

Graph-Theoretic Property: *atis* **Primary Initiating Elements**

(*Graph-theoretic properties* are those properties that are part of the meta-theory and have been abducted from graph theory to be used as a tool to provide solutions concerning the theory. Those solutions may be assigned as values to components or relations of the theory and thereby become part of the theory.)

Primary initiating elements, ${}_{pi}E$, =_{df} Elements that have paths emanating from them but none to them.

$${}_{pi}E, =_{df} \{x \mid \exists y[(x,y) \in {}_{pc}E \wedge \forall u(u,x) \notin {}_{pc}E]\}$$

Primary initiating elements are defined as a set of elements such that the elements are path-connected from the set element.