

Structural System Property: *atis* **Independence**

(Structural system properties are those properties that are part of the theory and describe patterns of system and negasystem connectedness. The structural properties define the topology of the system, and every affect relation defines a topology on the system.)

Independence, $\mathcal{I}\mathcal{S}$, =_{df} a *partition*, $\mathcal{Y} = (\mathcal{V} \subset \mathcal{G}_o, \mathcal{R} \subset \mathcal{G}_a)$, characterized by components that are primary-initiating-end-components of incident affect-relations.

$$\mathcal{I}\mathcal{S} =_{df} \mathcal{Y} \mid \forall \mathbf{u}, \mathbf{v} \in \mathcal{Y}(\mathcal{V}) \exists \mathbf{e} \in \mathcal{Y}(\mathcal{R}) [\mathbf{e} = (\mathbf{u}, \mathbf{v}) \supset \mathbf{u} \in_{PI} \mathbf{E}]$$

M: **Independence measure**, $\mathcal{M}(\mathcal{I}\mathcal{S})$, =_{df} a measure of primary-initiating component affect-relations.

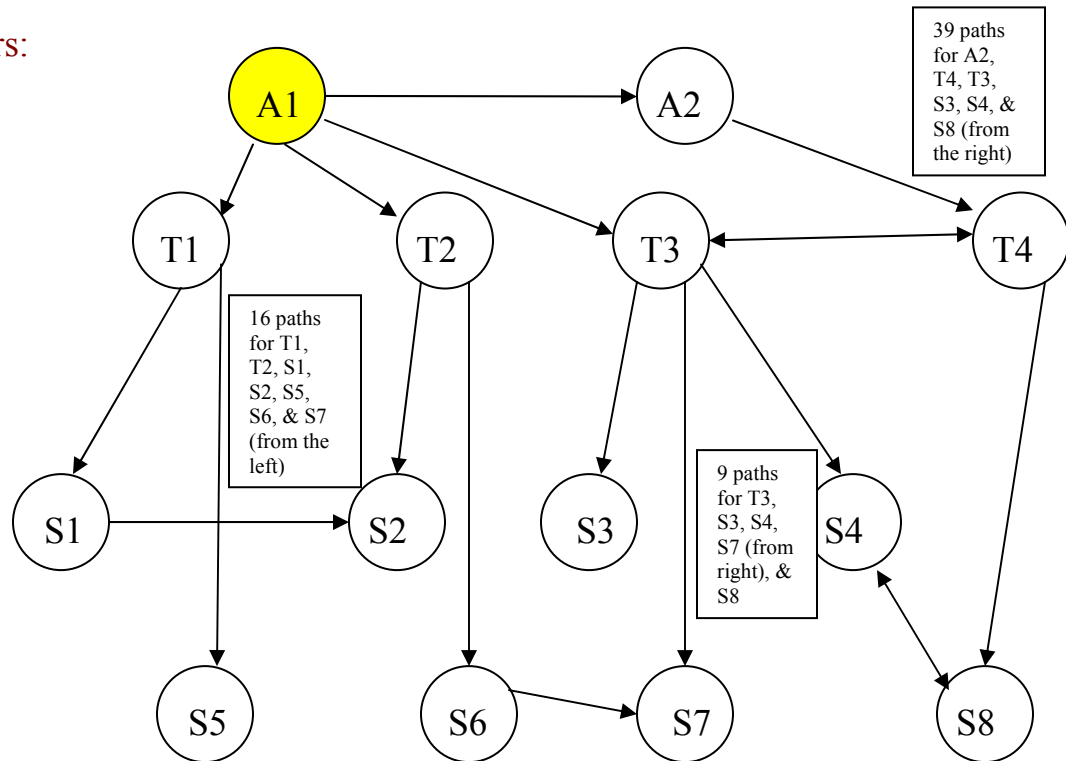
$$\mathcal{M}(\mathcal{I}\mathcal{S}) =_{df} \left\{ \left[\sum_{i=1, \dots, n} \left(\sum_{j=1, \dots, m} \mathbf{u} \mid \mathbf{u} \in_{PI} \mathbf{E} \mid_j \right)_i \right] \div \mathbf{C} \right\} \times 100$$

Independentsness in a School System

Administrators:

Teachers:

Students:



Affect Relation: *Controls Activities of*

In this system, there is 1 component that *Controls Activities of* other components with respect to *Independentsness*. Since there is only 1 affect-relation and 14 components, then the total possible affect relation paths is $P[Z(\mathfrak{S}_0)] = 236,975,181,590$; and therefore, $C = \log_2(P[Z(\mathfrak{S}_0)]) \approx 37$. There are 64 paths related to *Independentsness*.

Therefore: $\mathcal{M}(\mathfrak{S}) \approx 172.02$

Examples: Religious, para-military and some private schools strive to be independent systems. They are not completely closed in that they continue to receive community support, supplies, etc. But, they strive to limit the information their students receive so that the students can be indoctrinated in the values of the command system.