

Structural-Morphism System Property: *atis*Epimorphismness

(Structural-morphism system properties are those properties that are part of the theory and define the mapping-relatedness of object-set components.)

Epimorphism, \mathcal{P} , =_{df} components of two disjoint systems in which the components of one are related to every component of the other, and there are at least two components of the first related to the same component of the second.

$$\mathcal{P} =_{df} \underline{\mathcal{M}}(\mathfrak{S}_1, \mathfrak{S}_2) \mid$$

$$\mathfrak{S}_1 \cap \mathfrak{S}_2 = \emptyset \wedge \forall \gamma_2 \in \mathfrak{S}_2 (\underline{\mathcal{M}}(\mathfrak{S}_1, \mathfrak{S}_2)) \wedge \exists \gamma_2 \in \mathfrak{S}_2 \exists \mathbf{a}, \mathbf{b} \in \mathfrak{S}_1 (\underline{\mathcal{M}}(\mathfrak{S}_{a1}, \mathfrak{S}_{\gamma_2}) \wedge \underline{\mathcal{M}}(\mathfrak{S}_{b1}, \mathfrak{S}_{\gamma_2}))$$

Epimorphism is defined as a measure of two disjoint systems; such that, for every component in the second system, there is a morphism from \mathfrak{S}_1 to \mathfrak{S}_2 , and there exists a component, γ_2 , in \mathfrak{S}_2 such that there exist two components \mathbf{a} and \mathbf{b} in \mathfrak{S}_1 such that they are both mapped to the same component, γ_2 , in \mathfrak{S}_2 .

Epimorphism is a homomorphism that is a *surjective function*; that is, a function that is *onto*. The following homomorphism, $f_{epi}: \mathcal{T} \rightarrow \mathcal{S}$, defines an *epimorphism*:

Object-Set \mathcal{T}

Object-Set \mathcal{S}

