

► PAMELA VILLAFANA-ALONSO, *Connexive Stoic logic*.

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The key idea of connexive logics (whose origin can be traced back to ancient times) is that no formula can imply or be implied by its own negation:

Aristotle's thesis:

(A1) $\vdash_{\mathbf{L}} \text{N} (\text{NA} > \text{A})$

(A2) $\vdash_{\mathbf{L}} \text{N} (\text{A} > \text{NA})$

Boethius' thesis:

(B1) $\vdash_{\mathbf{L}} (\text{A} > \text{B}) > \text{N}(\text{A} > \text{NB})$

(B2) $\vdash_{\mathbf{L}} (\text{A} > \text{NB}) > \text{N}(\text{A} > \text{B})$

The $\vdash_{\mathbf{L}}$ represents the relation of logical consequence of a logic \mathbf{L} , the N some negation and the $>$ a non-symmetrical conditional:

$\not\vdash_{\mathbf{L}} (\text{A} > \text{B}) > (\text{B} > \text{A})$

A logic \mathbf{L} is *weakly connexive* iff A1-B2 are valid in it.

A logic \mathbf{L} is *strongly connexive* iff A1-B2 are valid in it and these requirements are met:

- (1) In no model, $(\text{A} > \text{NA})$ is satisfiable
- (2) In no model, $(\text{A} > \text{B})$ and $(\text{A} > \text{NB})$ are satisfiable

A logic \mathbf{L} is *superconnexive* iff it is strongly connexive and validates the following schema:

(Connexive Explosion) $((\text{A} > \text{NA}) > \text{B})$

Chrysippus has been considered a connexivist logician. For him, a conditional is sound when the opposite of its consequent conflicts with its antecedent (*PH*, 2.111): $\text{A} >_c \text{NB}$. However, the literature only refers to this passage, but no further reasons have been given to hold that Stoic logic (**SL**) belongs to the family of connexive logics. In this work, I present the logic **CSL**, which is based on the core elements of **SL**. (I do a special exegetical work on stoic connectives.) Then, I use a contemporary semantics to express these core elements. Such semantics works with total and partial functions, common in computability contexts. Finally, I argue that **CSL** is strongly connexive, but not superconnexive.