

Dynamic System Property: *atis* **Derived Production Outputness**

(Dynamic system properties are those properties that are part of the theory and describe patterns in time as change occurs within a system or between a system and its negasystem.)

Derived production outputness, DP_T^f , =_{df} Feedthrough with a high dissimilarity of toput and output in which output is significantly more complex.

$$DP_T^f =_{df} f_T \mid \exists \mathcal{B} \subset \mathcal{A} (T_p(\mathcal{B}) \Vdash O_p(\mathcal{B}) \wedge \mathcal{M}[\mathcal{X}(T_p(\mathcal{B}))] \ll \mathcal{M}[\mathcal{X}(O_p(\mathcal{B}))])$$

Derived production outputness is defined as feedthrough; such that, there is a family of affect relations, \mathcal{B} , that is a subset of the family of system affect relations, such that, the toput with respect to \mathcal{B} yields the output with respect to \mathcal{B} , and the measure of the complexity of the toput affect-relations are substantially less than the measure of the complexity of the output affect-relations.

Examples: Manufacturing plants produce derived production output. These plants bring in raw materials from which their products are manufactured; that is, produce the derived production. A school system may be viewed as producing derived production output in that students who enter the school system are expected to change substantially as a result of their education.