

Structural System Property: *atis* **Unilateralness**

(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.)

Unilateralness, $_{\cup}\mathfrak{S}$, =_{df} a partition, $\mathfrak{y} = (\mathcal{V} \subset \mathcal{G}_0, \mathcal{R} \subset \mathcal{G}_A)$, characterized by chain-affect-relations.

$$_{\cup}\mathfrak{S} =_{df} \mathfrak{y} \mid \forall \mathbf{e} \in \mathfrak{y}(\mathcal{R})[\mathbf{e} \in \text{Ch}(\mathfrak{y})]; \text{ where 'Ch}(\mathfrak{y})\text{' is a chain.}$$

M: Unilateralness measure, $\mathcal{M}(_{\cup}\mathfrak{S})$, =_{df} a measure of chain affect-relations.

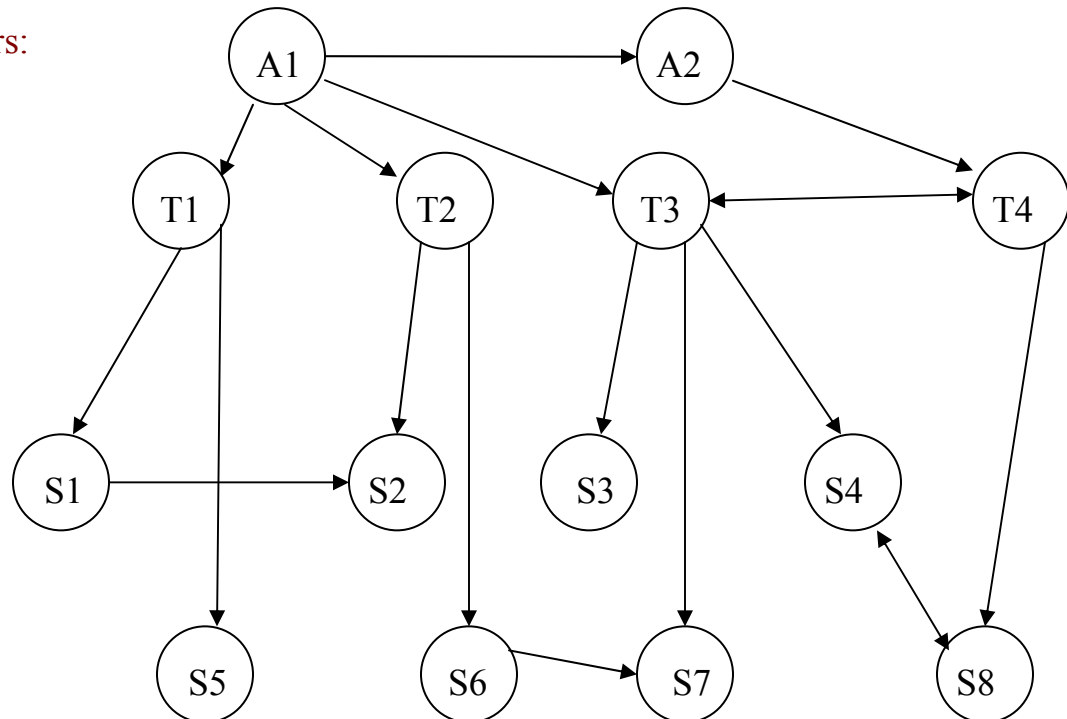
$$\mathcal{M}(_{\cup}\mathfrak{S}) =_{df} \left\{ \left[\sum_{i=1, \dots, n} \left(\sum_{j=1, \dots, m} [|\ell^{\text{Chain}}(\mathbf{e})| \div |\text{Ch}(\mathfrak{y})|]_j \right)_i \right] \div \mathbf{C} \right\} \times 100$$

Unilateralness (Chains) in a School System

Administrators:

Teachers:

Students:



Affect Relation: Controls Activities of

In this system, there are 0 components that *Control Activities of* other components with respect to *Unilateralness*. Since there are 14 components, then the total possible affect relation paths is 236,975,181,590; and therefore, $\log_2|\mathcal{A}_1| \approx 37$. There are 0 paths related to *Unilateralness*.

Therefore: $\mathcal{M}(\mathcal{S}) = 0.00$.

In the system shown below which has been modified from the one above, there are 12 components that *Control Activities of* other components with respect to *Unilateralness*. Since there are 14 components, then the total possible affect relation paths is $P[Z(SO)] = 236,975,181,590$; and therefore, $\log_2(P[Z(SO)]) \approx 37.786$.

For these 12 components there are 5 different chains. However, only 3 of these chains are relevant to this measure; i.e., those with 2 or more paths—the blue and orange chains are not relevant for this measure. There are 16 paths related to the relevant chains.

