

Structural System Property: *atis* Flexibleness

(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.)

Flexibleness, ${}_F\mathfrak{S}$, =_{df} a partition, $\mathfrak{y} = (\mathcal{V} \subset \mathcal{G}_0, \mathcal{R} \subset \mathcal{G}_A)$, characterized by components with receiving- or terminating-degree greater than 1.

$${}_F\mathfrak{S} =_{df} \mathfrak{y} \mid \forall \mathbf{v} \in \mathfrak{y} (\mathbf{v}) [d_I(\mathbf{v}) > 1 \vee d_T(\mathbf{v}) > 1]$$

M: **Flexibleness measure**, $\mathcal{M}({}_F\mathfrak{S})$, =_{Df} a measure of the degree of receiving- or terminating- components that have degree greater than 1.

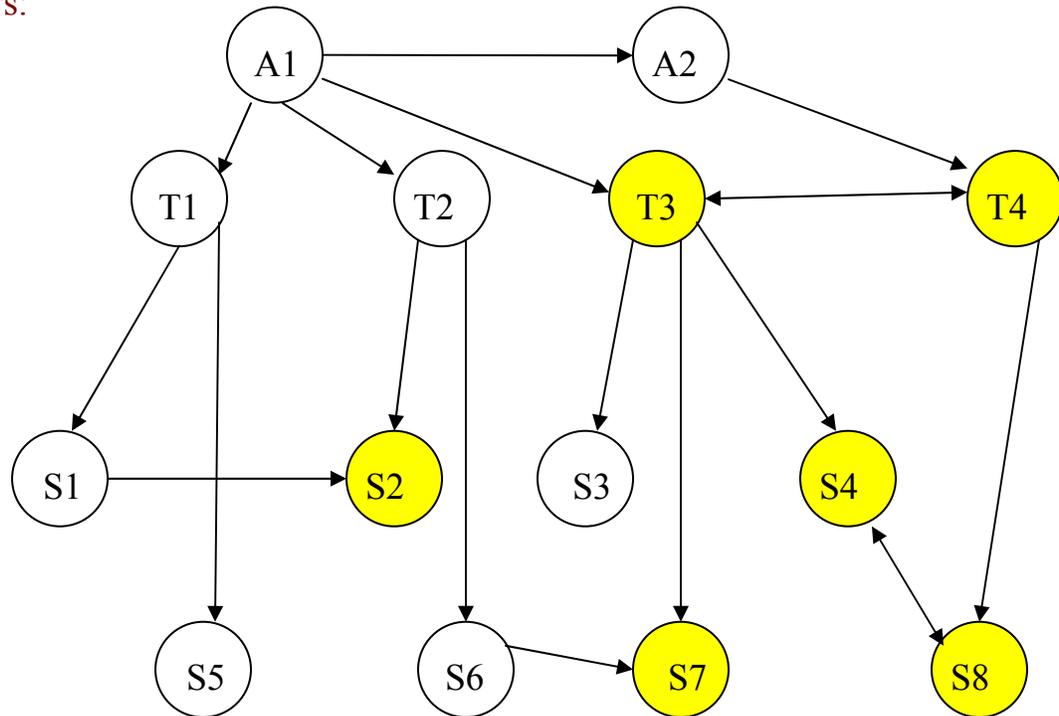
$$\mathcal{M}({}_F\mathfrak{S}) =_{df} \left\{ \left[\sum_{i=1, \dots, n} \left(\prod_{j=1, \dots, m} (|d_I(\mathbf{v}) + d_T(\mathbf{v})|_j \mid d(\mathbf{v}) > 1) \right)_i \right] \div \mathbf{c} \right\} \times 100$$

Flexibleness in a School System

Administrators:

Teachers:

Students:



Affect Relation: Controls Activities of

In this system, there are 6 components that are accessed by other components with respect to *Control Activities* of other components with respect to *Flexibleness*. Since there are 14 components, then the total possible affect relation paths is $P[Z(\mathfrak{S}_0)] = 236,975,181,590$; and therefore, $\log_2(P[Z(\mathfrak{S}_0)]) \approx 37$. The value is determined by finding the product of the degrees of each component that has 2 or more receiving affect relations. In this case the product is 64, and the $\log_2(64) = 6$. There are 6 paths related to *Flexibleness*.

Therefore: $M_{(F)} \approx 15.88$.