

CONTRASTING LOGICS

Conceptual Logic is the Logic for *Understanding* Sentences and for *Determining the Truth Value* of Statements; Truth|Alethic Logic is for *Validly Inferring* from Statement-to-statement's Truth Value (including meta-studies of alethic logic systems).

The logic required for **understanding** sentences and for **determining statements' truth value** differs from the logic required for validly inferring from statements' known, or assumed, **truth value** to the truth value status of other statements. The first is a conceptual logic with which we evaluate--**^coherent^** or **^incoherent^**--propositions. If a sentence's interpretation, a **proposition**, is coherent, it's understandable and has truth value, if incoherent, it's not understandable and has no truth value.

The concepts **^sentence^**, **^proposition^**, and **^statement^** differ. A **sentence** is a physical token produced by speaking, writing, or signing. A sentence may have several interpretations; each is a different proposition, a token **re-write** of the sentence. A **statement** is a proposition token plus a claim about its truth value. Truth logic is subordinate to conceptual logic for two reasons.

First, the truth value of statements exists only in the domain of coherent statements underwritten by coherent propositions. Conceptual logic's coherence evaluations are the **basement logic** for alethic logic.

Second, truth logic provides only valid inference forms between statements whose evaluations are **^true^** or **^false^**, or more for multi-valued systems, while conceptual logic furnishes two kinds of coherence that exist within a monistic conceptual structure. If (i) you know how to speak, write, and think in accord with the coherent ordering of concepts in propositions as others do, and (ii) know how to coherently order concepts and the world's substantives (roughly, objects, acts, events, processes) and tropes (roughly, properties, measured and unmeasured) as others do, you understand sentences as others do.¹ You satisfy the hypothetical **Lexical Imperative**:

¹ The *via activa* functors [Order] and [Ordering] replace the concepts **^relation^** and **^relating^**. I categorize **^relation^** as an operational functor rather than as a concept. Alethic logicians are unsettled about 'relations' ontological and logical status. /Relation/ is obviously in the *via passiva* mode; putting things in [Order] is in the *via activa*; they're unlike.

If you want to understand others as they understand themselves and want others to understand you as you understand yourself, travel on the same paths in lexical space that your and others' propositional functors tender. On [Functors], see Fn. 2, next page.

(i) Sentence tokens contain functor and term tokens: [Subsume] is a [Functor] token, /bird/ and /robin/ are term tokens; likewise, [Bond] is a functor, /snake/ and /scales/ are term tokens. These bracketed tokens are functors, [...], concepts are sans brackets, ^...^, *if they have a place in a systematic lexical structure of tokens*. I use eight different functors to construct a **lexical space** structure; they guide us to travel coherently among tokens therein.²

To explain how we coherently order concepts in propositions, I prefer the metaphor of traveling between word tokens in lexical space to the popular but misleading metaphor of 'composing' propositions from their parts. The composing metaphor suggests that the meanings of word parts constitute the meaning of their containing proposition; this miracle relies on an obscure, unexplained power of 'fusing' 'many' meaning parts into a 'one' whole meaning, sort of like cooking Haggis. If an ordering functor, say subsuming one concept under another or bonding one to another, sanctions a trek from one token to another in lexical space, the proposition is coherent. This is the (i) part of our understanding sentences. Call these token orderings **syntactical**.

(ii) The other kind of conceptual ordering that equips us to understand a sentence is coherently ordering a sentence's term or phrase tokens with the world's substantives and tropes via *emplacement*,³ illustrated below. Call these orderings **lexical**, or, more traditionally, **semantical**. I prefer /lexical/ to defend nominalism /semantical/ has been larded with psychological freight extraneous to logical investigations. Our brains are nominalistic and do well.⁴

² See "A Precis of Conceptual Logic" for a list and explanation of functors on my website:

<http://philosophy.sfsu.edu/philosophy/page/arthur-bierman>. /sfsu arthur bierman/ is a shorter access.

³ An essay that amplifies [Emplace] with [Assign] on my website answers critiques of my [Emplace] and explains how technology—eye glasses, microscopes, hearing aides, atom smashers—augment our sensory capacities; they, expand the range of substantives and tropes we perceive and may assign/emplace what we've observed with them into lexical tokens. The use of /see/ in augmented occasions isn't expanded, the things seen are. Pathologists say they **see** cells via their microscopes. This isn't virtual seeing. It's augmented, actual seeing.

⁴ Our brains respond to seen, heard, felt tokens; they arouse travel on functor neural paths that enable us to skip coherently between our brains' token locations in lexical space.

We unify these syntactical and lexical orderings when we literally, coherently assign/emplace physical substantives and tropes into their tokens unique locations in lexical space. Consider the token sentence, /The dot is black/; /dot/ is a substantive term into whose occupied space we may coherently emplace a small, black, round substantive into /**E.E**/. /**E...E**/ is an **E**mplacement quotation mark to indicate that the physical . is literally emplaced into /dot/'s place:

E.E @ /dot/.

This is ground zero substantive emplacement. The same holds for tropes. We may literally emplace a black trope into /black/ in case **E.E** carries a black trope into /black/. Tropes need carriers; they can't exist without them; they're bonded concepts in subject-predicate languages. Since **E.E** carries its black trope into /black/,

E(dot).E @ /black/,

we can understand the sentence and are **entitled** to claim its companion statement, <The dot is black>, is true. Thusly, we unify lexical tokens and the world's substantives and tropes within one lexical space. I symbolize these coherent emplacements into the /The dot is black/ as:

E.E @ /dot/ & E(dot).E @ /black/.

This monistic, coherence-based, syntactical/lexical account of truth, replaces the dualistic correspondence theory.⁵ The correspondence account features the duo, fact and statement. It assumes a 'fact' exists outside lexical space, which is incoherent. 'Facts's existence relies on coherent emplacements into lexical space's tokens. Further, since nature presents neither conceptual, [~], nor alethic negation functors, [-], but propositions and statements, respectively, do, facts and statements do not, cannot 'correspond'. Kant rightly distinguished ^contradiction^ from ^opposition^; nature has oppositions, but they are not contradictions as Hegel and Marx would have it.

⁵ Please note: The concepts ^coherent^ and ^consistent^ differ; the first belongs to conceptual logic, the second to alethic logic. And do not confuse my ^coherence^ with Absolute Idealists' ^consistent^ account of ^truth^ they championed late in the 19th and early in the 20th Centuries.

Conceptual logic unifies our syntactical and lexical emplacement acts. Alethic logic does neither; its purview is more narrow, confined to ascertaining valid inferential structures of statement-to-statement truth values. It provides no logical account of coherent conceptual orderings and clings to sclerotic explanations of how we may determine statements' truth values.

It's staggering to contemplate how much philosophers' reliance on alethic logic alone pauperized philosophical discourse. Plato was the first to suffer; Aristotle's alethic logic, nipped the tender bud of conceptual logic Plato tendered in his *Sophist*. Major 20th Century alethic logicians' obsessed with mathematical 'truths'—of which there are none, replaced now with coherence evaluations—have narrowed 20th Century philosophy. Highly skilled technicians continue to ramify this logistic program into the 21st Century. Look at recent issues of *Mind*, a philosophical journal published by Oxford University Press, which reviews only books published by Oxford and, occasionally, by Cambridge University Press. CD Broad once said, approximately, that the United States is the place where (UK) ideas go to die. Now the trade travels from West to East where logicists' ideas go to bloat.

Alethic logic contributes little to philosophy but symbolized clarifications of sentences; scope is a heralded example. This logic fell to its nadir with philosophers' reliance on a pseudo-Leibnitzian account of alethic modalities. I speak of the 'Possible Worlds' blight that relies on the Peripatetic's 'essential properties', dessicated reeds, unable to give the sturdy support needed to ferry entities' identities across 'possible worlds'. *A. K. Bierman, November 2013.*