper-coloredE @ /copper-colored/^.

The /(coin)/ token in this predicate emplacement indicates (a) I've moved the coin from the subject to the predicate place and (b) the coin has *carried* that color to the predicate place. The two emplacements together are written as a conjunction:

(E) EcoinE @ /coin/ & E(coin)copper-coloredE @ /copper-colored/.

Frege's metaphorical "falls under" a concept as a way of indicating what the predicate 'function'of 'copper-colored (x)' 'does' is replaced by the familiar conjunctive functor, [&], that agents use in complex statements. Functions, however, explain nothing; they're

inert. Agents are active. If ‘fall under’ is to get beyond metaphor, it’s agents who’ll do the job.

The copula in a predication such as <The coin is copper-colored> is a functor I interpret and call [Sooth], as in “Forsooth, Sire”. This gives us the rewritten proposition

(E) ^[Sooth] ^EcoinE @ /coin/ & E(coin)copper-colored @ /copper-colored/^^.

This full form reveals how token predication sentences are tied to statements, such as <This coin is copper-colored>, and to the way we determine their truth value. Determining falsity is slightly more complicated, because Parmenides stands athwart that route. I’ll explain further on (p. 19) how we can skirt him, with guidance from Plato’s *Sophist*.

[The reader may wish to, no, should use a penny to do this hands-on exercise in verification by emplacement. Tom did it. And did it well. So may you. /s/ /Thelma/]

Now hold your hat, Tom. (E) is *a fact I've made* by incorporating objects and tropes in the world into sentences. We can jettison states of affairs and facts as unnecessary baggage, retaining “states of affairs” and “facts” only as abbreviations of what I wrought when I turned /The coin is copper-colored/ into (E). That token became a [Sooth]/predication proposition containing the referential contents emplaced in /This coin is copper-colored/. [Sooth] is one of seven binary functors, interpretations of the copula; [Sooth] includes /have/ when it functions as a copula in my conceptual logic.[12]

I may make these emplacements, because the ‘referential contents’ of subjects and predicates are what may coherently be emplaced in them. Because the penny is a coin, I may coherently emplace it in the subject place, and because it is copper-colored, I may coherently emplace its color in the predicate place.

This is how we go from seeing an object and its property to verifying a statement. We agents relate Aristotle's "to say what is" to "what is" by acts of emplacement, which is bottom-dwelling emplacement per ^Ecock robinE & /Cock Robin/^.

So, now you can see how your seeing the copper-colored penny confirms <This coin is copper-colored>.

TOM: I do?

THELMA: But uff coerse, dear Roebin. You're reading the penny and it's color, which is the reverse of emplacement. First you utter /penny/ for the penny you see; then you utter /copper-colored/ for the color you see it has.

TOM: Reading what I see?

THELMA: Yes. You can read /This coin is copper-colored/. You pronounce its words, that is, substitute sounds for the shapes. That’s what reading is. We read the world in the same way. You pronounce objects and properties, substitute the sound /coin/ for the coin object, and the sound /copper-colored/ for the copper trope of the coin. And

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[12] We give age in English with forms of “to be-- “am” , “is”--while in French and Italian we give it with their forms of “to have”, “avoir” and “avere”—“ho” and “ha” in Italian.

when you've done that you've made a fact, a state of affairs. There's no language/world dualism here, as a correspondence account of truth assumes; you get a state of affairs, a fact, by fitting objects and their properties into a sentence structure. There's no need for 'a theory of facts' or 'states of affairs' corresponding structures. Wittgenstein's *Tractatus*' "pictures" can take a vacation from here to eternity.

TOM: Doesn't correspondence come to the same thing as emplacing and pronouncing? They're all relations between saying and being.

THELMA: I don't think so. "Correspondence" invites a discovery of some kind of isomorphism between sentence and factual or experience structures, as if sentences and facts, independently, had the same structure. Do you think 'facts' or experiences have an English or a Turkish or a Japanese grammar or semantics? Correspondence theories hang on to a dualism nourished by the arid metaphor of a boundary between world and language and/or between thought and language. Tarski's

"x is a true sentence if and only if p"

rests on this dualism. He says "In order to obtain concrete definitions we substitute in the place of the symbol 'p' in this scheme any sentence, and in the place of 'x' any individual name of this sentence."[13] He assumes we know the meaning of the 'p' sentence; even so, he doesn't supply a bridge between 'p''s 'meaning' and 'x''s truth for his T-scheme. He doesn't need to for his original purpose, because formal language expressions have no meaning in the ordinary sense. But since natural language sentences do, he should have connected 'p''s meaning to a world 'state' in order to explain how we know the truth values of the statements we make with these sentences. And so should have Davidson who put a natural language spin on Tarski's T scheme.

It's tempting to defend the T-scheme by claiming that the 'p' sentence 'refers' to a 'fact' or a 'state of affairs', because it must be as obvious to me as to Tarski that a 'p' sentence by itself isn't enough to make the sentence named by 'x' true—at least for natural language sentences.

I've already registered my disdain for 'states of affairs' and it's Correspondence Master. I have no idea how can we could actually relate Tarski's 'p' sentence to its designated state of affairs, step by step, to show that the 'x' named 'sentence' is true? Why haven't epigones of Tarski done this? Is this a fair question for flesh and blood inquirers?

TOM: It's not unfair.

THELMA: That's a ringing endorsement! For me, an emplacement account erases the categorial distance between sentences versus objects and tropes, and connects meaning and truth. By interpreting 'reference' as coherent emplacement, we're thrown into actively constructing a relation between physical things--objects/tropes and token sentences. They're on an ontological par, whatever your account of physical entities might be. Don't think of sentences as representing 'extralinguistic reality' but as parents happily

[13] Tarski, "The Concept of Truth in Formalized Languages", pp. 155 - 156.

accommodating object and trope offspring to their sentential home--if true--or forbidding prodigal offspring to darken their sentential door again--if false.

Verifying by emplacement is an actual procedure we can enact; I've just done it; having done it, we know it's possible. It's as ordinary as fitting your headphone jacks into the audio-out receptacle on your tuner. There's no ontological obstacle, no subject/object dualism to 'overcome', no call for a cosmic Aufhebung dialectic that surpasses subject-object ruptures and delivers the Absolute unspoiled by contradiction. Down-home insertion per the ole-in-an'-out tuner jack is quite enough to harmonize truth and meaning.

An emplacement account of truth plumps for realism without representationalism.

TOM: Now there's a Jolly Roger to rally 'round! Showing the way to sail out of the Hall of Mirrors into Byzantium without giving up the world not well lost, eh, matey?

THELMA: I hope that's not irony, Tom. (Silence) When we think something is a phone jack, we plug it into a fitting receptacle and emplace it into its English word type, "phone jack".

TOM: Sure. Children learn to associate jacks with the word "jack".

THELMA: Mine is not a psychological point. I'm talking about the cryptographic and logical moves of emplacement. Learning emplacement coherence enables the child to replace grammatical subjects and predicates with their contents. Maybe this comes about by associative learning, but, however it’s done, how one learns something shouldn't be confused with the logic of what’s learned.

Professors often confuse these two, which you'd have thought they wouldn't do anymore after philosophy and psychology departments were split off in universities. One of the last places they split was at the University of Arizona, in the late forties, as I recall, where today the confusion between psychological and logical theories is seldom heard. But armchair psychology seems to linger on, especially in some northeastern American philosophers' mentalese, a kind of animistic phlogiston, and in artificial intelligence tracts, the latest form of popular mechanics amusements.

TOM: Sometimes your meanness exceeds your respect for earnest speculation.

THELMA: That's true, and that's one of the reasons you like me so much.

It's the coherent serial emplacements of a coin and its copper color into the token /This coin is copper-colored/ that entitles me to claim <This coin is copper-colored> is true. What is is as I said it is, per Aristotle. Basta!

TOM: Lacking a solid account of coherence, you've just erected a house of cards on a concept that has practically no history in analytic philosophy--or anywhere else, except an oft discredited epistemological theory championed by metaphysical idealists.

THELMA: Coherence value--coherence and incoherence--is the fruit of logical relations between concepts, which is NOT the same as mutually supportive truth value consistencies. You can find out more about conceptual versus statement coherence by

taking a look at Bierman and Assali's *The Critical Thinking Handbook*.[14] Or, better yet, committing your precious time to the Appendix I'm drafting for our conversations.

TOM: Suppose you'd had a nickel instead of a penny in your hand? Does emplacement work for false sentences?

THELMA: I could have coherently emplaced the nickel in that /coin/, but not its color in that /copper-colored/. Hence, I wouldn't have been entitled to claim <This coin is copper-colored> is true. A silver color is not a coherent referential content of any /copper-colored/ token.

TOM: That's why you're entitled to say it's false.

THELMA: Yes, but not because the coin's not copper-colored simpliciter, which invites an embrace of negative facts and runs afoul of Parmenides' stricture that we cannot say what is false because we cannot 'speak' referentially of what is not, in this case of the copper-color that is not a property of the nickel. Here's Parmenides:

> "Come now, listen, and convey my story [said the Goddess]. I shall tell you what paths of inquiry alone there are for thinking:
> #1. The one: that it is and it is impossible for it not to be. This is the path of Persuasion, for it accompanies Objective Truth.
> #2. The other: that it is not and it necessarily must not be. That, I point out to you, is a path wholly unthinkable, for neither could you know what-is-not (for that is impossible), nor could you point it out. "Whatever can be spoken or thought of necessarily is, since it is possible for it to be, but it is not possible for nothing to be. I urge you to consider this last point, for I restrain you firstly from that path of inquiry (#2).[15]

Giovanni Reale points out how difficult it is to translate lines 3 and 5, because one has to identify the subject on which there have been disparate judgments: "the one [says] that it is..., the other [says] that it is not".[16] Reale lists eight proposals, which in summary include "Being"; "it"; "reality"; "truth"; the indefinite "something"; (no subject for "exists" and "not exists"); "the way", "a way", "the other way".

Parmenides claims, in my terminology, (a) a trope that is not can not be emplaced in what I say, and if it can not, then (b) I have not said what is false nor thought what is not. Plato disagreed with (b); we can speak and think falsely of what is not, because an existing "other" property may be emplaced in a "different" predicate, which provides a incompatible statement about what is. For example, "This coin is silver-colored" is true because silver colored is (does exist) and may be emplaced in "silver-colored". From the truth of "This coin is silver-colored" and the incompatibility of ^silver-colored^ and ^copper-colored^, I may infer the falsity of "This coin is copper-colored".

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[14] Part III, "Reasoning about Concepts". Bierman, A. K., & Assali, R. N.,; Upper Saddle River, NJ, Prentice Hall, 1996.

[15] Parmendides, *Poema sulla natura*, p. 91, trans. from the Greek to Italian, Giovanni Reale; Milano, Rusconi, 1991, *On Nature (Periphysis)*, Parmenides, Sept. 4, 1998. Translated from the Italian to English by A. K. Bierman.

[16] G. Reale, *Poema*, Fn. 10, p. 91.

<This coin is silver-colored> (is true)
<^Silver-colored^ is incompatible with ^copper-colored^> (is true)

_____

<This coin is copper-colored> (is false)

What I'm saying here might easily be confused with a somewhat related point that Barwise and Etchemendy make in dealing with paradoxes. They distinguish between a negative assertion and a "sort of 'embedded denial'", which they call the "witnessing condition"--"there must be a set of facts that "witnesses" p's falsity by making its negation true".[17]

I know the difference between a sentence that has [Not] in it, explicitly or implicitly (^dead^ implicitly contains [Not], rewritten as ^~alive^, or vice versa), and heartily distinguish affirming from denying, but Barwise and Etchemendy's witnessing condition does not utilize conceptual negation--which differs from statement negation—as I do in accounting for the truth of sentences containing negation.

TOM: Your "what is not" applies to a trope rather than to an object, such as Pegasus, that is not.

THELMA: I'm following Plato's interpretation of Parmenides' verses.

The way I interpret Plato's *Sophist* is that he, unlike Lord Russell in *Logical Atomism*, knew how to challenge Parmenides without committing to negative facts.[18]

Hold it! I know, you're about to ask me what the truth of negative statements has to do with paradoxes.

TOM: I was not, but if you want to say something about it, go ahead.

THELMA: All I want to say for now is: All, 'paradoxical' statements contain negation; for example, "false", "falsehood", or "not true", "heterological" ("not autological"), "classes that don't belong to themselves". *A correct understanding of negation and why false statements are false is important for blocking alleged paradoxes and their challenge to the consistency of languages and logics.*[19]

TOM: Promises, promises. But, OKAY, I'll wait.

Meanwhile, I don't want to insult you with an obvious objection, but you can't physically emplace most referential contents in grammatical subject and predicate places. You've thought about that, I'm sure.

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[17] Barwise, Jon, and Etchemendy, John, *The Liar*, p. 81; New York, Oxford University Press, 1987.

[18] *Sophist*, 257b - 264b. See F. J. Pelletier's, splendid discussion of Plato's tactic in *Parmenides, Plato, and the Semantcs of Not-Being;* Chicago, University of Chicago Press, 1990, especially pp. 39 - 44. For a related point, see John McDowell's notes, pp. 202 - 204, Plato's *Theaetetus*, Translated with Notes; Oxford, Clarendon Press, 1973. His translation replaces "misjudging" with "other-judging". In the *Euthydemus*, Plato amuses himself with how Euthydemus and his brother, Dionysodorus, make a living confounding the innocent by running Parmendies argument on them.

[19] Thelma distinguishes between the negation of concepts and propositions/interpretations of sentences, symbolized as [~], from the negation of statements, [-]. She gives a proof later that shows [~] cannot be reduced to [-]. Conceptual negation is central to showing why the Liar and other alleged paradoxes aren't paradoxes. [~] is a functor like "un-", "dis-', "in-" and other negating suffixes are. ^Like^ and ^dislike^/^[~]like^ are incompatible concepts as are ^agree^ and ^disagree^ are.
.

THELMA: The Pacific Ocean is a definite challenge, not to speak of the sun. But, think of how easy it is to emplace the property of omnipresence if you're omnipotent. I admit, Plato's corrupted remains, so far as I know, are unavailable, laying aside that not even found remains would do for verifying "Plato joked". Then there are such dubious entities as classes and numbers, infinite classes and non-nominalistic word types. Emplacement attenuates to more and more remote substitution procedures whose coherence requirements need lots of elaboration. But then, philosophy professors need fresh work and their graduate students supply us with long lines of clever and technically advantaged workers. Plus, an emplacement account of true and false statements is no worse off than any other for remote referents, and better off for proximate ones.

I remind you that *pointing*, for example, to the sun or a visible area of the Pacific, along with shared background information, often identifies the emplacements for the grammatical subject and predicate, even though we haven't physically emplaced them. That should stimulate a little faith, hope, and charity for an emplacement conception of reference. And, then, don't forget my point about reading states of affairs, reading off a statement subject and its property. If I'm standing on the beach in San Francisco looking west and say "The Pacific is not pacific", I'm reading a portion of the world. I'm emplacing in the audible /Pacific/ the body of water I see before me and emplacing in the audible /not pacific/ its high roller tropes.

TOM: What do you do with "The sun is hidden"?

THELMA: Like I said, emplacements may be attenuated. I can't see the sun, but I infer it's there, because the world or the moon's lit. I don't read off the unseen sun, but imagine emplacing the inferred sun just as I read the signature on a promissory instead of the cash in hand. Kant relied on the faculty of imagination to explain how we emplace substantives and tropes into lexicalized concepts, which is seldom given its proper due.

But I like using physical emplacement as a benchmark, because it keeps the fancy dancing grounded.[20]

Anyway, dear Tom, I think physical emplacement will be enough to deal with the Liar Paradox, maybe the Grelling, too, because it requires the emplacement of tokens. In fact, it may be enough for all self-reference paradoxes, including Yablo's, if Priest is right about semantic and logical paradoxes having an identical, underlying structure.[21]

TOM: I'm on hold. But what about keeping your promise to explain the different requirements for coherent emplacement in singular grammatical subjects versus grammatical predicates?

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[20] For other modes of attenuated substitutions, see Bierman & Assali, *Handbook pp*. 311 – 313.

[21] See Priest, Graham, "The Structure of the Paradoxes of Self-Reference"; *Mind*, Vol. 103, No. 409, 1994, pp. 25 - 34; and his "Yablo's Paradox"; *Analysis*, pp. 236 - 242, Vol. 57, No. 4, October 1997. See also Diego Marconi's review of Priest's *Beyond the Limits of Thought*; *The Philosophical Review*, Oct. 1997, Vol. 106, No. 4, pp. 620 - 622.

THELMA: Here it comes, sweetie, but I'll confine myself to the minimum, to emplacement in singular subjects and predicates, which is all we need for investigating paradoxical sentences. Actually, there's no other kind of emplacement, if we replace [All] with [Any].

Singular grammatical subjects, whether proper names, common names with a singular determiner (this wig), or definite descriptions (the man who came to dinner), need a one - one coherent relation with their emplacements. However, grammatical predicates have a one - many relation. Because there are many red tropes, I may coherently emplace in predicate tokens of "red" any one of red's many tropes--Here a red,/ There a red,/Everywhere a red, red;/Old McDonald had red tropes. Tropes aren't 'abstract' particulars, but are this seen patch of color--that heard pitch of sound, this tasted flavor--with its dated location--the red in Old McDonald's bandana as here and now as "chick, chick, chicks".[22]

TOM: Are you singing red is the class of its instances?

THELMA: No, I am not. Nor are red 'instances' the many manifestations of a distinct, independently existing (non-class) entity. A property is its tropes, wherever they may be, because the many tropes are one property. Properties are individuated differently from objects. Distance between objects makes us count them as more than one; the twin girl here is one, the twin girl there is two. But, distance between twin red tropes does not make us count two properties; a red trope here is the property red, a red trope there is the identical property red; two distant red tropes are one red property.

An object is individuated under a more constrained spatial condition than a property. An object occupies one place at a time, a property as many places at a time as there are tropes of it. A trope is spatially individuated like an object, because it's collocated where it's carrier is, although it has no continuing temporal existence through change as objects or masses do. If a berry's color has changed from green to red, green hasn't become green but has been replaced by red, tolling the end of that green trope. But the object sails on, yet itself. Waters roiled and waters serene survive their alterations.

Tropes stay with their objects; they are 'properties' *of* them; they're owned. This books' cover is red, That melon is sweet. This note is Middle C. That apple is tart. This Barolo is acidic. My finger is sore. These tropes are experienced; some confuse them with *qualia*. I don't. Conscious creatures interact with objects that cause them to have different sensory qualia, which are prima facie evidence that those objects possess these tropes. If I look at a book cover, see its red trope, then look away, I don't see its red trope; when I look back, I again see the red trope, but not the red qualia. Without evi-

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[22] Donald Williams introduced the term "trope" into contemporary philosophical lingo, but used it differently from the way I do. Also, do not be misled about my concept of trope by D. M. Armstrong, "3.23 Tropes", pp. 22 - 25, *A World of States of Affairs*; Cambridge, Cambridge University Press, 1997. See Margaret D. Wilson's "History of Philosophy Today; and the Case of the Sensible Qualities, *The Philosophical Review*, Volume 101, January 1992 starting with p. 209 to 243, for an excellent review of theories of sensible qualities.

dence of its having gone out of existence, replaced by a blue trope, the red trope continued to exist, unlike the qualia. ^Trope^ =/= ^qualia^, and ^trope^ =/= ^property^.

In this short story, we can count *one* trope and *two* qualia; *several* tropes and *one* property. Trope's aren't identical to either qualia or properties. Qualia never recur. A trope, on the other hand persists, because it's predicated as a property of a substantive on the evidence of a sensed qualia carried by the substantive. A property differs from a trope: It's a one-count of tropes coherently emplaced in a predicate type.

TOM: In that case, if there are two books that are similarly red, you count *two* tropes, because they stay with their objects that per hypothesis are *two*. That seems true of taste, odiferous, and kinaesthetic tropes, but not of auditory ones. If I blow a Middle C on my trumpet, you would claim it's the trumpet's trope, although it seems counter-intuitive to claim it's a property of the trumpet.

THELMA: Well, I certainly wouldn't attribute it to you, even though your blow-into the trumpet caused the sound like the madeleine's almond flavor caused Proust to remember his grandmere's house. As the flavor belonged to the madeleine so the note belongs to the trumpet. Another trumpet's Middle C will probably have a different trope.

TOM: Okay, but if I play Middle C, then stop, and play Middle C again, with the same trumpet, unlike with the red trope, I don't think I should count that Middle C as one trope and two qualia.

THELMA: I agree. Auditory and visual tropes have different identity conditions. Space is crucial for counting visual tropes, time for counting auditory tropes. The first Middle C trope you played disappeared and another one appeared. The orchestra director asks the trumpeter. "Give me that C again. He not asking him to play the first C again. Time is crucial for counting auditory tropes as space is for visual tropes. Don't you think that's right?

TOM: I guess so. But I do find it very strange to attribute Middle C and every other note playable on a trumpet to the trumpet. The same goes for any musical instrument, including our throats' sung notes.

THELMA: It seems strange, maybe, because visual tropes have been overwhelmingly emphasized in philosophical literature, which has given space a dominant role over time, which is central for counting auditory tropes.

TOM: Tropes may vary slightly qualitatively, such as fading shades of red and drifting scents of cheese while maturing. Would you count such tropes as two because they don't exactly resemble each other, although they're each tropes of the same object?

THELMA: Ah, vagueness again. Listen, Tom, we've got other fish to fry here and I don't want to settle that issue here.

TOM: You think you could?

THELMA: To whose satisfaction? Forget that. I've done enough to explain ^trope^ for my purposes here. I do want to give a cheer for tolerating variations in perceived tropes' quality to insure generous coherence conditions for predicate emplace-

ments. Sometimes it's useful to ignore the variant quality of tropes, leaving us with tropes shorn of indistinguishable quality. It leaves us free to coherently emplace any of these shorn red tropes into tokens of "red", and will thereby have coherently emplaced red into /red/ tokens in predicate position.[23]

To sum up, it should be clear that red is not the class of its tropes. That's why I use the coherent emplacement requirement 'any trope' instead of 'all tropes' or the 'class of tropes' that satisfy a function. It's incoherent to substitute a class, even the class of red tropes, into /red/; a set isn't a trope nor a property, nor can it be either.

TOM: You seem to think "red" is a singular name like "Plato" is, even though red is spread throughout the world in its many tropes.

THELMA: Ah, that could have been Giordano Bruno's dream: To be a property rather than a person.

TOM: To escape being burned at the stake?

THELMA: Don't tropes burn? Or at least burn up with their porters? I think so.

TOM: But not all tropes burn away at once; the property continues to exist wherever other tropes tarry with their porters/ continued existence.

THELMA: Good. I believe you're right about property words being proper names --with a twist, though--because they take any one of many possible trope emplacements. Maybe that's what people who champion 'natural kinds' are trying to say. Water's dream: To be a property or congery of properties rather than a mass through all possible worlds. How much easier for aqueous to be in many worlds than it is for aqua to be there! Tiger, Tiger, burning bright/Wherever you might dight/Predicate yourself to heart's delight!

TOM: Time to shut off your beer supply.

THELMA: You want me to dry up?!

TOM: Maybe t
his will sober you up. Frege said that a sentence cannot be made up only of names, which is what you have if predicates are proper or common names. Sainsbury, our contemporary, says the same. "What would happen if predicates were a species of name? Then a sentence like "Tom is happy" would be construed as two names juxtaposed. But two names juxtaposed cannot form a sentence, only a list".[24]

THELMA: That depends on what kind of list you're making. Subject names and predicate names aren't the same kind of list as two subject or two predicate names. The are different lists. Also, I can cite Wittgenstein as a contrary authority: "An elementary sentence consists of names. It is a connection, a linkage of names."[25]

TOM: "Tom Mary" isn't a sentence.

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[23] Thelma: I like what Bierman had to say about Hume's strategy for standardizing our perceptual judgments in his essay "Of the Standard of taste". See A. K. Bierman, *Life and Morals*, Ch. 12, "Hume and the Moral Thermometer"; New York, Harcourt Brace Jovanovich, 1980.

[24] Sainsbury, Mark, *Logical Forms, An Introduction to Philosophical Logic*, p. 155; Oxford, Blackwell Publishers, 1991.

[25] *Tractatus Logico-Philosophicus,* 4..2 , (Trans.). David Kolak; Mountain View, CA, Mayfield Publishing Company, 1998.

THELMA: That's right, but that sentence doesn't have the kind of names Wittgenstein or I had in mind. "Tom Mary" has two subject names rather than a subject and a predicate name. After all, Wittgenstein says that an elementary sentence is “a function of names in the form of "f(x)", "f(x,y)", etc", where "f" and "x" are different kinds of names. (Ibid., 4.24) And, of course, /Tom Mary/ isn’t a sentence; it’s faulty grammar blocks its sentence-hood; it has neither a copula nor a property name.

Clearly, if we cue off on Wittgenstein, we have to have a function, "f", as well as a name "x". Like Russell and Frege, he absorbs the copula into the function; they were principally after the extensions of predicate functions whereas I'm after the coherent conceptual contents of predicate names. Without the content, EredE vs. EhotE, there's no distinction between one function and another, nor, consequently, one extension from another, except by concept-free enumeration of their members, which is not satisfactory, as Socrates pointed out to Theaetetus at the beginning of Plato's Theaetetus.[26]

Besides, if we put a copula in your non-sentence, we'd have "Tom is Mary", which is grammatical, whose copula I'd guess would be interpreted as identity, particularly if you were subject to the social plight of transvestites and hermaphrodites, and whose form is "F(x,y)". Notice that Sainsbury's "Tom is happy" isn't just a subject list; it has an "is", Wittgenstein's "sought linkage".

TOM: But that was my point: A combination made up solely of names doesn't make a sentence. Suddenly you're inserting a copula, which confirms my point!

THELMA: Don't be so testy. If Wittgenstein's "f" name absorbs, and hides, the copula, then I'm not distorting his view. Sainsbury's "happy" doesn't absorb it, which is why his sentence is just a list, as the copula deprived /Tom happy/, /Tom Happy/, /tom happy/, and /tom Happy/ are. Sainsbury’s added "is" is probably predication, which makes "happy" a property rather than an object name, whose trope is carried by Tom. Pidgin English speakers don’t think they need to waste time on a copula for that ‘list’. <Tom happy. Good.> works just fine.

As for Frege, with my ^property^ concept and verification by emplacements, we can give a literal interpretation to his metaphor of 'unsaturated' functions or predicates--into which he also absorbed the copula. They're literally unsaturated in “f(x)” because tropes never occur without a carrier and “(x)” doesn’t designate one; that's why we first emplace an object into a sentence's subject and then move it into the predicate place carrying its trope cargo. A ‘function’/trope, such as EuglyE emplaced in <Ugly(slug)>, weighs in with an implicit predication functor, [is]. EuglyE needs a collocated carrier, such as the argument, (EslugE). A property trope can't be separated from its carrier--unlike the Chesire cat's grin. When an object coherently emplaceable in the sentence's

[26] See Bierman, "Socratic Humor: Understanding the Most Important Philosophical Argument", Apeiron, pp. 23 - 42, Vol. 5, No. 2, August 1971.) It appears in his website. http://sfsu.edu/phlsphr/arthur_bierman.

grammatical subject carries a property trope that is coherently emplaceable in a sentence's grammatical predicate….

TOM: … the statement is true. I heard about that. I take it that a property, abutted with [any] may have many different carriers--A is red, B is red, et cetera.

THELMA: That's right, but a class of carriers can't carry its members' predicates; only each of the members can carry a trope.

TOM: Would thinking otherwise be committing the fallacy of division?

THELMA: I wasn't thinking of that, but of how we verify "all" statements. If we didn't verify "All robins fly" by verifying that any robin, R1 - Rn of ^robin^'s coherent emplacements carries EfliesE into /fly/ (is a member of ^fly^'s extension), as in

^Erobin R1 - Rn @ /Robin R1 - Rn/ & E(robin R1 - Rn)flyE @ /fly/^,

we wouldn't know "All robins fly" is true. Putting it a negative way, if we didn't know there's one earth-bound robin, a single exception, Erobin xE, to "All robins fly",

^Erobin xE @ /Robin x/ & E(robin x)earth-boundE @ /fly/^,

we wouldn't know "All robins fly" is false. That falsification condition points us toward the verification requirement:

All emplacements are singular--a single object for a singular grammatical subject token and a single trope for a singular grammatical predicate token.

TOM: But you've said nothing about how I know that a trope I've emplaced in a predicate is a coherent emplacement beyond assuring me that unidentified reference theorists, here and now or to come, can and will supply all I need.

THELMA: Tom, you know the difference between ^blue^ and ^red^. If you emplace a blue trope in /red/, you know thatt's incoherent. What do you want me to do, tell you how you know red is ^red^ when you know ^red^ as well as I do--I suspect? If you think you've made an incoherent emplacement, look again, as Prichard advised us to do "before, at some time or other in the history of all of us" in case you doubted that ^4 X 7 = 28^ is coherent. Following Prichard, my advice is, if you're not color-blind, "Look again", and if you are color-blind, ask a trusty-eyed friend to look.[27]

TOM: Excuse me, but I think the question I asked is different from the one you answered. You've allowed that property words may be proper names and that any one of several distinct tropes may be emplaced in a property predicate. Do you think we know we can coherently emplace various tropes for "red" and can't emplace others because red

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[27] H. A. Prichard, "Does Moral Philosophy Rest on a Mistake?", Mind, Vol 21. 1912, near the end of his article, where he invokes a similar mistake for theory of knowledge. This article is also in Prichard's *Moral Obligation*, Oxford, 1949. See also Michael Dummett, *The Logical Basis of Metaphysic*s, p. 314, where he points out that we are credited with knowing the meaning of "yellow" [how we're able coherently to emplace yellow] in case we agree "by and large" with others; hence, the capacity to recognize the color yellow does not explain why one agrees with others' judgments. He turns [Same-recognition-capacity explains Agreement-in-judgment] on its head. Nor, by parallel reasoning, does the capacity to recognize 'resemblance' between colors explain our agreement. Instead he credits us with recognizing resemblance because we *agree* that A's color resembles B's. Dummet; Cambridge, MA, Harvard University Press, 1991. For a related discussion, see C. I. Lewis' chapter, "The Pure Concept", especially pp. 73 - 78, in *Mind and the World Order*;New York, Charles Scribner's Sons, 1929.

tropes resemble each other and other tropes don't? Or because red tropes are instances of a singular universal? Or what?

THELMA: You're fishing for an ontological explanation behind our ability to coherently emplace tropes, aren't you? We don't need one to deal with the emplacement of predicates' referents. Here's a book and its red trope. Here's another. You see them as well as I do. You can coherently substitute the two books and the two tropes into the subject and predicate tokens of /This book is red/. That's all you need do to confirm the truth of those two sentences. We can coherently emplace without the help of frictionless ontological oars that row no boats. Alex Oliver knows we can do this. Read his "The Metaphysics of Properties".[28]

Can we, may we, go on to something more practical?

TOM: How about dealing with coherent emplacement into definite descriptions? Surely you don't equate their and names' coherence requirements.

THELMA: You're right, I don't. A proper name isn't a description; it doesn't contain a predicate as descriptions do. Russell saw this clearly and told us so clearly.

TOM: You agree with him that definite descriptions aren't denoting expressions, and that their surface grammar as a sentence's subject obscured their logical form? That you can't substitute a definite description for a name? That "Scott is Scott" is a different statement from "The author of Waverley is Scott"? That the first is a truism, the second is a fact in literary history?[29]

THELMA: I agree, willingly, eagerly, sincerely. But note, Jocko: All that holds even if sometimes you can't identify a name's referent without a definite description, and that using a description to identify a referent is epistemology, not logic.

TOM: Well, then, if definite descriptions aren't denoting expressions, you mayn't emplace 'referential contents' in them.

THELMA: I certainly may, because his analysis specifies the coherence requirements for the emplacement of a single entity, although he may not always have thought of it that way. Unlike proper names, definite descriptions carry their own coherence conditions. His "one and only one" prescribes a singular emplacement, and the predicate that describes it, "the author of the Waverly novels", should pick out the "one and only one" coherent emplacement, fulfilling its duty of satisfying the singular demand.

By the way, Tom, I know of no better brief account of Russell's theory of definite descriptions than A. J. Ayer's in his "Names and Descriptions".[30]

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[28] A. Oliver, *Mind*, Vol. 105, No. 417 (Jan., 1996), especially p. 63. Also see "Natural Kind Terms and Recognitional Capacities", Jessica Brown, *Mind*, Vol. 107, No. 426 (April, 1998), 275 - 303, where she explains how a scientifically ignorant community can recognize natural kinds.

Do not be misled about my concept of trope by D. M. Armstrong's, "3.23 Tropes", pp. 22 – 25, *A World of States of Affairs;* Cambridge, Eng., Cambridge University Press, 1997.

[29] B. Russell, *Introduction to Mathematical Philosophy*, op cite, p. 174.

[30] *Logique e Analyse*, p. 200, 5e Annee, 1962, Louvain, Editions Nauwelaerts. This is no surprise, because Ayer was a gifted, penetrating, clear expositor.

TOM: Thanks for that, but your interpretation sounds more like Frege than Russell in, at least, one of Frege's periods.

THELMA: Because you think Frege treats definite descriptions as having Bedeutungen?

TOM: After all, Frege wrote, "Whoever discovered the elliptic form of the planeary orbits" has a reference, namely, Kepler.[31]

THELMA: I'm saying definite descriptions may be referring expressions, because they may have referential content, as when they have the same referential content as a name, although not always; there's no guarantee they do. There is no present king of France but there is a present president of France; the first hasn't referential content, the second does (2009), viz. Nicholas Sarkozy.

Emplacing Sarkozy--not his name--in the space held by "The present president of France (2009)" satisfies Russell's coherence requirements; and surely Sarkozy is its referential content. If he isn't, I need you to explain why the claim "The present president of France (2009) is of Hungarian origin" is true. Who else would you emplace in "x" and "y" in Russell's analysis, given that there's only one president of France:

There exists an x such that (x is France's president in 2009), and (y) [y is France's president) if and only if (x is identical to y)] and (x is of Hungarian origin)?

That is, there's one and only one president of France, namely, Nicholas Sarkozy and he's of Hungarian origin.

TOM: But, according to Strawson, if definite descriptions don't have referential content the sentences in which they occur aren't statements as they are neither true nor false. Such sentences "presuppose" referential content. Lacking this content, they have no truth value.[32]

Frege seems to hold the same view about sentences whose grammatical subjects lack a referent.[33]

THELMA: Is that so?

TOM: Dummett says so, and I agree with him. Look. He says here that sentences whose subjects don't denote an actual object "express intelligible propositions (thoughts in Frege's terminology), but these propositions are neither true nor false".

THELMA: You've studied Dummett? Where does he say that?

TOM: On *The Logical Basis for Metaphysics*. You doubt Dummett? Where's your Frege books? (Pause, searches) Listen. "Now languages have the fault of containing expressions which fail to designate an object...because the truth of some [other] sentences is a prerequisite." Note "prerequisite", which is very similar to Strawson's "presupposition". Frege writes, "Thus it depends on the truth of the [prerequisite] sentence, namely,

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[31] Frege, "On Sense and Reference", pp. 68 – 69. Notice the telling use of "namely", which ties the description to Kepler's name.
[32] Strawson, P. F., *Introduction to Logical Theory*, pp. 174 - 176,;New York; John Wiley & Sons, 1952.
[33] Dummett, *Logical Basis*, 324 – 325.

There was someone who discovered the elliptic form of the planetary orbits [an existence statement],

whether the subordinate clause,

"who discovered the elliptic form of the planetary orbs" [Kepler],

really designates an object or only seems to do so while having in fact no reference."[34]

Russell thinks statements with definite descriptions and "ordinary names" that designate nothing are false. What do you say? Whose side are you on?

THELMA: None of the above. Neither Frege, Strawson, nor Russell explicitly took account of coherent and incoherent emplacement, at least in their logical writings, although I think Russell skirted close in some of his remarks about his theory of types.[35]

Frege, in his Grundlagen period, and Russell loved class logic and posited ideal conditions for it as the foundation of mathematics. Strawson paid attention to emplacement ignorance with "presupposition" and I, who swim with humbler fish, whose daily non-mathematical existence is marred by factual and coherence ignorance, sympathize with him, and challenge a logic that neglects this "human, all too human", condition.

No language, no logic without agents! Also no accounts of language and logic without factoring in agents' beliefs and purposes when they speak, write, emplace, and infer!

Should I gulp the hook claimants' dangle? Should I believe that referential contents of a grammatical subject really exist? Our ignorance complicates what we're entitled to say about statements' truth value. This is why I distinguish two-valued logic, which I'm not abjuring here but housing amongst our ideals, from three-valued entitlements. I may be entitled to claim a statement is true, is false, or is unknown. Unknown entitlements may occur when we have no ready at hand coherent emplacement for the subject nor evidence from which to infer that it exists; in that case we have no evidence for a statement's truth or falsity; hence, we aren't entitled to say a sentence is true nor to say it's false. Kleene proposes, instead, a three-valued logic to accommodate this.[36]

A statement's truth value being unknown due to factual or coherence ignorance differs from Strawson's and Frege's claim that a statement hasn't been made if a sentence's grammatical subject has no known referent. In their view, our well intentioned effort to make a statement has failed, because what we've uttered, according to them, even though we intended to make a statement, has no truth value. They deny us the right to say its truth value is unknown. They left honest agents off the page.

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When my love swears that she is made of truth
I do believe her, though I know she lies.
--W. Shakespeare (Sonnet 138)

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[34] "On Sense and Reference", p. 69.

[35] Russell, *Principles of Mathematics*, p. xiv; New York, W. W. Norton, 1964.

[36] Kleene, S. C. *Introduction to Metamathematics*, pp. 332 – 336; Amsterdam, North-Holland Publishing Co., 1962.

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TOM: Also, their view doesn't seem to square with lying. I don't see how you can lie unless what you say isn't knowingly false. A witness who tells a detective "The butler did it" is lying if she knows there is and was no butler in the castle. If she's lying, she's telling a falsehood; if it's a falsehood, it's a statement, a false statement, precisely because there was no butler in the castle to commit the murder.

THELMA: Strawson acknowledged it would be deceitful to use a sentence knowing the subject has no referent.[37]

TOM: But he doesn't draw the proper conclusion from that.

THELMA: Why couldn't you call the instrument of a lie a pseudo-statement, or a fiction, rather than a false one? The witness may intend not to refer while trying to make the detective believe she does. If she manages to make him believe she has, she can comfort herself with not having lied, for she has not made a statement.

TOM: Casuistic rubbish! No hard- or soft-boiled detective would buy that. A speaker intending to refer and doing so aren't necessary conditions for making a statement. If they were, no one could make a false statement by pretending to refer, knowing the 'designated' referent doesn't exist. Nor would detectives have to be skeptical or cynical about the reliability or honesty of witnesses who accuse suspects.

Intending to refer is, however, a sufficient condition for a speaker to make a statement. If the maid thinks she's referring with "The butler" and predicates something of him, she's making a statement, and, perhaps, a true one, even if it turns out to be false, because there is no butler and because the local parson did what she thinks the butler did.

And for an auditor, believing that a speaker intends to refer to an existing entity, and attributes a property or relation to it, is both a necessary and sufficient condition for a statement being made.

It's necessary, because, if he doesn't believe the speaker so intends, maybe it's beause she's competing in a lying contest or working up a fiction rather than making a true or false statement.

It's sufficient, because if he does believe the speaker intends to refer, he takes her to be making a statement. Think of children being taken in by parents who tell them about Santa Claus. Believing their parents intend to refer is enough to make kids believe Santa is a real person rather than a fiction. And, being the trusting tykes they are, the kids believe Mom and Dad have made true statements about this benevolent guy rather than telling them red-and-white lies.

THELMA: Then, by you, it's possible for the maid to make a statement about the butler even though she knows "The butler" has no referential content, and its possible for an auditor to think the maid's made a statement if he believes she intends "The butler" to

[37] Strawson, *Introduction*, p. 175.

refer to an existing butler. So, it turns out that speakers and auditors have different criteria for whether or not a statement has been made.

Doesn't this disparity bother you?

TOM: Not if we privilege the auditor's point of view. A statement is made if the auditor believes the speaker intends that the grammatical subject has a coherent referent, regardless of what the speaker knows or believes. AUDITOR BEWARE!

THELMA: Are you proposing an ethical feature of conversation?[38]

TOM: Nothing as fancy as that, even though I subscribe to some rules of respect.[39]

It's much simpler, it's utilitarian rather than ethical. I'm taking respect for agents' beliefs and purposes seriously. Speakers' are favored by the auditor's confidence in their good-faith referring. It will satisfy speakers who are trying to say something believable. It will satisfy liars, because their success depends on others believing they have made a statement. Story tellers and fiction writers will be satisfied, since they won't be charged with making false and defamatory statements if litigious auditors or readers realize they didn't intend to refer.

An auditor-first rule arises out of communication requirements, because a speaker who wants to be understood and have her speech acts taken as she intends has to adopt the auditor's conditions. The auditor's in the saddle.

THELMA: What about this case? The witness tells the detective, "Rolf came in at midnight", when she knows he didn't, but knows it was Oliver who came in, throwing the detective off the scent.

TOM: It's different from the butler case, because, as you tell the story, "Rolf" does have a referent, unlike "The butler". Strawson would have to agree that the witness made a statement.

THELMA: But was the witness intending Rolf to be the referent of her /Rolf/?

TOM: Who else? According to your notion of coherent emplacement, nobody except Rolf could be the referent of /Rolf/. She couldn't lie with that sentence nor throw the detective off if Rolf weren't the referential content. She might be thinking of Oliver when she says "Rolf came in at midnight", but that doesn't alter the coherence requirement that only Rolf may be emplaced coherently in her /Rolf/. Plus, if she wants the detective to believe Rolf came in at midnight, she has to adopt the same coherence requirements as his, namely, emplacing Rolf in /Rolf/. Auditor Detective's in the saddle.

THELMA: So, she has to intend to emplace Rolf in her /Rolf/, just as she expects and wants the detective to do.

TOM: No, she doesn't have to intend that. It's out of her hands once the coherence requirements for emplacing someone in tokens of "Rolf" are abroad in the agora. It's the

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[38] See Bierman and Assali, *Handbook*, "Ethical Rules for Argument Reconstruction and Evaluation", pp. 147 – 149. It was a standard part of "Logick" books for decades—Rules of Interpretation, Rules of Controversy. See Hedge, Levi, *Elements of Logick*, Chapters XVI and XVII; Boston, 1921. This text was widely used in the Nineteenth Century.

[39] "On Sense and Reference", p. 69.

public requirements for coherent emplacement in tokens of "Rolf" she uses to lie about Rolf's midnight entrance. If the detective knows his way around the agora, he'll emplace Rolf in her /Rolf/. That's the road to the false statement she wants him to believe; and it is false, because it is Rolf and he didn't come in at midnight.

<ErolfE @ /Rolf/ & E(rolf)came in at midnightE @ /came in at midnight/>.

THELMA: It's too late for side-by-side in the cinema, Tom. I'm tired and have to get up early to figure out alternatives to Russell and Strawson's conflicting views that surface, respectively, in their accounts of denoting and referring. And what logical effects the existence and non-existence of names' and definite descriptions' referents have on statement-making conditions, statements' truth value, and the logical relations grafted into categorical statements' Square of Opposition?

TOM: You're thinking of Russell's pseudo-subject in "The present king of France (is bald)", and Strawson's in "All my children (are asleep)" said by someone who has no children?

THELMA: They're the classic examples. But I'm thinking of two additional factors that affect the truth value of statements with denoting/referring expressions.

One is the coherence and incoherence of emplacement into any singular grammatical subject, including definite descriptions, and a trope emplacement into any singular predicate.

The other factor is our knowledge and ignorance about the existence of referential content: We simply may not know whether a subject or predicate term has existing referential content, in which case we're entitled to claim only that a statement's truth value is Unknown.

We also have to deal with cases where we know it's conceptually impossible for a referent to exist, such as a round-square or omnipotence.

Further, if "true" and "false" are treated as contradictory evaluations, and if there really are logical paradoxes, then both true and false apply to such statements as the Liar. These anomalous statements shred the principle of non-contradiction, -(T and -T), or, alternatively, the principle of excluded middle, (-T or T). Without those principles, all claims about what is true or false in a two-valued system are undermined; "a man can neither speak nor mean anything", as Aristotle said, according to H. G. Apostle's translation.[40] What's left but the skeptic's unknown?

W. D. Ross translates this passage as "one who is in this condition will not be able either to speak or to say anything intelligible".[41] C. A. Kirwan's translation is "there will be nothing for such a person to speak or say".[42]

TOM: Ah, yes, the long-lost Paradox Game. Thanks, for bringing a little closure to the evening. But your last point sounds like the Skeptic's Last Stand. Yet, skeptics

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[40] *Metaphysics*, Bk. IV, 1008b, 9 – 10; Bloomington, Indiana University Press, 1966.
[41] McKeon, Richard, Ed., *The Basic Works of Aristotle;* New York, Random House, 1941.
[42] Ackrill, J. L., Ed. *A New Aristotle Reader*; Princeton, Princeton University Press, 1987.

aren't finished off by the self-refuting charge, <You know one thing if you know nothing can be known>, because that cuts no ice on wintry Pond Paradox. It's paradoxical statements, not skeptics, that are said to be self-refuting, plunging us into the abyss of Aristotle's unspeakable-unsayable Unknown.

THELMA: My target is more modest than skepticism. My target is (c) of the following (a) - (c) possible pieces of emplacement information about a statement's terms,

(a) its coherent emplacements are known to exist by virtue of actual or inferred emplacement,

(b) purported emplacements are known to be coherent/incoherent,

(c) it isn't known if one of a term's purported coherent emplacement exists or doesn't exist.

If (c) applies to one or more of a statement's terms, we're entitled to claim its truth value is unknown.

Some say we should adopt a three-valued statement logic: True, False, Unknown, or Undefined, or Undetermined, or one with acknowledged truth value "gaps". As I said, I'm sticking with the standard two-valued truth logic for via passive statements but hold we're entitled to three possible values for via attiva judgments.

^^Statement value (2)^ =/= ^judgment value (3)^^;

hence, ^^statement^ =/= ^judgment^^.

In short, I maintain we're not entitled to make a judgment that a statement is true or false in case (c) holds, because it bequeaths us the Unknown.

As they properly should, these three kinds of reference information, (a) - (c), inject epistemological factors we have to consider before we're entitled to say a statement is true, false, or unknown. I'll have something to say about what effects they have on the Russell-Strawson options for the Square of Opposition when you come over tomorrow.

TOM: I think you're stalking Russell's "On Denoting" and Strawson's "On Referring". What do you call your smoking gun? "On Emplacing"?

THELMA: Thanks, a good title. However, I don't stalk lethally, but only with a candid camera. (Long pause) I do think there's more to the story than they've told us.

TOM: You've been holding out on me. You've been thinking about paradoxes a lot. No wonder you didn't want to go to a movie.

THELMA: No, I haven't. But I have been thinking about coherence and a logic of concepts for a long time. I surmised they might lead to a different response to the Liar paradox, and others with the same structure. As to that, check out Graham Priest's "The Structure of the Paradoxes of Self-Reference" if you have time before we meet tomorrow.[43] He thinks Frank Ramsey was wrong to divide the self-reference paradoxes into the semantic and the logical or mathematical. He produces a structure into which he thinks both kinds fit. I also thought dealing with paradox might be a good test for an

[43] *Mind*, Vol. 103, No. 409 (Jan., 1994), pp. 25 – 34.

incipient coherence/conceptual logic. Jousting with paradoxes used to be standard sport for ancient and medieval philosophers. Many have taken up arms again, beginning in the Nineteenth and continuing into the Twentieth Century. The literature on paradoxes is dauntingly huge.

TOM: Russell's Paradox wounded Frege badly.

THELMA: Don't remind me.

TOM: Good night, Thelma. Sweet, coherent dreams.

THELMA: I hope you mean that. I like good will when I'm trying to figure out something difficult.

THE FOLLOWING AFTERNOON

The Emplacement Chart: If Truth (Falsity and Unknown) Be Told

TOM: What hast thou wrought, Thelma, since last we parted so late last night?

THELMA: How sweet of thee to use the good, old intimate second person singular, Pilgrim. (Pause) Have you been drinking so early?

TOM: No. I have want of beer.

THELMA: You may well need it after you see my emplacement chart and hear my reasons for assigning judgment values to statements based on reference information of the (a) – (c) kinds I left you with last night. (p. 31) Here's your copy of the chart.

TOM: Thanks. But before I even look at it, I've got to give you a little dig for your slippy-slidey uses of "statement" and "sentence" yesterday. Sometimes you say statements are true or false, other times that sentences are. I know you're aware of the distinction between sentence, proposition, and statement.

THELMA: Sure. It's my Carnal Semantic Theology. I'm also aware of some of the different ways others distinguish them.

TOM: You're about to add to the list, aren't you?

THELMA: No, I'm in a de jure frame of mind, ready to stipulate like mad and to subtract from the list of the ways ontology workers distinguish them--if it's ontological categories you have in mind. I'm a country girl, a farmer's daughter, used to hammers, spades, pitchforks, and plows, physical tools. When I think of sentences I think of physical things I can work with. As a nominalist, for me propositions and statements never sever their ties from token sentences; they don't designate abstract things over and above such tokens. Rather there're two different kinds of things we *do* with sentences. They're the harvest of soilful tilling. Using "proposition" and "statement" as names of suspect ontological entities is too passive for me.

TOM: I'm sympathetic to that but maybe it's too reductive.

THELMA: Tom, you've got to give up your post-modern habits. You make husky pragmatism sound like pornography! Look, try to think of a proposition as a sentence transformed into another sentence, a lexical rewrite, as I said before. "The car is hot" is a sentence that may be rewritten as "The car is stolen" by anyone who thinks the second is an interpretation of the first. Going from one sentence token to another, we've still got just a sentence token. We do this, because sometimes we want to rewrite a sentence, "The car is hot" as "The car is stolen", that, on reflection, we think better conveys to an auditor the sentence we thought (heard ourself say) but didn't say (to others). I identify sentence re-writes with caret marks:

^The car is stolen^.

TOM: Do you think translations are lexical rewrites?

THELMA: Yes, I do. But between two lexical systems rather than one, as when we go from "The car is stolen" to ^La macchina e' derubata^.

I call a careted sentence a proposition in observance of historical ontological theories of meaning and content that some identify with propositions, as in "Sentences express propositions" or "The meaning of a sentence is a proposition" or "The content of sentences are propositions", where, however, ^proposition^ =/= ^statement^.

I also use carets around words to indicate an interpretation. (p. 7) In my example, the meaning of "hot" is ^stolen^. Here, again, we don't need to suppose that meaning is an entity over and above a word token and its relations in a lexical system. Expressions inside carets are tokens, physical marks; the carets indicate they're the results of a lexical rewrite, as ^stolen^ is a rewrite of /hot/. The transfer process travels via coherent lexical paths in a lexical system. Of course, ^stolen^ and ^stolen^ may be rewrites of /hot/ and /hot/, or of a type, "hot", which is a one-count of /hot/ and /hot/.

TOM: Huh? Again?

THELMA: Tokens are related to types as many-to-one; one type is any one of its many tokens, not one set of all of them. ^Type^ and ^token^ are count concepts; they're two different ways of counting words. Neither "type" nor any of its tokens--/type/, /type/ --is the name of an abstract referent, whatever that means. I'm using platonic realists' jargon to let you know how I disagree with them. Returning to C. J. Langford's introduction to logic, he asked "How would you count how many books there are in the U. of Michigan library?". He wanted us to distinguish between the count of the physical volumes (tokens) and the count of titles (type). Of course, the volume (token) count was greater than the title (type) count—several volumes of the *Critique of Pure Reason*.

Further, ^stolen^ may be an interpretation of both /hot/ and "hot", because the type, "hot" is any token of /hot/ under a specified description. I call word tokens in carets concepts out of respect for our Anglo-American tradition. Sometimes the transfer is minimal; ^gene pool^ might be the only lexical rewrite of /gene pool/ or "gene pool"; there may be but one location for them in lexical space.

TOM: I take it that it's not the token+carets that refers to a concept, just the token.

THELMA: I try to hide my hostility that glooms up when anyone, including you, talks about /concept/ 'referring' to concepts. It's too easy, to lazy, to slip back into old-think that suggests "concept" refers to an abstract entity.

TOM: What else do you want people to think?

THELMA: The token between the carets together with its place in a lexical system *is* the concept; each token in a place in the system has at least one lexical relation different from any other token in the system. For me, concept mastery is relational mastery of where tokens reside in lexical space. *Concepts are structural entities*.

When we understand a sentence, we can rewrite it as another or the same sentence, which I call a proposition; and when we understand a word token, we can rewrite it as another or the same token, which I call a concept. If I scan a sentence in Polish, a lang-

uage I don't know, I can't rewrite it into English; its propositions and concepts escape me, because I have no knowledge of the lexical or emplacement relations of Polish tokens; I don't know how to travel coherently in Polish lexical space.

Concepts are shared, intersubjective, when persons lexical systems are isomorphic. They have the same concept when their tokens of a type have similar relations to the tokens of other word types in lexical space, remembering that a type's tokens may have more than one place in lexical space with differing relations to other tokens. We have intersubjectivity of concepts also if our categorematic terms have the same coherent emplacements.

TOM: So, propositions and concepts are token sentences and words, respectively, or their rewrite tokens, not other kinds of entities over and above tokens. And they're shared when persons have isomorphic lexical-emplacement systems.

THELMA: Good. This gives us intensional 'entities' of which even Quine could approve; the analytic/synthetic rubber crutch is retired. That distinction supposedly indicated different grounds of truth for statements, because the relations between analytic and synthetic statements' subject and predicate concepts were thought to differ:

Analytic: predicate concepts are contained in the subject concept per Kant or they're identical as in tautologies (red is red; corn is corn);

synthetic: predicate concepts are not contained in nor identical to the subject concepts.

I retire this way of thinking, because so-called 'analytically' true statements aren't predication statements. (Thelma explains why she thinks this in "Appendix for Tom". Only a [Sooth] interpretation of a sentence's copula yields a predication statement.) Statements about relations between concepts in propositions are grounded on empirical experience that is organized by a conceptual system's implicit inference schemas. By making them explicit, we can use them to turn a language's speakers' beliefs about their heard and seen lexical and emplacement patterns into evidence for or against passive reports, as Socrates did. The use of conceptual logic's sound inference schemas locates tokens in lexical/emplacement systems.[44]

The a priori/a posteriori distinction also is retired because it signifies modes of knowing statements' truth--'before' or 'after' experience of states of affairs. Given the collapse of the analytic/synthetic dualism, the a priori/a posteriori pair is no longer needed; there are no such distinct grounds of truth that require different dates of knowing.

TOM: Does that mean all truth values are synthetic a posteriori!

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[44] See the Appendix for a sketch of a conceptual logic for subject/predicate sentences. There Thelma distinguishes conceptual from statement negation and offers seven copula interpretations that serve as binary relations between subject and predicate types/tokens (concepts): Subsume, incompatible, bond, conger, link, identify, and sooth (traditional predication) with which we may construct valid inference schemes to reason about conceptual coherence value, especially when it's contested. Is ^reason is a simian faculty^ coherent? Tom, try making conceptual arguments for and/or against this.

THELMA: Don't think about 'truths' with passe' lingo! The old distinctions are dead, like Nietzche's God is dead. We need to be more sensitive to alternatives, which my emplacement chart offers.

May I go on?

TOM: There's lots more I need to hear from you before I consent to those cryptic conclusions.

THELMA: We can't do all this in two or three days. I meant those conclusions to telegraph some consequences of what I've been thinking, knowing that your tolerance for unorthodox slants was probably damped in graduate school. (Silence)

I call a sentence a statement when a speaker appears to commit herself to a truth value entitlement, remembering your point that the auditor's in the saddle. This commitment includes apparent good faith expectations that she has emplacements to support her entitlement to the truth value of <S> or <Not<S>>. The speaker may explicitly say the statement is true, false, or unknown, or may simply enunciate a sentence and be taken as asserting it is true. "Frances! Millie's home"; "Frances! Millie's away".

TOM: Some people use "proposition" the way you use "statement", but obviously not in the sense you just gave to "proposition".

THELMA: That's right. A statement is a sentence taken as an assertion, as making a truth value claim, which differs from taking a sentence as an interpretation. Frege puts a turnstile, |--, in front of a sentence to indicate that it should be taken as a 'judgment' or an assertion. I'm not sure which. Verifying a statement's truth value is quite different work from interpreting the sentence used to make a statement. What police do to verify that a car is stolen differs from what lexicographers do to verify that /The car is hot/ may be interpreted/rewritten as ^The car is stolen^.

To mark off an interpreted/rewritten sentence token used to make a statement, I put angle marks around it (p. 8):

<The car is stolen>.

It's verification engages emplacement into its token terms. <…> doesn't indicate we have another kind of entity over and above a sentence token.

TOM: You're trying to avoid adding entities to the world like Ockham did.

THELMA: I'm trying to address the more interesting issue of what we do with sentences. Language is inert; the distinctive uses we make of its tokens are based on the differing ways we deploy them. This account of propositions and statements puts speakers/writers/auditors/readers in charge; together they drive all linguistic acts and motivate these distinctions.

TOM: Hooray for agents!?

THELMA: Yea! To summarize, here are three ways of talking about sentences:

As physical entities ("The car is hot" and /The car is hot/);
as interpretations/propositions/rewrites (^the car is stolen^); and
as statements (<The car is hot/stolen>).

It's very important to understand that when sentences are deployed as physical entities, they are neither interpreted nor stated. This is important, because, as I'll explain, sticking to tokens and their rewrites and emplacements undermines the conventional presentations of the Liar paradox as a self-referential statement.

TOM: Then it's sentences that are true, false--or unknown.

THELMA: No, it's statements we can evaluate that way. Depending on their emplacement profiles, we're entitled to say statements = (coherently interpreted sentence tokens claimed to be true, false, or unknown via coherent emplacements) may be so evaluated. For example, it's true <Tom's car is stolen> is true, if

/Tom's car is hot/ → ^Tom's car is stolen^ → ^Etom's car^ @ /Tom's car/ & E(tom's car)stolenE @ /stolen/^.

If we don't have this emplacement profile, we're entitled to say its false or unknown. I'll explain how to distinguish which it is when we discuss the Emplacement Chart's sixteen emplacement profiles. For me, emplacement is part of the interpretation process. I'll explain this also later.

TOM: If I read you right, that coherent emplacement proposition entitles us to say <Tom's car is stolen>.

THELMA: Exactly, the carets of <Tom's car is stolen> adds the claim element to the interpreted proposition ^Tom's car is stolen^; I'll use such predication statements as handy *abbreviations* of the above moves from sentence token, /…/, to an interpretation/proposition token, ^…^, to emplacement tokens, ^E…E @ /S/ & E(…)…E @ / P/^, where /S/ is the sentence's subject and /P/ it's predicate. This entails there are no statable all-time, everywhere statement truths, including those that have no indexicals, because time, place, and circumstances in which sentences are deployed as judgments affect our interpretations and what we're entitled to claim. Reality techtonics slide emplacements from beneath our token sentences. Truths saddle up on the backs of interpreted tokens, which you may think of as I suggested you think of tropes: Their occurrence is dated and have single locations with its surround of surmised circumstances. That's why we have logics with temporal and locative operators. For abbreviation purposes, philosophers are prone to reach for 'context', the all-purpose cloak, instead of citing dates, locations, and surmises.[45]

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[45] See Austin, J. L., "Truth" in *Philosophical Papers*, pp. 89 – 90; Oxford, Clarendon Press, 1961. Note his "descriptive" and "demonstrative" conventions. Nino Cocchiarella reminds me of some standard counterexamples to the universal truth-value contingency claim, principally, mathematical statements, such as 2 + 2 = 4, and natural laws. But I don't think there are mathematical statements; almost everyone confuses them with propositions in my sense; hence, they should be evaluated as coherent or incoherent rather than as true or false. Laws of nature, whether lofty (acceleration of falling bodies)) or basal (ripe pears are juicier than unripe ones), have no truth to lend to the conclusions of arguments; they're fillers, dragooned into arguments as premises to insure validity. Their standing is held hostage to the truth value of arguments' singular conclusions. If a conclusion is true, as shown by emplacements, keep the 'law'; if it's false, because there's a counterexample, discharge it, given that there's no other detected, more egregious, errors. Notice the covert quantifier [Any] hiding beneath counter-examples: <All S are P>, if there's *not any* S that's ~P. Hume doubted we could guarantee there wouldn't be *any* such counterexample even for laws, and so do I..

Please, if I happen to say out of old habit that we're entitled to claim "sentences are true, false, or unknown", think of such sentences, instead, as interpreted tokens, token re-writes deployed as statements.

TOM: It's interpreted tokens that are taken as statements?

THELMA: You can make statements with them only if you claim or are taken to claim that the interpreted token is true, false, or unknown.

You can't get started in this truth and coherence business without token sentences, nor continue without interpreting them, nor fully rise to statements without laying claim to a truth value entitlement to someone within immediate or remote ear- or sight-shot based on coherent or incoherent emplacements into the subject and predicate terms of token sentences, or based on the non-existence of coherent emplacements for either or both terms. All those emplacement alternatives add up to sixteen possible grounds for entitled judgments as in my sixteen-rowed Emplacement Chart.

TOM: That many emplacements! Sixteen!? That's damned nominalistic, alright.

THELMA: That's my farmers' daughters' bias, if they weren't seduced by platonistic traveling salesmen. If you don't void their blarney, you're likely to multiply living progeny indecorously. This includes multiplying properties. One reason to avoid treating "true", "false", and "unknown" as properties of sentence tokens is to avoid underwriting dormant, value attributions that explain nothing about why we should favor one entitlement for a statement over the other two.

I think it's better to think of true/false/unknown entitlements as assessments of our ventured emplacements into sentences' terms: True = you won the game of emplacement; False = you lost; Unknown = It's over, 'til it's not.

TOM: You think we should stop thinking of statements as true, false, or unknown, but should think of them as subject to evaluation via our emplacement activities.

THELMA: Welcome to Club Emp, Tom. If you coherently emplace an object and a property in the spaces of a sentence token's object and property word tokens, you have succeeded. There are fifteen other entitlement possibilities that merit either False or Unknown judgments. My Emplacement Chart isn't for three-valued logic but for three-valued epistemological entitlement judgments about truth values.

And, don't confuse statements' ^truth value^, a dear, simple ideal, with ^entitled judgments^ about our emplacement successes and failures. My old friend Professor Don Gieschen made me be clear about this.

EMPLACEMENT CHART

	S	P/~P	V	
1	+	+	T	S+ P+/S+ ~P+
2	+	-	F	S+ P-
3	+	~	F	S+ P~
4	+	?	U	S+ P?
5	-	+	F	S- P+
6	-	-	F	S- P-
7	-	~	F	S- P~
8	-	?	F	S- P?
9	~	+	U	S~ P+
10	~	-	F	S~ P-
11	~	~	U	S~ P~
12	~	?	U	S~ P?
13	?	+	U	S? P+
14	?	-	F	S? P-
15	?	~	U	S? P~
16	?	?	U	S~ P?

In the S(ubject) and P(redicate) columns, "**+**" indicates you know there is a coherent emplacement; "**-**" indicates you know there is no coherent emplacement; "**~**" indicates there's an incoherent emplacement; "**?**" indicates you don't know if there is or isn't a coherent emplacement for a grammatical subject or predicate. In the V(alue) column, T is true, F is false, and U is unknown.

Now, get out your red pen and make a red dot. You're entitled to say <<The dot is red> is true> if you've done this:

You've coherently emplaced, literally put the dot into the sentence's subject, /dot/, and put the dot, the red trope's carrier, into the predicate token, /red/ /dot/ and /red/ are the sentence's categorematic tokens. Row 1 represents this case. I write coherent, collocated emplacements in /The dot is red/ this way:

^EdotE @ /dot/ & E(dot)redE @ /red/^.

This emplacement proposition shows we're entitled to claim <This dot is red> is true. ^EdotE @ /dot/^ shows a dot is coherently emplaced--/@/--in /dot/'s space, which is that sentence's subject token, assuming the dot you designate with /The/ has been identified.

^E(dot)redE @ /red/^ shows the dot's red trope is coherently emplaced in that sentence's predicate token, /red/. The dot has carried and emplaced the red trope into the

predicate /red/. ^E(dot)redE^ is a collocated emplacement of the dot and its red color in /red/. The parentheses around /(dot)/ in ^E(dot)redE @ /red/^ shows the dot has been emplaced in /red/ and that it's carried a red trope into /red/.

When these two coherent emplacement operations occur, I say the dot and the red trope are **collocated** in a sentence. And when they're collocated, we're entitled to claim <The dot is red> is true; or, as is more colloqually said, we 'know' the dot is red.

TOM: The dot is emplaced twice; first, in the subject, then in the predicate.

THELMA: It's emplaced first in /dot/ and again when you emplace the red trope into /red/, because you can't detach a trope from its host. Here "carries" doesn't designate an ontological relation between substances and their properties, but reports that I've physically carried the predicate's emplacement on the back of it's host into a sentence's predicate place. If the red trope goes where my dot goes, they're collocated, and that's all we need for verifying the truth of <The dot is red>. This hands-on nominalism extends the promise of "direct" reference, and gives a literal interpretation to Frege's "falling under" a concept. An argument, EdotE, coherently emplaced in a sentence's subject, "falls under a concept" if it carries a trope, EredE, coherently emplaceable in the 'function'/predicate token /red/.

^EleafE @ /dot^ shows I've incoherently emplaced a leaf in /dot/'s space. ^E(dot) greenE @ /red/^ shows I've incoherently emplaced green in /red/'s space.

Diego Marconi reports that Donald Davidson, in his Hermes Lectures, given at Perugia in May, 2001, asks "…what is the connection between a subject and a predicate that unifies them into a proposition?"[46] That's looking for unity in "all the wrong places", as Tarski does, on whom Davidson leans for an explanation: Statements' are unified because the predicate contributes the truth conditions of a statement with that subject. This is deceptively near the right answer, except for one affliction: Predicates can't unify. They're inert. Humans carry an object emplacement from the subject to the predicate during emplacement maneuvers; humans unify subject and predicate, if the emplacements are coherent. When such emplacements fail, there is no lexical unity; incoherence is the result. Once again, honor the agents, and the coherence value of the propositions they construct. When agents are left out, we're left with reliance on magical acts by inert parts of speech.[47]

Try tenderly, doubly emplacing your tender pinky in /My fingernail is pink/, Tom. Write it big. Now, unify the subject and predicate tokens in that sentence token by emplacement.

Seriously, write that sentence down and put your pinkie in /fingernail/'s space, then move it into /pink/'s space. Is your <My fingernail is pink> true or false?

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[46] Marconi's review of Donald Davidson's, *Sulla verita'*, Trans. S. Levi; Roma-Bari, Laterza, 2006(?).

[47] Diego Marconi, "Predicazioni della verita (True Predications)"; *Il Sole-24 Ore*, 17 April, 2006.

TOM: That's very farmer-daughter-like, very hands on, alright. Have I told you the one about the farmer's daughter who...

THELMA: Tom!

TOM: But, seriously, if Jack has successfully collocated the subject and predicate's emplacements and Jill hasn't, is the sentence true for Jack and false or unknown, for Jill? Is the sentence's truth value relative to their beliefs? Which is at severe odds with my idea of truth.

THELMA: What idea?

TOM: For me, a statement's truth value doesn't depend on a person's belief. If it did, nobody could have right or wrong beliefs. A statement is true or false, not both, but some one may believe it's true and another that it's false. One truth can't equal two conflicting beliefs; so, you can't identify truth with a belief. <The wind impregnates females> was false even if the ancients believed it.

THELMA: Don't identify ^successful collocation^ with ^believes is true^ nor ^unsuccessful collocation^ with ^believes is false, or unknown^. They don't equate. Jack believes <The dot is red> is true, because he successfully collocated, and Jill believes its false or unknown if she didn't or couldn't. Their beliefs are relative to their collocation operations, of which there are sixteen in my Emplacement Chart, only one of which entitles them to a claim a statement is true.

TOM: They can't both be right.

THELMA: Of course not. That's because ^true^, ^false^, and ^unknown^ are incompatible, as are ^successful^ and ^unsuccessful^.

TOM: But if they disagree...?

THELMA: Then they have to go over their emplacements again to see if the object and the property are coherently emplaced. Whenever I proclaimed that a great physicist was wrong, my high school teacher dryly said, "Do the experiment again, Thelma". What other evidence do Jack and Jill have for deciding if <The dot is red> is true or false? How could 'real truth' out 'there', 'somewhere', independent of Jack and Jill's emplacements, actually play a role in determining that <The dot is red> is true or false?

It's easy to see a problem in disagreement if you think it's about beliefs simpliciter. You can sense the temptation to think that's the full story in the following remarks. "The Food and Drug Administration (FDA) and women's health advocates are at odds over an important public health question. Are tampons safe? The problem is that the answer depends on whom you ask."[48]

One problem is that hearing inconsistent answers reflecting different beliefs doesn't help me decide whether or not I should use tampons. My decision should depend on which party has the evidence. Is <Dioxin is carcinogenic> true or false? Dioxin is a by-product produced when tampon material is bleached with chlorine. That calls for lots of

[48] Yolanda Lenzy and Amy Allina, Washington, D.C., *The Network News*,, July/August, 1999.

attempted collocated emplacements. The entitled answer, given conflicting results of emplacement tests, should most likely be stated as a probability.

TOM: So, you don't equate <<S> is true> with <X believes <S> is true>.

THELMA: Tom, I'm insulted you'd even think I might think so. And it would be just as insulting to accuse me of believing a statement's claimed true, false, or unknown status can be sundered from agents' emplacement results.

TOM: You said ^/EleafE @ /dot/^ shows a leaf was incoherently emplaced in that /dot/. And that ^E(dot)greenE @ /red/^ shows green was incoherently emplaced in that /red/. What are we entitled to claim about <The dot is red> if someone emplaces this way: ^E(leaf)E @ /dot/ & E(leaf)redE @ /red/^?

THELMA: We're entitled to say its unknown. I'll explain why when I discuss Row 9 of the Emplacement Chart (p. 81ff).

TOM: Given that "true", "false", and "unknown" aren't properties, but emplacement successes and failures, I think we should grant that you're entitled to believe a statement is true if you believe someone else has coherently emplaced collocated referents in a sentence's subject and predicate. Leaving that out would cancel a lot of what passes for knowledge. If Arnauld said Descartes was bearded, and I trust Arnauld to have emplaced honestly and coherently as follows,

^EdescartesE @ /Descartes/ and E(descartes)bearded @ /bearded/^,

I think I'm entitled to believe <Descartes had a beard> is true, providing there's no contrary evidence or testimony.

THELMA: "Emplaced honestly". Epistemology from a moral point of view! Unavoidable once you paint collocating agents into the epistemological landscape. Let us therefore praise generosity and diss stinginess. Honesty prompts sharing knowledge, deceit prods hoarding it. Rene', the Vain, blesses Uncle Arnauld, the Honest.

TOM: At least as far as his beard goes.

THELMA: Would you like to know how portraits of Descartes fit into the emplacement account of truth if we're as generous to portraitists as we are to other witnesses?

TOM: Are you going to be weird again?

THELMA: What I'm about to say will sound weird to conventional minds but suggestive and liberating to daring ones, amongst which I count yours. It didn't sound weird to Leibniz, who gave pictures the same conceptual status as symbols.

TOM: How can I refuse that?

THELMA: You can't and expect to stay adventurous, open, audacious, bold, and, even cheeky, my sweet.

If you believe the portraitist was honest, you believe he painted much of what he saw. When he looked at Descartes, he must surely have said to himself, rewritten from his old French, <This guy's subtly bearded>, a feature he noted and painted. In my terms, his portrait emplaced Descartes' and his bearded visage just as this proposition does:

^EdescartesE @ /Descartes/ & E(descartes)beardedE @ /bearded/^.

We can do this, Tom, because, as I said before, we can read states of affairs, which are but emplacements in grammatical sentences' structure. We can read them just as we pronounce out loud what we're reading. When we read out loud, we substitute a sound for a mark; when we read a state of affairs, we substitute sounded words for their coherent emplacements. The painter knows that the man before him is a coherent emplacement for /Descartes/ and that the hair on his face is a coherent emplacement for /bearded/; so he pronounces the name /Descartes/ for Descartes and the property name /bearded/ for his brush strokes--he ascends from observation to speech and portrait--and provides us with a painting we may read in part as <Descartes was bearded>, plus many other reads, which turns "A picture is worth a thousand words" 180 degrees around.

TOM: You're saying there's a two-way street between words and their emplacements: A way down, from word to emplacement, and a way up, from emplacement to word and brush strokes.

THELMA: The way up, the way down? Sounds occult.

TOM: Listen, this Emplacement Chart (p. 43) is getting warm in my hands.

THELMA: OKAY. I'll start with assumptions and symbols.

I assume all emplacements are singular: For the subject, one object; for any one of the subjects' predicates, one trope.

The grammatical subjects may be proper names (Robin Assali), demonstratives with accompanying demonstrations ("that", or David Kaplan's "Dthat", with pointing), demonstratives with common names ("that Lamborghini"), definite articles with common names and contextual information ("the car [that Gail owns]"), definite descriptions (the man who wrote "On Denoting"), pronouns whose use is anaphorically tied to any of the above.

TOM: Is the pointing you use with demonstratives, such as "that", part of the grammatical subject?

THELMA: I like that question. I think so. The pointing gesture isn't the referential subject; so, what else could it be but the grammatical subject? Good.

As to predicates, for purposes here, they're tropes I can see, feel, taste, hear, or smell, and that are carried into predicate emplacement when I move the emplaced object into the predicate place.

TOM: By "feel" do you mean ^touch^, so that you can emplace an object's felt surface into, for example, /rough/?

THELMA: I'll confine myself to touch for now, to tropes felt by me and others. The epistemological relations between sensations/qualia and tropes/properties is not in the scope of this essay on conceptual logic; so, don't ask.

TOM: I won't. Then felt pain and pleasure aren't tropes, because objects don't carry pleasure and pain into tokens of "pleasure" and "pain" the way a dot carries red into tokens of "red". Only sentient beings carry pleasure; the Medici Venus cannot. Pleasure

and pain aren't properties of objects that please us. According to Santayana, what's peculiar about aesthetic pleasure is that it only seems to be a property of the object observed. For him, "Beauty is pleasure regarded as the quality of a thing", although he doesn't think it actually is.[49]

THELMA: You read aesthetic tracts?

TOM: From time to time.

THELMA: We must troll museums more often. Each with each. Go where the muses dwell, where we're lured into forgivingly deceptive, but pleasing collocations.

TOM: I don't think that's why I'd go to museums, even with you.

THELMA: But you're the one who reads Santayana. (Silence) Okay.

While a painting doesn't really carry our pleasure into /pleasing/ of /This painting is pleasing/, <I hurt> offers no problems. If I emplace myself in that /I/ and move over to that /hurt/, I carry my pain with me; pain and I are definitely (Ouch!) collocated sometimes: ^EthelmaE @ /I/ & E(thelma)painE @ /pain/^. Isn't that why we say it's my pain and not yours?

TOM: I don't think sounds are properties of objects and instruments; I doubt they carry Middle C into /Middle C/. They seem different from objects' color properties.

THELMA: I wouldn't play a violin to get a trombone sound, would you? No more than I'd look at a red object to see blue. And why would Stradivarius' violins be so sought after if they didn't have precious sound properties? And I'm not talkin' 'bout dispositional properties but pay-off in the playin', matey.

TOM: But if no one anywhere in the world were playing a violin, there would be no violin sound tropes. Unlike color tropes, they have short lives.

THELMA: If there were no light anywhere in the world, color tropes also would cease to exist, and if there were only short squibs of light.... According to your view of properties, without violin sounds and surface colors, neither violin's sounds nor objects' color properties would exist. Think of sounds and colors this way: A bell when struck by a hammer makes a bell sound and a book's cover when struck by light elicits a red color, in cooperation with an auditor and a visualizor. We need an object and sentient being's cooperation under proper ambient circumstances to produce a trope. A trope isn't an object's material formation nor an observer's subjective possession anymore than it's an attribute of their ambiance; I don't want to confuse a trope with anything belonging exclusively to these three cooperating factors: Object. sentience, ambiance. In this context, it's reasonable to say that sound via a trope is a property of some struck object rather than the auditor or the ambiance.

TOM: That strikes me as elusive fancy dancin'.

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Now listen! Can't you see that when the language

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49 Santayana, George, *The Sense of Beauty*, p. 49; New York, Charles Scribners and Sons, 1896.

was new--as it was with Chaucer and Homer--the poet
could use the name of a thing and the thing was
really there? He could say "O moon," "O sea," "O love,"
and the moon and the sea and love were really there.
--Gertrude Stein, "Four in America"

* * * *

THELMA: We'll just to have waltz with that, Tom. Because I've been talking about emplacing observed objects and tropes, I assumed you knew we were talking about sensed not theoretical, dispositional physical properties of surfaces and violins, which could, respectively, produce color tropes, if lighted, and violin sound tropes, if Yitzak Perlman graciously took up his violin and bow to play for us at our favorite Lisbon cantina.

But, of course, I foresee a need for inferential elaborations to carry out emplacements of theoretical entities and properties. But they're needed even for pretty low level statements. To collocate object and trope in <Tom is humming> when you've left the room, I have to infer you still exist even if I don't see you and I have to infer it's you humming rather than a Doppelganger.

TOM: That's emplacement by inference rather than by hand, eye, or finger.

THELMA: There you go. Risky business sometimes, but necessary.

TOM: I'm sorry to get off the subject.

THELMA: Actually, you've brought us back to my Emplacement Chart.

The four symbols for emplacement profiles, +, -, ~, and ? mark epistemological factors that condition what we're entitled to say about the truth value of sentences. And I hope that after you've understood the chart you'll appreciate how much the super-simple equation of 'meaning' with 'truth conditions' needs beefing up. Combinatorial and emplacement coherence requirements leave that popular equation grasping the frayed apron strings of naive logical positivism, in all its extensional guises, including some 'pragmatistic' variants.

To understand those four symbols properly, you have to distinguish the related uses of combinatory and emplacement coherence. I use the first to evaluate combinations of categorematic tokens in sentences, and the second to evaluate emplacements in them.

For the second, I use the **plus/+**, **minus/-**, **tilde/~**, and **question/?**, to mark four different emplacement profiles, ignoring vagueness issues. I interpret them as follows:

+ : A subject or predicate's coherent emplacement is known to exist: S+, P+.

- : A subject or predicate's coherent emplacement is known not to exist: S-, P-.

~ : There is an incoherent emplacement in a subject or a predicate: S~, P~.

? : It is not known that a subject or predicate's coherent emplacement exists or doesn't exist: S?, P?. It's possible that S+ or S-, and P+ or P-; we don't know which is the case.

TOM: They compute to sixteen collocation possibilities only one of which, S+ P+, is a successful truth entitlement; so that's sixteen different conditions for assigning truth value. OKAY, but before we get to that--I know you've alluded to this before--please explain "coherent" and "incoherent" combinations of token interpretations.

THELMA: It applies to combinations of categorematic tokens in grammatically correct attributive sentences. Some combinations, /Puffins have beaks/, are coherent. Others, such as /Truths have beaks/, are incoherent; they have no literal interpretation. Similarly, /Puffins are birds/ is coherent and /Puffins are fish/ is not. Grammatically correct incoherent combinations, such as /Lips too red are a sin/ can't be used to make statements without liberal, perhaps metaphorical, doctoring. Undoctored, they have no entitlement value, neither true, false, nor unknown. In my chart, I assume emplacements are suited to literal interpretations of tokens.

I just happen to have an apposite example from the *Washington Post* (April 20, ‘06). The columnist, Dan Froomkin, was doing some coherence value work. He writes:

> “When President Bush gave longtime political guru and senior adviser Karl Rove the additional title of deputy chief of staff for policy a little over a year ago, it was the ultimate expression of Bush’s failure to make a distinction between politics and policy. But there is a difference. Politics is about elections; policy is about governing. In politics, it’s all about winning; in governing, it’s about making things better.”

Froomkin accuses Bush of conceptual ineptitude. His reasoning is pretty simple; it takes a lot of conceptual reasoning to sort it out fully, but it serves as a typical and common example of conceptual work that can’t be adequately sorted out with truth logic alone. Basically, he thinks the propositional combinations ^*politics* is about *elections*^ and ^*policy* is about *governing*^ are coherent whilst ^*politic*s is about *governing*^ and ^*policy* is about *elections*^ are incoherent combinations.

Combinatory coherence is system based. Coherence logic supplies inference forms we can use to trace routes in a lexical/conceptual system that are embedded in natural languages. Anyone who knows a natural language uses these paths to produce coherent, meaningful, sentences. This is the via attiva. I explain this in your Appendix, Tom. However, same-language speakers' paths may not be perfectly isomorphic, leading them to disagree about the coherence value of some sentences, which happens typically in philosophers' discourse. Reflecting on the divergence in their via attiva ways, judging, and critiquing them, takes the via passive way. This way to the mews, my friends.

The inference forms of coherence logic supplement our intuitions about our via attiva practices; they help us to reason about the coherence value of subject and predicate combinations in grammatical sentences. It's similar to the way we use truth logic to

reason about the truth value of sentences. Given coherent premises and valid conceptual argument forms, we can derive coherent conclusions.[50]

TOM: I take it truth and coherence are related logically, as are truth and coherence logic?

THELMA: Truth presupposes coherence; a sentence can't be used to make a truth value claim if it doesn't have a coherent interpretation. Thus, if we have a coherence disagreement, it would be pointless to argue about it by truth logic methods. If two informed persons disagree about the truth of <Buddhism is not a religion>, they'd better work on their conceptual acts. The time-honored cry that recognized this necessary prelude was "Define your terms!". But appeal to definitions is a deficient methodology—and no wonder. If two contenders have adequate definitions, they will but reflect their different lexical practices, which is the very source of their disagreement. Definitions simply carry conceptual disagreement back to their linguistic practices. Where do contenders turn if they disagree about their definitions? Coherence logic is a resource they can use to reason about their concepts and their definitions in a good-faith discourse to reach agreement via justified de jure changes in either's or both's practices.

I promised you an introduction to my incipient coherence logic. That's coming in an appendix to this essay's Appendix for you, Tom—at least enough of it to help you see how it's possible to reason about intensions, a subject matter for empirically grounded logical study, which began with semantic field (Feld) theory.[51]

TOM: Hopefully, that will help. After all, you are throwing up a lot of material we've never talked about.

THELMA: I'm trying to detour around exhausted conceptual veins and open richer ones. It's painful to watch people quarreling over flecks once the nuggets are mined out.

Plus, "+", indicates a person knows a coherent emplacement for a term exists; this isn't lexical knowledge. /My hand/ is S+ for fortunate people.

Bar, "-", indicates a person knows a coherent referent of a term doesn't exist; this, too, isn't lexical knowledge. Currently, /dinosaur/ is S- for most of us.

With some reservations, I allow that S- and P- may indicate non-existence based on lexical grounds.

TOM: Usually you're damned sure of yourself.

THELMA: /This round square/ and /the least convergent series/ are subject examples and /omnipotent/ and /infinitely dense/ are predicate examples that can't have coherent emplacements on lexical grounds. I have reservations about letting S- and P- include them, because I said before that the chart is meant to cover only sentences that

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[50] See Bierman, *LOGIC: A Dialogue*, Chapter 12; and Bierman and Assali, *The Critical Thinking Handbook*, Part III, Chapter 11, for earlier versions of a conceptual logic.

[51] For some history and background of these empirical studies, see John Lyons, *Semantics*, Vol. 1, 8.4, "Semantic fields"; Cambridge, Cambridge University Press, 1993. Also, see sections 9.1 – 9.5 for sense relations, which are almost my via passsiva functors.

are combinatorally coherent. /God is omnipotent/ is surely grammatically correct, but if /omnipotent/ has no coherent emplacement, there's nothing to make it emplacement coherent. Does that entail /God is omnipotent/ is combinatorally incoherent? For now, I'm going to suppose it doesn't. That way my chart covers such theological sentences as /God is omnipotent/ (S- P-, S+ P-) that lack existent coherent emplacements; thus, I'll treat /God/ as (S-) rather than (S~) and /omnipotent/ as (P-) rather than (P~). Also, I'll treat disputed metaphysical claims, such as <Humans have mind and body properties> as combinatorally coherent even though humans may have only body properties as materialists hold, (body+ mind-), or may have only mind properties as ontological idealists hold, (mind+ body-). Spinoza may be an exception as mind and body emplacements in predicates are different modes of one and the same property.

Maybe I'll have an answer to my question in the Appendix I'm planning for you. It may turn out that words or phrases without coherent emplacements are disguised incoherent sentences, which would entail that sentences containing them don't have coherent interpretations either. Also, although I've distinguished combinatory from emplacement coherence here, they're not two kinds of coherence. Emplacement is subsumption, as ^^book^ subsumes ^Silas Marner^^ and ^^vehicle^ subsumes ^Ford^^ are; as such, emplacement has combinatory coherence or incoherence, as I explain in the Appendix.

TOM: I remember Jerome Schmidt asking our parochial school teacher if God is omnipotent, followed triumphantly by: If He is, can He make a stone so heavy He can't lift it? Arguing about that at recess was more fun than shooting marbles—for some of us. Qualified omnipotence didn't satisfy Jerome.

THELMA: Maybe Jerome should have asked your teacher if God can create statements that are true if and only if they're false.

TOM: Power, not logic, was our teacher's forte. He liked to use his rubber hose to punish bad boys and girls. When they dodged, rubber marks were inscribed on the walls.

THELMA: Bad omen. He probably tried to stuff Jerome's brain full of Tertullian nonsense, <I believe it because it's contradictory>, the strongest test of all for your faith, which is just as incoherent as <I believe it because it's false>.

TOM: Jerome Schmidt wasn't working on coherence logic in grade school.

THELMA: Sorry to hear he missed a promising career.

TOM: That sounds like you're arguing for the conceptually necessary non-existence of objects and tropes, a variation on Anselm's argument for the conceptually necessary existence of God. If the concept ^God^ is tied to ^omnipotent^, and ^omnipotent^ has no coherent emplacement, then by equal reason there's no God emplacement.

THELMA: I'd rather not pursue that right now, Tom. I want to continue with my emplacement chart's symbols. Thank you.

Question, "?", indicates non-lexical ignorance about a referent's existence or non-existence. The existence of a ^saintly^ trope is doubtful (P?) for many moral pessimists.

Tilde, "~", indicates a known incoherent emplacement, such as emplacing a hat in /leg/, S~, or emplacing green in /red/, P~. Note that the tilde comes after the subject and predicate (S~, P~). This indicates that it is not conceptual negation, which comes before concepts (~S, ~P).

I use the tilde for both, because they're related logically: ^EgreenE @ /red/^ gives us P~. We get P~, because ^green^ is ^~red^, a contrary of ^red^; their conceptual contrariety accounts for the incompatibility of ^green^ and ^red^, and for the incoherence of ^EgreenE @ /red/^.

TOM: What's this about conceptual contrariety?

THELMA: Tilde, [~], in front of a word is concept negation, which differs from statement negation, [-]. A concept, ^effective^, preceded by [~] , as in ^~effective^ = ^ineffective^, forms a concept that is incompatible with ^effective^. It forms either a contradictory or a contrary concept. That's why substituting a green trope into /red/ is incoherent, P~.

[~] stands in for such English prefixes as "un-" , "dis-", "in-", with which we form, respectively, the concepts ^~fit^, ^~abled^, ^~direct^. It also stands in for such English prefixes as "a-" and "im-" with which we form the concepts ^amoral^ and ^immoral^.[52]

TOM: Touting conceptual negation isn't standard doctrine.

THELMA: You're right, if you have Frege and his epigones in mind.[53]

If we had only statement negation, we wouldn't have such contraries as ^moral^, ^immoral, and ^amoral^. If "not" were to be interpreted only as statement negation, we could negate <Hulda is moral> only with <Not<Hulda is moral>> rather than with the more informative alternatives <Hulda is immoral> and <Hulda is amoral>.

```
        ~moral
         /    \
immoral    amoral
```

Statement negation can't discriminate between contrary concepts nor, consequently explain why contrary statements are contrary. As you'll see, the coherent link proposition in conceptual logic, ^[Link, *] character {moral amoral immoral}^, makes morality concepts' contrariety explicit and shows why either <Hulda is amoral> or <Hulda is immoral> make <Hulda is moral> false, a feature that has no acknowledged place in the standard Square of Opposition and reveals no hint that a coherent [Link, *] proposition with its explicit contraries, {moral immoral amoral}, underwrites the coherence of all three statements while logically grounding their incompatibility.

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[52] Bierman & Assali, pp. 339 – 343.

[53] For Frege's view that the only interpretation of "not" is statement negation, see his "Negation", especially pp. 130 – 31(*Translations from the Philosophical Writings of Gottlob Frege,* (eds.) Peter Geach and Max Black; Oxford, Basil Blackwell, 1952. For a criticism of this view, see Fred Sommers, *The Logic of Natural Languages,* pp. 282 – 85; Oxford, Clarendon Press, 1982.

TOM: That's a mouthful. I'd be more willing to swallow it if you explained how you can get both contradictory and contrary concepts out of one conceptual negation, [~].[54]

THELMA: [~] creates incompatible concepts, which covers both contradiction and contrariety. If a concept has only one incompatible concept, such as ^alive^ versus ^dead/~alive^, they're contradictory. If it has more than one incompatible concept, such as ^red^ versus {^blue green yellow…}^, it's contrary to them: <^red^ is ^~blue^>, <^red^ is ^~green^>, and so forth.

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            Incompatible [!]
            /              \
Contradictory    Contrary
            |              |
One Concept    One+ Concepts
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We also form contradictory and contrary concepts without explicitly using [~] and without using suffixes. We use different words; you know ^single^ and ^married^ are contradictory, ^green^ and ^red^ are contrary, as any one does who's acquainted with English, although [Not, ~] and suffixes are missing.

An identical trope can't be emplaced coherently in both /green/ and /red/, because they're conceptually contrary. Nor can a bus be emplaced in the subject of /The car is old/, because ^bus^ and ^car^ are incompatible, as are ^ship^ and ^airplane^. They're all subsumed by ^vehicle^: ^[Subsume, /] vehicle {car bus airplane ship}^; so, EbusE @ /car/ is an incoherent placement, S~. If you're mystified by this, you'll find illumination and relief in the subsequent Appendix.

TOM: Some philosophers think conceptual distinctions mirror natural differences, that the difference between red and green ground a conceptual distinction. "Nature has joints" is a favored phrase.

THELMA: But the difference between red and green tropes isn't a logical relation; nature doesn't have either statement, [-], or concept, [~], negation; so, mere difference can't be the source of logical incompatibility between ^red^ and ^green^.

I'm puzzled why these 'realists" tar human devices as merely conventional, as if we weren't a part of nature, and as if our logic practices also weren't. If "realists" included humans and what we devise in the natural scheme of things, they could think twice before opposing us and our works to the 'real' and its 'necessities'. I suspect some leftover epistemological theology. Aren't we evolved, natural creatures, Tom? Why shouldn't our creations, our artifacts, be as natural as flowers gracing stalks, with the added dollop of human normativity—good/ bad, efficient/inefficient, beautiful/ugly, coherent/incoherent, true/false? Mightn't 'nature's joints' be a joint product of nature's laws and the

[54] I bracket conceptual functors, such as [Negation, ~], [Bond, :], and [Sooth, .], to distinguish them from concepts. Thus, I've written [~] rather than ^~^ here. If there's a variation in my symbolism, whether in my or Tom's speech, think functor, [F].

concepts that evolved from human creatures' dimly conscious efforts to adapt? Nicholas Rescher made this point pungently: The physical world's character for humans "is not shaped one-sidedly by the nature of the object of investigation itself (objectivism), or shaped one-sidedly by the cognitive instrumentalities by whose means we address the problems at issue (subjectivism), but represent an interaction between the two in which the contributions of the two are inextricably intermingled."[55]

Am I getting too insistent?

TOM: Don't look at me. All I've got is my genes .

THELMA: Be that as it may, in the chart, I use the symbols "T", "F", "U" for the three epistemological entitlements to making truth claims about a statement. Again, this three-valued entitlement is logically distinct from the two-valued truth values for statements. A statement may be true or false by my coherent emplacement standard but that it is one or the other may be ^Unknown^ by us.

Thanks for your preludial patience, Tom.

EMPLACEMENT CHART

	S	P	V	
1	+	+	T	S+ P+
2	+	-	F	S+ P-
3	+	~	F	S+ P~
4	+	?	U	S+ P?
5	-	+	F	S- P+
6	-	-	F	S- P-
7	-	~	F	S- P~
8	-	?	F	S- P?
9	~	+	U	S~ P+
10	~	-	F	S~ P-
11	~	~	U	S~ P~
12	~	?	U	S~ P?
13	?	+	U	S? P+
14	?	-	F	S? P-
15	?	~	U	S? P~
16	?	?	U	S~ P?

[55] Rescher, Nicholas, *A System of Pragmatic Idealism*, Vol. 1, p. xiii ; Princeton, Princeton University Press, 1992.

TOM: I notice that all the profiles that have a least one [-] are F. Your chart shows eight “F”s. All but one, row 3, have at least one [-]; that exception has a [~].

Row 1

Only one emplacement profile, S+ P+, row 1, entitles us to say a statement is true. You've already explained that.

THELMA: Yes, but it may be useful to show how this modifies and amplifies Tarski's T-schema. I replace his general T-schema,

x is a true sentence if and only if p,

with

/S is P/ is true if and only if S+ P+.

/S is P/ reflects Tarski’s mistaken use of “true sentence”; only statements, <S is P>, have truth value and sentences do not.

TOM: Your left equivalent refers to a sentence token; it replaces Tarski's "x", which he claimed is a name for a sentence type, interpreted as a class of tokens, which you think is the wrong referent for "x", because classes of sentences, don’t have truth value. Your right equivalent cites the emplacement profile that entitles us to claim the ‘sentence’ token is true. It replaces and amplifies Tarksi's sentence token, /p/, which he thought refers to a 'corresponding' part of reality, but doesn’t explain how to determine that his sentence type "x" 'corresponds' or 'conforms' to the 'reality' referent of his "p".

The proper way to write his T-schema is

<S is P> is true if and only if S+ P+.

THELMA: Sometimes you’re very good. His general F(alse)-schema would be:

x is a false sentence if and only if not p.

I extrapolate this from his "(1'), "snow is white" is false if and only if snow is not white".[56]

My replacement for this extrapolated F-scheme is:

<S is P> is false if and only if S+ P- (row 2), S+ P~ (row 3), S- P+ (row 5), S- P- (row 6), S- P~ (row 7), S- P? (row 8), S~ P- (row 10), or S? P- (Row 14).

Row 2

If someone knows a sentence's emplacement profile is S+ P-, row 2, she's entitled to say it's false. By P- it's known that no coherent trope for P exists; hence, we know there can't be the necessary collocation of emplacements for S and P, S+ P+, that entitles us to say <S is P> is true.

[56] Tarski, “Truth and Proof”, p. 64, left column.

For example, suppose God exists, S+, and omnipotence doesn't, P-. Then we're entitled to say it's false that God, or anything else, has the property of being omnipotent. Or, suppose red tropes disappeared from the world because of changed light or ocular structure. Then <The dot is red> would be false.

Furthermore, by hypothesis, P-, we entertain no doubt about the non-existence of omnipotent or red tropes; hence, we're not entitled to say a sentence's truth value with the S+ P- profile is unknown.

TOM: But suppose an agonistic believed that there's room for doubt about the existence of an onmipotent trope.

THELMA: Then the profile of <God is onmnipotent> would be S+ P?, which has the value Unknown.

TOM: Or suppose somebody believed but didn't know there is at least one omnipotence trope, P+.

THELMA: If Jill didn't know, she had no evidence; hence, she's not entitled to believe or say there is a P+ profile; she's entitled only to P- or a P?. And if she believed there is a God but had no evidence, she's not entitled to believe or say there is an S+; she's entitled only to S- or S?. She has to be an atheist, S-, or an agnostic, S?.

However, knowing they're entitled to believe and saying they don't know isn't possible for someone who reasonably believes there is such a trope. I put no wedge between reasonably believing and knowing when a person reasonably believes she has more evidence for than against the existence of a trope. So, for a reasonable believer, the profile for <God is omnipotent> would be S+ P+ rather than S+ P-.

TOM: According to you then, it's possible for Jill to know

<B> <Bandicoots don't have marsupia>

even though it's false.

THELMA: Jill's too bold. She said <I know>. She doesn't, however, have to take back <I know>, because she couldn't know. No one can. At most we can believe we're entitled to claim we know, although I'm not throwing out "knows <S>"; it's too handy a shorthand for "entitled to claim <S> is true". What we do find out later, honest searchers that we are, is that we aren't or weren't entitled to claim we know.

TOM: (Pause) Sure, I've taken back something I said I knew. But only if it turns out that it was false, because that shows I didn't know.

THELMA: "...**it** was false" shows you think statements have truth value independent of knowers. Why do you persist in leaving the agent out of claims to know and to attribute truth value to statements? You're a realist, not an idealist about truth value, because you jump from the two-valued logical convention, ^Statements are true or false^, to ^Statements are really now or were True or really now or were False even if we don't know now which it is^. Why? Lifeless sentence scrawls and mouthed, airy disturbances await agents' object and trope emplacements. Until that happens, truth is utterly alien to physical, token sentences.

First comes the <I know <S>> = <I'm entitled to claim I know<S>>, then comes the <<S> is true>. Platonic realism reversed this order in his Theaetetus, repeatedly endorsed through the centuries, to the prolonged detriment of ^knowledge^. No wonder no one has an answer to Edmund Gettier's challenge to the justified, *true* belief account of knowledge.

It may turn out later that Jill has more evidence against than for <S>. At that point, a reasonable Jill would say, "I'm no longer entitled to say <S is true, but am entitled to say it's false. I was mistaken. Bandicoots do have marsupia." Now if you come back and tell me that <S> was false all along, I say "No". What you should have said is that there was evidence against <S> 'all along', bandicoots have marsupia, that Jill didn't have or ignored. And if Jill didn't have that evidence or ignored it, she wasn't entitled to claim she knew <S>; Jill was mistaken. So, what was there 'all along' wasn't the falsity of <S> but the marsupia, the evidence that entitles her to say now that <S> is false. Don't confuse 'truth' unanchored from evidence with evidence that was there 'all along'.

Interpret "<S> was false 'all along' as ^there was evidence 'all along' that entitled Jill to say <S> is false^--if you reasonably believe the evidence is not the result of a miraculous, fundamentalist belief that bandicoots' marsupial were created just now.

TOM: You know I'm not a miracle man.

THELMA: Yes, I do. Nor am I a miracle woman, nor even miraculous. So, according to the way I think, we may say <Jill was wrong about bandicoots not having marsupia> without conceding that <Bandicoots don't have marsupia> had free-standing falsity 'all along'. Statements don't 'have' truth value; they're assigned them by agents—reasonable and unreasonable—both of whom may be mistaken.

TOM: Then by you it's possible for a reasonable Jill not to know the truth.

THELMA: Correction, Tom: It's possible for a reasonable Jill not to be entitled to claim she knows the truth. Having more evidence for than against at one time does not entail she'll never have more against than for at another time, either because she's learned something in the meantime or because the world has changed between her first and second dated statements. In either case, Jill needn't have stopped being reasonable, that is, going with the evidence she has at the later time and altering her knowing claims accordingly.

The same holds for predictions. Suppose Mame predicted <Hitler will be no threat to peace>, and believed it. We don't have to concede her prediction qua statement was false 'all along'. Rather, "all along" there was evidence Mame ignored or of which she was ignorant.

Put the blame on Mame, boys.
Put the blame on Mame.
Rewrite that 'all along' refrain, boys.

If she hadn't ignored or wasn't ignorant of the evidence that was there 'all along', she could reasonably have said <Hitler is a threat to peace>, and be entitled to say she

knows it, within a goodly margin of error--40%, 60%?—as with the best of 'historical' predictions. Claims to knowledge entitlements, regardless of their tense, are vulnerable to error as any other claims are. Only those who “quest for certainty” think otherwise.

Oh, Tom, if only you'd given me long, Gilda gloves for Regents Day!

TOM: In wartime, everything's in short supply.

THELMA: OKAY, one last salvo at Hill 117.

Don't depersonalize knowing, Tom. Please. Knowing is an achievement; and truth an earned entitlement. It’s not a property of comatose sentences. Stop your ears against the siren song of 'correspondence' between a statement and a fact or a state of affairs, a song in praise of ‘objectivity’ that pales your judgment as mere ‘subjectivity’. If Hegel could dispense with that dualism in a paragraph, so can you. (Pause)

Do you know what I want, Tom?

TOM: What does a woman like you want?

THELMA: I want you (Beat) to take up cudgels for truth by emplacement success. (Tom holds Thelma's hand.)

For example, to say an historian is "looking for the truth" is a way of saying she's "looking for the evidence that will yield S+ P+". If you were training graduate students in history, would they be content if you instructed them to "simply look for the truth"? And if they asked how they should do that, what would you say? "It's colored blue"? Hm? What could you say other than "look for evidence"?

TOM: You're getting to me, but...

THELMA: Here's more temptation. There's also unreasonable believing—believing against the evidence—and nonreasonable believing--believing without evidence, believing ‘on faith’. In both cases, I'd say Jill didn't know, because she's either wrong about the evidence for <S> or has ignored it. And, of course, evidence, too, is something she may or may not be entitled to claim she possesses.

Interpret "+" as "a subject or predicate's emplacement content (the evidence) is reasonably believed to exist", replacing "known" with "reasonably believed".

We may allow the same change in the interpretation of “-“: "It is reasonably believed that a coherent emplacement for a subject or predicate token does not exist".

Having emplacements for subjects and predicates in hand or having inferential evidence that they exist (S+, P+), are grounds for reasonably believing a statement is true. Having none (S- and/or P-) after a decent search for them or evidence for them are reasonable grounds for believing a statement is false. And I don't have to tell you how fraught with uncertainty a belief about the non-existence of something is. Think of the Loch Ness monster, Unidentified Flying Objects UFO, and the Abominable Snowman.

TOM: No, but it's good to be reminded. I take it that the shift from "known" to "reasonably believed" doesn't alter the value assigned to "+" and "-".

THELMA: They indicate we entertain no reasonable doubt, respectively, about the existence and the non-existence of coherent emplacements. Nor does "~" indicate

doubt about an incoherent emplacement. The question mark in "S?" and "P?" covers reasonable doubt about whether or not an emplacement is coherent as well as doubt about its existence or non-existence.

The bond between ^knowing^ and ^reasonably believing^ is made plausible by G. E. Moore's challenge to the conceptual coherence of

<I know it, but I don't believe it>.

It's incoherent for anyone who thinks the analysis of ^I know^ <p> includes <I believe <p>>. It's equally incoherent for anyone who holds that a reason for claiming to know <p> is also a reason for not believing <p>. Further, whatever reason we might have for not believing <p> is license to doubt that I know <p>.

The wedge driven between believing and knowing is truth value: Although I may believe <p>, if <p> is false, I don't know p. You used this wedge to challenge that Jill knew <S> if <S> was false all along. I'm pressing for an agent who reasonably believes <p>, has no reasonable doubt that she has evidence (S+ P+), and reasonably concludes she's entitled to claim <p> is true. So we might modify the converse of Moore's statement by adding "reasonably":

<I reasonably believe <p>, but am not entitled to claim I know it>.

Now this is incoherent. Reasonable belief, having more evidence for <p> than against it, entitles Jill to claim she knows <p>, because there are no other grounds than evidence for claiming <p> is true. Also, no other agent, friendly or unfriendly, has any other ground. Any grounds for truth other than evidence is hermetically sealed to believing/knowing agents. So, the grounds for claiming <I reasonably believe <p>> are also grounds for claiming <I'm entitled to claim I know <p>>.

TOM: In short, truth is a chimerical wedge. It doesn't split ^reasonably believes^ from ^knows^. (Beat)

But, you realize, you're excluding a revealed, divine source for truth, Thelma.

THELMA: Don't strain my good humor, dear.

A popular 'analysis' of <Bobby knows <p>> is

<Bobby believes <p>>,
<Bobby has evidence for <p>>,
<<p> is true>.

In the first two parts, we've got an agent, Bobby, which seems right since we're analyzing what it means for a person to know. Suddenly, in the third part, Bobby's taken a hike. Where'd he go? Who's taking his place to tell him <<p> is true>, asssuring him he knows p? Is he supposed to wait for a graven tablet to be delivered by Moses II? It's incoherent to have a non-agent ingredient as part of an analysis of the agent-driven concept ^to know^. I favor the following 'analysis" to the popular but discredited one:

<Bobby believes he has more evidence for than against <p>>;
<Therefore, Bobby's entitled to believe and to claim he knows <p>>.

This keeps agents center-stage, effective masters of <…is true/false> rather than slaves of un-reachable ‘truth’ residing outside their platonic Cave. I will, however, often say someone “knows” instead of someone’s “entitled to claim she knows” for brevity. But I don’t want you to forget, *ever*, ever how to unbrief ^know^. So, don’t get picky on me.

TOM: OKAY. I’ll remember. Apart from that, echoes of Hegel keep resonating.

THELMA: Blame it on the late Professor Jacob Loewenberg.

TOM: Thelma, I feel a little adrift. I need some assurance that all this has bearing on the Liar Paradox.

THELMA: I assure you, it does. (Skeptical silence) To decide if the Liar is a paradox, we need to know we can assign it an emplacement profile, and whether or not an assigned profile yields the necessary conditions for paradox. May I go on?

Row 3

From now on, Tom, interpret "knows" as ^reasonably believes^.

Anyone who knows/reasonably believes a sentence's profile is S+ P~, Row 3, is entitled to claim it's false.

It's the classic case, going back to Plato's response to Parmenides. A statement's falsity may be inferred from another statement's truth in case their statement subjects are identical and they have incompatible predicates. This applies to:

<Sam's car is red> and
<Sam's car is green>,

providing Sam has only one car and that it’s only one color. Suppose Sam's car is green. Emplacing Sam's car and its green trope in <Sam's car is green> entitles us to say it's true, because with that car carrying a green trope into /green/ we can make the following coherent S+ P+ emplacements:

^sam’s-carE @ /Sam’s car/ and E(sam’s-car)greenE @ /green/^.

But, if I emplace his car in /Sam's car is red/, what I get is,

^Esam’s-carE @ /Sam’s car/ and E(sam’s-car)greenE @ /red/^,

which is S+ P~. Knowing <Sam's car is green> is true, and knowing that ^red^ and ^green^ are incompatible, we know we're entitled to infer that <Sam's car is red> is false.

(i) <Sam's car is green> A factual truth
(ii) <^Red^ is contrary to ^green^>. A conceptual truth

(iii) <Sam's car is red>> A factual falsehood.

We can put this in a more schematic form:

(i) <S is P> (is true).
(ii) <^P^ is incompatible with ^~P^>.

(iii) <S is ~P> (is false).

Thank you Plato.

Row 4

Those who reasonably believe a sentence has an S+ P? profile are entitled to give it the value U, unknown.

Suppose the existence of four- and five-toed mammals, mas, had once been confirmed, but neither four-toed mas nor such tracks have been seen for decades. Doubts about the existence of the four-toed property of mas would arise, P?. Perhaps this property has ceased to exist, just as red tropes might cease to exist.

TOM: I would have thought that four toes are four objects that would be coherent emplacements for "toe". How do you get a 'four-toed' *property*, which is an emplacement for a predicate, out of them?

THELMA: I'm relying on your indulgence and shared ignorance about the relation between "to be" and "to have". "To have" seems to be a verb-maker, as nominalizations are noun-makers. That's how we go from "has four toes" to "is four-toed". I admit it's bad style, maybe even grammatically shady, to say "My dog has the color brown" or “My dog browns” (which Russian sanctions) in place of "My dog is brown" to underwrite moving from "My dog has fleas" to "...is fleasy", or from "My dog has three legs" to "...is three-legged". But until somebody comes up with a good semantic reason why I can't convert "has" into "is" and a "has"(noun-fleas) into an "is" (adjective-fleasy), I feel free to ask your indulgence. (Pause) Your silence encourages me.

We're not entitled to claim <Some mas are four-toed> if the emplacement profile is S+ P?, because by the P? hypothesis P?, we’re not entitled to claim four-toed mas tropes exist; so, we don’t know if we can make a P+ emplacement that would entitle us to say the statement is true.

Nor are we entitled to assert a sentence with this profile is false, because by hypothesis P?, we entertain reasonable doubts that such tropes exist, unlike sentences with the row 2 profile (S+ P-), which we’re entitled to say is false.

Since we're not entitled to say any statement about this or that ma with an S+ P? profile is true or false, by elimination it must be unknown, U.

TOM: Your story about mas conceded that the property "five-toed" exists. Given your interpretation of Plato's reply to Parmenides, can't we infer from <Mas are five-toed> and from <^Four-toed^ is incompatible with ^five-toed^> that <Mas are four-toed> is false?

THELMA: You've forgotten that the inference from one statement's truth to the falsity of a statement with an incompatible predicate is valid only if their subjects have identical emplacements. Given identical subject emplacements, you can infer from the truth of <This ma is five-toed> to the falsity of <This (identical) ma is four-toed>, but not

otherwise. Since any five-toed and any four-toed ma can't be identical, your proffered inference is invalid.

There's another problem with your question. <Mas are five-toed> is universally quantified, which I interpret as <Any ma is five-toed>, which isn't about one specific ma. From the truth of <Any ma is five-toed> and the S+ P? profile, we can't make the anti-parmenidean inference to the falsity of <Some ma is four-toed>, because, by hypothesis, Row 4's P? leaves open that for all we know no four-toed ma exists. Hence, it's possible that some specific ma, say maX, bears a four-toed trope, which would yield the emplacement proposition,

^EmaXE @ /maX/ and E(maX)four-toedE @ /four-toed/^.

Since it's possible <MaX is four-toed> is true, we can't conclude we're entitled to infer <Some mas are four-toed> is false.

TOM: But the profiles in your substitution chart are general. They apply to any sentence that has one of the emplacement profiles.

THELMA: They apply to any sentence whose emplacement possibilities (+, -, ~, ?) have the epistemological status represented by one of the sixteen rows, keeping in mind that my chart's profiles are for statements with singular subjects, one object, and P+ predicates require but one existing trope. The generality of the chart is provided by the determiner "any", "any one" emplacement rather than "all" emplacements. It's the generality of what Russell called "real" versus "apparent" variables.[57]

Tom, I'm curious, are there any properties whose existence you doubt?

TOM: Well, I'm not sure there's moral perfection or a will that's free. I don't even know if "Christ was morally perfect" has a coherent interpretation, or if "Kant's will was free" has one; they may be incoherent. But I am sure they're not physically emplaceable.

THELMA: Let's suppose those sentences had coherent interpretations, and let's not insist on physical emplacement, because all of us have to deal with the truth value of statements with emplacements deduced from evidence at hand, which reminds me of the hullabaloo about the existence of 'theoretical entities' in the Fifties and Sixties, which often went hardly against the existence of Freud's id, superego, and ego. He has no respectable theory; so, we can't validly infer to the existence of ids, egos, and superegos.

What value are we entitled to give <Tom's will is free> if it has Row 4's profile (S+ P?),

Etom's-willE @ /Tom's will/ and E(tom's-will)freeE @ /free/?

TOM: There's been such a long controversy about free will without a clear cut result that for me, at any rate, I don't know if there is a P+ emplacement for /free/, or even an S+ for /will/; so, I don't know if <I have free will> is true or false. I don't even know if ^free^ is a property concept. In fact, I'm not too clear on ^will^, either.

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[57] See B. Russell, *Logic and Knowledge*, "Mathematical Logic as Based on the Theory of Types", Section II, "All and Any", especially p. 66, ed. Marsh, Robert.

Is ^will^ a faculty? And is ^faculty^ a concept of an object or a clutch of our bodies' adverbial capacities? Also, if ^unfree will^ is a conceptual oxymoron, incoherent, it's pointless to ask if we have or don't have free will, as if this were a genuine question for which we can assemble empirical evidence for a <Yes> or <No> answer. That incoherence shows that a will that isn't free couldn't be a will. There's so much conceptual chaos here, sweetheart, that I'm sure you agree neither I, nor you, nor anyone else could be confident about answers to these questions. Hey, I'm conceptually confused, Thelma.

THELMA: Your becoming modesty should be espoused by everyone who dares mention ^will^ and ^free^ in the same breath. If everyone else were as modest about their conceptual structure as you are, they'd have to agree that the coherence and truth value of <Tom's will is free> is unknown to them. Deeply unknown. /Will/ and /free/ easily fly from our mouths, emplacements for them are harder to come by.

TOM: Do all rows where we don't know if there is an existing emplacement for a subject or predicate have the value Unknown?

THELMA: I don't think a sweeping judgment would be useful. I'd rather think about each row with you, just as we did with ^will^ and ^free^. Maybe sometimes an S- counts more than a P? in an S- P? profile (Row 12) for a statement's value. Or vice versa in an S? P- profile (Row 14).

Row 5

Our entitlements to claim a categorical is **true** depends
on our success in coherently emplacing objects or other substantives into sentences' subject tokens and tropes into sentences' predicate tokens;

entitlements to claim that a categorical is **false** depends
on incoherent emplacements in the subject and/or predicate tokens or on our entitlement to claim a would-be coherent substantive and/or trope emplacement doesn't exist;

entitlements to claim a categorical's truth value is **unknown** depends
on not having evidence for any of the above true or false entitlements.

Emplacement is putting an object in the place occupied by a sentence's subject token, and putting a trope in its predicate token's place. Note B. Russell and Quine quotes on page 4. A fuller explanation and examples of emplacement come after the Emplacement Chart that governs doxastic judgments on page 3.

* * * *

In case you're wondering about the overworked ^coherent^/^incoherent^ concepts, widely deployed (~1995 – 2007) in contemporary philosophical literature without guilt although inadequately understood, sometimes acknowledged rightly not to be identical to the alethically ^consistent^/^inconsistent^, the central point of my conceptual logic is to mature the concept of ^coherence^ value as a logical alternative to the embryonic con-

cepts of sentences' ^sense^ and ^meaning^, and to clarify the difference and interrelations between coherence and truth value. The following remarks might reassure you of the legitimacy of such an inquiry since the early years of the Twentieth Century.

"'Bring me sugar,' and 'Bring me milk' make sense, but not the combination 'Milk me sugar'".[58] The latter "'combination of words makes no sense' and excludes it from the sphere of language and thereby bounds the domain of language". He adds, "For us a language is a calculus; it is characterized by *linguistic activities*" (p. 193, W.'s emphases) My conceptual logic captures an important part of the active calculus he alleged, never formulated, but amply hinted at in examples, and later repudiated. There is a calculus but it ain't rigid.

* * * *

I treat the A and E categoricals as conjunctive statements and the I and O as disjunctive statements with an OM determiner. **OM** is the **Omnitude Determiner** for categorical statements. OM's scope covers the complete lists of the subject ar-guments in the A and E conjuncts and in the I and O disjuncts. The conjuncts and disjuncts must have the same list.

Suppose Patsy and Quentin are Jill's children, and that she has no others.

p = Patsy is asleep -p = Patsy is ~asleep/awake

q = Quentin is asleep -q = Quentin is ~asleep/awake

With these and OM, we can construct the Square of Categorical Statements, as

OM(p & q) OM(-p & -q)

A	E
I	O

OM(p or q) OM(-p or -q)

The following Emplacement Chart isn't for three-valued logic but for three-valued doxastic, entitlement judgments about truth values.

And, don't confuse statements' ^truth value^, a dear, simple ideal, with ^en-titled judgments^ about our emplacement successes and failures. My friend, Prof-essor Don Gieschen made me be clear about this.

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[58] Ludwig Wittgenstein, *Philosophical Grammar*, p. 189, (Ed,) Rush Rhees, (Trans.) Anthony Kenny; Berkeley and Los Angeles, University of California Press, 1978.

EMPLACEMENT CHART

	S	P	V	
1	+	+	T	S+ P+
2	+	-	F	S+ P-
3	+	~	F	S+ P~
4	+	?	U	S+ P?
5	-	+	F	S- P+
6	-	-	F	S- P-
7	-	~	F	S- P~
8	-	?	F	S- P?
9	~	+	U	S~ P+
10	~	-	F	S~ P-
11	~	~	U	S~ P~
12	~	?	U	S~ P?
13	?	+	U	S? P+
14	?	-	F	S? P-
15	?	~	U	S? P~
16	?	?	U	S~ P?

In the **S**(ubject) and **P**(redicate) columns, "**+**" indicates you're entitled to claim there is a coherent emplacement; "**-**" indicates you're entitled to claim no coherent emplacement exists; "**~**" indicates you're entitled to claim there's an incoherent emplacement; "**?**" indicates you don't know if there is or isn't a coherent emplacement for a sentence's grammatical subject or predicate. In the **V**(alue) column, **T** is true, **F** is false, and **U** is unknown. For example, you're entitled to say <<The dot is black> is true> if you've done this:

You've coherently emplaced a dot, E **.** E into /dot/, the subject of the senence token /The dot is black/, and a black trope carried by the dot into the sentence's predicate, /black/; /dot/ and /black/ are this sentence's categorematic tokens. Row 1 represents this case, S+ P+, because you've coherently emplaced a dot in /dot/ and a black trope in /black/. You can write your coherence emplacements this way.

^E **.** E @ /dot/ & E **.** E @ /black/^.

The E...E quotation marks indicate the dot and the black trope have been emplaced.

This emplacement proposition shows us we're entitled to claim <This dot is black> is true. ^E **.** E @ /dot/^ shows a dot is coherently emplaced--/@/--in /dot/'s place, which is that sentence's subject token; and ^E **.** E @ /black/^ shows the dot has car-ried the black trope into that sentence's predicate token, /black/, which is a coherent trope emplacement, giving us the S+ P+ profile, Row 1 of the Chart.

I call ^E **.** E @ /dot/^ and ^E **.** E @ /black/^ *collocated* emplacements of the dot in /dot/ and its black color in /black/ in /The dot is black/. They're actual emplacements. But when I write virtual emplacements, such as this one,

^EsnakeE @ /snake/ & E(snake)coiledE @ /coiled/^,

we have to conceive or imagine coherently emplacing a snake, S+, or incoherently emplacing, S~, say, a turtle into /snake/. Similarly, you have to conceive or imag-ine emplacing either a coiled trope, P+, or a wriggling one, P~, in /coiled/. The parenthe-sized /snake/ shows this S+ snake is supposed to carry the trope coiled into /coiled/, which, if it's a coherent emplacement of that trope, P+, shows that <The snake is coiled> is true, S+ P+, Row 1. If the snake isn't coiled, then it incoherently carries that trope into /coiled/, P~, and <The snake is coiled> is false, S+ P~, Row 3.

You may be able to detect some archaic plausibility in my proposed em-placement acts as an interpretation of predication, and as a logically incorporated substitute for a vaguely psychological, alogical interpretation of /reference/ (as if, from our mind's bow, we released an arrow aimed at a target beyond our skin and mucous surfaces) by recalling Russell and Quine's forceful *de re* remarks.

"I believe that in spite of all its snowfields Mont Blanc is a component part of what is actually asserted in the proposition 'Mont Blanc is more than 4000 metres high'."

--Bertrand Russell in a letter to Gottlob Frege

"It is rather the object designated by such a [singular] name that counts as a value of the variable; and the objects stay on as values of variables though the singular terms be swept away."

--W. V. O. Quine

Emplacement conceptually logicizes direct reference and clarifies its semantic status. The extension-intension dualism disappears as emplacement incorporates sub-stantives and tropes into one, combinatory logical space, and shows coherence and truth values are fused in that singular space. My essay, "On Emplacing", soon to be in a res-pectable draft (Sept. '07) will appear on my web site; it's more formal, detailed Appendix on conceptual logic is nearing its morning horizon.

Anyone who reasonably believes that a sentence's emplacement profile is S- P+, Row 5, is entitled to say it's false, despite Strawson's claim that it's not a statement, because, he claims, statements presuppose an S+ profile.

Examples are Russell's "the present king of France", Louis XX (of France), and Strawson's <My child is asleep> when the speaker has no child, or <The butler did it>

when there is no butler in the manse. By hypothesis, S-, we know there is no coherent emplacement, although we know bald and sleep tropes exist, P+. My Roman neighbor, Oreste, sports a bald trope, and his nephew is asleep more than he's awake.

TOM: I agree. The non-existence of a subject emplacement implies we can't get S+, which we need for truth, Row 1, the only row that gives us truth entitlement grounds. And, if we have no doubts about S-, we're not entitled to say its truth is unknown. Russell was right and Strawson wrong.

THELMA: Russell was right for the wrong reason, as I explain later. And you agree with Strawson's--and Frege's--claim that sentences whose singular grammatical subjects are known not to have coherent emplacements aren't statements, and, so, can't be false? Is <Pegasus is swift> false?

TOM: I thought we settled that question when you agreed that if an auditor believes a speaker intends to refer with her statement's subject, her sentence is a statement, and she's responsible for it, even if the auditor doesn't know the subject has no existing emplacement. That was a maid's lie about a non-existent butler. On the other hand, if the auditor does know there is no such butler, he may take the sentence as fiction or a whopper.

THELMA: But fictional sentences aren't taken as statements precisely because their subjects don't refer and speaker and auditor agree they don't, S-, unlike deliberate S- lies that liars hide, foiling agreement on S- outside of whoppers and fiction..

TOM: You're saying Strawson's right in fictional or whoppers' cases. But you're also saying we shouldn't put statements about states of affairs in the same category as fictional and whopper sentences. But who ever thought fictional sentences are statements, including Lord Russell? Both parties to fiction know there's no intended referent, hence, no intended statement, although I'm not sure these shared attitudes apply to parodies and satires that float ambiguously between fiction and fact. To protect themselves from litigious, naïf and avaricious readers, authors put disclaimers in novels' fore matter--"Any resemblance to persons living or dead is purely coincidental"--which isn't much comfort to strawsonians.

THELMA: Nor would it have been to Strawson. We can offer them this comfort: (S- P+), Row 5, is "subject false, while Row 2 (S+ P-) is "predicate false".

TOM: "Subject false" sounds more like an insult than comfort. I don't think Lord Strawson would have agreed that all sentences with an S- P+ profile are false, because you've made your point only with singular subjects, not with universally quantified statements, such as <All my children are asleep>. His point was that it's contradictory to <Some of my children are asleep> only if the speaker has some children, because if the

speaker doesn't have any, she hasn't made a statement and "the question of the truth or falsity of [it] simply does not arise", so, neither can its contradictory's status "arise".[59]

If the presupposition that a person who says <All my children are asleep> has children is satisfied, Strawson thinks we can save the traditional Square of Opposition. Then <All my children are asleep> is a statement, may be true, and be the contradictory of <Some of my children are not asleep> as well as be the contrary of <None of my children are asleep>. Modernists' view is that universally quantified statements, re-written as material implication, may be true even if their subjects' have no existing, coherent emplacements. They have but one falsification condition in the truth table: T → F = F. In the other three cases where the conditional statement = T, the contrariety of A and E statements is nullified. Venn diagrams reflect the same view. Strawson condemns that interpretation of universal categorical sentences.

Pardon me for lecturing the learned.

THELMA: Thanks for the irony, sweetie. As to the learned, T. Parsons pointed out that the existential interpretation of O statements (Some S is not P) is recent; Aristotle's English translators correctly render his O as "Not every S is P", which does not presume "S" has existing emplacements, S+, as the modernist "Some" interpretation does. Consequently, Aristotle's Square of Opposition doesn't have 'extensional' troubles and doesn't need Strawson's remedy.[60]

However I'm sympathetic to Strawson's resistance to the modernist critique of the so-called 'Traditional' Square'. If our detective were told by the father that no son of his could have been the murderer because <All my children were asleep>, our sleuth would have taken his sentence as a statement, believing the father intended to refer with his /my children/. Remember, you said the auditor's in the saddle. But Strawson aimed at the wrong target. His proper target is the misrepresentation of universal categorical statements as material implicative class inclusions:

If any child is in the class of my children, then each is included in the class of sleeping children

Logicists, trying to base mathematics on logic as Frege and Russell did, find their logic in natural languages like everyone else, but the portion of logic they took from it was selected and tooled for its utility in deriving mathematical statements, improving proofs, establishing relations between classes and between sets. Logicists selected a logic for their purpose.

However, not all of natural languages' logic is captured by their truth logic. Natural languages also host coherence logic, which logically antedates and supplements truth

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[59] Strawson, P. F., *Introduction to Logical Theory*, p. 174; London, Methuen, 1952. On p. 176 we read, "Thus the rule that A is the contradictory of O states that, if *corresponding statements of the A and O forms both have truth valu*es, then they must have opposite truth values".

[60] Parsons, Terence, "The Traditional Square of Opposition", *Stanford Encyclopedia of Philosophy*, (Fall, 1999 Edition), especially pp. 5 – 8; Edward N. Zelta (ed.), URL = http*://plato.stanford.edu/entries/square/*, last revised Sept. 11, 1997. Aristotle, *On Interpretation*, 17b, 17 - 26, trans. E. M. Edghill.

logic; a sentence must have a coherent interpretation before it can be used to make a statement; coherence stands between grammar and truth logic. By working out a language's coherence logic, we can avoid putting the whole of logic in the one-size-fits-all truth logic of Boole, Frege, Russell, and their successors.

TOM: You're stepping on a lot of toes attached to a lot of big-booted people in the field

THELMA: No problem. The wiser the philosopher with, say, an 8-size shoe, the more open-minded she is.

To continue upstream, the class interpretation of universal statements rests on two wrong turns: (a) Class relation predicates, such as [Included in], devour the copula and (b) turn both subjects, "my children", and predicates, "asleep", into class forming functions, f(x), my-children(x) and asleep(x), utilizing material implication as the relation between them. This way of interpreting universal statements has sucked unsuspecting, untold millions of logic students, to say nothing of their untold thousands of mentors who took it from their mentors, into this voracious, Boolean, Venn-diagram-abetted, extensional vortex.

TOM: Aren't you a little too harsh

THELMA: No more than Strawson who called it "grotesque' for anyone to claim "'All the books in his room are by English authors' had made a true statement if the room referred to were empty of books…".[61] Tom, if we employed coherent emplacement requirements into each sentence's subject tokens, /Patsy/ and /Quentin/, in order to verify <All my children are asleep> instead of using "children" and "asleep" as functions to be satisfied and for forming classes, the logical functor for <All my children are asleep> would be conjunction rather than material implication. We'd have a conjunction of singular statements about the aforementioned children: <My child Patsy is asleep> and <My child Quentin> is asleep> and, per OM, <This lists all my children>.

TOM: I suppose that conjunction and <That lists all my children> play the role of the determiner "all" in <All my children are asleep>.

THELMA: Not at all. I propose replacing it with the Omnitude Determiner, OM. [All] is usually understood by extensionalist logicians as [Every member of a class has a specified property(s)], I interpret it as

> [List conjunctively each entity claimed to have a specified property(s); list no more].

How else could you verify that <All of my children are asleep> is true? Plus more good news: With OM there's no taint of classes or members.

> Interpret OM for [Some] claims, as in <Some of my children are asleep>, as
> [List disjunctively each child claimed to have a specified property and list each claimed to have an incompatible property; list no more].

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[61] Strawson, *Introduction*, p. 148.

Because OM serves both [All] and [Some], it can't be treated as a universal member/class determiner nor as a particular categorical statement. You can supply the relevant interpretations for E and O categorical statements.

* * * *

Universal positive, A statements, OM calls for conjunction:

[OM] <<My child Patsy is asleep> and <My child Quentin is sleep>>,

[OM] <<S1 is P> & <S2 is P>>.

Particular positive, I statements, OM calls for disjunction:

OM <<My child Patsy is asleep> or <My child Quentin is asleep>>,

OM <<S1 is P> or <S2 is P>>.

Universal negative, E statements, OM calls for conjunction:

OM <<My child Patsy is ~asleep> & <My child Quentin is ~asleep>>

OM <<S1 is ~P> or <S2 is ~P>>.

Particular negative, O statements, OM calls for disjunction:

OM <<My child Patsy is ~asleep> or <My child Quentin is ~asleep>>.

OM <<S1 is ~P> or <S2 is ~P>>.

* * * *

Don't forget, Tom, OM places a listing obligation on a person who uses both "all" and "some", and "none" and "not all", and their equivalents: The speaker is obligated to list each thing she asserts has the predicated property, P, asleep, and that has its contradictory or a contrary property, ~P, ~asleep/awake in the A/O pair and their equivalents in the E/I pair.

Interpret ^~asleep^ as a contrary rather than a contradictory of ^asleep^, if you conceptualize nodding and drowsing as neither a sleeping nor a waking state. I explain further how [~] may be interpreted as both contradictory and contrary in the Appendix to this essay.

Suppose Patsy and Quentin are Jill's children, and that she has no others.

p = Patsy is asleep -p = Patsy is ~asleep/awake

q = Quentin is asleep -q = Quentin is ~asleep/awake

With these and OM, we can construct the Square of Categorical Statements, as follows:

OM(p & q) OM(-p & -q)

A	E
I	O

OM(p or q) OM(-p or -q)

TOM: I still don't think "some" in I and O statements is an OM determiner, even if you tell me it's not an interpretation of "all". I need some assurance here.

THELMA: O and I need OM, because if Jill didn't list the same children she did in the A and E statements, there'd be no way of establishing relations between those categorical statements. Its true, the omnitude determiner has different truth conditions in "all" and "some" statements. In I and O statements, she uses [or] rather than [and] as the functor between the statements in the list and it's allowed that in I and O statements she may list entities with incompatible properties, <Quentin is awake> and <Patsy is asleep>.

But OM obligates her to list the conjuncts that make her A and E statements true, and to list all the disjuncts that make her I and O statements true as well as all those that, respectively would make E and A statements false. If her 'universal' and 'particular' lists aren't identical, she's not entitled to claim that the A and O nor that E and I are contradictory. Contradictory statements must have identical subjects. Not listing all her children in the I and O hampers them from falsifying E and A.

Also, listing the names of children she doesn't have, claiming <Jason is asleep>, doesn't verify her I statement nor falsify her E statement; nor does it help verify her A nor help falsify her O. That's because Jason's profile is S-. Listing <Jason is awake/~asleep> has parallel consequences.

OM requires us to make the I and O disjuncts identical to A and E's conjuncts, which makes it possible to establish relations between categorical statements in the Square of Opposition. I'll do that now.

TOM: Before you begin, I'm curious about why you use conceptual negation in the E and O statements. That's unorthodox for traditionalists.

THELMA: Not at all. With it, we get obverse transformations of A and E in which traditionalists used "non-", which I interpret as conceptual negation, [~]:

All S is P = No S is non-P/~P,

No S is P = All S is non-P/~P, and so forth.

Strawson implicitly uses [~]. I recall his talk about incompatible predicates, which is what P and ~P are, and that it's we agents who make them so. I think he was trying to improve on Aristotle's argument in his Metaphysics with a de jure conceptual argument for why we should accept the principle of non-contradiction; it would have been stronger if he'd distinguished explicitly between conceptual and statement negation.[62] syllogistic requires that P and ~P be incompatible concepts and can't be predicated of the same subject. Strawson's de jure conceptual argument explains why we should embrace the principle of non-contradiction. I'm sure you see the connection to Plato's anti-parmenidean move. [63] The non-contradiction truth principle rests on the conceptual incompatibility

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[62] Strawson, *Introduction*, p. 5. Aristotle, *Metaphysics*, Book IV, Chapter 4.

[63] Plato shows in his *Sophist* why Parmenidies is wrong when he claimed (if he did) that you can't say what is false. Plato uses (in most English translations) the concept ^Other^ in his refutation. I turn ^Other^ into a conceptual negation [~] of predicates. ^P^ and ^~P^ are others. The falsity of a statement, <S is P> is inferred from the truth of a proposition whose

principle that says two propositions that have the same subject concept and conceptually incompatible property concepts can't both be true.

TOM: I'd guess you think the omnitude determiner differs from Strawson's pre-supposition proposal for universal statements.

THELMA: You'd guess right. If Jill, can't meet her obligation to supply a list because she has no children, Strawson thinks her /All my children are asleep/ can't be used to make a statement, whereas I think it can, and I also think it's false.

Remember your point that the auditor's in the saddle. If an auditor thinks another has made a statement, it's to be taken as one. If that weren't our practice, no one could successfully lie to someone else. Omnitude commits Jill to giving a list, and it must be a full list.

If she makes a partial list, leaving out her child Ruth, perhaps because Ruth is awake, we don't have all the information to which we're entitled. We may think we do, but she knows we don't. While we may reasonably believe from what she said that her conjunction is true because we have S+ P+ for the Patsy and Quentin conjuncts, she knows we're entitled only to say her universal statement's truth value is unknown, because she's withheld information about Ruth's asleep/awake state.

It's also possible she may have no children and can't list anyone; in that case, she's lied; to lie is to make a false statement. It's false because any attempt to fulfill her omnitude obligation, say by listing <Patsy is asleep> and <Quentin is asleep>, produces false conjuncts; the profiles for their subjects or any other conjunct she might list are S-. By rows 5 - 8 of the substitution chart they're false, and, of course, if any conjunct is false, the omnitude conjunction is also false.

TOM: But I think that entails the O statement,

OM<<Patsy is ~asleep/awake> or <Quentin is ~asleep/awake>>,

isn't contradictory to A. Two falses don't make a contradiction; O needs to be true to contradict A. Nor are E and I contradictory, on the same grounds as for the A and O. An S- profile makes each conjunct of E and each disjunct of I false.

This isn't what I'd exactly call a way of saving the relations in the 'good-old

Nor can contrariety between A and E hold if Jill has no children. That both may be false, if their conjuncts have S- profiles (rows 5 - 8) is OKAY for contrariety. But, by the same reason, if A and E have S- profiles neither can be true, which isn't OKAY, because one of two contrary statements may be true.

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predicate is an Other, <S is ~P>, or vice versa. The argument goes like this: <S is P> (is true); ^P^ and ^~P^ are incompatible concepts; incompatible property concepts can't both be true; therefore, <S is ~P> (is false). <My cherry is sour> (is true); ^sour^ and ^sweet^ are incompatible concepts; therefore, <My cherry is sweet/~sour> (is false). Russell, perhaps under the supposition that true and false statements need distinct correspondent facts, opted in *Logical Atomism* for 'negative' facts as false-makers. That's too speedy; falsity detours through inference from 'other' truths. Carets, ^…^, indicate concepts, which are not mental entities, but tokens with a unique place in lexical space. It takes mental powers to fashion, identify, and use concepts. But our powers to discern concepts and concepts themselves are distinct.

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Whatta ya' say to that, pilgrim?
Square of Opposition', which you said you could do with your omnitude determiner. I don't see much difference in your omnitude and Strawson's presupposition results. You don't get a contradiction if Jill has no children; neither does he, because he doesn't think A and E sentences can be used to make statements if she has none.

THELMA: Tom, since when did you expect two false statements could contradict anything? I thought language-equipped agents did that. And how can two false statements by themselves, absent an agent, be contrary? (Skeptical silence)

The emplacement chart plots emplacement conditions under which *agents* are entitled to say statements are contradictory, contrary, true, false, or unknown. The logical forms of A, E, I, and O statements, whether aristotelean, traditional, or boolean/russellian, don't plot their own logical relations in the Square. You seem to think that any statement with an A form is contradictory to a statement with the O form. That's the wrong way to read the Square. Get doxastic, Tom! Read it in the bright light emplacements throw. They confer truth values on statements via entitlement judgments on the Square's agent-interpreted forms without which there are no logical truth relations between categorical statements. Read the Squares's relation between A and O as: If we're entitled to claim either the A or the O statement is true, we're entitled to say the other is false. Strawson understood and developed this, but, in comparison to the emplacement chart, his reference conditions were too spare. The Square isn't merely a square of categorical statement forms and presuppositions, but of agents' coherent S+, S~, S-, S? and P+, P~, P-, P? emplacement efforts into the Square's categorical statements. I marvel at the persistence of platonic realism among logicians whose logical skills fall short of their ontological capacities. Perhaps they're cursed by misplaced confidence in their fervid, confident intuitions the relations between aspatial, atemporal, airy-fairy 'objects', or by the surety of their belief in their intellectual superiority over the lesser tribes. Who knows the causes for this kind of reasoning? Not I. So let's go on.

If the A statement by entitlement is true, its O is false, and if the O is true by entitlement, the A is false. If <OM <Patsy is asleep> & <Quentin is asleep> & <That lists all my children>> is true, <OM <Patsy is ~asleep> or <Quentin is ~asleep> & <that lists all my children>> is false. And vice versa.

TOM: So, by you, <All S are P> and <Some S are not P> are not always contradictory, nor are <No S are P> and <Some S are P>. The form of categorical sentences isn't enough to establish logical relations between them.

THELMA: Good. Sentences with those forms can be contradictory only if they have an S+ emplacement profile and the identical entity that makes them S+ is emplaced in all the Ss of the Squares' A, E, I and O sentences. If Jill has no children, both her A conjuncts and O disjuncts have S- profiles; they're both false. The emplacement conditions for either's truth fail; hence, their contradiction conditions aren't met.

TOM: You're maintaining that the failure of S+ reference conditions, sentences with S-, S~, or S? profiles, don't have the same logical results as violations of Strawson's presupposition requirement. He won't allow sentences to be used as statements if they're subjects don't have coherent S+ profiles, while you do. In any of the three failures of S+, S-, S~, or S?, we're entitled to one of the three truth value claims.

THELMA: Given the luxury of Unknown among the entitled truth values. Tom, we have to keep via attiva, epistemological entitlements distinct from via passive, logical relations. Don't shunt thinking agents aside; without them, there is no via passive logic. Russell didn't appreciate this distinction that's so central to Dewey's logical theory.

TOM: You don't want S or P to be functions with which we may form classes, and you don't interpret traditional categorical statements as asserting relations between classes nor between members and classes.

THELMA: A class interpretation of quantified statements may be suited to mathematics where there are well-defined classes, but not to ill- or undefined, amathematical situations involving existing or non-existing children. Also, in real life situations, we don't have to worry about an infinite number of members that can't be listed in anyone's lifetime. What we want in real, finite, life situations are a conjunction and disjunction of statements to whose subjects and predicates we may give emplacement profiles.

TOM: But what about big, big classes, such as dogs? Do you think <All dogs are faithful> could be verified by verifying each conjunct? And what about really huge classes, such as molecules? Verification of each conjunct is out of reach in such cases.

THELMA: Isn't that why ardent generalizing scientists want laws?

"If the law applies, the inference flies."

Eternally tentative as laws may be? Or, more modestly, they'll settle for a probability logic, or a statistical theory? And don't ask me about how to establish unproblematically the reliability of laws, OK? Do you really think their sole role is to be true premises in inferences rather than also stating truths? Why can a single false statement falsify an [All] statement if universal statements' truth didn't depend on the truth of its individual conjuncts per OM? (Reflective silence)

Do you know about the Slow Food movement?

TOM: Never heard of it.

THELMA: Its proponents want to slow down our eating habits, and advocates avoidance of unhealthy fast food. Carlo Petrini started the movement in Bra, Italy. Eating slowly gives us time to enjoy our fellow diners' company, to converse leisurely with them in cultured repose rather than solipsistically wolfing paper-wrapped garbage. I organize semi-annual, five-hour Slow Food Lunches at Moose's restaurant here in the city. Perhaps it's time for Slow Truth, verifying conjuncts and disjuncts while going to and fro, stalking un'impiazzamento. But, if you're into Fast Truth, you can always induct.

TOM: Why didn't you invite me to your slow lunches?

THELMA: I didn't want to unsettle your ironclad, hotdog routine.

TOM: Did you explain at those lunches how Slow Truth will save the good-old Square? What Strawson defended.

THELMA: I didn't there, but I will here. Suppose John, Joan, and Juan are a Julia's children, and that she has no others.

p = John is asleep
q = Joan is asleep
r = Juan is asleep
OM = The A, E, I, and O statements list the same children

A conjunctive interpretation of an A universal statement, OM(p & q & r), is the contradictory form of a disjunctive interpretation of an O statement, OM(-p or -q or -r), by De Morgan, dropping the negation on the disjunction.

An E statement, OM(-p & -q & -r), and an I, OM(p or q or r), are also contradictory forms by De Morgan and the negation-dropping move

We get the same results by interpreting O statements as <Not every S is P>, as Aristotle did. This denies that all the A conjuncts are true, entailing that at least one disjunct is true, say, <Juan is ~asleep>. But if there is no Juan, S-, there's no emplaced person to carry an awake trope into the predicate of /Juan is ~asleep/, although there are lots of awake, P+ tropes in the world despite Oreste's sleepy nephew. Since <Juan is asleep> is a false conjunct (S- P+), Row 5, it follows that the A conjunction is false, as is that disjunct in A's O. But it's not the O's false disjunct that falsifies its A, but the falsity of A's 'Juan' conjunct. Contradiction sometimes has to sit at the back of the bus. On the other hand, if every one of A's conjuncts are true, its contradictory O statement (Not every S is P) is false.

TOM: I'll bet this would have made John Stuart Mill happy. Remember how question-begging he thought it was to affirm the truth of universal statements (All men are mortal) without acknowledging that it depends upon verifying the truth of statements about each covered individual (Socrates, Plato, Tom, ... is mortal)? I can find the passage in his *Logic*, if you have a copy of it. Oh good.

Here it is. "It must be granted that in every syllogism, considered as an argument to prove the conclusion, there is a petitio principii... That, in short, no reasoning from generals to particulars can, as such, prove anything: since from a general principle we can not infer any particulars, but those that the principle itself assumes as known."[64]

THELMA: Mill was definitely in favor of Slow Truth. And emplacement entitleents. But he shouldn't have written that syllogisms don't "prove anything". He should have written they only affirm the entitled truth of the conclusion".

In line with that, OM also rids traditional logic of singular statement embarrassents, such as <Socrates is a man> and <Socrates is mortal>, which don't fit happily in

[64] Mill, J. S., *A System of Logic*, Eighth Edition, Book II, Chapter III, Section 2.

“all” or “some” categorical statements. With the determiner OM, however, they do fit happily, because logical relations between categorical statements turn finally on the truth value of singular conjuncts and disjuncts, including truths of such OM singular statements as those about the faithfulness of Fido, your Burney, my Plumbea, and the discomfiting pesterings of everybody’s Socrates.

Are you ready to appreciate how my treatment of categorical statements saves the other semantic relations in the Square?

TOM: I just realized, really, that I've been waiting for this all my life!

THELMA: Despite your redundancy, I'm so glad I'm the one to be there for you.

As I explained, entitlement truths and falsities save the traditional square. A and O, E and I are contradictory. Statements with the same subject emplacements that have incompatible predicates, P and ~P, can't both be true--short for "we're not entitled to claim or believe they’re both true", to remind you of the alert, omnipresent, guardian agents in all epistemological claims. This holds whether ~P is interpreted as a contradictory or a contrary of P.

A and E are contrary. Both can't be true, because both p and –p, and q and -q have incompatible predicates. They can both be false in case a disjunct in each of their sub-contraries is true.

I and O are sub-contrary. Both may be true. I is true, if Patsy is asleep, and O is true if Quentin is ~asleep/awake. A disjunction is made true by a true disjunct. Not both may be false if one is true, because I and O disjuncts have identical subjects and incompatible predicates, P and ~P.

I and O are sub-altern, respectively, to A and E. Because A's conjuncts are identical to I's disjuncts, the truth of A entails the truth of I. Similarly, E’s truth entails O's truth. From the falsity of A and E, we can conclude only Unknown value for their sub-alterns, unless each of the conjuncts is false, in which case their sub-alterns are false.

A and E are super-alterns, respectively, to I and O, because the falsity of I and O entail, respectively, the falsity of A and E. From the truth of I and O, we may conclude only Unknown value for their super-alterns, unless each of I or O’s disjuncts is true, in which case their super-alterns, A or E, respectively are true. *I remind you* that all talk of truth value is shorthand for agents' entitlements, and there are no logical relations between categorical statements without them.

(Thelma sings to the tune of Kurt Weill’s "That Old Bilbao Moon") That old agent behest/I won't forget it lest/I'm doomed to sad regrets.)

TOM: You're turning into a real humanist, Thelma.

THELMA: Too trying, like love at last sight. But, I must confess, I've lost what little love I had for a class interpretation of categorical sentences, empty classes, and vacuously false antecedents of true material implications. The Extension Apple in Frege's Garden of Eden is one source of the Original Sin that afflicts the Square.

The infatuation of modern logicians with classes and sets, and the neglect of conceptual negation, overwhelmed by alethic negation, has made the late 19th and the whole of the 20th century a stunted epoch for an alternative logic. Strawson should have steared clear of its wracks. By using coherence logic and coherence emplacement conditions in subject-predicate sentences, we avoid a Boole/Russell quantified, material implication distortion of ordinary languages' categorical sentences.

Sorry for that last sentential barbarism, Tom.

TOM: Go in peace, Thelma, speak plainly, and sin no more.

THELMA: I've got to get back to writing plays. Help me! (Pensive pause)

OK. Starting back: I think I've shown how to preserve Aristotle's, Boethius', and the some Medievals' Square of Opposition without having to endorse Strawson's rescue tactic (no statement without referential content); and without having to abandon Russell's analysis of definite descriptions, which, I claimed, specifies coherent emplacement conditions in them, as in <Jill's only child is asleep>. If these conditions aren't satisfied, because of an S- profile, the statement containing that description is false, rows 5 - 8, as Russell would have it.

TOM: But giving up Russell's and others' class interpretation of universal statements, such as, <All integers divisible by two without a remainder are even>, is costly.

THELMA: Not at all. To interpret mathematical statements as logical statements, which was his and Frege's principal end, let them use material implication. But we don't have to use it for amathematical statements. Every teacher of logic has had to explain to students—often not very successfully--the counter-intuitive material implication reading of "if..., then..." statements ever since. Maybe students are on to something.

For logical interpretations of amathematical statements, we can use conjunction. It was Strawson's merit to see that amathematical, ordinary language discourse was at odds with the modernist Square of Opposition. Good. By moving to coherent emplacement conditions and a conjunctive interpretation of universal statements, we maintain the relations that traditionalists and Aristotle found in the Square; plus, we can correct Russell's material implication interpretation of universal statements that gives us <S → P> is true in case <S> is false, as when there are no existing subject emplacements, no dragons to make true <All dragons breath fire>. By banishing [→] from interpretations of universal statements, we revert to the simple S- profile, which, by rows 5 - 8, are false rather than boolean-russellian true.

TOM: Usually, you're not so diplomatic.

THELMA: It's not diplomacy, Tom. It's an inexorable movement toward the Absolute where all contradictions are resolved by Aufhebung distinctions.

TOM: I never took you for an Hegelian.

THELMA: Irony doesn't seem to be your strong point, dear. You'll never make it as a post-modernist. But forget the part about the Absolute, OK?

TOM: Before you go on to row 6, I have one more question. The class of whole numbers and the class of even numbers, both infinite classes, have the same cardinal number. Do you think such 'uneven' classes exist?

THELMA: That's easy to answer: No. Also, finite classes don't exist. Universal statements about members of finite classes give way to finite conjunctions per the omnitude determiner.

TOM: But it seems to follow then that all mathematical statements that refer to infinite classes are false, S-, per rows 5 - 8; so, they can't be used in proofs. But without them, you can't prove every bounded class of real numbers has a least bound. Few mathematicians are willing to relinquish least bounds, because they're needed for mathematical analysis resting on continuity. That's a lot to trash.[65]

Which will you give up? Your views about the falsity of statements with an S- profile, rows 5 - 8, or your claim that infinite classes don't exist?

THELMA: Neither. I detect a transcendental argument in your reasoning: Infinite classes must exist, because if they don't, we couldn't prove some exigent mathematical statements are true. Obviously, this assumes these statements are or can be known to be true, even though we can't back their truth with putative proofs, a curious position to take for anyone who thinks we're entitled to claim a mathematical statement is true only if it's proven, Goedel and his Legionnaires excepted. Further, in such proofs, existence axioms may be introduced, but there's no way of showing infinite classes really exist outside the virtual reality these axioms give them.

Transcendental arguments don't prove an entity exists, only that it's needed to validate the truth of some claim. Kant plumped for transcendental arguments, but firmly denied that they entailed the existence of transcendental entities. Such virtual, transcendental reality was too pale for him. It casts no shadows.

TOM: Your argument reminds me of a magician trying to stuff a resistant rabbit into a tophat!

THELMA: Tom, I think there's a third choice beyond giving up the falsity of statements with an S- profile or giving up mathematical analysis and classical theories of continuity: Mathematical statements have coherence rather than truth value. Coherence value doesn't hang on the existence of sets, finite or infinite. Once you give up alleging truth for mathematical 'statements' drawn from empirical models, you can give up the existence of sets. I know this is a promissory note, and one I can't honor here although I will try to do so partially in the Appendix.[66]

TOM: On to row 6?

THELMA: I'd love to go there.

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[65] Quine, W. V. O., *Set Theory and its Logic*, pp. 249 – 250; Cambridge, Harvard University Press, 1963.

[66] This promissory note finds a friend in Leslie Tharp's attempt to base mathematics on conceptual grounds, which I take in the direction of a coherence- rather than alethic-valued logic and mathematics.. Leslie Tharp, "Myth and Mathematics: A Conceptualistic Philosophy of Mathematics"; S*YNTHESE*, Volume 81, No. 2, November, 1989, LESLIE THARP MEMORIAL ISSUE, pp.167 – 201.

Row 6

Row 6, S- P-, entitles us to say a sentence with this profile is false.

We don't need to spend a lot of thought on this row. If we entertain no doubts that neither S nor P have emplacements, we're entitled to say <S is P> is false; it fails doubly short of the truth profile, S+ P+; and, since it leaves no room for an S? or P?, we can't say with agnostics that its truth value is unknown. Alternatively, if were entitled to believe neither S nor P have coherent emplacements and are entitled to disbelieve there are any lurking ones, we're entitled to believe <S is P> has an S- P- profile, and is false.

Atheists give this profile to Standard Protestant, Catholic, and Islamic theologies' 'conceived' Deity with its inflated omni-properties.

Row 7

Row 7, S- P~, is false.

Side order of fresh caution: I expect you to remember that truth value claims must always import epistemological achievements of knowing--reasonably believing and being entitled--even if I abbreviate them to conventional Deistic cheaters, "is true", "is false", "is unknown", as I just did above with "Row 7, S- P~, is false".

TOM: (Sings to the tune of "That Old Bilbao Moon".) That old agent behest/I won't forget it soon.

THELMA: Lovely tenor for the church choir. Proponents of a finite god may rest their case on row 7 by claiming the Standard-Issue Christian God doesn't exist. Any emplacement of a finite trope into an 'omniproperty' of it would be incoherent. Thus, any sentence with an S- P~ profile entitles us to declare it egregiously false.

TOM: A lot of your profiles have theological examples.

THELMA: It takes a theologian's zeal to even imagine examples for them. Nevertheless, we have to provide for every kind of attempted emplacement. An adequate emplacement chart should have a profile for every doctrine that's been promoted and contested in our culture. My sixteen-row chart does.

TOM: There must be non-theological examples.

THELMA: When you think of some, tell me.

TOM: How's this for S- P~: <The butler killed Master with a .38 calibre pistol>, where the butler is non-existent, S-, and supposing Master was killed with a .32 calibre pistol? Emplacing a .32 calibre bullet in /.38 calibre/ is incoherent.

THELMA: That would be kind of a double lie, a subject and a predicate lie. Good. We've escaped the theological beyond.

Row 8

TOM: Row 8, S- P? is subject false.

You seem to require an order for emplacements in sentences: First the subject, then the predicate. If there's no subject, there's no carrier for the predicate. Hence, we know we aren't entitled to claim a statement with this profile is true, because we don't have the needed S+ to carry its property P into /P/. And since S- excludes doubt or acknowledged ignorance, S?, about the existence of the subject's emplacement, we aren't entitled to assign this profile the value unknown, U. So, by elimination, a sentence with an S- P? is false regardless of our doubt, P?, about the existence of a trope for P.

The order of emplacements is another aspect of Frege's 'unsaturated' predicate, isn't it? If we don't have an emplacement for the subject, that is, don't have an argument for a function, our verifying entitlement process can't even get started; the predicate is in second position for verification. The function, f( ), awaits the argument's emplacement, f(a). I like that. You've not interrupted, so I'm guessing you agree with me.

Row 9

THELMA: I do.

With incoherent emplacements into the subject, rows 9 to 12, we're entering new territory. This may remind you of the Theaetetus (194) where Socrates talks about mistaking one man for another when you mismatch your perception of a man with your wax memory imprint of another man. Easy to do where everyone, men and women, wears those ample, swaddling togas.

TOM: I know. It's always been a problem, the Greek problem, actually.

THELMA: And now it's our problem, too.

The following emplacements into /Acropus is talking/,

EantinousE @ /Acropus/ & E(antinous)talkingE @ /talking/,

have row 9's profile, S~ P+.

TOM: Providing that proper names are incompatible. Which they would be if they're rigid designators.

THELMA: If there are rigid designators, that would be right, but the restricted problem in this case comes from mistaking Antinous for Acropus and emplacing him in /Acropus/. That's as incoherent as if I were to emplace you in /Thelma/. Theaetetus mistook Antinous for Acropus, Plato suggests, because he mismatched his perception of Antinous with his 'memory's' wax imprint of Acropus.

TOM: You're saying proper names are rigid designators.

THELMA: Kripke's concept of ^rigid^ designator without a coherence logic and coherent emplacements conditions resides at an intuitive level, making it impossible to give you a simplified, flat-out Yes-or-No answer. We shouldn't rush to judgment without a precise theory of how to establish an entity's identity from one time to another. Just having a name is pretty damn thin. Besides, few things have names. I remember the old *San Francisco Examiner*'s advertisement, an evening paper competing with a morning paper: "A lot happens between 8 [AM] and 6 [PM]". Let's talk about this later.

Incoherently emplacing Antinous in /Acropus/ is in effect saying Antinous is Acropus. "Are you Antinous?" "No, I'm Acropus." End of incoherent emplacement story, unless Acropus habitually lies or forgot his name per Kent Bach's Nominal Description Theory.[67]

A cautious observer of indistinctly perceived persons might have hedged her bet with an indefinite subject, <*Someone* is talking>. Then, emplacing the talking person seen into /Someone/ would entitle us to say the indefinite statement is true. But <Acropus is talking> saddles us with a riskier statement; we aren't confidently entitled to say it's true, because the person talking is dimly observed, and, consequently, mistakenly emplaced in /Antinous/ whom we can't use to verify that Acropus is talking.

TOM: Then <Acropus is talking> is either false or unknown. Closer inspection might reveal that Antinous is talking, which would yield the emplacement proposition:

^EantinousE @ /Antinous/ & E(antinous)talkingE @ /talking/^.

This S+ P+ profile would entitle us to say <Antinous is talking> is true. Then, from the truth of that statement and the incompatibility of /Acropus/ and /Antinous/, we're entitled to infer <Acropus is talking> is false.

<Antinous is talking> is true.
^Antinous^ is incompatible with ^Acropus^.
Therefore, <Acropus is talking> is false.

THELMA: You're appealing to Plato's reply to Parmenides that we used for row 3, where we employed incoherent predicates, ^P^ and ^~P^. But your suspect incompatibility of /Acropus/, S, and /Antinous/, ~S, isn't valid for showing that the incoherent emplacement ^EantinousE @ /Acropus/ shows <Acropus is talking> is false. Incoherently emplacing Antinous into /Acropus/ can't tame the free radical Acropus. It doesn't exclude either P+,

(a) E(acropus)talkingE @ /talking/,

or P~,

(b) E(acropus)~talking(miming?)E @ /talking/.

For all we know, Acropus is in Patras talking like mad, P+, which would entitle us to claim (a) <Acropus is talking> is true; hence, we can't soundly infer that (b) <Acropus is talking>, P~, is false.

We can infer the falsity of a statement with an incoherent predicate emplacement, P~, but not with an incoherent subject emplacement, S~, because, although some may think /Acropus/ is incompatible with /Antinous/, Acropus is free to carry his tropes to Patras or any where else he pleases. Tropes, however, aren't free radicals; they aren't free to travel where they list; they have to go where their carrier goes. If I point to a red ball, I'm pointing at both the ball and its red rider. Remember, tropes are in the second emplacement position in English.

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[67] Kent Bach, "Giorgione Was So-called Because of His Name"; *http://online.sfsu.edu/~kbach./*.

TOM: In that case, you think the value of a statement with the profile of row 9 (S~ P+) is unknown, U.

THELMA: Yes. And since rows 10, 11, and 12 have incoherent emplacements for the subject, S~, we can eliminate any entitlement to truth claims for such statements since we don't have the requisite S+ emplacement. This entails that statements with S~ profiles are either false or unknown; so, our choice between them rests solely on the predicate's profile.

TOM: Not so fast. That may hold for "talking", because lots of free-radical people may be talking at once, wherever they are, including Acropus and Antinous. But if there is a property only one person carries, I think we can use the anti-parmenidean inference.

Let's go back to the maid's lie about the non-existent butler committing the murder, supposing there was a murder. I grant, it has row 5's profile, S- P+. But, we do know <Someone committed the murder> is true; so, there is at least one person X, who, when emplaced into /Someone/, entitles the detective to say that <X is a murderer> is true.

Now, suppose:

The local parson isn't the house butler;
the local parson did it; and
^The parson^ is contrary to ^The butler^.

From the truth of <The local parson did it>, we can infer the subject falsity of <The butler did it> by the Platonic pattern, just as, from the truth of <The dot is green>, we can infer the predicate falsity of <The dot is red>.

<The parson did it> is true.
Ethe local parsonE is incompatible with Ethe house butlerE.
Therefore, <The butler did it> is false.

This argument is perfectly parallel to the one you gave for the falsity of a statement with the row 3 profile S+ P~.

THELMA: It is parallel, but it contains two errors. First, murdering need not be done by a single person; some tropes may be shared: "Et tu Brutus?" Several people had a hand in murdering Julius Caesar.

Secondly, Ethe local parsonE and Ethe house butlerE aren't incompatible—your second premise is wrong--unlike EredE and EgreenE. One and the same trope can't be coherently placed in /red/ and /green/, but one and the same person may be coherently emplaced in both /the local parson/ and /the house butler/. One and the same person may have two fitting definite descriptions. Thackeray's parsons were paid notoriously small sums; the parson may have secretly moonlighted as the house butler in the lord's manor. That's the coherence version of Russell's claim that definite descriptions are unlike proper names: They don't rule out an identical emplacement, such as the same person, whom we may think of as a laissez faire radical emplacement for /the poor parson/ and /the local butler/. King George could reasonably ask if Scott and the author of *Waverley* were the same person, because some one else might have written it, or because more than one

person might have been the author of Waverley. If two or more persons had written it, <Scott is the (one and only) author of Waverley> is false in contrast with /Scott/, which, as a proper name, takes one and only one emplacement. Also, King George might have doubted that a single person could have written so many *Waverley* novels; /Scott / may have been a pseudonym for a team of authors, which would coherently take as emplacements however many people had a hand in writing them.

This is a point apart from the possible non-existence of an emplacement for a definite description, which is why statements about baldness and murder are false if no one calls “Present!" when the majordomo announces "The present king of France!" at the Winter Ball, or "The house butler!" announced by the Duke on the butler’s birthday fest. Row 5's profile, S- P+, which is false, differs from row 9's, S~ P+, which has the value Unknown, because there are laisssez faire radicals for definite descriptions, and because free radicals may share and carry their tropes anywhere.

TOM: I can think of one possible exception: Your previously oft-cited Standard Christian God, of whom they say there is only one, so that "God", being a proper name, has only one emplacement. Since we don’t have to worry about there being moonlighting laissez faire parson-gods, any emplacement for /God/ except God is incoherent. And nothing shares Its omnitropes. So, from

<God has omniproperties P1, P2,...Pn> is true

we can infer

<Some other being has those omniproperties > is false.

This excludes the possibilities that

<Zeus has omniproperties P1, P2,...Pn> (S~ P+)

is true and unknown.

THELMA: Tom, I'm not going to be drawn into your theological speculations. But, convincing me that /God/ has but one emplacement, and that omniproperties aren't shareable takes a big bit of theological derring-do.

Can omnipotent God^1 prevent omnipotent God^2 from doing whatever God^2 wills? And vice versa? You're Tom; you're here before me. Your name plus whatever needs to be added to it to make it a logically proper name, say, /Tom 1,343,488/, are straightforwardly empirical, identity verifications, but as to /God/... (Pause)

Shall we go on to row 10? (Beat) Good.

Row 10

As to row 10, S~ P-, since, by hypothesis P-, there is no coherent emplacement for P, we have to assign statements with the S~ P- profile the value of false.

Suppose red tropes stopped existing and were displaced by blue tropes. Oh, look, there’s naught but blue on Lucy’s lips! Consider <Sam’s car is red>. We get an S~ profile for it if I mistakenly emplace Sam's then-red, now-blue car, in /Dan's car/: ^Esam's-car @ /Dan’s car/^. Also, if I know there are no red tropes, I know there’s no color I can

coherently emplace in /red/, which gives us the profile P- for the predicate in <Sam's car is red>. Putting these together, we have the profile S~ P-:

Esam's-carE @ /Dan's car/ & E(sam's-car)blueE @ /red/.

In this case, unlike row 9 (S~ P+), Sam's car isn't a free radical as Antinous was, because Antinous' talking was P+ or P~, but, in this profile, red is neither, because it's P-. No matter that Sam's car is here or in Patras, if red tropes don't exist, we aren't entitled to claim his car is red; it's not P+. Nor are we entitled to say the truth value of <Sam's car is red> is unknown to us because P? fails in its face-off with P-.

Row 11

Row 11, S~ P~, entitles us to claim statements with this profile have the value unknown, U.

Take <Dorothy is muttering> with the following incoherent emplacements,

EavrilE @ /Dorothy/ & E(avril)whisperingE @ /muttering/.

We can't verify <Dorothy is muttering> with this S~ P~ profile. Nor can we infer from the truth of <Avril is whispering> that <Dorothy is muttering> is true. Nor can we infer its falsity, because somewhere over the rainbow a free radical like Dorothy may be muttering, and where Dorothy goes so goes her muttering. Of course, Dorothy may not be muttering there or anywhere else, but we don't know she isn't; so, we can't say <Dorothy is muttering> is false.

TOM: Dorothy as a free radical. I'll bet Frank Baum would have liked that.

Row 12

Then, I'd guess, we're entitled to say that statements with row 12's profile, S~ P?, also have the value unknown, U.

THELMA: If we incoherently emplace Profiro in the subject of <Prince Myshkin is Christlike>,

EprofiroE @ /Prince Myshkin/ & E(profiro)christlikeE @ /christlike/,

we have the S~ P? profile. I say P?, because I don't share Dostoyevski's confidence in the existence of a christlike trope. That leaves P+ and P- open to reasonable doubt.

Let's take the P+ case first. We aren't entitled to say statements with the S~ P? profile are true even if we suppose P+ obtains. That Porfiro is christlike doesn't verify <Prince Myshkin is christlike>. In short, if P+ obtains, we'd have S~ P+, which we've shown is U, unknown, by row 9.

Now the P- case. Although Prince Myshkin is a free radical, and although christlike tropes might not exist by hypothesis, P?, we don't know they don't. Therefore, we aren't entitled to say <Prince Myshkin is christlike> or <Profiro is christlike> is false. We don't know if either carries a christlike trope. Thus, by default, we're left with the value unknown, U.

Rows 13 - 16

TOM: I think there's an argument for claiming that rows 13 - 16 are unknown.

THELMA: But...

TOM: I know what you're going to say: Row 14, S? P-, is F in your emplacement chart. Wait! Listen to my argument.

Subject emplacements always have first position. If we don't know, S?, that statements with these four profiles do or don't have existing emplacements, their value will be unknown to us, regardless of the status for predicate emplacements.

Since I don't know if there is or isn't an emplacement for /Mr. and Mrs. John Paul Smyth III's oldest daughter/, I don't know if I'm entitled to assign truth or falsity to <Mr. and Mrs. John Paul Smyth III's's oldest daughter is married> any more than someone who is ignorant of French history knows whether or not /Louis XX/ has a coherent emplacement and, so, doesn't know if <Louis XX is bald> is true or false. For truth entitlements, we need row 1's profile, which such ignorance withholds from us.

Nor does our ignorance of whether or not a statement's subject and predicate have emplacements entitle us to say it's false. They may have the falsifying emplacements of rows 2, 3, 5 to 8, or 10's profiles, but by hypotheses S? or/and P?, we don't know if they do. We don't know, in sum,

if S is S+ (rows 2 and 3);
nor if S is S- (rows 5 to 8);
nor if S is S~ (row 10).

Therefore, the only value we're entitled to assign rows 13 - 16 is unknown, U.

Whoosh! I needed a sweeping conclusion. I'm bushed.

Row 14

THELMA: Not that sweeping, though. Roy Mash convinced me that row 14 should be F. Consider his <The present dictator of Burundi is onmnipotent>. We may not know if Burundi has a dictator or not, S?, while by hypothesis, P-, we do know /omnipotent/ has no trope emplacement, S? P-. Hence, even if the existence of a Burundi dictator is unknown to us, S?, there's no omnipotent trope for him to carry over into the predicate to give us S+ P+. Since I know that an S+ P- statement can never be true, knowing that there is or isn't such a dictator makes no difference to that statement's value. Hence, its value is not Unknown, but false.

TOM: This has been a pretty tough session.

THELMA: But worthwhile?

TOM: That depends on whether or not this long, detailed conversation enlightens me on the Liar Paradox, and others like it.

Let's call it quits for today. I want to be fresh when we try to apply what we've developed, and try to think about where we are and how we got here. Besides, there's a movie on at the Alcazar I want to see.

THELMA: What's the movie?
TOM: Only the shadow knows.
THELMA: Is that its name, or are you holding out on me?
TOM: Let's go see. An emplacement's in order.

III THE FOLLOWING EVENING

Paradoxy, bee gaun! Yncohayrance tells ye so.
--Fanebius Perlyng (from *Layt Warnings*}

Jim appears dressed like Amarillo Slim…
Jim is the croupier,
Raking and paying.
He laughs,
You know a paradox
From pliers
But you are no gambler.
Don Cushman (*Present Difficulties*)

TOM: You didn't like the movie last night. Are you in a better mood this morning?

THELMA: I felt good last night, but the Shadow didn't know much. It reminded me of what my late Professor, Jacob Loewenberg, said of James Stirling's *The Secret of Hegel*: "The secret was well kept".

TOM: I hope that all we've gone through has something to do with paradox, and that you won't commit a Stirling.

THELMA: That would be embarrassing. I've tried to avoid that by underscoring the need for an emplacement in /This statement/ of <This statement is false>. We need it to determine that it's false. I argued that coherently emplacing referential contents—substantives in sentences' subjects and tropes in their predicates, S+ P+, entitles us to say statements are true. And that any other emplacement profile entitles us to claim a statement is false or unknown.

TOM: Since <This statement is false> is true if and only if it's false, it has to have an S+ P+ profile to make it true and at least one of the eight profiles that make it false.

THELMA: Some philosophers claim "true" and "false" are dispensable; they brush them with disquotational and deflationary solvents. They doubt that /true/ can have a P+ profile, deny it has a coherent emplacement trope, because they think it's redundant. And since falsity is always inferred from a truth per Plato's anti-parmenidean argument,

<S is P> is false, because <S is ~P> is true, and ^P^ and ^~P^ are incompatible, /false/ needn't nor hasn't a coherent emplacement trope. Beware the slithy troves/Where Bertrand hove/With factoids negamost.

TOM: What else could true and false be if not properties of statements?

THELMA: One-place functors. Consider, first, the functor [Not, -] We use it to

form a statement contradictory or contrary to the negated statement.[68] The [-] in <[-] <This dot is red>> forms a new statement alethically incompatible with <This dot is red>. We should interpret "is false" as a denial functor, <[Deny] <This dot is red>>.

Negating, [-], and denying, [Deny], aren't identical acts.

TOM: You think they're different operations?

THELMA: I just said they are. [Not] is an **alethic functor**; we use it to turn a statement into an incompatible statement. The English [Not] is also used as conceptual negation, [~]. It turns a concept into an incompatible concept and a coherent proposition into an incoherent one or vice versa. So, please, don't confuse [-] with [~], and warn your friends not to confuse them on pain of estrangement, a Mittel-Europa malady.

[True], [False], and [Unknown] are **entitlement functors**. We use [True] to affirm that someone has coherently emplaced objects and tropes, S+ P+, into <S is P>; we use [False] to deny that anyone has done so; and we use [Unknown] when we can neither affirm nor deny true or false value entitlements. We use all three functors to invite interlocutors to share our stand on statements' truth value entitlements.

Don't think of [True] and [False] as property tropes of statements but as medals bestowed for bravi emplacement acts. [Unknown] withholds these bestowals.

TOM: [True] doesn't seem like a functor. If <This dot is red> and <True<This dot is red>> are identical, [True] in the second statement is redundant. It changes nothing. We can't use it to make a new statement as we can with [Not, -], because using [True] to affirm a statement is asserting the same statement.

THELMA: You have to distinguish the **first person entitlement triad** [Affirm]/[Deny]/[Withhold]from the pair [Assert]/[Not assert]. All five are one-place functors as [Not, -] is, but the [Affirm/…] triad is the **first person** version of the **impersonal, public entitlement triad**[True]/[False]/[Unknown]. Only you, I, we affirm, deny, withhold judgments: <I/we [Affirm] <S> or <-S>> and <I/we [Deny] <S> or <–S>> and <I/we [Withhold] <S> or <-S>>; we may always coherently ask <Who affirmed/denied/withheld <S>?> Judgments are first person stances toward emplacement success and failure. By contrast, the triad's [True]/[False]/ [Unknown] are impersonal, public functors. Anyone may or may not share our personal entitlement stances toward <S> and <-S>. For the unwary, the impersonal triad is a *cri du coeur* for 'objectivity' and should be avoided unless acknowledged as deceptive shorthand for the [Affirm]/[Deny]/Withhold] triad. In short, contrast these two triads:

[Affirm]/[Deny]/[Withhold] -- First person entitlement triad,
[True]/[False]/[Unknown] -- Impersonal, public entitlement triad.

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[68] Thelma distinguishes between a concept and a functor. Functors indicate acts to be performed. She marks functors with square brackets, […], concepts and propositions with carets, [^…^].. She will have more to say about this in her Appendix to this essay.

The **semantic functors** [Assert] and [Not assert] differ from these triads. With /[Assert] /S// or /[Assert] /-S//, we turn /S/ and /-S/ into the statements <S> and <-S>; that's how we launch sentences into the pugilistic ring of truth value champs and chumps.

Note that <-S> differs from <[Not assert] /S/>. Using [-] in <-S> turns a statement <S> into its contradictory or contrary. With [Not assert], versus [Assert not], we decline to turn a sentence into a statement, thereby withholding judgment about the truth or fality of <S> and <-S>. [Not assert] is alien to contradicting--Bolzano's error--but is a first cousin to [Withhold] judgments.

My angle brackets, <…>, are in part like Frege's turnstile, |--, in his *Begriffsschrift*, which he uses as an assertion functor. If we decline to put |-- in front of /S/, we decline turning /S/ into <S>, and thereby forsake making a truth value claim. Until [Assert] does its work on /S/ or /-S/, there's no <S> or <-S> to affirm, deny, or withhold. In our life after [Assert], but not before, we can affirm, deny, or withhold entitlement judgments about statement's truth value. I'd like to expand on this for clarity, Tom.

With *one* semantic functor, [Assert], we turn /The dot is red/ or /The dot is ~red/ into the statements <The dot is red> or <The dot is ~red>. We have three personal entitlement functors, [Affirm]/]Deny]/]Withhold], and three matching impersonal ones, [True]/[False]/[Unknown], to indicate our stance toward statements' epistemic entitlements. One [Assert] functor isn't identical to three personal entitlement functors nor to three impersonal truth claims. Don't let this contrast, however, tempt you to think truth value claims are pragmatic rather than semantic. All these one-place functors are subject to agents' choice, all aswim alike in 'context' soup. The contested distinction between ^pragmatic^ and ^semantic^ doesn't void this point.[69]

TOM: Before explaining what import you think these distinctions have on paradoxes, I'm so dizzied trying to keep clear your distinctions that leap from negation's head that I need you to recapitulate them--succinctly? Please.

THELMA: Good idea. Give me a minute. (Untimed pause while Rome burns)

Logical functors: With [Not, -], we turn <S> into another statement, <-S>, which is either the contradictory or contrary of <S>, or turn <-S> into <S>, if you allow the double negation transform. With our English [Not, ~], we turn a concept ^C^ into either the contradictory or contrary concept ^~C^. Also, with [~] we turn a coherent proposition into an incoherent one, or vice versa. [-] is a logical statement functor, whereas [~] is a logical concept and proposition functor. They're logically distinct, neither being reducible to the other, which gives us distinct coherence and alethic logics. But for both, without negation, there's no logic; with different negations, there's different logics.

Semantic functors: /[Assert] /S// turns /S/ into <S>, but /[Not Assert] /S// doesn't do so. With [Assert], we burden ourself with an entitlement claim, a judgment; with [Not

[69] See Kent Bach's website, http://online.sfsu.edu/~kbach/ for a useful account of their difference. Note, however, that both [Assert], as a statement maker, and alethic entitlement functors, are the work of agents. Thus, you can't distinguish semantic from pragmatic functors by saying the first involves a speaker's context and the second does not. Both do.

assert], we do not. I call them “semantic” functors, because with them we commit or refuse to commit ourselves to entitled and unentitled truth value claims.

Entitlement functors: These are the personal and impersonal triad of functors.

(i) With the personal triad functors we say, <I/we [Affirm]/[Deny]/[Withhold] entitlement judgments about <S> or <-S>;

(ii) with the impersonal functor triad we say, <S> or <-S>, is [True]/[False]/[Unknown]>.

We [Affirm]/[Deny]/[Withhold] entitlement judgments according to assertions’ emplacement profiles per the Emplacement Chart, which exhibits sixteen possible emplacement combinations. They challenge us to choose which of these personal and impersonal triadic judgments we’re entitled to make.

Logical, semantic, and entitlement one-place functors are logically distinct.

Does this help, Tom?

TOM: I’ll treasure it forever. Would you email it? (Hopefully) I presume it’s relevant to wrestling with the Liar.

THELMA: Immensely. If [True] and [False] are entitlement functors, not predicates, the Liar’s <This statement is false> becomes <[False] This statement>, which is ungrammatical; it has no predicate. Without a predicate, nothing can be asserted nor, a fortiori, can a judgment be affirmed, denied, or withheld.

Moreover, I expect you not to forget that asserting as well as affirming, denying, and withholding aren’t predicates. They're acts we perform, something we do. Conceptual negation, "~", too, is an act with which we make concepts out of other concepts, and with which we make new propositions out of others with differing coherence value.

TOM: Since <[False] This statement> is an absurd candidate for a paradox, it seems as if anyone who thinks it is, has to hold that "true" and "false" are predicates.

And whoever thinks the subject of <This statement is false> has an S+ profile has to claim that its predicate, /false/, has either a P- (row 2) or P~ (row 3) profile, since only they yield the profiles S+ P- and S+ P~ that entitle us to say the Liar's statement is false.

THELMA: Before pursuing the Liar's predicate profile, let’s see if its grammatical subject, "This statement", can have a coherent S+ emplacement.

TOM: Because subject emplacements take first place?

THELMA: Yes, If there’s no S+, we don't have to deal with P- or P~.

TOM: What's to find out? Everybody seems to think <This statement is false> has a coherent emplacement for its subject. Except maybe you?

THELMA: No. Quine noted the difficulty of finding one, although he demanded a formulation of the Liar "that says of itself that it is false without venturing outside the timeless domain of pure grammar and logic", which is an incoherent demand, given that

[True] and [False] are entitlement functors we marshal to relate languages' sentences to a world in time.[70] If you agree there's no a priori truth, which Quine strangled in its crib.

Tom, it's just struck me how incoherent Quine's favored formulation of the Liar is! He wrote, it "says of itself…". Did I miss something? Can statements 'say' something about themselves? Are there thinking, maybe even garroulous, statements?! Imagine!

"Self-reference" and "says of itself" roll off the lips and the pen, and out of word processors with assured ease. Not that self-reference isn't the sole culprit in committing paradox, because, as I said before, <This statement is true> isn't paradoxical; it's not even true. Saul Kripke pointed out that Goedel absolved self-reference of guilt for validating paradoxes.[71] Although self-reference may not be enough to produce paradox, it may be culprit enough to turn statements with a "not" in them into paradoxes when "false" is interpreted as [Not True]. Interpreting it that way doesn't beef up the Strengthened Liar Paradox as is usually thought, because the functor [Not True] is identical to [False] in a two-valued system that underwrites the paradox.[72]

Whatever role self-reference might play in generating paradoxes, we have to ask a prior question: Does "This statement" have a referent?" If it doesn't, self-reference contributes nothing to making a paradox of the Liar's statement.

When I asked what your intended referent of the Liar's "This statement" is, you said it's

quote This statement is false unquote.

That was before I distinguished between expressions in double quotes ("..."), slashs (/.../), carets (^...^), and angle brackets <...>. Because each has different identity conditions, a coherent emplacement in one is incoherent in any other. ^E/tom/E @ /Tom/^ is coherent, but ^E<Tom is tired>E @ /Tom/^ is not. Any entity--substantive, trope, or token--may be coherently emplaced in the functor [E…E]. That's why we can coherently talk about anything in our universe; further, since each substantive has at least one property (^ this object has no properties^ is incoherent), we can predicate properties of any object. This enables us to make a statement about any object, which, in turn, makes every substantive in the world a subject of entitled knowledge claims—true, false, unknown.

You may want to give a different answer now to <What's the emplacement for /This statement/?>, because referents of expressions in quotes, "…", and slash marks, /…/, aren't statements, but physical marks. Don't forget that a type is any physical token, such as /rubber/, buried between double quotes, "rubber". The double quotes indicate a token count has been made; for example, we count as one type any token that answers to the same specified description, say, a token constructed by the series of letter tokens /r/-/u/-/b/-/b/-/e/-/r/ to which "rubber" answers. As physical marks imprisoned in quotes and

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[70] Quine, W. V., *Quiddities*, p. 148; Cambridge, MA, Harvard University Press, 1987; Thelma's emphases.

[71] Saul Kripke, S., "Outline of a Theory of Truth", *The Journal of Philosophy*, Vol. 72, 1975, pp. 690 - 716, especially p. 692.

[72] See Dowden, Bradley, "Liar Paradox", p. 2, *The International Encyclopedia of Philosophy*, *www.utm.edu/research/iep/p/par/-liar.htm*, 1999, for remarks on the Strengthened Liar.

slashes, sentences aren't being used as assertions, and, as such, have no truth value. Of course, sentence tokens freed from their slashed prisons could be used to make statements, but aren't being so used when they're treated as mere physical presences.

TOM: I guess that's right. It seems obvious enough.

THELMA: It didn't seem so to a great logician. Tarski mistakenly said "True" applied to types of sentences and that types are classes.

You look surprised. Well, to adapt an incoherent phrase, shamelessly overused by the late President Reagan, "I just happen to believe", I "just happened to make" a xerox of page 156 of Tarski's "The Concept of Truth in Formalized Languages".

His footnote to the following example of his T-scheme is,

"(3): 'it is snowing' is a true sentence if and only if it is snowing".

In this footnote, he points out that (3) contains what he calls "quotation-mark names" of which the above /'it is snowing'/ is an example. Notice that he says the "expression between" the quotation marks is the "object denoted by the name in question". Look.

TOM: Yes, I see that, but I also see that the first line in this footnote is, "Statements (sentences) are always treated here as a particular kind of expression, and thus as linguistic entities," and in this case the "linguistic entity" is the sentence "it is snowing".

THELMA: Laying aside the gullible equivocation of /"Statements (sentences)"/, note farther down he says: "terms like 'word', 'expression', 'sentence', etc., do not denote concrete series of signs but whole classes of such series which are of like shape with the series given; only in this sense shall we regard quotation-mark names as individual names of expressions". (J. H. Woodger's translation)

I interpret his concrete series of "signs" as ^tokens^. He then declares that similarly shaped tokens are types, which he says are "classes". The malconsequences should be obvious.

TOM: A class isn't a statement; so, it can't be true or false? (Beat) This implies his Convention-T has to be reinterpreted.

THELMA: Right. Just as a class of apples isn't an apple, so a class of statements (sentences) isn't a statement (sentence). A class isn't identical to any of its members.

Plus, choosing to hold that "sentence" denotes classes of tokens, he puts himself at odds with his arguments purportedly showing the Liar is a paradox. It clouds his 1931 argument—when his "Concept of Truth" was first presented in English[73], page 158--and his version in *Scientific American*.[74] In both arguments he uses "sentence", which he'd said denotes a class of tokens, but actually specifies one and only one sentence, a specific token, to which the Liar's subject refers, because in the 1931 version he specifies it as "'the sentence printed on this page, line 5 from the top'", which is the sentence "c is not a true sentence"; "c" abbreviates "line 5 from the top" token. We know it's a token, be-

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[73] "The Concept of Truth in Formalized Languages", p. 158, *Logic, Semantics, Metamathematics*, Alfred Tarski, Trans. J. H. Woodger; Oxford, Clarendon Press, 1956.

[74] June, 1969, p. 65,third column.

cause he says "the sentence printed" and says where in *that* article. By “sentence prined”, each page 158 of any copy will have its own token. Further, a class of sentences/tokens can't be printed and doesn't have location, although its member tokens do. Note, he does not say "printed on this and every similar page of every copy, line 5 from the top", which would allow a tolerant reading of his “signs” as ^type^ rather than as ^token^.

TOM: The point being that he hasn't really specified a class of sentences but a token as the referential content of the Liar's grammatical subject.

THELMA: Exactly. The same goes for the 1969 version, thirty-eight years later, where he specifies the referent of the Liar as "The sentence printed in red on page 65 of the June 1969 issue of Scientific American" and completes it with "is false" to provide another version of the Liar. That sentence is the only one printed in red on that page of that issue, and, I assume, in every copy of that issue.

We could scissor out his 1931 token and emplace it in his argument wherever he uses the abbreviation "c"; we could do the same thing with his red 1969 token, emplacing it wherever he uses its abbreviation "s". By doing so, we wouldn't have altered his arguments and would have used but one scissored token rather than a class of tokens. But...

TOM: I know. The referent Tarski describes is, again, a token. And a token referent isn't asserted, isn’t used as a statement, hence, can't be false or true. So, you want to know, "Where's the paradox?".

Do other people who think the Liar is paradoxical make Tarski's mistakes?

THELMA: I leave it to the guilty to confess.[75] Tarski's a pretty careful worker, but he's made a hopelessly incoherent mess of his presentation. He hasn't given us a suitable S+ emplacement for the Liar's subject. It's incoherent to say of a token as a referent that it's false. It might be abbreviated, colored red, in English, located at so-and-so, but it can't be false, nor true, nor, hence, a fortiori, paradoxical.

TOM: What if Tarski objected that sentence tokens may be used to make statements?

THELMA: I'd agree. That was my point about [Assert]: ^[Assert] /S/^ turns the token /S/ into the statement <S>. If a cop scissored out the token /This car is hot/, he could flash it to his partner, silently informing him that the car beside them, with the dewy-looking bird at the wheel, is stolen. But he'd certainly not be referring to the scissored token as Tarski did to his tokens.

TOM: You're suggesting that what I should have answered when you asked me what I intended as the referent of "This statement" is "I intended to refer to <This statement is false>", because only statements could be the referential content of "This statement". Emplacing anything but a statement in it would be incoherent.

THELMA: Exactly. Do you want to state the paradox as <<This statement is false> is false>?

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[75] To confess, send an email saying you do so to: abierman@sfsu.edu..

TOM: I don't mind.

THELMA: Good for you, because ‘til the end of time neither you nor anyone else will ever suffer paradox. It's not a problem; you can stop worrying about it. Your sleep will be sweet serene from now on. (Pause)

You don't get it? This statement version of the Liar now consists of a version of Eubulides ‘paradoxical’ statement, 1<…>1, within your new statement, 2< 1<…>1 >2:

2< 1<This statement is false>1 is false>2.

If the original Liar--<This statement is false>--is statement 1<...>1, and is the subject of 2<…>2, I want to know what I may coherently emplace in l<…>l’s /This statement/.

TOM: And supposedly my answer is like the one I gave before,

N<…<2< 1<This statement is false>1 is false>2 is false>…>N,

which leads persistent, benighted persons to a fruitless infinite regress. Right?

THELMA: I think so. If the grammatical subject of the self-referential Liar refers to what can be true or false, we're stuck with substituting a statement, in this case, with substituting <This statement is false>--if you claim the Liar is self-referential. Once more, its grammatical subject, "This statement", like all subsequent ones, is insatiable for a coherent emplacement.

TOM: That outcome seems as bad as being a paradox. In fact, didn't Yablo construct a paradox that had no overt or covert self-reference but did have the linearity of an infinite series?[76]

THELMA: What's bad about it, if it disparadoxes the Liar?

If an infinite regress is generated, we never can produce an S+. But without an S+ in any N<...>N, we're not entitled to claim 1<…>1 is false as you do in your statement 2<…>2,

2< 1<…>1 is false>2.

That's because 1<...>1's falsity, per Plato, has to be inferred from a true statement, *1<…>1* with an S+ P+ profile whose S+ is identical to 1<...>1's and whose predicate, ~P+. is incompatible with P. We learned we need true statements from which to infer false ones from Plato's anti-parmenidean argument in the *Sophist*. Schematically, we have:

1<S is P>1 is true. S+ P+

^P^ is incompatible with ^~P^.

_____

1<S is ~P>1 is false. S+ ~P

Yablo can't get his paradox unless he has a statement with an S+ P+ profile, which he's not going to get from a linear, infinite series of failed emplacements--unless he just assumes it, which is not interesting.

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[76] See Yablo, Stephen, "Truth and Reflection", *Journal of Philosophical Logic*, 14, pp. 297 -349; and "Paradox without Self-reference", *Analysis*, 53, pp. 251 - 2; also, Sorenson, Roy A., "Yablo's Paradox and Kindred Infinite Liars", *Mind*, 107 (January 1998), pp. 137 - 155.

TOM: You're arguing that if we're caught in an infinite regress, we'll never reach an S+, without which we'll never be able to produce a paradox, because we'll never be able to produce a true or false statement to satisfy the true-if-and-only-if-false (or true-and-false) condition of a paradox.

THELMA: Didn't I say I liked your aptitude for succinctness?

TOM: Yes, but I don't think you'll like my doubts that the statement version of the Liar leads to an infinite regress. In my view, 1<This statement is false>1 is itself the emplacement content of 1<…>1's subject, "This statement". Is it or isn't it true?

THELMA: If I agreed that the buck stops there, then, I suppose, you'd argue this way, putting it schematically, shortening 1<This statement is false>1 to 1<St>1.

If 1<St>1 is a statement, it has to be T or F. Assume 2<1<St>1 is F>; if 2<…>2 is true then 1<St>1 must have the opposite value T; hence, **2<…>2 is true**, because, per Aristotle, it says of what is (false) that it is (false).

TOM: Good. You're finally playing the game, Thelma.

THELMA: But, if 2< 1<St>1 is true>2, that is, if <2 1<This statement is false>1 is true>2, < 1<St>1 must be false, because 2<…>2 says of what is (true) , 1<St>1, that it is not (false). This shows, per Aristotle's notion of true and false, that **2<…>2 is false**. That's the other half of the paradox!

TOM: So there you go!

THELMA: Where do I go?

TOM: You've just proven that <This statement is false> entails that 2<…>2 is true and false, which is a logical contradiction. And your claimed infinite regress is stopped.

THELMA: It's stopped, because if a statement is contradictory, then it's certainly false and can't also be true. Right?

TOM: That's my point.

THELMA: Then where's the paradox, if a contradictory statement can't be true?[77]

TOM: Yet, the Liar is contradictory. That's the Semantic Paradox game, Thelma. Just what Eubulides the Megarian intended—to produce a logical disaster. A statement is supposed to be true or false, not both. The Liar is both. Bye, bye Aristotle. (Silence)

You know Eubulides is the author of the Liar paradox? It's said he wanted to refute Aristotle's claim that truth comes from saying of what is that it is, and from saying of what is not that it is not.

THELMA: That's part of what Aristotle said. Let me read you again what he said:

> "To say of what is that it is not, or of what is not that it is, is false, while to say of what is that it is, or of what is not that it is not, is true".[78]

And didn't Tarski follow Aristotle in holding what he called a correspondence account of truth? "Snow is white" if and only if snow is white. Doesn't that say of what is

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[77] For an argument with this conclusion for propositions, not statements or sentences, see Mills, Eugene, *Philosophical Studies*, Vol. 89, 197-212, 1998, especially p. 204.

[78] *Metaphysics*, Bk. IV, Ch. 7, 1011b, 26 – 29; (Trans.) W. D. Ross.

that it is? Remember his Convention T? He talked about the "so-called classical conception of truth ('true—corresponding with reality')".[79]

TOM: You know the "Snow is white" business is the T-equivalence condition, not strictly a definition of “truth”.

THELMA: Fine, but which side is Tarski on? Aristotle's or Eubulides’?

If he's on Eubulides' side, he shouldn't champion Aristotle's so-called correspondence theory of truth--which I turn into an emplacement account--nor his own T-equivalence formula. Eubulides’ paradox is meant, you say, to destroy Aristotle’s account.

On the other hand, if he's going to stick with Aristotle, Tarski shouldn't admit Eubulides' Liar's Paradox argument is valid.

TOM: What the heck! It is valid. And it refutes Aristotle.

THELMA: We'll see about that. But first I'd like to know what argument Eubulides used to show the Liar Paradox refuted Aristotle's conditions for truth and falsity? That would be really interesting.

TOM: I don't know what argument he used; no one else seems to know, either. It's lost, if there ever was one. But it's plausible he might have used the following argument. Assume 1<This statement is false>1 is the self-referential content of the Liar's grammatical subject, "This statement”. Suppose (A) and (B) were Eubulides’ arguments against Aristotle.

(A) If we say of what is, 1<This statement is false>1, that it is not, 2<1<This statement is false>1 is true>2, we say what is true in a two-valued system, because, according to 2<…>2, 1<This statement is false>1 truly says what it is, namely, false. Now, to say of what is that it is conforms to Aristotle's requirement for truth, but here by saying of what is not that it is, we get truth, instead. This contradicts one of Aristotle’s notions of truth conditions (to say of what is not that it is not).

(B) And if we say of what is, 1<This statement is false>1, that it’s false,

2<1<This statement is false> is false>2,

we say of what is that it is not, because 2<…>2 is true. If it’s false that 1<…>1 is false, it has to be true in a two-valued system. To say of what is that it is conforms to Aristotle's requirement for truth; but here, on the contrary, by saying of what is that it is, we get Aristotle’s falsity conditions.

So, if my conjecture about Eubulides’ argument is right, the Liar Paradox refutes Aristotle's ‘correspondence’ account of truth and any other correspondence theory, as well as your emplacement version, because it's possible for a statement to be true even if there is a disagreement between saying and being (A), and for a statement to be false even though there is an agreement between saying and being (B). Moreover, he's produced such a statement, namely, his Liar paradox.

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[79] Tarski, "Concept of Truth...", p. 153.

Logic, at least classical, two-valued logic, abhors exceptions, such as the Liar, and so should you. Statements are supposed to be true or false, not both, nor to ping-pong between one and the other, as the Liar does.

According to Tarski, "the real source of the antimony of the liar" is the "all-comprehensive, universal character" of "common" languages. This character is due to the fact we may use them to "name" and "designate" their own terms and sentences, and to claim that those sentences are "true" or "false".[80] That's what happens when you emplace1<This statement is false>1 in the subject of 2<This statement is false>2.

THELMA: I find it hard to believe that a saying, <This statement is false>, is what is. So would Aristotle, since he contrasts *saying* what is with what *is*. This problem also afflicts the "assumings" (If it's true, then...; if it's false, then...) that are used to demonstrate the truth and falsity of <This statement is false>. These demonstrations take place only in the precinct of saying, as Quine wanted, never in the precincts of both saying and being. You aren't entitled to say what the truth value of the Liar statement is (true, false, or unknown) by relying on "*if* it says what is" or "*if* it says what is not". That feeds solely off logical relations between hypothetical statements with no specified emplacement content from non-linguistic 'reality', just as uninterpreted formal systems without models or applications do. Both are confined to relations internal to a set of sayings.

Russell counseled us to keep a robust sense of reality while philosophizing even about "abstract" matters. Now it's one thing to assume a statement is true or false and another thing to show there are S+ P+ emplacements that make a statement true or that there are the eight emplacements that make a statement false. Your Paradox game flagrantly assumes, which is but logical theology. It has a puny sense of reality, whereas to show a statement's emplacement profile is S+ P+ has Russell's recommended robustness. The second looks beyond Quine's "timeless domain of pure grammar and logic", a vacant domain absent any emplacements that would make statements true or false. It's almost as if paradox theologians forgot that the Liar contains "is false", which, as a denial, needs the support of being, something over and above "timeless", airless sayings.

Paradoxes poisoned the early logistic program for mathematics with internal inconsistency, dating from Russell's revival of paradoxes at the beginning of the 1900s. Hilbert's program, on the other hand, was stunned by a blow from without. Goedel's incompleteness proof of arithmetic purports to show there are truths that systems of sayings can't prove are true; he thought there is robust, referential content outside of saying that makes them true: "We have a kind of perception of objects of the theory of sets, as one can see from the fact that the axioms strike us as true"; there is no reason "to have less faith in this kind of perception, that is, in mathematical intuition, than in sense perception".[81] But sense perception ain't that reliable. Why this childlike trust in intuition?

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[80] A. Tarski, "Truth and Proof", *Scientific American*, June, 1969, p. 67.

[81] Cited in *Le ragioni della logica*, Carlo Cellucci, p. 111; Bari, Italy, Laterza, 1998. [Trans. AKB] Cellucci's reference is to Goedel, Kurt, *Collected Works*, Vol. II, p. 268, ed. S. Feferman et al.; Oxford, Oxford U. Press, 1986 - 1995. Also see Cellucci, pp. 213 and 236.

Unlike the Liar statement, <Jack Daniels makes whiskey> rambles into being. The argument you constructed for Eubulides, although clever and plausible, doesn't refute Aristotle's account of truth, because Eubulides 'refutation' was, according to your proposed reconstruction of it, confined to saying and Aristotle's account of truth was not.

TOM: <Jack Daniels makes whiskey> "rambles into being" because it's subject and predicate have non-linguistic emplacement content? So, it has a possible emplacement profile?

THELMA: Yes, but, since there are no linguistic activities without agents, which Wittgenstein's ^use^ bequeathed us, I would state it a bit differently. I believe that the person who wrote <Jack Daniels makes whiskey>, perhaps for an advertisement, intends and wants us to reach out beyond language to what is, to a bottle of their whiskey. I believe she intended that we accept the following as her statement's referential contents:

^EjackdanielsE @ /Jack Daniels/ & E(jackdaniels)makes-whiskeyE @/makes-whiskey/^,

because those emplacements would entitle us to say her statement is true and induce us to believe what she writes. Or if we treat this statement as an *alloy* of emplacing an act, Emakes-whiskeyE, and relationally ordering Jack and his whiskey, we get,

EjackdanielsE @ /Jack Daniels/ & E(jackdaniels)makes-whiskeyE @ /makes whiskey/ & ~/whiskey makes Jack Daniels/ (the incoherent ordering relation).

For this statement to be true, we need to emplace coherently Jack Daniels and whiskey, and all the events in that process of making whiskey in /makes/, and, second, the coherent ordering of <Jack Daniels makes whiskey> versus the incoherent ordering of <Whiskey makes Jack Daniels>.

Surely, these are rambles into being: Jack Daniels isn't a word, but a man or a distillery; and making whiskey isn't just saying, it's distilling. You don't drink words and you don't write whiskey. Rambling into being is making statements whose subjects and predicates the speaker intends or is believed to intend to have coherent emplacements, entities outside of sayings. Of course, these intents and beliefs may fall short. They may be known to have emplacements, S+ and P+, but, also, they

(a) may be known not to have emplacements, S- or P-, which isn't based on lexical (nor a priori) information; or

(b) may not be known to have or not have emplacements, S? or P?, which isn't based on lexical (nor a priori) information.

The Liar statement has none of these possible profiles, because it either leads to an infinite regress or, if you insist on making <This statement is false> the referential content by emplacing it in "This statement", you can produce a paradox only by imprisoning it in saying. It takes no 'reality' rambles, unlike <Jack Daniels makes whiskey>.

TOM: I know. I drink Jank Daniels--if I have the scratch.

THELMA: And you also know that <This statement is false/~true> is a negative statement, if ^true^ and ^false^ are construed as properties of statements.

TOM: Whoa! I can just as easily make <This statement is true/~false> negative, the negative of <This statement is false>.

THELMA: Regardless of which statement we call 'negative' and which 'positive', they're incompatible. But, of two incompatible statements, I call a statement positive if it's verified with an S+ P+ profile, as we can verify <Sam's car is red> with the emplacement of Sam's car and its red trope. Whereas, to verify <Not <Sam's car is red>>, we need an anti-parmenides inference that uses conceptual negation, "~". You're right that statement negation by itself isn't enough to distinguish positive from negative statements.

<Sam's car is green> is true.

^Green^ is incompatible with ^red/~green^.

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<Sam's car is red> is false.

TOM: That looks familiar.

THELMA: Doesn't it? We can abbreviate that argument: <Sam's car is red> is false if it has an S+ ~P+ emplacement profile.

We're entitled to say <Sam's car is red> is false by coherently emplacing the green trope of Sam's car in /~red/:

Esam's-carE @ /Sam's car/ & E(sam's-car)greenE @ /~red/.

This pits <Sam's car is red> against <Sam's car is green>, with its S+ ~P+ profile and verifies, in a shorthand way that <Sam's car is red> is false. Schematically,

<S is P> is false, if <S is ~P> is true, and <S is ~P> is false if <S is P> is true.

TOM: Because Plato's anti-parmenidean inference requires a premise about conceptual incompatibility, and since incompatibility uses conceptual negation, it seems you think statements whose verification requires conceptual negation are negative.

THELMA: Maybe. I'm not sure identifying which statements are positive and which negative is worth much. I do think conceptual incompatibility of property concepts makes us ramble outside of saying in search of incompatible emplacements, freeing us from solely logical manipulations of statements' alethic "not"s and fancied affirmations and denials.

<[True/Not False]<S is P>> and <[False/Not True]<Not<S is P>> are logically manipulated equivalences that provide no bite on the difference between positive and negative statements. We can shuffle "[Not], [True], and [False] into coherent equivalences at will, unlike coherent and incoherent substitutions. We can't, for example, manipulate red and green tropes into being coherent and incoherent emplacements of one and the same token at will. Nature's will vanquishes ours.

TOM: Why can't you interpret ^~red^, a negated concept, as a disjunction of positive concepts, ^green^, ^blue^, ^pink^, etc.? Then emplacements in /green/, /blue/, /pink/, etc. would be positive, P+, as are P+ emplacements of /red/? That way the negative/positive conceptual distinction disappears.

THELMA: There still is ^red^ and ^~red^, one of which is negated; so, the negative/positive conceptual distinction hasn't, unlike Atlantis, sunk beneath watery equivalences. Further, ^green^, ^blue^, and other disjuncts are conceptual negations of ^red^ even though they contain no explicit conceptual negation functor, [~], and they provide for incoherent emplacements, P~, in /red/.

Green is a P+ emplacement in "green" and "~red", since ^~red^ subsumes ^green^. That's alright. But green is a P~, not a P+, emplacement in "red". Conceptual distinctions and coherent emplacements can't do without conceptual negation; without it, there would be no coherent and incoherent emplacements, and, consequently, no way of understanding that <Sam's car is red> is false if <Sam's car is green> is true, (S+ ~P+); nor that <Sam's car is ~red> is true if <Sam's car is green> (S+ ~P+) is true.

I don't want to give those up, do you?

TOM: Let's put it this way: For the first time since I rebuffed my parents "No, no, no, Tommy!", I'm cozying up to negation.

THELMA: Maybe that's because conceptual negation is constructive; we can make new concepts with it. It doesn't hinder free, playful activity as wielders of forbidding /No/s do.

Also, without conceptual negation, [~], we couldn't both verify the truth of ‘negative’ statements and avoid making Russell’s mistake of invoking negative facts to verify them, as he did in *Logical Atomism*. [~] makes color properties other than red coherently emplaceable in "~red", which we need if we're to avoid appeal to negative facts to verify such statements as <Not<Sam's car is red>> (unless Russell thought S+ ~P+ substitutions were negative facts). Remember, Russell didn’t flagellate himself for knowing little history of philosophy, nor did it keep him from writing a ‘history’ of it. Details? Hey!

TOM: OKAY, I got it, I got it! But where are we now with the Liar Paradox?

THELMA: Given that it's supposed to be self-referential, we've found that the grammatical subject of the Liar, "This statement", can't refer to:

(a) An uninterpreted token, because tokens can't be true or false;

(b) nor to a type, for the same reason;

(c) nor to Tarski's interpretation of a type as a class, for the same reason;

(d) nor to a statement, because that leads to an infinite regress, which never provides the S+ we need to verify the Liar has any truth value;

(e) nor to a regression-stopping, contradictory <This statement is false>, because it doesn't ramble into being, which is necessary for an S+ P+ or S+ ~P+emplacement proile that entitles us to say the Liar is true or false.

I’ll elaborate on these below, no matter how late it gets.

TOM: Thanks for the summary/Of refutations quite galore/Never heard of in Singapore/You may have been a headache/But you never were a bore/Thank you so much//You kept Eubulides, bye-bye, on the run/’Though his Liar was a headache/He's supplied us with our fun./So, thank you so much.

THELMA: You're welcome, so much. Oh, Tom. Something's changing!

TOM: Shall we dance?

THELMA: If I may keep talking. And if it won't be too arhythmical.

TOM: I'll see it through somehow. After all, I invited you to play this game.

THELMA: Well, then,/let me stop the regress,/Keep Eubulides on the run. Note the incoherence of

2<This statement is true>2

when we replace "is true"/with S+ P+, so

2<This statement is S+ P+ed>2, sweet mouth, just for you.

The orchestra's gone, Tom, but still I'm not entitled to state <This statement is S+ P+>, because /This statement/ isn't a statement. To save it from incoherence, you'd have to emplace a statement in "This statement", but we've seen it's hopeless to emplace <This statement is tru
e>. Now do you see the gravity of the infinite regress argument? (Beat)

However, if we emplace a statement in "This statement" that rambles into being, such as, <Tom is drunk>, the incoherence disappears and the infinite regress is stopped:

<<Tom is drunk> is S+ P+>.

TOM: Shouldn't that be

<<Tom is drunk> is S+ ~P+>?

At least ever since we started talking about the Liar Paradox. Seriously, Thelma, I don't think your emplacement procedure is appropriate for truth claims. You can't physically emplace a truth trope. Truth is an abstract property; it's not perceivable as red is.

THELMA: You've forgotten that truth value entitlements--truth, falsity, and unknown—are not properties; you're right, there are no such tropes to emplace in /true/, /false/, or /unknown/. They're what we're entitled to say after completing an emplacement procedure. Truth value claims are judgments on the outcome of the emplacement process.

I'd have thought Gettier's challenge to the standard view that knowledge is justified true belief would have had some effect by now. Lots of philosophers are slow learners. Keeping ^true^ as part of ^know^'s analysis erects an impossible barrier to knowing. Tom, I'm using "analysis" only because the issue has been posed that way in the literature. I hope I've made it obvious how anachronistic it is for thinking about concepts.

Listen to the bells in the distance tolling the end of "Analytic Philosophy".

Anyone who wants to hold onto this 'truth' element in the 'analysis' of ^know^ and thinks that adding a 'fourth' or 'fifth' or 'nth' codicil will innoculate us against the Gettier virus, faces two dilemmas. Any addition to the analysans of ^to know^ will be aimed at strengthening the evidence part. 'Non-defeasible' additions do this; they require that any new evidence counts for rather than against <P>, or, at least, doesn't count against it.

Although truths may be freely assumed, loosed of any ties to agents' evidence/emplacements, counter-examples can always be constructed to show any strengthened evidence conditions won't inoculate us against the Gettier virus. Whoever believes an inoculation is helpful is a hopeless optimist or a maladept conceptualizer; otherwise, they could learn to be satisfied with the 'justified belief' analysis' of ^to know^; they'd not need the 'truth' component. If a counter-example can always be constructed for any codicil, 'truth' proponents either have to admit no one knows they know <P>, since they don't have a non-defeasible criterion for knowing, or they have to give up the 'truth' component of ^to know^, neither of which is savory to them. This is the first dilemma, a dilemma within a larger dilemma whose other horn I put this way.

If you're pessimistic about finding a defense against counter-examples, evidence for justified belief is stout enough to entitle a person to say she knows; there's no need to include the truth component in ^to know^'s 'analysis'. This may not but should be a welcome outcome for the advocates of the 'truth' component, because they yearn to say <I know <S>> and know they know it, unless they're closet skeptics, and they're entitled to say so if they have more evidence for <S> than against it. Further, if they're confident of their entitlements, they can also say <S> is true, inviting everyone to say so.

TOM: So, you think we should junk the truth component of knowing's analysis, give up the very idea that there are truth value tropes, or any kind of non-tropic truth property of statements.

THELMA: I reject a realist notion of truth, as if it were an agent-independent property or relation between a truth-bearer and truth-maker. This doesn't entail that I'm denying the reality of S+ P+ emplacements. Truth-in-itself, apart from S+ P+ evidence, is inaccessible; it offers no handhold on knowing.

This leaves us free to do what we've always done--search for knowledge without reliance on free-floating 'truth'. Like professional soldiers, we "Carry on", Tom. With S+ P+ emplacements in <S>, we're entitled to say <I reasonably believe <S>>; with those same emplacements, we may say <I know <S>> and <<S> is true>, in the entitlement sense. Life is just one emplacement profile after another in a world of shifting profiles.

Notice that I'm not equating ^entitled to say <S> is true^ with ^<S> is true^, nor am I saying it's an analysis of ^know^; <…is true> is but a shorthand expression. ^Analysis^ and ^is true^ as part of ^know^'s 'analysis' are shopworn and dispensable.[82]

TOM: Private Tomasso reporting for orders, Sir.

THELMA: At ease, or parade rest, whatever you like, soldier.

However, if you persist in thinking truth values are properties, of whatever kind of expression you choose, <This statement is true> has to carry its own truth property since

[82] See Richard Kirkham's "argument against the claim that truth can be analyzed in terms of justification"; pp. 50 - 51, *Theories of Truth*, Cambridge, MIT Press, 1992.

it doesn't ramble into being. It has no emplacements except itself. And it won't do to assume it's true, if it's supposed to verify itself.

I don't think you want to hold that statements may guarantee their own truth or falsity. Even people who hold that we can intuit the truth of arithmetical axioms--Frege, Goedel--had the decency to claim there were intuited entities that make them true, although I have no idea how they discerned that thoughts or abstract entities provide coherent emplacements in axioms for is S+ P+ entitlements. Farm girls aren't privileged with such urban virtu'--in the Machiavellian sense. We don't equate strong convictions with reliable intuitions of truth value. We've learned better.

If you don't want to hold a self-guaranteeing theory of truth, you're lacking the premise, <This statement, <S is P> is true>, from which to deduce <This statement, <S is ~P>, is false>, per Plato's argument against Parmenides claim that we can't claim statements are false. Or maybe you think statements guarantee their own falsity.

TOM: Bernard Bolzano thought the Liar does.

THELMA: You've been reading again, haven't you?

TOM: Yes, but only two pages--in Bolzano's *Theory of Science*, pp. 22 - 23.[83] He points out that Savonarola, who unseated the Medicis, including Lorenzo il Magnifico, thought <This is false> doesn't deserve the name of a proposition: "For the definition of a proposition, namely that it is a true or false announcement, does not truly apply to ["insolubles"]. They have the appearance of propositions but are no more so than a dead man is a man even if he has the appearance of one."[84]

Bolzano rewrites Savonarola's <This is false> as <This (what I just now say) is false>, then rewrites both, which he claims is their equivalent, as <What I now assert I declare for false and do not assert it>. This rewrite, he says, "is, of course, not true".

THELMA: I'm not sure I understand this rewrite.

TOM: Then you probably also won't understand Kripke's "We may say that we are entitled to assert (or deny) of any sentence that it is true precisely under the circumstances when we can assert (or deny) the sentence itself...to call such a sentence [one that attributes truth to a sentence that contains the word "true" itself] "true" ("false") is tantamount to asserting (denying) the sentence itself."[85]

THELMA: I have the same problem with both Bolzano and Kripke's quotations. Kripke doesn't observe the distinction between [Assert] and the pair [Affirm] and [Deny] that I explained before. We use [True]/[Affirm] and [False]/[Deny] to assess a statement only after it's been asserted. Savanarola also fails to observe the same distinction with his <What I now assert I declare for false and do not assert it>. His "declare for false" is [Deny], which is not identical to his "do not assert". If he hasn't asserted, no statement was made; so, he can't deny it.

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[83] Ed. and trans. by Rolf George; Berkeley, University of California Press, 1972.
[84] *Compendium aureum totius logica*, Leipzig n.d., bk. 10, no. 18, as cited in Bolzano.
[85] Kripke, "Outline of a Theory of Truth", p. 701.

TOM: I remember the claim but not the reasons for it.[86]

THELMA: Then here's a new argument. To assert an interpreted /S/ is to make a statement, <S>. An auditor, who's in the saddle according to you, may take me to have asserted <S> because she thought I uttered /S/ sincerely. If she took it that way, <S> is a statement, and, therefore, was asserted even though I was lying, privately withholding commitment to the truth of <S> while pretending to assert it. If I were lying, I wasn't affirming it's truth. Since I may at the same time both *assert* <S>, per the auditor's right to believe I did, but *not affirm* it by withholding my commitment, it follows that [Assert] and [Affirm] aren't identical functors.

TOM: But if the auditor were suspicious and asked you if <S> is true, and you said "Yes", you'd have affirmed it. That would be asserting and affirming <S>, which implies they're identical functors.

THELMA: No, I'd be lying a second time by pretending to affirm<S> but privately affirming <-S>. Otherwise, I wouldn't be lying knowingly.

And if I'd said "No", denied that <S> is true--if I didn't lie again--then I would both have asserted and denied <S>, since I can deny a statement <S> only if I've asserted an interpreted /S/. But if [Assert] and [Deny] were identical functors, I couldn't deny anything I assert. But all of us sometimes deny what we've asserted; so, [Assert] and [Deny] aren't identical, nor, as I argued earlier, are [Assert] and [Affirm] identical. Assertions may be affirmed or denied; if they can't be, we couldn't disagree, nor could we take back what we asserted earlier. Thus, the [Assert] functor has to be distinct from both the [Affirm] and [Deny] functors.

But you believe Bolzano thinks "false" is dispensable, because saying a statement is false ("I declare for false") is the same as not asserting it ("do not assert it"), even if I've just shown you that "declare for false", that is, denying the assertion of a statement's truth, is not identical to "not asserting it". Yet, you drop out the 'dispensable' "I declare for false" from

<What I now assert (I declare for false) and do not assert it> (p. 104),

which leaves us with

<I assert <S>and I do not assert <S>, which is a contradiction.

TOM: And a contradiction carries its own falsity just as a tautology carries its own truth, which you earlier said statements can't do.

THELMA: I don't want to stop your report, but I do want to register a demurrer: Not everyone thinks contradictions and tautologies are statements. Wittgenstein didn't. he recognized their peculiar nature. He argued "Not only must a sentence of logic be incapable of being contradicted by any possible experience, it must likewise be incapable of being confirmed by experience."[87] Hence, neither S+ P+, S+ P~, nor any other profile

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[86] See pp. 88 – 91, above, for the reasoning.

[87] *Tractatus*, 6.1222.

in the Emplacement Chart is relevant to contradiction's and tautologies' truth value entitlements.

I bring this up because it supports my argument against the Liar being paradoxical if it's based on purely logical reasoning about 'sayings', imprisoned as they are in sayings' precinct, whilst statements' truth and falsity reside in the precinct of saying and being.

But, go on.

TOM: Then Bolzano faults Savonarola for believing that <What I now assert is true> follows from <What I now assert is false>. He points out that <What I now assert is false> "has the peculiarity" that we cannot contradict it by "prefacing its predicate 'false' with 'not', because by changing the predicate you also change the subject. The subject, "expressed by the words 'what I now assert', is different when I say 'What I now assert is false' as when I say 'What I now assert is not false'." [88]

THELMA: OK, he thinks the grammatical subject, "What I now assert", which is his rewrite of the Liar's grammatical subject, "This statement", has a different S+ emplacement in

(F) <What I now assert is false>/<This statement is false>

from what it has in

(-F) <What I now assert is not false>/<This statement is not false>.

If the Liar is self-referential, "What I now assert" in (F) refers to <What I now assert is false>; in (-F), it refers to <What I now assert is not false>. Since those statements are not identical, the attempt to prove the Liar is a paradox fails, according to your understanding of Bolzano, because the Liar's supposed contradictory statements, (F) and (-F), have distinct subjects, whereas contradictory statements have identical subjects.

TOM: Bolzano points out that the Liar shares this peculiarity with other statements "whose subjects and predicates contain a reference to the propositions themselves or to any one of their parts". Both of the following statements are true although they appear to be contradictory:

<In the present speech act, the third word from the end is the copula>

<In the present speech act, the third word from the end is not the copula>. (p. 23)

Despite the added negation, the second statement doesn't contradict the first, because adding the /not/ changes the subject's referent from a statement without a "not" to one with it, making them different statements. The "is" in the first statement is indeed the third from the end, but is indeed the fourth from the end in the second statement.

He also cites a pair of statements both of which are false rather than contradictory, although they differ only in that one has negation and the other does not:

<The number of words in the present sentence is eleven>

<The number of words in the present sentence is not eleven>. (p. 23)

Again, adding a "not" gives the two statements' subjects different emplacement content.

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[88] Bolzano, *Theory of Science*, p. 23.

Likewise, adding a "not" to the Liar, <What I now assert is not false>, gives us a different assertion, and, hence, a different subject content, different from the subject in <What I now assert is false>. This holds also if we substitute "true" for "not false": <What I now assert is true> differs from <What I now assert is false>.

THELMA: What does Bolzano think is the contradictory of <What I now assert is false> if it's not <What I now assert is not false>?

TOM: It's <What I now assert, I assert>, substituting "I assert" for "true", produces this tautology. Whereas, "is false" in <What I now assert is false> gives way to "I do not assert". So, for Bolzano, the contradictories are:

<What I now assert, I assert>

<What I now assert, I do not assert>.

THELMA: Since you've turned the Liar, a la Bolzano, into these two independent statements, a tautology and a contradiction, the Liar isn't a single paradoxical statement with contradictory values.

TOM: Do you know how Bolzano ends his brief remarks on the Liar paradox?

THELMA: Tell me.

TOM: "But enough of such hairsplitting."

THELMA: Are you telling me our Paradox game must end, Tom?

TOM: It looks like it. I hope so. If we'd started with Bolzano, we wouldn't have had to go through all your neologisms and your slash, angle, and caret quotation distinctions, nor would we have had to deal with coherent and incoherent emplacements--^E...E @ /.../^, nor the conceptual logic that hovers in the appendical offering. To say nothing of that sixteen-rowed emplacement chart.

THELMA: I thought you were enjoying the ride. Besides, it wasn't a waste if Bolzano and I come out at the same, right place--the Liar is not a paradox--although for different reasons. He thought it was false. I think it's incoherent. And by "incoherent", I don't mean statement-inconsistent, but proposition-incoherent. Every proposed referential content for the grammatical subject of <This statement is false> leads to incoherent claims

It's incoherent to claim the referent is a token, a type, a class of tokens, a statement whose subject's referent recedes ad infinitum, a true or false statement imprisoned within sayings, having no reality emplacement profiles. And, with your Bolzano addition, we have the incoherence of turning the single statement Liar into two statements, one being a tautology, the other a contradiction. He's turned One self-contradictory statement into Two statements, each contradicting the other. (See also (A) and (B), pp. 110 – 114), for an explanatory summary of these points.)

TOM: Well…what'll we do now? Catch some music?

THELMA: Tom, you stung me a little with your skepticism about the value of what we've been through, as if Bolzano is all we need to deal with the Liar. He's still stuck in the precinct of saying and doesn't help us see there's much more that needs to be

repaired in our thinking about the fundamental relation between saying and being if we're to understand where Eubulides, and a long parade of philosophers after him, went wrong. What we've been through together is not a waste if my reasons explain how Bolzano's argument works off conceptual logic, even if he didn't know it.

And along the way, we dealt with reference and truth, and made adjustments in Russell's and Strawson's positions on the logical relations between categorical statements in the Square. Now, in addition to "On Denoting" and "On Referring", we have "On Emplacing". Besides, aren't you glad to get past the simple identification of truth conditions and meaning? I am. And I'm glad you found Bolzano. He seemed to satisfy you.

TOM: My friend George Berger found him. Thank George.

THELMA: A friend of a friend is a friend.

TOM: You should be more selective. Any friend of *mine* is a friend of yours.

THELMA: My precious, trusty one. (Pause) But you should know that what we've done supplies what's missing from Bolzano's argument. I told you that paradox would be a test of coherence logic. And I think it turns out to be pretty supportive, since it voids the paradox that indicts truth logic and avoids ad hoc redemptions like Russell's Theory of Types, Tarski's infinite series of metalanguages, and Graham Priest's bold embrace of 'true contradictions'.

TOM: Still, Bolzano shows that even if we confine ourselves to sayings and don't make forays into being, the Liar itself isn't paradoxical, even if his pair of rewrites might be contradictory.

THELMA: We can develop a parallel but deeper explanation of why the Liar isn't paradoxical, if we add concept negation and coherence logic to our logical armory, a move he would have welcomed as a feature of his own pioneer study of concepts.[89] If Bolzano had used conceptual instead of statement negation, he would have understood that negating <This statement is false> with <This statement is not false> doesn't produce the contradiction (I assert, and do not assert). Instead, ^not false/~false^ produces the 'predicate' ^true^ in a two-valued system, and, so, produces <This statement is true>, whose subject differs from the subject in <This statement is false>. Here's why.

Two true statements with incompatible predicates, P and ~P, false/~false, can't coherently have the same emplacements in their subjects. If both <Sam's car is red> and <Sam's car is green> have coherent S+ P+ emplacements, their subjects must be distinct; Sam must have two cars or the cars belong to different Sams. I'm supposing all the usual qualifiers—red/green all over, at the same time, and so forth. Contradictory statements, on the other hand, require identical emplacements in their subjects, as Bolzano noted.

So, emplacing one and the same object into the subjects of statements with incompatible predicates leads to an incoherent subject emplacement: If S carries a P into /P/, it can't be the identical S that carries a ~P into /~P/, and vice versa. If you predicate the

[89] See Bolzano, *Science*, Book Two, Chapter 3, "Distinctions among Ideas that Result from their Relation to each other".

Liar's incompatible 'predicates' "false/~false" of an identical subject, you violate this emplacement rule in coherence logic, unless you're committed to asserting such contradictiories are true: Emplacing the same entity into the Liar's subjects in <If this statement is true, …> and in <If this statement is false, …> condemns the usual Liar reasoning to emplacement incoherence. This explains why, although both of the following statements have the same grammatical subject, namely, "This statement", they must have distinct emplacements if you're to affirm both

<This statement is false> and

<This statement is ~false>

as is done in the standard presentation of the Liar. So, conceptual negation explains why Bolzano is right when he splits the Liar into contradictory and tautological statements,

<What I assert, I do not assert>

<What I assert, I assert>,

but is wrong when he claims the first, self-contradictory statement alone is the correct reading of the Liar. Since it's contradictory, it's simply false; so, Bolzano tells us the Liar is not paradoxical. But he can't ignore that <What I assert, I assert> is the inexpugnable other half of his rewritten Liar. The two halves are inextricably woven together by [if and only if]:

<What I assert (is *true*), I do not assert> if and only if <What I assert (is *false*), I assert>.

This is as paradoxical as the original Liar. What is asserted? What but that purported statements have truth values, which is why /(is *true*)/ and /(is *false*)/ turn up in my equivalence explication of Bolzano's 'assert' pairs?

Nor did Bolzano realize he shouldn't rely on the predicates of his pair of self-referring statements--"is the copula/is not the copula", "is eleven/is not eleven"--to show how adding a "not" to the predicate also changes the subject in the Liar. The "is" in his "copula" example is the "is" of identity; in his "eleven" example, it's the "is" of equality, but, in the Liar, it's neither.

If you change the right side of an identity—from "is identical" to "is not identical"--or an equality statement—from "is equal to" to "is not equal to"--you also have to change the emplacements on the 'subject' side in order to avoid a contradiction. You don't, however, have to change subject emplacements for predication statements when you change its 'predicates'--"false", "~false". <Your speech is slurred> and <Your speech is ~slurred> are coherent; these contrary concepts don't force diverse subject emplacements. The two /Your/s may well have identical emplacements, otherwise how could I coherently, truly claim you're slurring your words while your wife coherently, but falsely claims you're not. Although two contradictory statements can't both be true, they can both be coherent. The same holds for the subject of the Liar. Bolzano couldn't have known this without distinguishing conceptual incompatibility from truth value inconsistency and without shifting from ^reference^ to coherent ^emplacement^. (Restful pause.)

Are you ready for a nice summary?

TOM: After all that, the summaryer, the nicer.

THELMA: It comes in two parts. Part (A) deals with emplacement in the subject of <This statement is false>; Part (B) deals with emplacement in its predicate, although, I warn you, the (f) part of (B) (p. 114ff) is not a summary of where we've been, but something "relatively different".

TOM: Goodbye concert or ein Jazz Keller tonight, eh?

THELMA: Hello to riffs on the Lyre.

(A)

Every attempt to emplace a referent in the Liar's grammatical subject, "This statement", to get an S+ produces an incoherent statement. The Liar's 'self-reference' turns out to be incoherent.

(a) If the emplacement for "This statement" is the referent of either

"This statement is false" or

/This statement is false/,[90]

we have only physical marks, a type count of tokens, that are themselves referents and as such aren't being used to refer nor are they being used to make statements. Not being used as statements, it's incoherent to say they're false, or true; they're merely incoherent emplacements in "This statement".

(b) If the emplacement for the self-referential "This statement" is

<This statement is false>,

we have an infinite regress, since we keep having to emplace the same Liar statement in "This statement", whose subject's emplacement in turn can never be anything but a sterile, unending repetition that never supplies a statement to be affirmed or denied on any occasion of "This statement"'s repeated emplacement. It's incoherent to claim a statement you can never produce is false, since you can't assign one of the eight possible false profiles in the Emplacement Chart to a will-o'-the-wisp statement, <S>.

(c) If you insist that the substitution for "This statement" in <This statement is false> is

<This statement is false>,

you must first show you're entitled to claim <This statement is true> is true. That's because, by the anti-parmenidean move, without it, you can't infer the falsity of <This statement is false>. You need a true statement with an "is true" predicate, <This statement is true>, otherwise you can't infer the falsity of the Liar, <This statement is false> is false. This follows the anti-parmenidean model for falsity that I argued for earlier:

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[90] These are alternatives because of my nominalist proposal that replaces "all" with "any". A sentence type, "S", is **any** sentence token, /S/, that satisfies a description of tokens, which tokens we count as ONE type. "Type" is a product of counting. It does not refer to an entity over and above **any** token satisfying the same description as others. A ONE count of tokens reflects our indifference to the time/space distinctness of tokens. /type/ has no emplacements other than a token counted among **any** tokens satisfying a description. Recall Langford's distinction between counting book title/types in the library and counting book copy/tokens there.

<S is P> is true.
^P^ is incompatible with ^~P^.

_____

Hence, <S is ~P> is false.

<This statement is true> is true.
^True^ is incompatible with ^false^.

_____

Hence, <<This statement is ~true/false> is false.

You need the conclusion <<This statement is false> is false> to affirm the antecedent of the Paradox Mantra, "If <This statement is false> is false, then it's true", in order to infer by Modus ponens that the Liar "is true". But we can't say a statement is true--the first premise above--if we've not found S+ P+ emplacements for it. Replacing *1 1*'s /is true/ in

*1<*2<This statement is true>2* is true>1*

with the emplacements S+ P+ that supports its truth, we have

*1<*2<This statement is true>2* is S+ P+>1*.

Replacing "true", again, this time in 2*, with S+ P+, which we must do before we're entitled to say it's true, we have

2<This statement is S+ P+>2.

But it's incoherent to say <<This statement> is S+ P+>, since <This statement> isn't a statement. If you try to repair this by emplacing the self-same statement, <This statement is true>, in /This statement/, you're back at infinite regress; you'll never be able emplace a statement in any token counted as a "This statement" type.

Incidentally, I think paradoxes with "split referents", such as the postcard, suffer from this criticism. A postcard on one side of which is printed "The statement on the other side of this card is false" and on whose other side is printed "The statement on the other side of this car is true". They, too, are incoherent. They ping pong between sayings and never ramble into being; no S+ P+ is ever supplied, because the (A)(a)(b), objections to the Liar, above, apply to the split Liar.

TOM: It seems to me you're just refusing to assume a statement is true or false, just stomping your foot down on what logicians have always assumed in order to discover or test the logical relations between statements. If you're going to bar anyone from assuming truth or falsity, all of logic, not just the Liar Paradox, goes out the window.

THELMA: Listen, pilgrim, even logicians have to observe the elementary requirements of coherence logic. If they're going to use "true" and "false" about axioms and theorems, they have to stick with their coherent emplacement conditions, put down in the minimalist way by Aristotle: ^Truth value^ is bonded to ^saying^ and ^being^. But sayings and assumings have no beings outside themselves! Without such beings, you can't

show the Liar true nor false, and if it's neither, it's certainly not paradoxical. Truth value needs emplacements of beings into sayings, which the snappy reasoning for paradox lack. <[Assume] <The Liar is false>> is incoherent, because, as I showed, /the Liar is false/ is a sentence you can't use to make a statement; because it doesn't have a coherent interpretation, it can be neither true nor false, assumedly or otherwise. Me, I'm stickin' wid da Stagirite, ta da guy what brung me.

TOM: It occurs to me there's another emplacement possibility for the subject of <This statement is false>. In (a) - (c), we've substituted names of the Liar--quotation names, slash names, angle names. Let's emplace the actual Liar sentence into "This statement", using your [E…E] functor, as in

EThis statement is falseE @ /This statement/,

just as if we'd emplaced a wig into /wig/ in /This wig is messy/.

THELMA: I didn't substitute names of the Liar with "…", /…/, nor with <…>. I emplaced the referent of the slash and quotation marked sentences, which are tokens. We've already dispensed with those incoherent emplacements. Still, your proposal puts me in mind of fresh trouble for the Liar, because doing what you suggest gives us

<This statement is false is false>.

That's a stutter, not a paradox.

TOM: You're just being silly. No? But at least it's not incoherent.

THELMA: Tom, "This statement is false is false" has too many /is false/s. Your claim that EThis statement is falseE is paradoxical can't even get started. Once you drop the superfluous "is false", all you have left is "This statement is false". You're back where you started. Then I'll have to ask you once more what you intend to emplace in "This statement", and you're off spinning your wheels again without ever being able to arrive at a paradox. Your Bolzano pointed out that /This statement/ is the possible subject of a statement but that it can never be the statement itself. (p. 22)

TOM: For twenty-three centuries logicians, important ones, such as Tarksi, have thought the Liar is paradoxical.

THELMA: Maybe all those logicians were wrong all this time, and Tarski was right half the time, which isn't a bad average: He was wrong about the paradox, right about statements needing a reality check outside of sayings in order to get a truth value. He does, after all, plump for the emplacements EsnowE and EwhiteE for his "Snow is white" in his T-schema example. (Tom muses for awhile, saying nothing.)

What do you think his ^satisfaction^ is about? Expressions with free variables, such as /Skeptical (x)/, may have an object or objects that 'satisfy' them. ^Skeptical (Tom)^ certainly satisfies it, makes <Tom is skeptical> true. You're a being, actually, a wonderfully skeptical being, who satisfies that saying. Tarski committed himself to saying *and* to beings that satisfy or do not satisfy predicates. Otherwise, how do you explain his approvingly citing Aristotle? (Silence)

(B)

Tom, it's time to deal with the parts played by the so-called predicates ‘true’ and ‘false’ in arguments made by people who believe the Liar is a paradox.

(d) We saw that treating "true" and "false" as functors rather than as properties turned <This statement is false> into <[False] <This statement>>, which, besides being ungrammatical, is incoherent, because <This statement> isn't a statement and, so, can’t be true or false. The same point counts against <[True] <This statement>>. Once “true and “false” are turned into functors, the veil is stripped from the Liar; /This statement/ stands nude before us, no longer able to pass as a statement with truth value.

(e) True and false aren't properties of statements, but entitlement reports on the success or failure of making S+ P+ or S+ ~P+ emplacements.

TOM: Mightn't they be properties of the emplacing activities themselves?

THELMA: No more than "under par" of "Nina shot under par on hole five" predicates a property of her play on hole five. It reports her score and shouldn't be confused with a property of her play such as "coolly" in <Nina played coolly on hole five>. "True" is analogous to "under par" rather than to "coolly”. /Under par/ isn’t an adverb. If we've succeeded in making S+ P+ emplacements, we're entitled to give ourselves a score of true; failing that, we're entitled to give ourselves scores of false or unknown. Think of "true", "false", and "unknown" as words we use to report the results of agents' knowledge work, as we use "under par" to report the results of golfers' work. Basic pragmatism serves here; the emphasis weighs on doing, on agents’ acts and their outcomes.

I like to keep agents up front when we're talking about our epistemological scores. I know there're lots of United States philosophers who've taken to calling themselves pragmatists in their mature years, maybe out of some nationalistic loyalty. But they're fair weather pragmatists, because when it comes to truth they drop knowers off the screen and embrace alien abstractions. As I said before, I find it useless to include ^true^ as part of ^to know^'s analysis. People who hold on to it may well confuse knowing <S is P> with knowing they know <S is P>; or they cling to truth assurance as a drowning man clings to a plank, thinking that truth will guarantee they know they know and will save them from sinking into the bottomless waters of pitiless doubt. Prichard warned us pretty long ago, in 1912, that once you let in the first, extra "know" of "I know I know", you're on the slippery slope to an epistemological black hole.[91] I want to keep Bobby front and center, and free of that extra 'know' and it's fake 'truth' assurance.

Bobby has more evidence/warrant in favor of p than against p (sometimes we want more than at other times); he has physical S+ P+ emplacements at hand, or infers to an unseen hummer, S+, who left the room, rather than to a S+ heard-humming Doppelganger; therefore, since Bobby's entitled to believe p, he’s entitled claim he knows p, and to opt for “is true”. “Snuff said”, as the tobacco-snuff ads said.

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[91] *Mind*, op cite.

By replacing the phantom statement ‘properties’ true and false with the “honest toil” of entitlement outcomes, S+ P+ and S+ ~P+, in the Liar equivalence,

<<S> is true> if and only if <<S> is false>,

where <S> stands in for the Liar claim, <This statement is false>, what we get is:

<< S> is S+ P+> if and only if <<S> is S+ ~P+>.

This equivalence is obviously incoherent, because equivalent statements must have identical emplacement profiles. But ^P^ and ^~P^ aren’t identical.

TOM: But that doesn't show you don't have a paradox! It's a confirmation, not a refutation of it! <S> is both true and false!

THELMA: Listen. Before the Liar can be a paradox it has to be coherent. But it’s not. As I said, the coherence of an ‘if and only if’ statement requires that its semantical equivalents have identical coherent emplacements, as in

<<S> is S+ P+> if and only if <<S> is S+ P+>, or

<<S> is S+ ~P+> if and only if <<S> is S+ ~P+>.

Instead, the Liar’s equivalents have incompatible emplacements, P+ and ~P+,

<<S> is S+ P+> if and only if <<S> is S+ ~P+>l;

hence, the Liar equivalence is incoherent. It violates the [If and only if] functor’s coherent emplacement conditions. Being incoherent, it’s neither true nor false; hence, it can't be a paradox, which demands it be both true and false.

TOM: But you said earlier that both of two contradictory statements may be coherent, and hailed it as proof that coherence value can’t be reduced to truth value.

THELMA: I did. However, the Liar isn’t two contradictory, coherent statements, <S is P> and <S is ~P>--remember our slurred speech exchange?--because they reside in a single [If and only if] statement that lives under the gun of identical emplacements. Paradoxical [If and only if] statements can’t have identical emplacements in their subject places, because their predicate concepts are incompatible. (See p. 107f for the argument.)

It’s easy to think of the Liar paradox as it’s usually presented, a pair of arguments summarized as “If true, then false” *and* “If false, then true”. However, that /*and*/ turns into a single equivalence statement—P → Q *iff* Q → P. What I've done is undercut the separate /if/ ‘saying’ antecedents in this equivalence, as well as in the standard argumentation by pointing out that they don’t ramble into being. Sans that ramble, there’s no truth value for “If the <Liar> is true, …” nor for “If the <Liar> is false, …”; hence, there’s no [If and only if] Liar ‘paradox’.

Here’s another argument, a short, sweet one. S+ P+ blocks <S is P>’s falsity; S+ ~P+ blocks it’s truth. We have both falsity and truth claimed in the Liar equivalence; so, neither is true nor false instead of both true and false. Further, since a statement must be either true or false, and since neither of the Liar’s constituent statements is coherent, neither can be true nor false; so, its incoherent to claim the Liar equivalence is a statement, much less a ‘paradoxical’ one.

As I said earlier, all paradoxical statements that I know contain negation some where. And all the arguments I know that are used to show they're paradoxical rely on statement negation. The authors of these arguments fail to distinguish it from concept negation. As a result they get a paradox. However, if they were to treat the negation in 'paradoxical' statements as conceptual negation, they wouldn't have a paradox. By adding coherence logic to our reasoning armory, we eliminate the Liar and all similar paradoxes that put statement logic in crisis. Statement logicians should embrace coherence logic with open arms. The Yanks have landed!

TOM: Break out the champagne! If the German soldiers haven't drunk it all.

THELMA: I'm ready. If only Bolzano could join us. He almost had it right. If he'd noticed that in the *Sophist* Plato had adumbrated conceptual negation, he would have been able to restate his argument as I have.[92]

TOM: New and old together/Make one bolder.

THELMA: Strange and forgotten/Makes one verscheiden.

Are you happier now that we've dispatched Eubulides' 'paradoxical' Liar? Now that he can no longer disturb the sleep of statement logicians? (Pause)

Do you think they'll thank me?

TOM: My granddad told me you can count your real friends on the fingers of one hand. There are more than five statement logicians. (Pause) Is that all you have to say about failures to find P+ emplacements for "true" and "false" statements?

THELMA: There's fresh stuff just in.

(f) I like C. J. F. Williams' way of showing "is true" is superfluous. He doesn't do for ^false^ what he does for ^true^, but we can extrapolate and I will. I like his argument, because, as I interpret him, he demands an S+ P+ profile for truth entitlements. This comes out in his lovely "thether". He has an empirical argument about how "true" can be replaced by "thether" in English, which I'll explain. I'm basing my remarks on Chapter V of his *Being, Identity and Truth*.[93]

He argues that statements containing the word "true" (and the words "exist" and "same") "can be expressed by sentences containing neither it nor any synonym for it (nor for them). Thus, "'What Andrew says is true' can be expressed by 'Things are as Andrew says they are'. Similarly, ...I drew attention to the fact that 'What Eric said was true' can be seen to be related to 'Eric said that war had broken out, and war had broken out'...". (Wms, p. 86)

TOM: I get an Aristotlean whiff from "things *are* as Andrew *says they are*" and Eric's war "*had broken out*". Also, isn't there a scent of Tarski in the air?

THELMA: That scent will sharpen shortly. The next move goes from Twentieth Century English translations of Aristotle back to Olde English.

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[92] See Plato's *Sophist*, 256, d7 – 257, e2. It has the first occurrence of my conceptual logic [Link, *] functor that I know of .

[93] Oxford, Oxford University Press, 1992. My other page references to Williams, "W." are to this book.

Williams points out that “some” words and pronouns come in pairs, and when they replace names or phrases in a sentence, the sentence remains meaningful.

(i)

One pair is "someone" and "he". They can replace, respectively, the first and second "Peter" in <Peter examined me and Peter married my daughter>, thusly: <Someone examined me and he married my daughter>. (Wms, pp. 43 - 44)

(ii)

Another pair is "somewhere" and "there". They can replace "in Stratford-upon-Avon" in <You can buy Catalan translations of Shakespeare in Stratford-upon-Avon but you can't buy Albanian ones in Stratford-upon-Avon>, thusly: <You can buy Catalan translations of Shakespeare somewhere but you can't buy Albanian ones there>. (Wms, p. 90)

(iii)

Williams, following Arthur Prior's suggestion, proposes we use the pair "somewhether" and "thether" that parallels our use of "somewhere" and "there", with this difference: “Somewhere" and "there" are pro-noun substitutes for nouns but "somewhether" and "thether" are pro-sentence substitutes for statements. (Where Williams uses “statement” I use "propostion".) These new pro-sentences can replace “war had broken out” in <Eric said that war had broken out and war had broken out>, giving us <Eric said that somewhether and thether>. (Wms, p. 92) Williams proposes that “thether” is equivalent to <What Eric said was true>. Hence, "true" is dispensable as a predicate of statements. He suggests that "is true" is used in English to supply us with grammatical pro-sentences.

<Eric said that war had broken out and it> is ungrammatical, because "it" is a pro-noun rather than a pro-sentence. By adding "was true" to "it", we supply ourselves with a complete prosentence (dropping “-” from “pro-sentence”) and repair the bad grammar, as in, <Eric said that war had broken out and it was true>.

TOM: "Thether" takes the place of "it was true".

THELMA: Right. Note, however, Williams isn't nihilistic about truth, just the word “true”. The /thether/s that replace "true" preserve the idea of "correspondence between a proposition and the facts" as <Eric said that war had broken out and war had broken out> does. Williams thinks we need the "thether" as well as the "somewhether". "Any existential instantiation of 'Eric said that somewhether and thether' will have a sentence which both specifies what Eric said and states the relevant facts. And it will be the same sentence that does both of these things. That is what correspondence is. That is what truth is." (W., p. 93)

TOM: You may approve of his ‘thether’ move as a way of ridding us of the predicate “true” and the property true, but you can't agree with his 'correspondence' point.

THELMA: Well, I agree that we need the duality of *saying*/somewhether and *being*/thether, as in Aristotle. I interpret his “existential instantiation” as S+ P+ emplace-

ments. Why would he want to mean anything else by that? Providing he'd agree that there are no ready-made states of affairs and facts out there in space-time. And that these dandy emplacements into sentences' subject and predicate tokens that bear the fruit of propositions are the products of human knowledge workers toiling in the heat thrown off by their epistemological furnaces, bless 'em.

So, without those ready-made states of affairs, Williams has to explain how we effectively relate 'thether' to 'somewhether', so that we have a shareable, operative basis for claiming we're entitled to affirm <Eric said that somewhether and thether >. I think those duals, somewhether and thether, get connected by agents' emplacements rather than his ingenious version of correspondence—the "same sentence" serves to specify "what Eric said and states the relevant facts"--for the reasons I gave earlier, and I can't think of a reason why he'd want to disagree. But, watch out, he's a subtle cogitator.

TOM: I'm tempted to add "is true" to <Eric said that somewhether and thether>. But this could be old habit, couldn't it? I just have to get used to the new lingo of pro-sentences.

THELMA: We do what we can, Tom, and if we can't, we must try harder and help each other.

My point about relating the duals applies also to Tarski's T-schema; he, too, has, as he said, the "classic" duality of correspondence:

(1) "snow is white" is true if and only if snow is white.

(1') "snow is white" is false if and only if snow is not white.[94]

The T-schema "depends on and exploits the prior understanding of those sentences to which the predicate 'true' is to be applied."[95] And, I add, it depends on and exploits the prior understanding of how to relate "snow is white" to white snow, how to relate the somewhether, Tarski's "snow is white" to its thether, white snow.

TOM: You think coherence logic and coherent emplacement supply those understandings or makes them explicit.

THELMA: They supply the missing semantics.

TOM: I take it, then, that you'd rewrite the T-schema as, /<Snow is white> if and only if S+ P+/, where you coherently emplace snow into /snow/ and white into /white/.

THELMA: Good.

<Snow is white> if and only if EsnowE @ /snow/ & E(snow)whiteE @ /white/.

TOM: But Williams' very imaginative bid to show how we can dispense with "is true" doesn't rid us of the Liar paradox, unless you can show also that we can replace "is false" in favor of something like incompatible with "thether".

THELMA: Good, again. I'd extrapolate to "is false" this way:

<Eric said that somewhether and ***non****thether*>,

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[94] Tarski, "Truth and Proof", p. 64, column 1.

[95] Dummett, *The Logical Basis of Metaphysics*, p. 69.

where our anti-parmenidean ^nonthether^ is inferred from an imcompatible P+ ^thether^. <War had broken out between Greece and Turkey> would be false, because <Peace had broken out between Greece and Turkey> is true, and because ^war^/^nonthether^ and ^peace^/ ^thether^ are incompatible concepts.

Given this, <Eubulides said this statement is false> becomes <Eubulides said somewhether and nonthether>. However, as I showed earlier, /this statement/ has no somewhether; it has no emplacement, nor, consequently, can somewhether have an echoing thether or nonthether. The prosentences 'thether" and "nonthether" are vacuous; they lack the master somewhether that tells us where to ramble to find the 'facts', to find the thether or nonthether. That's why <This statement is false> isn't a statement. Lacking emplacements in the subject and predicate places, it's incoherent to keep running the 'paradoxical' shell game. Eubulides couldn't coherently make a claim against Aristotle, because his somewhether fails to supply a reference to something we can identify as it's thether or nonthether, unlike Eric's <War had broken out> and <Peace had broken out>.

TOM: Listen, do you think your arguments apply to all other paradoxes?

THELMA: I don't know. But if Graham Priest, one of the best on paradoxes, is right, all self-referential paradoxes, including the split-referential, have the same structure.[96] He credits Russell with being right against Ramsey's division of paradoxes into logical and semantical. If so, both 'semantical' and 'logical' are subject to the same refutations I gave for the Liar. I leave that to my betters.

But, I can use my reference distinctions and coherence logic to show the Grelling is not a paradox. My way is somewhat similar to Russell's stricture; he didn't allow a class to belong to itself, which blocked paradoxes. He recognized that impredicative properties lead to a Vicious Circle. His stricture, in my view, implicitly rests at a deeper level on coherence logic and conceptual negation. Although he didn't explicitly trot out either of them, there were implicit hints in some of his remarks, chiefly about limits on the "significance' of some subject-predicate pairs.[97]

TOM: Thelma, what's the Grelling paradox?

THELMA: It turns on a statement's subject words that, when also used as predicates, do or don't describe themselves; autological words do and heterological words do not. ^Autological^ is ^~heterological^, ^heterological^'s contradictory. Here are some autological words: "English" is an English word, "short" is a short word, and "polysyllabic" is a polysyllabic word.

TOM: So, because "German" isn't a German word, "long" isn't a long word, and "monosyllabic" isn't monosyllabic, they're heterological. What about the word "good"?

THELMA: Downright bad, man.

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[96] Priest, G. "The Structure of the Paradoxes of Self-Reference"; *Mind*, Vol 103, No. 409, Jan., 1994, pp. 25 -34; also his "Yablo's Paradox"; *Analysis*, Vol. 57, No. 4, Oct. 1997, pp. 236 – 242.

[97] See pages 119 -120, this essay. Also see Bertrand Russell, *The Principles of Mathematics*, "Introduction to the Second Edition", pp. xiii- xiv; New York, The Norton Library1964.

Grelling asks: Is "heterological" heterological? If it describes itself as heterological, it's autological. But if it's autological, then "heterological" describes itself and must be heterological as it says. Going the other way, if it doesn't describe itself, it's heterological. But if it's heterological, then it does describe itself and, so, must be autological. One way or the other, we supposedly get an [if and only if] contradiction. Remember ^heterological^ is ^~autological^.[98]

TOM: I'd guess you're going to argue it's not a paradox because ^autological^ and ^heterological^ are contradictory concepts, ^P^ and ^~P^. Shall I go on? Thanks. Although both <S is P> and <S is ~P> are coherent, both can't be true nor can both be false, unless they have different coherent emplacements into /S/. No token, /S/, can carry both autological and heterological properties into /autological/ nor into /hetereological/; that's why classes formed with the same subject and contradictory predicate concepts have no members in common.

THELMA: I'm so pleased, Tom. You have been listening--and understanding.

According to Grelling, both </heterological/ is heterological> (</h/ is h>) and </heterological/ is ~heterological> (/h/ is ~h>) are shown to be both true and false per above; hence, there's a paradox. But if neither is both true and false, there's no paradox, which is what I'll prove. You look ready for that, my dear.

The first trap to avoid is mixing up his statements' /heterological/ subject tokens with heterological and ~heterological tropes. My symbolization of the Grelling avoids this. The subject of the proposition is an object, which I indicate with slash marks, /heterological/. In order to claim that both </h/ is h> and </h/ is ~h> are true and false, the identical token /heterological/ must carry both heterological and ~heterological/autological tropes into the predicates; obviously, it can't do this, because the property concepts ^h^ and ^~h^ are contradictory or contrary.

For each token sentence used to make these statements, here's a coherently interpreted emplacement proposition for each that makes *both* Grelling statements *true*:

(E1) //h/ is h/: ^E/h/E @ //h// & E(/h/)hE @ /h/^ → S+ P+ → True

(E2) //h/ is ~h/: ^E/h/E @ //h// & E(/h/)~hE @ /~h/^ → S+ ~P+ → True.[99]

The results for (E1) and (E2)'s emplacement propositions are, respectively, S+ P+ and S+ ~P+, entitling them both to the value True, given the coherency of those emplacement propositions. But not both can be used to make two true statements, because the heterological property concepts of the emplacements, EhE and E~hE, are contradictory.

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[98] For those interested in exploring the Autological World of Words, go to www.stanford.edu/~segerman/autological.

[99] Here's the way to make (E1) and (E2)'s *subject* emplacements, ^E/h/E @ //h//, where /h/ abbreviates /heterological/:

E/h/E @ //h//.

Emplace /h/ between the outside slashes of //h// that hold a space open wherein to emplace /heterological/, the token entity to be emplaced in the sentence's subject, as /wig/ provides a locale for emplacing a wig. EwigE differs from E/heterological/E; the latter is a word token, a wig is not. EwigE @ /heterological/ is incoherent; E/heterological/E @ //Heterological// is coherent, because the statement subject, /heterological/, the token subject, is a coherent emplacement for the grammatical subject, //Heterological//. It's a simple move from E/h/E to //h//. The locale for an emplacement always has one more pair of slashes than the emplaced token. We need the double slashes of //h///, because the emplaced /heterological/ is a linguistic entity while a wig is not.

Here's an argument that shows neither statement is both true and false, but that if one is true, as (E1) and (E2) emplacements show each may be, the other is false, as it should be for contradictory statements. Read the /S/ tokens of /heterological/ as the identical /heterological/ token in (E1) and (E2); read P as the property trope heterological in (E1), and ~P as the property trope ~heterological/autological in (E2).

(E1) S+ P+ → T As in (E1)'s tail above
(E2) S+ ~P+ → T As in (E2)'s tail above
^P^ and ^~P^ Contradictory property concepts

_____

(C1) (S+ P+ = T) → (S+ ~P+ = F) This consequent is false by Row 3 of the Emplacement Chart. The coherent P+ emplacement into (E1)'s predicate /P/ is an incoherent emplacement into (E2)'s predicate, /~P/.

(C2) (S+ ~P+ = T) → (S+ P~ = F) This consequent is false by Row 3 of the Emplacement Chart. The ~P+ emplacement into (E2)'s predicate /~P/ is an incoherent emplacement into (E1)'s predicate /P/.

What this shows, Tom, is that if </Heterological/ is heterological> is True, </Heterological/ is ~heterological/autological> is False. And if </heterological/ is ~heterological> is True, </heterological/ is heterological> is False. This shouldn't surprise us. (E1), S+ P+, and (E2), S+ ~P+, can't both be true, because they have an identical subject emplacement but contradictory trope concepts; this is an irremovable obstacle to Grelling's conclusion that <Heterological is heterological> is both true and false. This argument vanguishes Grelling's rendering, because it employs the conceptual [~] as well as the alethic logic's [-] with its limitation: Not both of contradictory statements may be true.

By distinguishing emplacements of token substantives into the subjects of Grelling's sentence from emplacements of tropes into its predicates, and respecting coherence conditions for emplacements and their effect on statements' truth values, we find that the consequents of (E1) and (E2) are not paradoxically both true and false, but that if the antecedent of the argument's conclusion, (C1), is true, the consequent is false;

S+ P+ (is true) → S+ ~P+ (is false),

similarly for (C2),

S+ ~P+ (is true) → S+ P~ (is false).

These are normal entailments of statements with incompatible property concepts.

TOM: You hinted that using your coherence logic way of dealing with paradoxes consorts with Russell's theory of types.

THELMA: I did. For starters, in 1944, after Max Black showed Russell's type theory led to a paradox, Russell acknowledged that his definition of "type" was wrong. He thought he should have distinguished different types of "symbols" rather than "entities". The argument I just made depends on dealing with 'symbols', subject and pre-

dicate tokens, and incompatible relations between concepts, which are our interpretations/rewrites of tokens.

Then Russell goes on to say, "I have never been satisfied that the theory of types, as I have presented it, is final. I am convinced that some sort of hierarchy is necessary,[100] and I am not sure that a purely extensional hierarachy suffices. But I hope that, in time, some theory will be developed which will be simple and adequate, and at the same time be satisfactory from the point of view of what might be called logical common sense."[101]

TOM: Ah hah! You think coherence logic and emplacement are what Russell was hoping would be developed and that it "might be called logical common sense".

THELMA: I'm tempted to think so, but, I would hope he'd see he could drop his reliance on hierarchical types if that happened. That tactic was unnecessary. Respecting the distinction between substantive and trope emplacements is sufficient to avoid paradox. His and Whitehead's function notation, F(x), had eliminated predication in favor of class interpretations of quantified statements. It would have been easy for him to adopt my defense against paradox, because he was on the side of emplacement from the beginning when he claimed Mont Blanc was "a component part of what is actually asserted in the proposition 'Mont Blanc is more than 4000 metres high'".

I'm extending logic's range to include coherence logic, which covers a lot of common sense inferences we make, such as <Maude is my sister; hence, her son is my nephew>, and <The dot is red; hence, it's colored>, which Wilfred Sellars called "material" inferences, by which I suppose he intended this to contrast with "formal" logic inferences.[102] Coherence/conceptual logic, which had its beginning with A. K. Bierman's *LOGIC: A Dialogue*,[103] is an explicit, more formal and comprehensive development of Sellars' and Brandom's informal conception of "material" inference.

Also, there are features of coherence logic that resemble some of Russell's remarks about his theory of types. He wrote, "Whatever involves all of a collection must not be one of the collection". If a sentence violates this stricture, such a set of words, he writes, is "non-sense", "not significant". "In the older conventional logic, it was customary to point out that such a sentence as 'virtue is triangular' can't be used to make a true or false statement, but no attempt was made to arrive at a definite set of rules for deciding

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[100] I've just claimed that the needed distinction dismissing the Grelling paradox is between a token emplacement for the sentence's subject and a trope emplacement for its predicate, rather than a "hierarchy". Russell may have held on to the problematic hierarchy condition because he was still thinking of classes as entities and that they needed a "separation" of levels to avoid impredication.

[101] Russell, B., "Reply to Criticisms", p. 691 - 692, *The Philosophy of Bertrand Russell*, (Ed.) Paul Arthur Schilpp; Evanston and Chicago, Northwestern University, 1944. Max Black's criticism is in the same volume, "Russell's Philosophy of Language", pp. 227 - 255. For a discussion of this, see Kneale, William and Martha, *The Development of Logic*, pp. 670 – 71; Oxford, Oxford University Press, 1975, the edition "with corrections".

[102] Sellars, W., "Inference and Meaning" p. 265, *Pure Pragmatics and Possible Worlds: The Early Essays of Wilfrid Sellars*, Sicha, J., ed.; Reseda, CA, Ridgeview Publishing, 1980. For an appreciative discussion of this, see Brandom, Robert, p. 95 - 105, *Making it Explicit*; Cambridge, MA, Harvard University Press, 1994.

[103] "Twelfth Conversation"; San Francisco, Holden-Day, 1964. This version was corrected and amplified in Bierman and Robin Assali's *The Critical Thinking Handbook*, "Part Three: Reasoning about Concepts"; Upper Saddle River, NJ; Prentice-Hall, 1996. It contains many applications and evaluations of conceptual reasoning. Those texts are superseded by the Appendix to this essay.

whether a given series of words was or was not significant. This the theory of types achieves."[104]

TOM: You think that coherence logic is such an attempt.

THELMA: Following Bierman, I wouldn't put it that qualifiedly. Coherence logic *does* provide logical means for deciding if a pair of subject and predicate words may be coherently combined in a sentence provided they have true premises about the relations they have to other words in a language that structure lexical space. Each language has a system of lexical space occupied by languages' tokens, some parts of which are relatively settled, others are not, and still others that are controversial. But the theory of types cannot begin to do everything that coherence logic can. It covers a very restricted part of lexical space. Still, Russell was on the right track, because he questioned a purely extensional account of type levels. The relations between tokens' interpretations in lexical space, not their extensions, is logically prior to the relations between their extensions (I discuss an emplacement dominant exception to this at some length in this essay's Appendix). Statement functions, <F(x)>, have a range of significance. You cannot emplace just anything in (x) and expect to get a true or false statement; it first has to be "signifycant", not "non-sensical". In my terminology, it's coherent propositions that identify the statements made and that certify their "significance". For example, if virtue is emplaced into /Triangular (x)/'s /(x)/, the resulting proposition, ^Virtue is triangular^ is incoherent, which I think was Russell's point. It is so, because, roughly, each of its categorematic concepts is bonded to different concepts that are incompatible with each other within English's lexical systems, of which Russell did not speak.

Coherence logic should cover relational sentences also with their ordered combinations of its substantive terms, as in the coherent /The Queen is left of Jack's only pawn/ and in the incoherent /Propinquity is left of Ellis Island/. Also, it should cover **alloyed** combinations consisting (i) of spatial or temporal ordering of substantive terms plus (ii) an act as in /Jane kissed Jack/ versus /Jack kissed Jane/, or of an event, /Jack fell on Jane/ versus /Jane fell on Jack/. Alloyed and relation sentences differ in that a purely relational sentence need have no concept of an act or event predicate as a constituent, as the static /left of/ does not.

TOM: It's coming pretty fast here.

THELMA: I'm just covering my backside. Didn't alert, notoriously suspicious gunfighters in the old West face a mirror reflecting the saloon door when there was lots of money on the table? And when rude, on-the-make gunfighters had nasty ambitions? I'm assuring you that conceptual logic covers sentences, propositions, and statements with more than one substantive term; it's not confined to /S P/. But don't inflate your

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[104] Russell, B, *Principles of Mathematics*, p. xiv; New York; W. W. Norton, 1964; from the "Introduction to the Second Edition", 1936. The book was first published in 1903. His claim about what the theory of types "achieves" is exaggerated.

hopes. I can't honestly claim to have figured out the conceptual logic for /S1-S2 P/ sentences as well as I have for /S P/, thus far. (Modest pause)

Tom, I'm curious. Do you think /butter/ could be heterological or autological?

TOM: What brought that up?

THELMA: I'm sideslipping to another landing on Grelling's 'paradox'.

TOM: Uh huh. That could be a Russell nonsense example. It seems absurd to emplace /butter/ in the /(x)/s of /Heterological (x)/ and /Autological (x)/.

THELMA: Because it's out of those predicates' range of significance?

TOM: I think so. But I sense you think otherwise.

THELMA: I do. But we have to elaborate the logical form Grelling used to state his 'paradox' in order to supply a corrective form. You do agree, don't you, that we can use Grelling's predicates to classify some tokens and types?

TOM: Yes, provided your idea that counting all tokens as ONE that 'fall under' the same description is a type. You said it's analogous to the way we count a library's physical book volumes versus the way we count the number of title-author books it has. In libraries that have two physical copies of at least one title-author book, the token/volumes count is larger than the type/title-author count of its books. Right?

THELMA: Right. I'd count *Republic*-Plato and *Ethics*-Spinoza as TWO author-titles. There might, however, be TEN copies of each of them. I'd count different editions and translations among title-author books rather than physical volumes.

TOM: But do you think different counts of tokens/volumes versus counts of types make a difference to the validity of Grelling's paradox?

THELMA: A major difference!

A word is autological if the subject and predicate *tokens* of a sentence are of the same type, and if the *token* emplacement in the subject carries a trope into the sentence's predicate *token* that gives the sentence an S+ P+ emplacement profile. This profile entitles us to claim the resulting statement is true. For example, the subject token /English/ coherently carries the trope of being an English word into the predicate token /English/ of //English/ is an English word/, which makes </English/ is an English word> true, thereby making </English/ is autological> true. But a type cannot do what a token does, because a type is not an emplaceable substantive, S+, that carries tropes; its just a way of *counting* tokens as ONE. This *major* difference torpedoes Grelling's 'paradox'.

A word is heterological if the subject and predicate *tokens* of a sentence are of the same type, and if the *token* emplacement in the subject incoherently carries a trope into the sentence's predicate *token*, which gives the sentence an S+ P~ emplacement profile, making the resulting statement false. Consider //Long/ is a long word/. It's subject token, /Long/, incoherently carries a *short* trope into the predicate's /long/. This makes </Long/ is a long word> false, thereby making </Long/ is heterological/~autological> true, because ^long^ and ^short^ are incompatible concepts. (See Row 3, S+ P~, in the Emplacement Chart, p. 43.)

Notice, Tom, that this argument for a token's heterologicality follows Plato's anti-parmidean argument form in his *Sophist* for showing statements may be false:

<S is P> is true; ^P is incompatible with ~P^; so, <S is ~P> is false.

Grelling posited ^heterological^ as ^~autological/heterological^ the conceptual contradictory of ^autological^, its platonic "other". He needed this to set up the conditions for his paradox, because paradoxes are pressed from negation's womb. Here, conceptual negation [~] is the womb that delivers what Grelling wanted. </Long/ is a long word> is false, because </Long/ is a short/~long word> is true and, since ^long^ and ^short^ are incompatible, they prove /long/ is heterological.

TOM: Your eyes are getting hard, Thelma.

THELMA: As well they should. I'm snuffing subtle, deleterious errors, after all.

I emphasized *token*s just now in reconstructing how I think Grelling explains his concepts, ^autological^ and ^heterological^, which he uses to classify 'words'. Six features in my reconstruction of his conditions, based on his examples, are pretty clear.

(1) What's autological or heterological for Grelling is a sentence's subject 'word'.
(2) A sentence's subject 'word', such as /heterological/, is a token, an emplaceable physical substantive.
(3) What determines whether or not the subject token is autological is that one of its tropes is coherently emplaceable in the predicate token of //autological/ is /autological/, as Eshort(word)E is an emplaceable trope of /short/.
(4) The subject token may be of the same one-count type if it's orthographically associated with the subject token (explained below), which we can use to describe the subject token truly.
(5) If conditions (1) - (4) are satisfied, the subject token is autological.
(6) If a sentence's subject token doesn't satisfy conditions (1) – (4), it's ~autological/herterological.

The buttery token is a physical hands-on example. If /Butter/ were written using butter, then </Butter/ is buttery> satisfies (1) – (4) conditions, making it an autological 'word'. It satisfies (4)'s /orthographically associated/ 'word', because /Butter/ and /buttery/ are so associated across a grammatical difference. Grammar imposes orthological correctness: Adding /y/ to /butter/ is grammatically necessitated; it honors the difference between using /butter/ as a noun versus using it as adjectivally, /buttery/.

<</Butter/ is buttery> is true> --} <</Butter/ is autological> is true>.

TOM: You're suggesting that because </Butter/ is buttery> is true and </Long / is a long word> is false, they're both within ^autological^'s and ^heterological^'s range of significance. So, /Butter/ in </Butter/ is buttery> is autological> is true, whereas, /Long/ in </Long/ is a long word> is ~autological/heterological> is true. Actually, I think that's surprisingly right.

THELMA: My compliments, Tom. You've picked up on the right logical form for autological/heterological claims. But Grelling doesn't use this form for his paradox, as I explain in my second criticism of his reasoning.

But before I do that, here are my annotated remarks on my first criticism.

Grelling doesn't emplace physical tropes (buttery, long) of such token physical tokens as /butter/ and /long/ to state and prove his paradox. He invites us to entertain the truth of <"Heterological" is autological> and <"Heterological" is heterological>. He violates (1) - (4) of my reconstruction of his explanations of these concepts, because he predicates autological and heterological of "Hetereological", of a word type, probably construed as a class name rather than of a physical token, which is misconceived, because types and classes don't have physical tropes, such as buttery and long.

Secondly, he doesn't respect the logical forms of autological/~autological claims, which you picked up on. His formulations violate (1). /Butter/ in </Butter/ is buttery> is the subject of the autological claim that we may truly assert as (B)'s consequent does:

(B) </Butter/ is buttery> is true> --} </Butter/ is autological>.

Instead, the logical form of Grelling's statements in the 'proof' of his 'paradox' are

(a) <<"Heterological" is autological> --} <"Heterological" is heterological>,

(b) <"Heterological" is heterological> --} <"Heterological" is autological>.

These (a) – (b) forms are deficient, because they lack such statements as B's </Butter/ is buttery>, or </Long/ is long>. He ignores his own explanation of his ^autological^ and ^heterological^ concepts. In place of such *statements* as in (B), he puts solely the *'word'* "Heterological"; Grelling mentions no trope that "Heterological" has to carry into what predicate to conclude validly that it's autological or heterological. "Heterological" is physically featureless in (a) – (b); so, we don't know what trope it possesses that would enable us to conclude from its emplacement profile that it's heterological or autological. Without a sentence, //H/ is P/ there's nothing equivalent to buttery or short tropes; he offers us only a nude "Heterological" subject. Without a trope predicate attributed to it, we can't judge that what Grelling says of /Heterological/ is what it is, viz autological, or says of it what it is not, viz ~autological. Thus, Aristotle's account of truth survives another 'paradox' attack. There's no mystery why Grelling doesn't supply needed trope predicates; he can't, because, as the first criticism points out, for him a 'word' is a count type, which, unlike a token, has no physical tropes to carry.

TOM: You make Grelling sound incompetent.

THELMA: I don't think he was. How could he argue otherwise, given that the difference between ^token^ and ^type^ wasn't as prominent in his time as in ours, and that he had to rely solely on alethic logic? Having conceptual logic available changes the way we can reason about conceptual issues. Also, I suspect that the appearance of *Principia Mathematica* induced an alethic hysteria that led logicians to search only within its

approved confines for solutions to all philosophical conundrums, including paradoxes, continuing even to our own technically favored times.

Back to hands-on, Tom. We can feel the butter token's buttery trope, we can 'see', compare the short trope of /long/ with /syncategorematic/ right here. But none of our senses detect auto- or heterological tropes carried by /autological/ or /heterological/, because they have none. Rather, they inform us of emplacement success, autological (</Butter/ is buttery>), or failure, heterological (</Long/ is long>), which indicate what we're entitled to claim about subject tokens of sentences' that have similar predicate tokens or are orthographically related. Coherent and incoherent emplacements into subjects and predicate tokens of such sentences are the grounds of these judgments about whether or not a token is auto- or heterological.

In short, ^auto-^ and ^heterological^ aren't tropes of substantives, but evaluations of the emplacement 'fit' between subject tokens and the tropes they carry into predicate tokens. That's why we need emplacements in a whole sentence, such as //Butter/ is buttery/, //Long/ is long/. With them, we know whether or not we're entitled to claim /Butter/ and /Long/ are auto- or ~autological/. The S+ P+ profile of

(BB) ^E/Butter/E @ //Butter//^ & ^E(/Butter/)buttery @ E/buttery/E^

verifies an autological claim. But Grelling gave us no sentences with such bellwether predicates as /buttery/ and /long/ with /heterological/ or /autological/ predicate tokens; consequently, we can't verify his autological claims with S+ P+ profiles or disverify his heterological claims with S+ ~P+ profiles. Without such trope emplacements, we have "no truth value to declare" at Paradox's customs desk.

TOM: Isn't a russellian hierarchy involved here? Aren't /heterological/ and /autological/ second level predicates, predicates of predicates, not of substantives, as you say?

THELMA: That's bootless. Emplacement obviates appeal to predicate levels. You just have to provide subject and predicate emplacements to verify or disverify a 'fit' between a sentence's subject token and one of its trope's emplacements in its predicate, which Grelling does not do.

TOM: Let me be frank. I think you're probably right.

THELMA: I accept that ringing endorsement, probably, but only as long as you understand that the saving emplacement 'fit' is conceptual as well as extensional. Russell was on target when he said, "I am not sure that a purely extensional hierarchy suffices" for dealing with self-reference paradoxes.

TOM: Why might Russell have thought an extensional approach doesn't suffice for resolving self-referential paradoxes, and why a conceptual approach might help us defang them?

THELMA: Extensions of self-referring paradoxes are skiffs that bob in the wake of their mother-yacht's coherence: No coherence, no extension. My way of thinking about intension puts front and center conceptually coherent interpretations of sentence tokens and coherent emplacements into their subject and predicate tokens. Facing the

paradox that Max Black showed infected Russell's account of type levels, Russell said he should have phrased it as hierarchies of "symbols" rather than the "entities" to which the symbols supposedly refer. But he was wrong twice. He also didn't need hierarchies of symbols for a solution. A simpler solution needs no types. Consider the sentence

(1) /M is a member of class C/.

If the emplacement into /M/ is Nino Cocchiarella, and the emplacement into /C/ is a class of logicians, we get a coherent proposition--^Nino has logician tropes^--and a true statement--<Nino is a logician>--because he has such tropes. But those same emplacements in

(1*) /Class C is a member of M/,

gives us ^the logician class is a member of Nino^, which is incoherent. Nino isn't a class and, so, not only doesn't but, as such, can't have members. The coherence of (1) and the incoherence of (1*) taken together, shows that ^member of^ is an asymmetrical ordering concept. The order of the terms /M/ and /C/ in (1) can't be reversed *salva cohaerentia*.

TOM: It's kind of an anti-symmetric emplacement principle. And I'm guessing you think this applies to Grelling's paradox.

THELMA: Right. According to a commonly accepted doctrine, <Cocchiarella is a logician> and </Butter/ is buttery> are alike. We form classes with the use of predicate concepts, such as^logician^ and ^buttery^. If the above statements are true, then, respectively, Nino is a member of the class of logicians and /Butter/ is a member of the class of buttery tokens. Statements' truth value depends on their emplacement profile, as in (1)'s S+ P+ profile:

(BB) E/butter/E @ /Butter/ & E(/butter/)butteryE @ /buttery/.

If (BB) is satisfied, /butter/ is counted as a member of the class C of buttery tokens. But ^C is a member of M^ departs from this form. A class isn't a physical substantive as a physical token is, it's but a count, so it can't carry a physical trope into the predicate token, /buttery/; nor is Nino a trope as buttery is, so he can't be emplaced coherently in a trope predicate token as (*2*) requires. /L/ is an abbreviation of /logician-class/.

(*2*) Elogician-classE @ /L/ & E(L)ninoE @ /Nino/.

(*2*) is as incoherent as (*1*) is, abbreviating /buttery-class/ as /B/,

(*1*) Ebuttery-classE @ /B/ & E(/B/)butteryE @ /buttery/.

(*1*) is incoherent, because a class, unlike a token, can't carry a physical buttery trope coherently into the predicate trope /buttery/, nor can a class of logicians carry the subsantive nino into the 'predicate' trope token, /Nino/, whereas a class can carry a trope such as being numerous into the predicate token /numerous/ (Hello, Gottlob.). Both (*1*) and (*2*) violate the asymmetry of the ordering concept ^member of^.[105]

TOM: You used "*can't* carry" in your arguments. What kind of "can't" is this?

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[105] Claiming that a class is a member of one of its menbers—not a case of being a member of itself--also runs afoul of grammar. Some classes have many members (plural); its a grammar gaff to state that such a class with its many members is a member of one of its members (singular). Bad grammar and incoherence hold hands here.

THELMA: Oh, you're so alert! It's a conceptual logic functor, a via attiva operaion combining conceptual negation, [-n't], with [can], which gets a leutic[106] modal interpretation in conceptual logic. Together, [-n't] and [can] coagulate into [Can't] that I interpret as the leutic modal functor [Enjoins us not to], which advises us not to reverse the terms of an asymmetric ordering relation. It's not an alethic [Can't/Impossible] modal; don't confuse [-n't] with alethic logic's statement negation, [-], nor with its [Impossible] modal. Wondering about it's logical status is on target, but I can't explain or justify it well here without the surround of more developed conceptual logic, including its "leutic" modal operators. I've been working on an exposition of my conceptual logic for you, in the Appendix to this essay, in which this conceptual [Can't] will be bathed in brighter light. I promise, you'll be the first to know.

Meanwhile, here are informal hints about the leutic [*Can't*]. ^Red^ and ^~red^ are conceptually incompatible; ^red^ is also incompatible with ^green blue yellow …^, because these concepts are subsumed by ^~red^; hence, the concept ^red^ *can't* be compatible with the concepts ^green^ or ^blue^. ^Longer than^ *can't* be ^shorter than^, because they're conceptually incompatible, too. Similarly, the concept ^class^ *can't* be the concept ^member/~class^ and ^member^ *can't* be the concept ^class/~member^. Some 2-place ordering concepts, such as ^longer than^ and ^member/element of^ may be stitched together as ^asymmetrical^ relations, which provide a simpler, more conceptual, and less ad hoc ground for Russell's dissolution of his own paradox than his type levels did/do.

My conceptual logic for 2-place predicates is far behind that for propositions with 1-place predicates, but I'm pretty sure that traditional features of ordering concepts, such as asymmetrical and transitive, are a good place to start to think about their coherence conditions for propositions. Identity, of course, is a horrid mess. I'm scrubbing it up, and think I've isolated its coherence conditions, which are not solely truth conditions as alethic contenders have advanced for centuries.

TOM: I have to ask a question I could hardly suppress while you were talking about ^asymmetry^: Why are you talking about classes? You've pushed hard on a nominalistic line all along. You've contended that so-called classes are but ONE counts of any coherently emplaced substantives in sentences' subjects that satisfy the same description. You pointed out that these counts aren't themselves substantives. Are you backing off?

THELMA: Not at all. I'm using Russell's own class realism language to show his proposed shift of his type theory from "entities" to "symbols" doesn't need types of any

[106] Leutic modalities constrain our lexical acts of combining concepts in propositions. We're either [Enjoined to], [Enjoined not to], or [Allowed to] combine concepts to construct coherent propositions. Which of these three constraints is fitting depends on the interpretation given to a sentence's copula. For example, I interpret the copula in <A heart is a bodily organ> as conceptual subsumption; the "a's give it away. In my logic, there are seven interpretations of copulas. /Leutic/ is short for the Greek /symbo-leutic/. I explain this further in "Your Appendix, Tom".

kind to vaporize his paradox, be they type levels of symbols or their referents. The asymmetry of ^member of^ is enough. He didn't need his stratified symbol types.

Intuitively, the concept of a satisfied descriptive trope, such as ^buttery^, fosters a ONE count of buttery tokens and hinders buttery from being a trope of a 'class', because tokens, not classes', carry buttery tropes into the predicate place /buttery/. ^Member of^ is asymmetric, because ^the *class*-of-buttery-things is buttery^, is incoherent.

TOM: I'm confused. Are you claiming (*1*) is false or incoherent?

THELMA: Incoherent. We're enjoined not to reverse the order of its terms, which is why ^member of^ is asymmetrical, Any 2-place proposition that becomes incoherent when we reverse its relation's terms is asymmetrical. The proposition ^the class of logicians is a member of Nino^ is incoherent, hence, asymmetrical,

(R) ^S1 asymmetric-[R] S2^ --} ^[~] ^S2 asymmetric-[R] S1^^.

Read [R] as an ordering functor. ^The consequent of (R) with its [~] functor signals that a reversal of an asymmetric relation's terms is an incoherent rewrite of the coherent antecedent containing the same asymmetric relation.^ To avoid uncertainty about (*1*) being false or incoherent, distinguish between (*1*) in which the terms of ^is a member of^ are reversed versus

(R*) <Nino is a member of the class of logicians> and <Nino is not a member of the class of logicians>

in which the terms are not reversed. In (R*), not both may be true, but both are coherent, whereas in (*1*), not both are coherent for the reasons given:

<Nino is a member of the class of logicians> (coherent and true) and

< Logicians are members of Nino > (incoherent, so neither true nor false).

What concept would you choose as a coherent direct object of ^is a member of^?

TOM: ^Class^.

THELMA: Most native English, philosophically and mathematically trained speakers would give the same answer. If some one answered ^Nino^, what would you think?

TOM: He misinterpreted ^member of^.

THELMA: And the result is?

TOM: It shows they don't know ^logicians are members of Nino^ is incoherent.

THELMA: That's how I think we should interpret Russell's semi-intensional remark, "Whatever involves all of a collection [universal class] must not be one [a member] of the collection". Whoever ignores that counsel inherits contradictions and paradoxes. He got it almost right. Russell's semi-surmised, but didn't develop, grounds for his stricture may be found in conceptual/coherence logic, exemplified here with the asymmetry of ^member of^, rather than in his alethic logic type-levels solution to self-referential paradoxes.

All classes are members of the universal class.

The universal class is a class.

Therefore, the universal class is a member of itself.

This argument is invalid, because if you allow a universal *class* to be a *member* of itself, per class, you've violated the asymmetry of ^member of^. Having allowed it, you've invited incoherence, *not falsity*, into the tent. Distinguishing conceptual logic's incoherence from alethic's logic's falsity is a major fork in logic's road map. Once conceptual logic supplements, and, in this case, replaces alethic logic, conceptual asymmetry consigns self-referring paradoxes with member/class terms to a moldering, alethic grave and elevates coherence logic to celestial (well almost) stature of an urlogic.

The 20th Century was a brilliantly dismal one for logic, dominated as it was by an alethic logic of classes and sets, which imprisoned it in a Neo-Dark Ages for logic and in which realism was the Witch of witches. I suggest recovery is possible if logicians and mathematicians use their intellectual wizardry and technical capacities to reconceive their work as a conceptual enterprise whose coherence values supplement alethic values. The culprit in this history has been the restrictive search for *the truth* of mathematical and logical 'statements.

TOM: Don't say this in public places. You'll be boiled in oil or ridiculed so relentlessly you'll wish you'd been boiled in oil.

THELMA: I explain why I think conceptual logic is the urlogic of truth logic and also how truth and coherence values are interrelated in this essay's Appendix on conceptual/coherence logic that I said I'm preparing for and will dedicate to you, Tom.

TOM: Spell my name right. (Thelma pinches and pulls Tom's right cheek, hard.) Thelma! Oooh! (Beat) Does your critique of Grelling's paradox apply to Russell's?

THELMA: Kurt Grelling's essay introducing his paradox, co-written with Leonard Nelson, "Bemerkungen zu den Paradoxien von Russell und Burali-Forti" (1908), explicitly addresses Russell's paradox, and I think makes it more transparent; it avoids engagement with ontologically troubling classes. But its logical form'is the same as Russell's:

"heterological" is heterological [if and only] "heterological" is ~herterological/autological;

r is an element of **r** [if and only] **r** is not an element of **r**.

That's because Grelling equates ^autological^ (is an element of) with ^~heterological^ (is *not* an element of). Since these 'paradoxes' have the same logical form, and Grelling's isn't a paradox, neither is Russell's.

TOM: Also, and more importantly, Russell hasn't supplied a sentence specifying a trope that a class **r** carries into a predicate, such as /**r** is *large*/, a trope that **r** may coherently carry into /large/ because we can count the number of **r**s and compare it to counts of other classes. Any class that has over a trillion members is pretty damn large. By that standard, <The class of (number of) molecules is large> is without doubt coherent and true. But Russell offers us a nude **r** shivering tropelessly before us. The /**r**/s in /**r** is an element of **r**/ and in /**r** is not an element of **r**/ don't have any specified tropes that we can use to determine if **r** is or isn't an element of **r** unlike the <**r**s are numerous> case. So, he

can't bring truth emplacements, S+ P+, to /**r** is an element of **r**/ about the class (second **r**) to which the element **r** (first **r**) supposedly belongs. He comes empty-handed to Paradox's customs desk--Nothing to declare--unlike my nephew Jake who could declare and could show the bewildered customs officer his buttery tokens.

What else can a kid do but play at writing buttery tokens with airline butter on the duty-free sales booklet while the plane is circling, circling boringly, endlessly? Russell's nude **r**s beggar for a sentence specifying a predicate token into which we may or may not coherently emplace one of **r**'s tropes. Why couldn't Russell have been more like Jake?

How'm I doin'?

THELMA: A+.

TOM: I take it you'd maintain "large" has different interpretations for /The class of brain nerves is large/ and /This nerve is large/.

THELMA: Who wouldn't? I'd rewrite the first as ^brains got lots of nerves; count 'em^, the second as ^here's one big nerve, man, check its girth^.

TOM: I like that /girth/ word.

At bottom, do you think one set may belong to, be a member of, another set?

THELMA: I think that's an incoherent question. I allow that the *members* of one set may coherently be said to be *members* of another set, providing you understand that sets per se don't exist, that they're a shorthand way of talking about the count of substantives based on their coherently emplaced tropes, a count, say, of how many *red* dogs there are. I mistrust all shorthand class talk that by-passes lengthier, explicit counting of substantives/'members', because such shorthand talk is the fatal first step to fregean and other realisms. /Red dogs are dogs/ shouldn't be interpreted as ^red dogs are members of the class of dogs^, but as ^^dog^ subsumes ^red dog^. Class talk is compromised shorthand for agents' count of dogs that satisfy ^dog^'s 'defining' tropes and their count of dogs that satisfy the red trope; this calls for patient coherent emplacements, as in (D1) and (D2),

(D1) EanimalE @ /animal/ & E(animal)dog-tropesE @ /dog-tropes/,
(^^animal^ subsumes ^dog^^);

(D2) EdogE @ /dog/ & E(dog)redE @ /red/,
(^^dog^ subsumes ^red-dog^^),

which figured in my Omnitude Determiner for the Square of Opposition (pp. 65 – 78).

Given that (D1)'s and (D2)'s emplacements are coherent, S+ P+,

(D1) entitles us to claim <There are dog animals>, and

(D2) entitles us to claim <There are red dog animals>.

Instead of claiming <The class of red dogs is included in the class of dogs> or <The class of dogs is larger than or equal to the set of red dogs>, I suggest we patiently aver

<Any animal coherently emplaced in (D1)'s subject token that coherently carries dog-tropes into (D1)'s predicate token verifies <There are dogs>; and

<Any dog coherently emplaced in (D2)'s subject token that coherently carries a a red trope into (D2)'s predicate token verifies <There are red dogs>.

If there is at least one dog that is ~red, the count of dogs is greater than the count of red dogs (red dogs are a subset of dogs).

If no dogs are ~red, the count of dogs and red dogs is the same (red dogs are a subset).[107]

Who needs talk about 'classes'' or levels of predicate types? Let's talk emplaced dawgs and emplaced dog-tropes, their number versus the number of emplaced rayd dawgs with their emplaced red trope. If Frege had gone full-bore for conceptual logic, instead of hungering after sacred classes, he would have dodged Russell's discouraging paradox that scarred his logistic system. Danke schoen, aber bitte, keine Mengen. If Russell had not been so extensionally committed, he would have been spared the torturous career of his type theories. Conceptual logic would have relieved Tarski of his unneeded infinite meta-languages, and Kripke could have dispensed with his elaborate alethic gymnastics digging a gap into which 'paradoxes' may plummet.[108]

So, that's my coherence logic interpretation of Russell's "Whatever involves all of a collection cannot be one of the collection". It shows we can stop the paradox he discovered in Frege without recourse to type levels (and Tarksi's meta-languages). It follows from what I've said about coherence conditions of emplacements into the terms of ^member of^, that it's incoherent to ask if a set that doesn't belong to itself belongs to itself. The predicate ^belongs to^ is as asymmetrical as ^element^/^member of^ are; so, asking if a set belongs or does not belong to itself is incoherent, because it violates the asymmetry of ^belongs to^ and ^member of^.

TOM: Russell thought vicious circles were the result of allowing such statements as <<C belongs to C> if and only if <C does not belong to C>>.

THELMA: Eubulides', Grelling's, and Russell's paradoxes show something's gone wrong. But what? And how can we correct it? As to the first question, those paradoxes show the naïvete' of truth logic plungers. As to the second, truth logic needs to be supplemented with coherence logic. This new logic can save us from paradox; and we can do this without recourse to Russell's types or Tarski's infinite series of meta-languages, or to gaps in truth value, as Kripke and others do, or to paraconsistent logic as Priest and Dowden do, consciously embracing true contradictions (dialetheias).[109]

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[107] Class realists can say that red dogs are included in the class of dogs, even if the number of dogs is equal to the number of red dogs, because ^dog^ is subsumed higher under ^animal^ than ^red-dog^ is, as reflected by (D1) and (D2).

[108] See Kripke, "An Outline of a Theory of Truth"; and "Logic, paraconsistent", *Stanford Encyclopedia of Philosophy, http://plato. stanford.edu/entries/logic-paraconsistent/*, 1996; and Bradley Dowden's, "Accepting Inconsistencies from the Paradoxes", *Journal of Philosophical Logic*, 13, pp. 125 - 130, 1984.

[108] The ad hoc solutions of Russell's types and Tarski's meta-languages for paradoxes, both just targets of Kripke's criticisms, seem sweetly benign and no more ad hoc than Kripke's serpentine ramble through alethic logic and set theory. For a summqry explanation of Kripke's gap-invention, see Richard L. Kirkham's *Theories of Truth*, pp. 281 -294; Cambridge MA, MIT Press, 1995.

Having recourse to types, meta-languages, dialetheias, and gaps seems defensible to those who believe alethic paradoxes are unavoidable without one or the other of these ‘solutions’. They should instead acknowledge that truth logic is too simplistic to deal adequately with paradoxes. A better solution is to look outside the truth logic that brought them to such a parlous state. My advice is: If truth logic, TL, brings paradox-trouble that vanishes when truth logic is supplemented with coherence logic, TL + CL, choose TL + CL.

But, Tom, please, don't confuse a gap in truth value logic with the epistemological gap, Unknown, U, in my Emplacement Chart. Kripke, if I understand him, believes a statement residing in the gap is Undetermined rather than Unknown. Adding coherence logic to truth logic, and eliminating ‘true’, used in the standard analysis of ^to know^, in favor of ^entitled^ to make or not make a truth value claim scuttles the need for truth logic's Undetermined. Of course, nothing scuttles the Unknown as long as we're wholly or partially ignorant, a fate finite creatures share, from ants to Kant and beyond. Instead of proclaiming a truth value gap to deal with paradoxes, we’re better off recognizing that so-called paradoxical ‘statements’ are incoherent. We may snuff them in their crib, deny them the maturity of coherent propositions; hence, destine them to fall short of underwriting true or false statements forever more

TOM: Let's end upbeat on that downbeat, Thelma. Although it's too late for a club date, shall we dance? Here? Now?

THELMA; I’d love to. (While they dance, Tom softly sings "Dancing in the Dark" by Arthur Schwartz with Howard Dietz.)

Dancing in the dark,
'Til the tune ends,
We're dancing in the dark.
And it soon ends.
We're waltzing in the wonder of why we're here.
Time hurries by, we're here
And gone.

THELMA: Just like paradoxes.
TOM: Don't spoil the mood, darling.

END OF “ON EMPLACING”

The Logical Structure of Conceptual Coherence 3.0 to follow

The following are notes to myself, and you, Tom, sketching some results of what I’ve argued above. I intend to use conceptual logic, informally presented above, but more fully and formally presented in *The Logical Structure of Conceptual Coherence 3.0,* one

of whose payoffs will be to show how that logic provides symbolic arguments that the Liar and similar 'paradoxes' are not paradoxes. If death intervenes, content yourself with the arguments given in this essay. Sound informal arguments are just as sound as symbolized, formal ones.

Here I've shown the Liar is incoherent, because it can never supply a coherent emplacement for /This statement/. Only an S+ emplacement in a sentence has a chance at making a statement true. Since True and False are entitlement pronouncements, not predicates of statements, the Liar's <This statement is false> becomes<This statement>False!, which has no predicate, hence, can have no truth value. The cry of "False!" is but as Lear's regrets thrown upon the windy heath. Without a predicate, nothing is asserted nor, a fortiori, is anything affirmed or denied. Nor can we withhold judgment, for that would be incoherently withholding judgment about <This statement>False!'s non-existing truth or falsity.

Grellling's and Russell's paradoxes are shown to be incoherent. They have the same logical form, so if either's paradox isn't one, neither is the other's. Grelling doesn't use the logical consequences of distinguishing between a token and type interpretation of /word/ Wort/. Also, in the statement of his paradox, he neglects to provide a predicate for heterological^ other than it's negation, ^autological^, which embraces Russell's odious vicious circle, seducing Grelling to his desired paradox--but cleverly so, as he makes no use of classes. Grelling's paradox demonstration fails, because he doesn't acknowledge that a coherent presentation of his paradox requires that the substantive token /Heterological/-(statement) needs to carry coherently a trope into a sentence's predicate that is conceptually independent of ^heterological^, which ^autological^ is not. The subject emplacement E/heterological/E can't coherently carry it's own conceptually negated, hence, incompatible, trope concept, ^~heterolgical/autological^, into the predicate /heterological/. It's painful to think anyone thought it could.

Two-stage plot line

Stage One: With conceptual logic, I contest three perennial and current modes of alethic reasoning on resistant issues: (i) Paradoxes, (ii) natural kinds, and (iii) Strawson's and the Boole-Russellian claims about the immediate relations of categorical statements and the diversely different ways they represent the Square of Opposition's structure. I address these issues to show conceptual logic's superior utility and how it differs from alethic logics. (i) and (iii) are contained in this essay. (iii) is treated in "Stipulating and Conceiving Natural Kind Concepts", which may be found on my website: http://www.sfsu.edu/~phlsphr/?page=/arthur_bierman; sfsu arthur bierman.

Stage Two: After the informal discussions that show the use of conceptual logic gives philosophically superior results to resolving the above three issues (and others) than the sole use of alethic does, I supply a more formal and extended presentation of conceptual logic in *The Logical Structure of Conceptual Coherence 3.0*.