

LEUTIC MODALITIES *CONTRA* A. PLANTINGA'S ALETHIC MODALITIES¹

“I am enjoined to doo ande I doo, I am enjoined nott to doo ande I doo nott,
I am allowed to doo and doo choicely hwat I maye.”

--Fanebius Perlyng

The leutic modalities are [Allow, A], [Enjoin, I] and [Enjoin not, I~], ([I] from [Injunctive]). Modally equivalent lexical acts ($\sim A \{--\} I \sim$) have the same outcomes; they tender the same coherent travels in lexical space. [{}--] abbreviates “lexical equivalence”. By replacing alethic with leutic modalities, I take a proactive approach to conceptual modalities just as replacing $\langle\langle S \rangle \text{ is true} \rangle$ with $\langle \text{Entitled to claim } \langle S \rangle \text{ is true} \rangle$ takes a proactive approach to truth claims. Our interlocutors propose we interpret their sentences as they do, and we propose they interpret our sentences as we do; each party invites the other to take the same paths in lexical space. We’re invited to participate in communal acts rather than be passive observers of pronounced statements’ with their truths and modalities tacked on for us. Take the via attiva, Tom. Do things with words!

Leutic Modal Equivalences

The following modally equivalent transforms of [Allow, A] and [Enjoin, I] are similar to standard alethic and deontic transformations with respect to the back-and-forth of negation signs. The modalities themselves, however, aren’t assigned to the same kind of sayings. [Possible] applies to statements; [Permitted] applies to acts specified by Kantian maxims; [Allow] and [Enjoin] apply to lexical acts. I use [~] instead of [-] to symbolize the negation of a proposition’s coherence value, because my topic is the coherence of propositions rather than the truth of statements. Incidentally, [~] applies also to Kant’s deontic modalities. The act of a universalized kantian maxim isn’t forbidden because the maxim is alethically self-contradictory, but because it’s conceptually incoherent.² Attempts to interpret Kant’s Categorical Imperative’s ^forbidden^ acts proposed in a universalized

¹ For an essay allied with this one, see on my website, “Two Squares of Opposition”. To enter my website, type: sfsu arthur bierman.

² A. K. Bierman & R. N. Assali, *The Critical Thinking Handbook*, (Upper Saddle River, N.J., Prentice Hall, 1995) pp. 495 - 513.

maxim by appeal to ‘self-defeating’ proposals are just as vague and naïve as Kant’s own examples, the Ptolemaic efforts of Onora O’Neill notwithstanding.

[A] {--} [~I~]
 [A~] {--} [~I]
 [~A] {--} [I~]
 [~A~] {--} [I]

Read these leutic modal equivalents as follows.

[A] [Allowed to] {--} [not Enjoined not to] combine concepts in propositions whose functors satisfy Leutic Imperative (b) (ii).³

[A~] [Allowed not to] {--} [not Enjoined to] combine concepts in propositions whose functors satisfy Leutic Imperative (b) (ii).

[~A] [not Allowed to] {--} [Enjoined not to] combine concepts in propositions whose functors satisfy Leutic Imperative (b) (i).

[~A~] [not Allowed not to] {--} [Enjoined to] combine concepts in propositions whose functors satisfy Leutic Imperative (b) (i).

Only the [Sooth] functor takes the [Allowed] leutic modalities, above. All other functors take the equivalent [Injunctive] leutic modalities, above.²

THE CORRELATIVE via attiva & via passive RELATIONS between leutic modality and coherence value⁴

I talked about propositions’ coherence and incoherence before I introduced the leutic modalities. I could have continued doing this without introducing leutic modalities, but with them it’s easier to understand why a coherence logic enables us to dispense with alethic modalities and their analytic, a priori, a posteriori, and possible-worlds interpretations.

Leutic modalities are built into via attiva propositions by their functors’ coherence conditions as specified by the Leutic Imperative’s, LI, (b), (i) and (ii). I will use via passiva correlatives of via attiva proposition forms in the Exchange

2 The Leutic modalities tell us whether we’re [Allowed to], [Enjoined to], or [Enjoined not to] travel on a route between two or more concepts in lexical space—whether we travel by writing, saying, signing, The Leutic Imperative is hypothetical: **If** you wish to understand others, take the same routes between concepts they do, and **if** you wish to be understood by others, take the same routes in lexical space they do. For more on this Imperative, see *The Logical Structure of Conceptual Coherence 3.0*; pp. 136 – 139, on Bierman’s website: http://philosophy.sfsu.edu/philosophy/page/arthur_bierman. For faster entry, google: sfsu arthur bierman.

3 On ^correlative^, *Ibid.*, p. 66.

Table below. With correlatives we can report claims about propositions' modalities and their coherence values. The Table shows the relations between leutic and coherence-value symbolisms. Once you've grasped that propositions internally harbor their leutic modalities, you need not inscribe leutic symbols into written via attiva propositions nor via passive statements.

Here's how to read the Exchange Table entries, p. 4, ignoring the functor $\{\{\text{--}\}\}$ and the [Allowed] equivalents, $[A\sim]$, $[\sim A]$, or $[\sim A\sim]$. I use its first line as an example, starting with the *left side* of the Exchange Table. I ignore the leutic equivalences of [I] and [A] in my instructions of how to read the Table's entries.

Is coherent	Leutic {--}		Is incoherent	Leutic {--}
: S P	I: S P {--} ~A~		~ : S P	I~ : S P {--} ~A

Read on the left half, / \wedge : S P \wedge / under /Is coherent/ as the via passiva statement $\langle \wedge$ [Enjoined] [Bonded, :] S P \wedge is coherent \rangle .

Under /Leutic {--}/, the equivalence of [I] and [~A~] is added

Or read /: S P/ as a tendered via attiva advisory proposition, for example, as \wedge [Bond, :] \wedge bird \wedge \wedge winged \wedge .

Read on the right half, / \sim : S P/ under /Is incoherent/ as the via passive statement $\langle \wedge$ ~Bonded, :] S P \wedge is incoherent \rangle .

Under /Leutic {--}/, the equivalence of [I~] and [~A] is added.

Or read / \sim : S P/ as the tendered via attiva, advisory proposition, for example, as \wedge [~Bond, :] S P \wedge . \wedge [~Bond, :] \wedge bird \wedge \wedge white \wedge .

The transformation rules between the Leutic modalities [Allowed, A], [Enjoined, I], and [Enjoined not, I~] are the same as those for alethic transformations of [Necessary], [Possible], [Impossible]. Carrying [~] across an [A] in either direction enjoins us to substitute an [I] for [A]; the same travel across an [I] enjoins us to substitute an [A] for [I]. Double negation holds: [~~] {--} []. In the following table, I do not bracket the modal symbols. I assume you understand modals aren't concepts; so, I need not continue to bracket them.

I suspect most of you know the relations exhibited in this Table, so take it as a reminder when you're unsure of your judgments. This Exchange Table lists and explains seven of the eight functor copulas by their symbols, not their names. Assign/Emplace] are excepted. The have their own essays, "On Emplacing" and "Assignments & Varieties of Emplacements" on my website.

COHERENCE-LEUTIC EXCHANGE TABLE

1. Is coherent	Leutic {--}		Is incoherent	Leutic {--}
: S P	I: S P {--} ~A~:		~ : S P	I~ : S P {--} ~A:
[Bond, :]				

2. :+ S P Any proposition using an attribute concept of a congerary range, $[\text{Ai...An}]$, has the same leutic profile as a $[\text{Bond, :}]$ proposition.
[Conger, :+]
- 3a. $/\text{S1 S2} \quad \text{I}/\text{S1 S2} \{\text{--}\} \sim\text{A}\sim/ \quad | \quad \sim/\text{S1 S2} \quad \text{I} \sim/\text{S1 S2} \{\text{--}\} \sim\text{A}$
 3b. $/\text{P1 P2}$ The profiles of 3a. and 3b. subsumptions are similar.
[Subsume, /]
- 4a. $!\text{S} \sim\text{S} \quad \text{I}!\text{S} \sim\text{S} \{\text{--}\} \sim\text{A}\sim! \quad | \quad !\text{S S} \quad \text{I} \sim!\text{S S} \{\text{--}\} \sim\text{A}!$
 You may read $/!/$ as the *via passiva* [Incompatible]. With the *via attiva unary* functor, we [Counter] S with $\sim\text{S}$ or vice versa.
 4b. 4b.'s profile is the same as 4a.'s. $\langle !\text{P} \sim\text{P} \rangle$ is *via passiva* and $\wedge\wedge[\text{Counter}] \text{P}$ with $\sim\text{P}^\wedge$ or $\wedge\sim\text{P}$ with P^\wedge is the *via attiva*.
[Incompatible, !]
- 5a. $=\text{S1 S2} \quad \text{I}=\text{S1 S2} \quad | \quad \sim=\text{S S} \quad \text{I} \sim=\text{S S} \{\text{--}\} \text{A}=\$
 $=\text{S1 S2}$ is coherent if S1 and S2 are similar tokens and each has one and the same coherent emplacement. $\wedge=\text{S S}^\wedge$ is incoherent occurs when similar tokens have different emplacements as in */free will/* versus */free entry/*.
 5b. $=\text{S R}$ 5a. and 5b.'s profiles are similar, but 5a.'s tokens count as similar written or spoken tokens, while 5b.'s tokens count as dissimilar, \neq Samuel Clemens Mark Twain/. signaled by $/\text{R}/$ in $\neq\text{S R}/$ above. 5b. is coherent if their coherent emplacements are one and the same:
 5c. The 5a. and 5b. profiles hold also for property concepts, $\wedge\text{P}^\wedge$.
[Identify, =]
6. $*\text{S} \{\dots\} \quad \text{I}*\text{S} \{\dots\} \sim\text{A}\sim \quad | \quad \sim*\text{S} \{\text{--}\} \quad \text{I} \sim*\text{S} \{\dots\} \sim\text{A}*$
[Link, *] is an enjoined functor, linking an S concept with a range of trope concepts: $\wedge[\text{Link, *}] \wedge\text{surface}^\wedge \wedge\{\text{rough smooth wavy ...}\}^\wedge$ is an important bridge between coherent enjoined *de dicto* propositions and true allowed *de facto* statements. You're *de dicto enjoined to* travel from $\wedge\text{surface}^\wedge$ to its $\wedge\text{range}^\wedge$ of concepts, but *allowed to* [Sooth] to any one of the range's concepts; unless one of them is bonded to $\wedge\text{surface}^\wedge$ as in: $\wedge[\text{Bond}] \wedge\text{golf ball}^\wedge \wedge\text{dimpled}^\wedge$. The [Link] bridge underwrites the *Emplacement* account. of truth value.

[Link, *]

7a. $.S P \quad A.S P \quad \sim I \sim \quad | \quad \sim.S P \quad \sim A.S P \quad \{\sim\} I \sim.$

7b. $.S \sim P$ 7b.'s profile is the same as 7a.'s with $\wedge \sim P \wedge$ replacing 7a.'s $\wedge P \wedge$.

[Allow, .] is the only functor in this system that's not enjoined. Any proposition with an [Allow, .] functor has an empirical, contingent alethic value range, $\wedge \{true \ false\} \wedge$. [Allow]'s via attiva epistemological [Judge] functor has a three-valued $\wedge \{true \ false \ unknown\} \wedge$ range. Coherence logic is a two valued system. Entitlement is has a three valued range.

[Sooth, .]

* * * *

4a.'s reading is a little tricky. You may read $\wedge ! S \sim S \wedge$ as via passiva $\langle \wedge S \sim S \wedge$ is incompatible \rangle ; this statement is true because $\wedge S \wedge$ and $\wedge \sim S \wedge$ are incompatible. The via attiva reading of [!] is animated by conceptually negating [\sim] a concept or proposition. Thy name is [Counter]; I counter S with $\sim S$ and P with $\sim P$ as in “. This functor enjoins you to travel via conceptual negation from concept $\wedge S \wedge$ to its incompatible concept(S) $\wedge \sim S \wedge$ and vice versa.

The plural / (s) / in the preceding sentence's /concept(s)/, indicates $\wedge \sim S /$ covers contraries, {red blue yellow ...}; this range contains more than two concepts. The singular /concept/ covers the case when $\wedge \sim S \wedge$ and $\wedge S \wedge$ are contradictory, {alive \sim alive|dead}; this range contains only two concepts. [\sim] Generates two ranges of incompatible concepts, contraries and contradictories.

(a) We have *intra-range* travel as in $\wedge ! \{sweet \ \sim sweet/sour/bitter\} \wedge$. Both $\wedge sweet \wedge$, $\wedge sour \wedge$ and $\wedge bitter \wedge$ are contrary concepts in a range immediately subsumed under $\wedge flavor \wedge$. In this case, we negate $\wedge sweet \wedge$ with $\wedge \sim sweet \wedge$ to generate other concepts, $\wedge sour \wedge$, $\wedge bitter \wedge$, that belong to the same range and are on the same subsumption pathway. We also have the shorter contradictory travel from $\wedge S \wedge$ to $\wedge \sim S \wedge$. Call these collective **range incompatibilities**. I featured this in the Link and Soothwalk argument forms, pp. 73 – 83, *The Logical Structure of Conceptual Coherence 3.0* on my website.

(b) We have *extra-range* travel between concepts on diverse subsumption pathways that branch off from a common concept. $\wedge Red \wedge$ and $\wedge blue \wedge$ are intra-range incompatible; they belong to the same range because they're immediately subsumed by $\wedge colored \wedge$, but $\wedge scarlet \wedge$ and $\wedge azure \wedge$ belong to different ranges, being

subsumed, respectively, by the incompatible red^\wedge and blue^\wedge . $\sim\text{Red}^\wedge$ doesn't create azure^\wedge as blue^\wedge does, and $\sim\text{blue}^\wedge$ doesn't create scarlet^\wedge as red^\wedge does. Levels of subsumption deserve respect; they block unwary acceptance of 'secondary properites'. But because scarlet^\wedge and azure^\wedge lie, respectively, on red^\wedge and blue^\wedge 's incompatible subsumption pathways, they inherit red^\wedge and blue^\wedge 's incompatibility. Call this **subsumed incompatibility**.⁵

Both kinds of incompatibility are de dicto and de jure based. They govern the coherence value of propositions whose terms are either SS substantive concepts, $^\wedge[!]\text{martin}^\wedge$ $^\wedge\text{badger}^\wedge$, or PP property concepts, $^\wedge[!]\text{cold}^\wedge$ $^\wedge\text{tepid}^\wedge$. They also contribute to but do not exclusively govern the coherence value of SP propositions with the [Sooth, .] functor: $^\wedge[.]^\wedge\text{water}^\wedge$ $^\wedge\text{hot}^\wedge$ is coherent but $^\wedge[.]^\wedge\text{addition}^\wedge$ $^\wedge\text{tepid}^\wedge$ isn't. What's it like to swallow a tepid numerical addition?

However, the coherence value of sooth, de facto, propositions is not governed solely by range or subsumed incompatibility or by other enjoined functors. It's also governed by de facto truth value of sooth statements via the **siring** relation between alethic and coherence values:

$\langle\langle[.] S P\rangle \text{ is true or false}\rangle \dashv\vdash \langle^\wedge[.] S P^\wedge \ \& \ ^\wedge[.] S \sim P^\wedge \text{ are coherent}\rangle.$
 $\langle\langle[.] \text{tooth white}\rangle \text{ true/false}\rangle \dashv\vdash \langle^\wedge[.] \text{tooth white}^\wedge \ \& \ ^\wedge[.] \text{tooth } \sim\text{white}^\wedge \text{ are coherent}\rangle.$

The "verifiability" slogan of logical positivist's popular version of a truth-conditions theory of meaning from the 1920's on approximates my siring relation between truth and 'meaning'. By itself, even the oft revised versions of that theory fall far short of an adequate theory of 'meaning'; conceptual, coherence logic rights it with the siring relation. In sum:

We govern coherence values of all propositions with [Enjoined]de dicto and de jure functors (seven) to construct a lexical structure I call a lexical space, ex-

4 The attributes in a conger, $[A_i \dots A_n]$, at the top of their subsumption paths are what might approximately be called 'categories'; I prefer /determinables/. I stake nothing on the various ways "category" has been interpreted nor on the grounds justifying why some properties and relations and not others were selected to be categories. I chose the concepts in my examples as plausible categorical coherencies only, nothing more. I am not doing ontology but providing a methodology and canon for doing so. However, I think philosophers' search for an ontology of 'what is' is a misdirected enterprise. First, we should understand how humans may agree on concepts and propositions' coherence value before addressing ourselves to metaphysical 'statements' truth about what is 'really out there'. This would eliminate a lot of endlessly fruitless epistemological controversy. We need to shift to a more pragmatic center of philosophy. The emplacement functor, $[E \dots E]$, is neutral about whether objects/substantives should have a realistic or an idealistic ontology. What needs preserving is our capacity to judge the coherence value of emplacements.

cept propositions with the [Allowed] *de facto* functor. With that functor, we govern propositions' coherence with valid siring inferences:

True or False [Sooth] SP/S~P Statements --} [Sooth] SP and S~P Propositions' Coherence.

The truth value of statements hang on [Enjoined] coherent emplacements of substantives and tropes, respectively, into sentences' subject and predicate tokens.

The truth-conditions view of 'meaning' has the further logical feature that *de facto* [Sooth] statements' truth values that sire coherence value take precedence over *de dicto* and *de jure* determined coherence values of propositions. *De facto* coherence is a major motor for conceptual change that I illustrated in *The Logical Structure of Conceptual Coherence 3.0* with the shift from morphological to DNA grounds for classifying creatures and plants.⁶

Although the concepts in [Sooth] SP propositions beget neither range nor subsumed incompatibilities that SS and PP propositions do, they contribute to the coherence value of SP propositions, including SP congeries.⁷ They prompt us to modify substantives' congeries, $\wedge[:+] S [Ax \dots Ay]^\wedge$, to alter their coherence conditions in response to new knowledge. We can do this in two ways.

I modify $\wedge S^\wedge$ as $\wedge S|aspects^\wedge$ and $\wedge S|parts^\wedge$. (There may be more.) They give concepts in congerie attributions logical independence, hence, they free them from incompatibility. The concepts in ranges, $\{C1\dots Cn\}$ are incompatible; those in congeries $[A1\dots An]$ are not.

(i) $\wedge S|aspect^\wedge$ attributes characterize the *whole* of a substantive with such determinant *attributes* as $\wedge hot^\wedge$ and $\wedge firm^\wedge$.

These propositions

$\wedge[.] pepper|taste hot^\wedge$

$\wedge[.] pepper|texture firm^\wedge$

have different subjects, $\wedge pepper|taste^\wedge$ and $\wedge pepper|texture^\wedge$; hence, propositions about $\wedge pepper^\wedge$ with $\wedge hot^\wedge$ and $\wedge firm^\wedge$ aspects are logically independent. The aspect distinction entails that $\wedge[:+] pepper [hot firm]^\wedge$ is coherent although $\wedge hot^\wedge$ and $\wedge firm^\wedge$ are range concept incompatible. Both are friendly lodgers in $\wedge pepper^\wedge$'s congerie.

⁶ The following pages are further thoughts about congeries; see *The Logical Structure of Conceptual Coherence 3.0*, pp. 105 – 110.

⁷ See "Assignments & Varieties of Emplacements" on my web site. There I introduced enriched complexities for the [Emplace] functor that uses the perceptual extensions showered on us by low and high tech instruments that gift us with visual, auditory, ...magnifications, and by [As... If] stances of dead speakers who emplaced in the past..

(ii) $\wedge S|part$ attributes characterize different *parts* of substantives. A suspect's *eyes*' color (blue) may differ from his *skin*'s color (ruddy). Police may use both to identify a suspect without incoherence despite these colors' range incompatibly, because the $\wedge eye|part$ and $\wedge skin|part$ substantives are different sentence subjects. A classic example of the S|part move is Plato's spinning top in his *Republic*. (Plato, *Republic*, 436b, 58 - 437a) There he pointed out that an apparent contradiction between saying a top is both at rest and in motion at one and the same time isn't contradictory if you distinguish the top's center from its peripheral part and note their different relations to the surface on which it's spinning. The contradiction disappears when its different parts are distinguished: $\wedge [.] S|center rest$ versus $\wedge [.] S|periphery motion$. Plato's point applies to other congerly predications. A toucan's crest may be red and its beak blue, so that both $\wedge [:+] toucan|crest red$ and $\wedge [:+] toucan|beak blue$ may be coherent, because the propositions have different subjects. So, $\wedge [:+] toucan [red|crest blue|beak]$ is coherent; the incompatible color concepts are compatible lodgers in $\wedge toucan$'s congerly.

Here's the form of the inference that subsumed incompatibilities may, with the S|part distinction, lie down in peace in any substantive's congerly, just as they do in $\wedge toucan$'s and Plato's spinning top:

$$\begin{aligned} & \wedge [.] S|part1 Trope1 \wedge \wedge [.] S|part2 \sim Trope1 \wedge \\ & \wedge [!] Trope1 \sim Trope1 \wedge \\ & \wedge [/] Trope1 Ti \wedge \wedge [/] \sim Trope1 Tj \wedge \end{aligned}$$

$$\wedge [!] Ti Tj \wedge$$

$$\wedge [.] S|part1 Ti \wedge \wedge [.] S|part2 Tj \wedge$$

$$\wedge [:+] S [Ti Tj] \wedge \quad \text{Coherent}$$

Since $\wedge S|part1$ and $\wedge S|part2$ are distinct parts of one and the same substantive with incompatible attribute concepts, T and $\sim T$, that subsume, respectively, the incompatible attribute concepts Ti and Tj. Since Ti and Tj are coherently soothed of different parts of S, we may conclude that $\wedge S$'s congerly coherently contains, simpliciter, Ti and Tj, thanks to S|parts.

Here are further remarks, although somewhat repetitive, that may consolidate your understanding of what I've writ. Incompatible range concepts for a sub-

stantive's *aspects* differ logically from the incompatible range concepts for its *parts*. Only one of a range's incompatible trope concepts may be coherently soothed, bonded, or congered of one and the same substantive concept; the same holds for any concepts subsumed by such concepts. [^]Cube[^] can't have [^]sided[^]'s *subsumed incompatible* [^]equal-sided[^] and [^]unequal-sided[^] tropes in its congerity.

Several incompatible trope concepts of a range may be coherently soothed of, bonded or congered to different [^]parts[^] of [^]toucan[^]. Although [^]scarlet[^] and [^]azure[^] are incompatible--[^][/]red[^] {*scarlet* Chinese-red ...}[^] and [^][/]blue {*azure* cerulean ...}[^], both may be coherently soothed, bonded, or congered of [^]toucan[^]'s different parts: Both [^][Sooth, .] toucan|crest-part **scarlet**[^] and [^][Sooth, .] toucan|beak-part **azure**[^] are coherent.

Conceptual logic allows that the world's de facto actuality overrides our de dicto enjoinders, and, ultimately, solicits us to make de jure decisions about the structure of our lexical/conceptual system. This is important. It explains why the logical positivists' oft revised mantra—Without specified truth value conditions, sentences have no meaning—lured so many philosophers for so long, including even, Donald Davidson, the Dean of the Wary. Of course, it wasn't possible to come up with persuasive accounts of the mantra's exaggeration; without conceptual logic, they couldn't do that.

* * * *

Here's a **summary** of the [Congery] functor's features.

[Congery, :+] S [A1 ... An], where [A1 ... An] are complicit, incompatible trope concepts.

(i) Each complicit trope concept in a congerity, [...], is *bonded* to a substantive concept, either the substantive as a whole, [S|aspect], or its [S|part]s, unlike a range of *linked* trope concepts, {...}, to a substantive.

(ii) Subsumed concepts of incompatible congerity concepts' are incompatible.

(iii) The highest concept of each complicit subsumption pathway is a determinable, under which there are determinate concepts.

(iv) Each complicit determinable concept of a congerity and all their subsumed determinate concepts are incompatible with all other complicit determinable concepts of a congerity and their subsumed determinate concepts.

(v) Complicit, unique attribute concepts in congeries' bonded ranges, [^][[:+] [A1 ... An][^], distinguish one kind of substantive from another, and

(vi) have been used to identify determinable substantive concepts, such as $\hat{\text{matter}}$ versus $\hat{\text{mind}}$. Think of Descartes' $\hat{[\text{extended} \sim \text{thinking}]}$ versus $\hat{[\sim \text{extended thinking}]}$ congeries.

* * * *

Traditional acolytes of the de re Peripatetic Program confused essential *attributes* of substance|objects with complicit *concepts of them*; they thought they were doing natural science classifications rather than conceptual work. Even Rene' was unable to free himself completely from Papa' Aristotle, no more in Sweden than in Holland or France. Many contemporaries (2014) still think classifications mirror 'nature's joints' even though de facto discoveries *await* de jure decisions that alter earlier 'joints'. Substantive concepts' congeries are constructed by de jure choices from their de facto property concepts; you have some 150 choices for dinosaurs' congerly concepts. S concepts have no existence apart from their P congeries. Some de facto trope concepts coherently soothed to substantives are chosen to enter their congeries, others are not. Of course, choices, often controversial, must be justified.⁸

I've explained why congeries are coherent even though they harbor incompatible complicit concepts in another place.⁹

* * * *

Hegel thought he could overcome all contradictions and revive Parmenides' One. This required that all 'contradictions' be overcome (aufheben) by relentlessly distinguishing concepts within a lexical system and by enrichments of substantives' congeries. There would be hope for his program were the world a static firmament, but, ironically, for the champion of change contra Kant, it's not quiescent. We're eternally condemned to make de jure congerly choices because the undending evolution of cosmic and local geography, of animal and plant species and of social relations, fosters ongoing changes in substantives' tropes. The mad

⁸ Justification is discussed at some length with examples on pp. 97 – 127, *The Logical Structure of Conceptual Coherence 3.0*. The examples include the congerly changes for dinosaurs and birds, and whappos and whappigs. On pp. 127 – 133, of 3.0, I explain de dicto, de facto, and de jure grounds for coherence values.

⁹ See pp. 105 - 110 in *Conceptual Logic 3.0* (short for *The Logical Structure of Conceptual Coherence 3.0*) for a more radical and more fertile solution to the 'congerly crisis'. It's also more questionable because it relies on a speculative, immature logic of conceptual relations that was but stirring in its crib, but has matured quite a bit, as in the last part of this essay.

dream of a wholly coherent system of concepts of our cosmos is philosophically pathological. “The market is up today on ^S|aspect^s and and down on ^S|parts”.

Hegel didn’t distinguish, first of all, between alethic contradiction and opposition, which Kant did. If he had, he’d have saved himself from a lot of silly alethic claims. Nor did he differentiate ^incoherent^ and ^contradictory^, a failure he shares with most philosophers up to and including today (2015). Re-reading his *Phenomenology* as a discourse on the dialectic of coherence rather than truth value, a sympathetic reader could profit from his imagined ‘conceptual’ rerun of Western Civilization’s intellectual course from its youthful, exuberant incoherences to its imagined mature reduction of all our concepts into a wholly coherent “Absolute”. If we were to eliminate all propositional and alethic incompatibilities, we would cast out every rending pluralism that threatened Idealists’ Absolute. The Cambridge pluralists B. Russell and G. E. Moore discredited Oxford Idealists who carried the torch for Hegel in England, who foresaw the arrival of the Absolute, at least in Western civilization, as a plenum of coherences and truths. All else would be silence. No one need hear “Absurd” and “False” again. This hope has an appealing allure, don’t you think? So bold, so optimistic. Yet, so wrong.

* * * *

The Exchange Table (p. 3) doesn’t fully reflect the deployment of [Allowed], which includes [A] and [A~].

^[A, .] bone white^

allows you to sooth ^white^ of ^bone^.

^[A~, .] bone white^

allows you not to sooth ^white^ of ^bone^, and, so, to sooth some other color concepts of ^bone^. The [~] in [A~] moves inside the proposition to negate the concept ^white^; so, you’re free to sooth a ^~white^ trope of bone whether ^gray^ or ^red^ without loss of coherence. ^[A, .] bone ~white/gray/red^ is coherent. ^Red in tooth, claw, and bone^ goes through coherently.¹⁰

Distinguish [A~] from [~A]

[A~] {--} [~I], [not enjoined to] travel from C1 to C2;

[~A] {--} [I~], [enjoined not to] travel from C1 to C2,
[not allowed to] travel from C1 to C2.

¹⁰ See pp. 81 – 82 on the Sooth Walk inference, *Conceptual Logic 3.0*. Hereinafter, in this essay, I will often use only “3.0” for naming that essay.

Given the coherence-leutic exchange possibilities, p. 3, and the leutic natures of the various lexical functors, I could dispense with the leutic symbolism in my exposition of coherence logic without loss; however, I shan't so dispense when I'm addressing philosophical issues tainted by alethic doctrines. If you've grasped the Exchange Table, which reflects the application of Leutic Imperative (b), (i) and (ii), you'll see it causes no loss of conceptual information.¹¹ Although Lexical Imperative (b) (Fn. 11) notes each functor tenders a modality for lexical strolls, we're enjoined from speaking incoherent English if we wish to be understood literally by our fellow English speakers who do speak a coherent version of it. Of course, one person's coherence may be another's incoherence. That's why we need coherence logic as a reconciliatory tool. Why else spend five decades on this logic, Tom, if it weren't a civic duty to provide and use a conceptual canon for public discourse?¹²

All lexical functors have coherence limits: The functors with the [Enjoin] modality puts more severe limits on tendered propositions than on those with the [Sooth] and [Emplace] copula functors.¹³ But these [Allow] functor propositions don't have unlimited latitude; hence, some [Sooth, .] and [Emplace] propositions are incoherent.

There are important relations between the leutic modality of functors specified by LI(b) and the coherence value of propositions: Functors', [Enjoined] and [Allowed], modal limits, affect propositions' coherence value, and, so, functors' advisory status.

¹¹ See 3.0, pp. 136 – 139, for the Leutic Imperative below:

(a)

If you wish to be understood by speakers who travel within a lexical system, travel only on their coherent enjoined and allowed via attiva paths.

(b)

(i) If a coherent proposition becomes incoherent when at least one of its concepts is negated, we're *enjoined to* travel on the path it tenders and are enjoined *not* to travel on the path that the propositions with the negated concept(s) tender.

(ii) If a coherent sooth proposition derived from a link proposition by (SLW) does not become incoherent by negating either or both of its concepts, we're *allowed* to travel on the paths tendered by the sooth propositions with any combination of negated and unnegated concepts in that link range of concepts.

¹² This coherence/conceptual logic is the philosophical basis for the yet unwritten epilogue of my *The Philosophy of Urban Existence*, which was the prologue to this humanistic civic endeavor.

¹³ See *Conceptual Logic 3.0* on p. 83f of my website for Enjoining Princes and the Allowed Vassal.

We're [Enjoined not to]/[I~], [not Allowed to]/[~A]/ form any incoherent propositions, including those with an allowed functor. We're [Allowed to, A], [not Enjoined not to, ~I~], form any coherent proposition, including those with enjoined functors; [Allowed to, A] is a modal functor only for Sooth propositions.

REWRITING ALETHIC MODALS AS LEUTIC MODALS

Statements conventionally burdened with alethic modalities should be rewritten as via passive claims about the leutic modality and coherence of our via attiva propositions. Via passive leutic claims report the tendered via attiva modes of copulaic travel between categorematic concepts as tendered by such sentential syncategorematic/copulaic acts as [Bond], [Link], [Subsume], [Sooth], [Negate].

I occasionally shift between using “travel between concepts” and “combine concepts” in via passive reports, which does no harm insofar as they're equivalent descriptions of lexical acts we originate and suffer. The downside of [Combine] is that it tempts us to think of concepts as ‘abstract entities’, as if we were combining non-material lego pieces, my earlier, perhaps injudicious, analog. Keep in mind that concepts are physical word-token-things lodged in structured lexical space; their locations in space are determined by the lexical logic of functors, which invite us to take coherent versus incoherent paths between them; they advise us, in old-speak, about coherent and incoherent ‘compositions’ of sentential tokens. David Prall suggested that our cognitive activity is “aptness of the body”.¹⁴ Neither reify nominalize, nor deify, good Tom.

I propose the following via passive leutic modal rewrites of alethic modals:
 <Necessary <Rubies are red>> as <[Enjoined to bond] ^ruby^ and ^red^>;
 <Impossible <Rubies are blue>> as <[Enjoined not to bond] ^ruby^ and ^blue^>;
 <Possible <My ruby is small>> as <[Allowed to sooth] ^ruby^ and ^small^>.

I interpreted the [are] in <Rubies are red> as [Bond], because avid, English-speaking gemologically hip shoppers know ^ruby^'s ^red^ differentiates it from other precious stones. These shoppers also know ^red^ may be bonded to but one

¹⁴ David Prall, “Knowledge as Aptness of the Body”, *The Philosophical Review*, Vol. 44, 1935. Our cognitive capacity is, among other things, our body's aptness for manipulating tokens in sentential contexts and coherence logic.

concept in the precious gem-noun range, namely, to \wedge ruby \wedge . Garnets are semi-precious red stones, my dear.

Using [Travel] rather than [Combine] to characterize our lexical acts, we get these sample via passiva rewrites:

<Necessary <Rubies are red>> as <[Enjoined to travel] between \wedge ruby \wedge and \wedge red \wedge >;

<Possible <Ruby is small>> as <[Allowed to travel] between \wedge ruby \wedge and \wedge small \wedge >.

<Impossible <Rubies are blue>> as <[Enjoined not to travel] between \wedge ruby \wedge and \wedge blue \wedge >.

THE COPULA AND COHERENCE LOGIC

Perhaps the most important outcome of coherence logic for English is its help in understanding the ‘intensional’ logic of its copula, which most philosophers and logicians confine to ‘extensional’. They’re guilty of this over-simplification, because they’re in thrall to their exclusive alethic interpretation of the copula; this centuries-long practice of conventional logicians leaves no place for an intensional coherence logic. In my logic, [Sooth, .] and [Emplace, **E...E**] are functors in “matter of fact” statements; no other of the other seven copula/functors in the via attiva mode are factually predicative. The injunctive functors are not ‘predicative’, although they limit what may be coherently predicated with these functors via the funnel of the injunctive linkage functor. Sooth and emplace propositions have alethic results, because coherent emplacements of substantives and tropes into token sentences determine their truth value.¹⁵

It’s not often noted how damaging it is to attribute the alethic modal [Possible, M/Moeglich] to sooth statements, <M< [.] S P>> and <M< [.] S ~P>>. It’s easy to take the via passive stance toward them and think they’re True or False statements only, neglecting the via attiva *entitled* stance toward truth value: We’re entitled to say they’re true, false, or unknown, depending on their coherence assignment/emplacement profiles. Ardent alethic modalists don’t know that [Possible] derives from [Allowed]. They attribute [Possible, M] to statements, because

¹⁵ C. I. Lewis’s forays into his so-called intensional and alethic modal logic is still extensional logic. His quarrel with Russell and Whitehead, and their predecessors and successors, is not about an intensional vs. an extensional logic, but with the preferred interpretations of [If...,then...]; the functors [\rightarrow], implies, and [\dashv], entails.

they're ignorant of the following logically prior, coherence conditions for [Allow]:

- (i) The copula of a sentence used to make a statement is the [Sooth] functor;
- (ii) the sentence must have a coherent propositional interpretation; and
- (iii) it has coherent emplacements, incoherent emplacements, or at least one non-existent (angel) pseudo-emplacement.

Thus, fully coherent sooth propositions underwrite “synthetic” judgments/statements. The injunctive functors replace “analytically true and false”, “alethically necessary/impossible” judgments/statements. Quine rang the tocsin. The analytic/synthetic distinction had long been sinking, laden as it was with primitive notions of concepts adrift on porous mental and quinean behavioral rafts along with part/whole meanings that favored compositional accounts of sentence meaning and simplistic accounts of definition and synonymy unsalvageable by ‘markers’ drawn from chomskyan grammar.

A structural account of lexical concepts proffers the blade of coherence logic with which we can disjoin ourselves from the analytic/synthetic and its traditional, associated supports that Kant regimented. With that same blade, we can sever the alethic cords that retarded an understanding of what a “conceptual system” is, and of dismissing over-simple ‘truth conditions’ theories of meaning. Twentieth Century analytic philosophy has become repetitive, laboring on finer and finer distinctions about its tools that have no issue for public conceptual discourse about practical problems. It’s research has centered on mathematics and physical science. There’s more to do. It’s time for this century’s philosophers to take new turns, try fresh approaches, and enjoy happy release from ‘analysis’.

More good news: Lexical systems aren’t set in granite; we may cooperatively develop, correct, extend, and refine them. This is possible because the injunctive functors aren’t injunctively injunctive, not necessarily necessary; $\wedge I [/] P1 P2^{\wedge}$ does not entail $\wedge I I [/] P1 P2^{\wedge}$.¹⁶ The injunctive coherence of $\wedge [/]$ colored black \wedge is contingent upon an alterable lexical system, even though “black is what it is and not another thing”. This instance of Bishop Butler’s oft-quoted phrase gets its bite from the incoherence of $\wedge EblackE @ /red/\wedge$ and $\wedge EnoirE @ /rouge/\wedge$. We may make de jure and de facto grounded changes in a lexical system; a coherent

¹⁶ We’re enjoined to travel, for example, subsumptively from $\wedge hot^{\wedge}$ to $\wedge scalding^{\wedge}$, but we’re not enjoined to enjoin any one to so travel. The Lexical Imperative is hypothetical. We don’t use [Enjoin] to enjoin enjoinments, but to advise ourselves and others to take travel paths likely to subsidize propositional exchanges with each other.

^[/] colored black^ in a lexical system may become incoherent in that revised system. Whether it is or isn't coherent is a long-vexed question, hotly debated in mediaeval times, more coolly now. Black objects reflect no ~black color. Have you had any recent sightings of green fallen angels, Tom? Bertholt Brecht doubted you would have any: "Those who are in darkness drop from sight". (*Three Penny Opera*)

Another reason to substitute [Allowed] leutic propositions for [Possible] 'synthetic' statements, <S>, with the forms <. S P> and <. S ~P> is because both may be coherent. But it's [Impossible] for both <. S P> and <. S ~P> to be true. As to [Necessarily false] in this light:

$$\wedge[\text{Incompatible, !}] \wedge \text{true} \wedge \wedge \text{false} \wedge \wedge$$

<<[.] S true> & <[.] S false>> is incoherent;

hence, <S> has no alethic value, which is why a fortiori the conclusion can't be alethically self-contradictory, nor [Necessarily] false. Both allowed 'synthetic', sooth statements may be coherent, but not both may be true and false.

Further, the Law of Non-contradiction, <[Impossible] <S> and <-S>>, for soothage statements is best explained as a restriction imposed by the required coherence of emplacement propositions: It's incoherent to emplace one and the same trope into /P/ and /~P/ of /[.] S P/ and /[.] S ~P/. *Coherence has logical priority to truth*, because the coherence value of emplacements into the subject and predicates of /[.] S ~P/ and /[.] S P/, with which we make the sooth statements, <[.] S ~P> <[.] S P>, determine those statements' respective truth values.

/[.] S ~P/	or	/[.] S P/
(C) $\wedge [.] \text{EsE} @ /S/\wedge \wedge \text{E}(s)p\text{E} @ / \sim P/\wedge \text{--}$		$\wedge [.] \text{EsE} @ /S/\wedge \wedge \text{E}(s)p\text{E} @ /P/\wedge$
<S+ P~> = <[.] S ~P> is false	--}	S+P+ = <[.] S P> is true ¹⁷
<The book is ~thin> is false	--}	<The book is thin> is true.

The first conjunct in (C)'s antecedent shows an object, s, is coherently emplaced in /S/; its second conjunct, $\wedge \text{E}(s)p\text{E} @ / \sim P/\wedge$, shows s incoherently carries a property p into /~P/, which makes <[.] S ~P> false. However, s does coherently carry p into /P/ in the consequent's second conjunct, $\wedge \text{E}(s)p\text{E} @ /P/\wedge$, making <[.] S P>

¹⁷ /S+/ in /S+~P/ is short for /The emplacement of /s/ into /S/ is coherent/; the /P~/ in /~P~/ is short for /The emplacement of /p/ into /~P/ is incoherent/. /S+P+/ is short for /The emplacements /S/ and /P/ are coherent/.

true. A book can't coherently carry a ~thin and thin trope into /thin/. This shows an emplacement account of truth value underwrites Aristotle's Law of Non-contradiction. <The book is thick and thin> can't be true (all other factors being equal), because one and the same trope can't be coherently emplaced in both /~P/ and /P/.

Aristotle may have been fishing for this coherence logical account when he was trying to defend the Law of Non-contradiction.¹⁸ He writes, "But if all are alike both wrong and right, one who is in this condition will not be able either to speak or to say anything intelligible."¹⁹ He could plausibly be interpreted as trying for a coherence logic reason to bolster his defense of Non-contradiction, if it's plausible to interpret "intelligible" as ^coherent^ and "unintelligible" as ^incoherent^. His interpreters and translators may have missed this by thinking his logic, like theirs, was solely alethic.

Ross's translation has Aristotle endorsing a redundancy: unable to ^to speak or to say^, unless Ross intended ^to state^ for /to say/. Strange. Anyone may 'speak', 'say' out loud, /The book is thick and thin/, whether or not the sentence is "intelligible". Having no Greek, Tom. I resort to H. G. Apostle's translation: ^can neither speak nor mean anything^.²⁰ /Nor mean/ in place of /say/ avoids the redundancy and also offers support for interpreting "unintelligible" as ^incoherent/meaningless^. Aristotle didn't shy away from insulting his opponents; in Apostle's translation, he avers that whoever violates the Law of Non-Contradiction, wouldn't "differ from a plant". Hey, Cabbagehead, smarten up! But, lacking conceptual and alethic negation, cabbages, unlike kings, can neither deny nor forbid anything.

* * * *

Tom, it's time for a short clarifying, historical digression on ^materially implies^, [\rightarrow], as used in alethic logics, and ^entails^, [--}], in Lewis' strict implication versus [--}] as used in this coherence logic. This will help you to "compare and contrast" my conceptual entailment, [--}], from Russell and Whitehead's implication, [\rightarrow] and from Lewis' [--}].²¹ [Entails] and [Implies] are via passive reports on arguments' premises and conclusion. [Infer] is the via active sibling of

¹⁸ See his *Metaphysics*, Bk. IV, Ch. 4, a problematic section on why violating the law damages discourse.

¹⁹ 1008b, 8 -10; trans. W. D. Ross.

²⁰ Apostle, Hippocrates G., *Aristotle's Metaphysics*, same lines as Ross's; Bloomington, Indiana University Press; 1975. Of course any one may speak, utter, a contradiction; Apostle repeats Ross's error; so, that part of their translations has to be changed.

²¹ [Entails] and [Implies] are via passive reports on arguments' premises and conclusion. [Infer] is the via active sibling of [Entails] and [Implies] we construct inferences. Quine differentiated the (via attiva) [If...then] [Infer] *connective* from the (via passive) *semantic* report [Implies]. Quine's terms are in italics.

[Entails] and [Implies] we construct inferences. Quine differentiated the (via activa) [If...then] [Infer] *connective* from the (via passive) *semantic* report [Implies]. Quine's terms are in italics.

I drop Quine's redundant "names" and write the [Implies] semantic statement as:

<[Implies, \rightarrow] <All men are mortal> <All white men are mortal>>.

The second clarification distinguishes <[Implies] <p> <q>> from <[Entails] $\wedge p \wedge q \wedge$ >; the first is a semantic relation between statements, the second between propositions. Russell interprets material [Implies] and Lewis interprets his strict implication, [$--$], as relations between *statements* whereas I interpret [Entails] as a relation between *propositions*, between interpretation/rewrites of sentences.

I propose a three-step semantic process from /sentence/ to \wedge proposition \wedge to <statement>. Lewis' skips my \wedge proposition \wedge ; he goes directly from /sentence/ to <statement>; hence, it's seriously misleadingly to say Lewis' system is \wedge intensional \wedge . At least it's not intensional in the way my coherence logic is; his logic is extensional, because all his readings of his symbolism are wholly alethic, including all his modal readings. It's not extensional, of course in the way Principia Mathematica (PM) is, because Lewis adds to PM (i) [Possible], (ii) the relations of strict implication and consistency, and (iii) uses them to isolate the concept \wedge deducible \wedge . (iv) He notes that some implications are valid on the basis of their statements' concepts rather than their logical constants alone. His example of (iv) is <[Entails] <Today is Monday> <Tomorrow is Tuesday>>. ²² However, he doesn't formulate a logic for such inferences, even though it's an intuitively strong 'intensional' example. My whole concentration, on the other hand, is on just these unexploited 'intensional', logical relations between concepts. \wedge today \wedge , \wedge tomorrow \wedge , \wedge Monday \wedge , \wedge Tuesday \wedge , and between the propositions in which they're lodged.

* * * *

'Extensionalists' opt for 'material implication' (Russell), 'intensionalists' for 'strict implication' (Lewis) or some variant of it. Lewis' principal aim is to supplant Russell's material implication with a strict implication semantic relation, because he wanted to explicate \wedge deducible \wedge . Lewis remarks "that $p -- \} q$ is equivalent to 'q is deducible from p', while $p \rightarrow q$ is not."²³

²² C. I. Lewis and C. H. Langford (L&L), *Symbolic Logic*, p. 156; New York, Dover Publications; Unabridged and unaltered reprint of the first edition, The Century Co., 1932.

²³ L&L, p. 139. In 18.1, p. 159, Lewis pulls [Possible, M], [consistent/o], and [strict implication] \wedge together:

travel between subject and predicate concepts in lexical space that gives us an ‘intensional’ logic for concepts and propositions worthy of the name.²⁵

I’m cheering for the primacy of valid, via attiva inference tenderings--^[Infer] ^q^ [from] ^p^--relegating via passive--<<q> is deducible from <p>--to secondary rank. Sprinter Dove is the first to hit the tape--via attiva act; the announcer declares Dove the winner--via passive report. Lewis’ logic and its variants are enriched extensional, via passive logics. They rely on various explanations of ‘alethic’ modalities, such as possible worlds, or on inferential alethic restraints such as relevance to explicate so-called ‘intensional logic’. All are incoherently conceived endeavors, because ^alethic truth^ and ^conceptual coherence^ are incompatible, although complementary, concepts. I’ve often shown you they’re incompatible, Tom.²⁶ No amount of alethic tinkering can ever yield a conceptual/coherence (intensional) logic.

Although I use Lewis’ strict implication symbol, [--}], in my logic, it differs from his, because mine is not a semantic via passiva alethic relation between statements but invites us to execute a via attiva act of inferring from premises to a conclusion in conceptual arguments. My conceptual [Entails, --}], invites us to infer validly from coherent premises to a coherent conclusion, ^[--] ^p...pn^ ^q^. With this validity in hand we can give true via passive reports about the entailments between propositions, <[--] ^p...pn^, ^q^>, so <^q^ is deducible from the premises>.

Lewis requires that <[Implies] p q> be interpreted as ^<q> is deducible from <p>, and holds that his strict implication, [--}], satisfies this requirement. He offers this alternative interpretation of [Implies] to Russell and Whitehead’s material implication, [→]. Although the falsity of <I’m frying eggs in San Francisco now> and the truth of <I’m a monkey’s butler> satisfy the material implication standard for the truth of

< [Implies, →] <I’m frying eggs in San Francisco now> <I’m a monkey’s butler>>,

it violates Lewis’ 17.12,

²⁵ Parry, p. 121, gives an example of what Lewis thought was an intensional implication. On my website, my essay “Connexion and Contradictions”, gives you details on conceptual connexions and conceptual via attiva inferences.

²⁶ <- << . p q> & < . p ~q>>, usually called an alethic /contradiction/, is rather an incoherent conceptual proposition. But both ^ . p q^ & ^ . p ~q^, as two distinct propositions outside the scope of [&], are coherent; hence, one is true and the other false, because coherent emplacements in /p/ and /~p/ are incompatible. So [=] ^contradictory^ ^coherent^. 1 =|= 2.

$$p \dashv\vdash q \text{ .}=\text{.} \sim(p \circ \sim q).$$

Read $\sim(p \circ \sim q)$ as $\wedge \langle p \rangle$ is inconsistent with $\langle \sim q \rangle$. For Lewis, $\langle I'm \text{ frying eggs in San Francisco now} \rangle$ and $\langle I'm \text{ a monkey's butler} \rangle$ (my example) are, however, “as far as one can see...not inconsistent with one another”. Lewis’ examples are “Roses are green” and “Sugar is sweet” (*L & L*, p. 154).²⁷ He thinks there’s no deductive glue holding them together; they’re logically independent.

Lewis needs such conceptual functors as bonding, subsumption, linking, as well as range and congerly incompatibilities for their intensional glue; without them, he can’t fully explain why $\langle I'm \text{ a monkey's butler} \rangle$ is not deducible from $\langle I'm \text{ frying eggs in San Francisco now} \rangle$. Some possible world semanticists fall short because they narrowly limit themselves to ‘essential properties’ of ‘natural kinds’ (Hello, Aristotle). The logic of the congerly functor isn’t available to them. Relevance logicians juggle alethic-based restraints and thereby cast their fate with alethic players. No fault of theirs, because they didn’t have the conceptual/coherence logic, which is here, *now*.

Revising Alvin Plantinga’s Alethic Modal Attributions

I return to Plantinga’s statements to which he attributed the alethic modality [Necessary, L] (3.0, p. 91). I take his account of alethic modalities as canonical. In what follows, I show how to convert [Necessary] alethic ‘statement’ examples into coherent leutic via attiva propositions and their via passiva correlatives. I will show you how to reconceive them as via attiva propositions by replacing the alethic via passiva [Necessary, L] with via attiva leutic [Enjoined, I] modality. We can also conceive of ‘necessary’ statements as correlative via passiva modality statements about via attiva conceptual travels in lexical systems. **LI** and **LexImp** are short for **Lexical Imperative**; I use these symbols in place of van Fraassen’s “/” symbol, which he uses to abbreviate hypothetical’s “on the condition that”. My symbols **/LexImp/** and **/LI/** abbreviate:

²⁶ See James D. McCauley, *Everything that Linguists Have Always Wanted to Know about Logic*, (Second Edition; Chicago; University of Chicago Press, 1993) 400ff, esp. p. 401, where he compares Anderson & Belnap’s relevant logic to Lewis’ ‘strict implication’. What’s lacking is an ‘intensional’ account of ‘relevant’, which can’t be supplied without at least as much coherence logic as my system has. Until that’s offered, ‘relevant’ is but the promise of an intensional restriction on material implication. \wedge Relevant \wedge is going in the right direction but needs to have a conceptual logic that yields a new set of valid inference forms that are drawn from relations between concepts.

If you wish your lexical propositions to be understood by others as you do, and **if** you wish to understand others' propositions as they do, then travel on the same routes between token/concepts as they do.

The forms of lexical propositions implicitly include my **LexImp** provision as this schema does explicitly:

$\wedge[\text{Enjoined, I}] [/] \wedge C1 \wedge \wedge C2 \wedge \text{LexImp} \wedge$.

Read this via attiva proposed schema as $\wedge[\text{You're enjoined to subsume}] \wedge C2 \wedge [\text{under}] \wedge C1 \wedge$ on the **LexImp** condition \wedge , as in

$\wedge[\text{Enjoined, I}] [\text{Subsume, /}] \wedge \text{cloud} \wedge \wedge \text{thunderhead} \wedge \text{LexImp} \wedge$.

The following schema is a correlative via passive statement form,

$\langle \text{Subsuming } \wedge S2 \wedge \text{ under } \wedge S1 \wedge \text{LexImp} \wedge \text{ is enjoined} \rangle$.

$\langle \wedge[\text{Subsumes, /}] \wedge \text{cloud} \wedge \wedge \text{thunderhead} \wedge \wedge \rangle$ is true \rangle , a coherent via passiva statement given the fulfilled **LexImp** condition.

This via passiva statement's truth is initially based on observing 'widely' shared coherent travels in native speakers' lexical space and shared assignments/emplacements in token sentences' terms. When native speakers' lexical habits differ, which is prime socratic grist, this has to be repaired by using coherence logic. How else could philosophy continue to exist century after century? Philosophers thrive happily on repairing conceptual differences. They've got useful work to do. Conceptual harmony lets philosophers dose, dissonance animates them. Coherence logicians can reason us to shared coherence and conceptual civility! It has a normative civic duty to fulfill. Hemlock is the reward.²⁸

It's incoherent to attribute alethic modality to *propositions*, even to enjoined, bonded propositions; $\langle \wedge[\text{Necessarily true}] \wedge : S P \wedge \rangle$ is an incoherent schema, because propositions with that form don't have truth value, only coherence value. There are, however, true and false correlative *statements about propositions*' and their leutic modalities. Their truth depends on contingent enjoinedments and allowances of the lexical system under the aegis of the Lexical Imperative; statements may be false, because they violate these contingencies.²⁹ Alethic logicians tend to

²⁸ See my website, "The Most Important Philosophical Argument".

²⁹ $\langle \text{God exists} \rangle$ should be conceived as $\wedge \text{EgodE} @ / \text{God} \wedge$. Thus, $\langle \text{God exists} \rangle$ is not a statement, but an emplacement that has to be evaluated as coherent or incoherent. This is a better way of expressing Kant's denial that */exist/* is a predicate. Lacking a predicate, */God exists/* must be given another reading, as here. Obviously, you can't emplace god in */God/* as you can emplace a dime in */dime/*. How do you show there is a being, god, that you've coherently emplaced in */God/*? Anselm's argument is a lexical ballet that can never descry the dancer from the dance. Classical arguments for God's existence, as in Thomas Aquinas, are transcendental arguments whose only outcome can be a conceptual conclusion, never an existential emplacement. The argument that I can't conceive the creation

dump distinct lexical functor interpretations into the all-purpose predicative copula [To be], that is into the [Sooth, .] functor in my conceptual system.

<RED IS A COLOR>

The alethic

<[Necessary, L] [.] Red is a color>,

becomes the leutic via attiva

^[Enjoin, I] ^[Subsume, /] ^colored^ ^red^ LexImp^^.

Its correlative via passive is

<[Enjoined, I] ^[Subsuming, /] ^colored^ ^red^^ LexImp>.

The via attiva is coherent, the via passive is true. The via attiva's functor [Subsume] has no /-ed/, but the via passiva's functor does.

of the material world without conceiving an uncaused cause is just a transcendental break with the concept of linear causality. ^Linear causality^ bears the seeds of an infinite retreat that God-existentialists have to stop; ^uncaused cause^ suits them; so, they just say it. This transcendental argument rests on the bare-faced incoherence of ^uncaused cause^; it's incompatible with its built-in, indefinitely voracious ^linear^ form whose appetite not even god can escape, for no cause can come into being without first being an effect; EGodE, too, is an effect. Whoever remains faithful to ^linear^ can never cede "an ^end^ on it" whilst conceiving said ^end^ as ^a cause^ and never as ^an effect^.

<NO NUMBERS ARE HUMAN BEINGS>

<[L] No numbers are human beings> becomes

\wedge [I] [\sim =] number human \wedge , via attiva, or possibly

\wedge [I] [\sim =] human number \wedge , via attiva,

depending on how Plantinga interprets /are/. His quantified statement is too gross-grained to identify which propositional functor I should attribute to him. He may even have had the subsumptive functor in mind,

\wedge [I] [\sim /] number human \wedge

which is not equivalent to

\wedge [I] [\sim /] human number \wedge ,

because subsumption is asymmetrical. Or, interpreting his statement as a correlative via passiva claim,

<<[L] No numbers are human beings LexImp> is true>

becomes one or the other of the following via passive asymmetrical statements,

<< \wedge [I] [/] \wedge human \wedge \wedge number \wedge LexImp \wedge > is false>, or

<< \wedge [I] [/] \wedge number \wedge \wedge human \wedge LexImp \wedge > is false>.

Read these interpretations, respectively, as: <<Subsuming \wedge number \wedge under \wedge human \wedge LexImp> is false>>, or vice versa when its terms are inverted.

If Plantinga not implausibly, interpreted /are/ as a /[Sooth, .] functor/, this allows statements with an <. S P> or <. S \sim P> form may *possibly* be true/false:

<<. numbers humans> true/false> or <<. numbers \sim humans> true/false \wedge .

But this logically conflicts with the *necessary* truth of Plantinga's <No numbers are humans>, which apparently dooms a sooth interpretation of his /are/. However, he could save the 'necessity' of his sooth statement by giving it an a priori status resting in the arms of 'by definition', the good old move, but a tattered one ever since Quine and Goodman launched their attacks on it.

My critique differs from theirs. Interpreting [Necessary] as [Enjoin] puts us into propositions' lexical space, the land of coherence rather than truth value. This is structured conceptual territory; it obviates appeal to vague 'meaning' and 'definition' as well as reliance on the debatable Aristotelian distinctions between a substantive's essential and accidental properties to ground the 'a priori'. So, appeal to the a priority of <No numbers are humans> doesn't support its [Necessary] modality. Isn't it refreshing to be conceptually free to abnegate centuries of inconclusive disputes on the a priori?

<NO PRIME MINISTER IS A PRIME NUMBER>

Plantinga's /is/ in

<[L] <No prime minister is a prime number>>

could be interpreted as [Identify, =], which along with its quantifier /no/ gives us

\wedge [I] [\sim =] prime minister prime-number \wedge .

Plantinga's \wedge prime-number \wedge is singular, indicated by the /a/[Any one] before /prime number/, it seems reasonable to interpret Plantinga's /is/ as an [Identity] of singulars in both the via attiva proposition and its via passive correlative statement.

The incoherent via attiva proposition,

$\wedge\wedge$ [I \sim] [=] [Any one] \wedge prime minister \wedge [Any one] \wedge prime number \wedge LexImp $\wedge\wedge$ entails

<<[I] [=] [Any one] \wedge prime minister \wedge [Any one] \wedge prime number \wedge LexImp> has no truth value>.

Read the first as, for example, <You're enjoined from identifying \wedge W. Churchill \wedge with \wedge any singular prime number \wedge on pain of incoherence>. What sane, native English speaker would allow that corporeal man to be coherently assigned to /3/?

Or, this /is/ might be interpreted as subsumption. Coherence logic forces us to specify more precisely what relationship is claimed to hold between \wedge prime minister \wedge and \wedge prime number \wedge than alethic logic does. Alethic logicians are hooked on extension; they interpret most [Is] copulas as catch-all sooth functors. Please: Stop.

Also, the various interpretations of the copula in extensional logics are not equivalent to coherence logic's seemingly matching functors. For example, <S is a member of the class P> is false if there are no Ss, S-, according to the Coherent Account theory of truth value; only S+P+ emplacements underwrite True statements. Coherent emplacements in /S/ and /P/ makes <[Sooth, .] S is a member of P> true'. If no Ss exist, S-, the statement is false; phlogiston, S-, isn't a member of anything.³⁰ In contrast, if we interpret /is/ as conceptual subsumption, \wedge [/] bird

³⁰ The author of an article in *ConsumerReports: On Health* (April, 2013, Vol. 25, No. 4) writes "Myth: Be sure to eat pomegranates, berries and other "super fruits." TRUTH: "All fruits are 'super', (Jeffrey) Blumberg says. "There is no scientific or regulatory definition of 'super fruit.' It can mean anything—therefore, its meaningless." It seems Blumberg read Aristotle's defense of the Law of Non-contradiction. Blumberg's "definition" should be understood as my congerly functor, [+]. Without a congerly, even a provisory or partial one, no substantive token has conceptual standing, because it has no place in any lexical space.

robin[^] is coherent whether or not birds or robins are extinct. Concepts' lexical routes remain even after robins are extinct; check out any paleontological text.³¹

<IF A THING IS RED, THEN IT IS COLORED>

<L<If a thing is red, then it is colored>> may be interpreted as a coherence inference with a missing premise rather than as a statement.

^ [A] [.] thing(ripe cherry) red [^]	(Plantinga's antecedent/premise)
^ [I] [/] colored red	(Missing premise)

^ [A] [.] thing(ripe cherry) colored (Plantinga's consequent)

Adding the missing premise gives us a valid coherence argument. I interpret Plantinga's /is/ in his conditional statement's antecedent as the functor [Sooth, .]. Its missing premise's functor is [Subsume, /]; its consequent/conclusion's functor is [Sooth, .].

Given that the first and second premises' functors are, respectively, leutically allowed [A] and enjoined [I] coherent, we have to accept the weaker allowed conclusion rather than a stronger enjoined one. This argument employs the concept [^](physical) thing cherry[^]; the conceptual congerly attribute, [^]colored[^]; and [^]colored[^]'s subsumed range of trope concepts [^]{red white pink green, ...}[^].

Every valid conceptual inference may be converted into a coherent conditional proposition and vice versa. So, if we convert Plantinga's [Necessary/L] <If...then> /red/colored/> statement into a valid conceptual argument, then we may convert the valid argument back into a coherent, enjoined conditional proposition containing two different leutic modalities, [A] and [I]. His

< [L] <If a thing is red, then it is colored>> converts to
[^] [I] [^]If ^{^^}[A] [Sooth, .] thing red[^] & [^][I, /] colored red^{^^}, then [^][A]
 [Sooth .] thing colored^{^^^}.

We can read this via attiva conditional proposition as, [^]If you travel on the allowed sooth path, [^]. thing red[^], and on the injunctive subsumption path, [^][/] colored red[^], you're allowed to travel on the sooth path, [^]. Thing colored[^]. Without coher-

³¹ See my "On Emplacing", p. 63, line 5 of the "Substitution Chart" and my account of the Chart, pp. 73 – 87, which is the fulcrum of "On Emplacing". (sfsu arthur bierman) There I submit some corrections and expansions of Russell's "On Denoting" and Strawson's "On Referring" with the use of more logical tools than they had.

ence logic, Plantinga couldn't know the alethic necessity of his conditional statement is better interpreted as the validity of the coherence argument.³²

* * * *

A final note on leutic modality: Aspect and part ways of thinking about substantives' congeries of tropes reflect one of the ways English speakers distinguish *kinds* of substantives from *individuals*. (See pp. 6 – 9 above.) The attribute concepts in this congerie proposition,

^[[:+]] (physical) substantive [density color shape size ...]^, are determinable attributes indicating a kind; their subsumed concepts, such as ^[/] shape {square circular ...}^, are determinates marking relative locations on subsumption pathways we use to individuate/differentiate individuals. We do this with the [Link] functor:

^[Link, *] shape {square circular triangular ...}^.

I'm not doing categorical ontology but do reject 'abstraction' modes of explaining how to isolate category from individual concepts. Subsumption of concepts is a more literal way of avoiding 'abstraction' in favor of our familiar, daily subsumptive discourse. Think of your deliberations about what determinate color of determinable paint to use on your dining room walls. The tropes of "No way red" and "No way green" aren't abstractions; they reject any and all determinate subsumptions under ^red^ and ^green^.

Here's another way to put my explanation of congerie coherence, a constant in our conceptual travels in lexical space, friendly to positivists of all stripes.

Both ^Epite @ /pit|part/^ and ^EovalE @ /oval|aspect/ are carried by an olive into the predicate tokens /pitted/ and /oval/ of sentence tokens. /Part/ is a substantive, /oval/ a trope. The following propositions are coherent

^EoliveE^ @ /olive/ & E(olive)pite @ /pit|**part**/

^EoliveE^ @ /olive/ & E(olive)ovalE @ /oval|**aspect**/,

even though ^pit^ is *range incompatible* (versus ^flesh|part^ of ^olive^); ^oval^ is *subsumed incompatible* (versus ^round^ aspect of ^olive^), Both ^pit^ and ^oval^ are coherent concepts in ^olive^'s congerie:

^[[:+]] olive [pit|**part** & olive oval|**aspect** ^ & ...].

We know this, because Epite and EovalE are coherently emplaceable in

³² Sellars remarks on 2.0131 of Wittgenstein's *Tractatus* are germane: "...A speck in a visual field need not be red, but it must have a colour." Wilfrid Sellars, "Naming and Saying", *Science, Perception and Reality*, pp. 239 - 240, London, Routledge & Kegan Paul, 1963.

^^EoliveE^ @ /olive/ & E(olive)pitE @ /pitted|**part**/^ and

^^EoliveE^ @ /olive/ & E(olive)ovalE @ /oval|**aspect**/^,

which entails both of their correlative statements are true. Thus the ^part|aspect^ distinction yields the coherence of congeries and thereby sanctions the coherence and truth evaluations, respectively, of SP propositions and statements.

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San Francisco

1.415 . 673 . 6361 (Ph/Fax)