

Graph-Theoretic Property: *atis* Terminating Connected Components Set

(*Graph-theoretic properties* are those properties that are part of the meta-theory and have been abducted from graph theory to be used as a tool to provide solutions concerning the theory. Those solutions may be assigned as values to components or relations of the theory and thereby become part of the theory.)

Terminating connected components set, ${}_T\mathcal{E}$, =_{df} a set of system components that are receiving components but not initiating.

$${}_T\mathcal{E} =_{df} \mathcal{X} = \{ \gamma \mid \gamma \in \mathcal{R} \subset \mathcal{S}_0 \wedge \exists \mathfrak{x} \in \mathcal{S}_0 (\mathfrak{x} \neq \gamma \wedge \forall \mathfrak{x} [(\mathfrak{x}, \gamma) \in_{pc} E \wedge (\gamma, \mathfrak{x}) \notin_{pc} E]) \}$$

Terminating connected components set is a set of components, γ ; such that, the components, γ , are in a subset of the object-set, and there exist distinct components, \mathfrak{x} , of the system object-set such that for all such \mathfrak{x} , (\mathfrak{x}, γ) is path-connected and (γ, \mathfrak{x}) is not path-connected.

