

System Type: *atis* **BackgroundPopulationSubsystem**

(*System type* is part of the metatheory and describes configurations and properties that characterize a specific system.)

Background population subsystem, ${}_{\mathfrak{B}}\mathcal{P}\mathcal{W}$, =_{df} the subsystem defined by human components that are not in any other system partition.

$${}_{\mathfrak{B}}\mathcal{P}\mathcal{W} =_{df} \mathcal{S}^{\hat{u}} \mid \mathcal{S}^{\hat{u}} = ({}_{\mathfrak{B}}\mathcal{P}_E, \mathcal{A}_{\mathfrak{B}\mathcal{P}} = \{(\mathbf{x}, \mathbf{y}) \mid (\mathbf{x}, \mathbf{y}) \in \mathcal{A}_{\mathfrak{B}\mathcal{P}} \supset (\mathbf{x}, \mathbf{y}) \notin \mathcal{A}_{\mathfrak{Q}} \subset \mathcal{A}_{\mathfrak{P}}\})$$

Population subsystem is a subsystem; such that, the background population components, ${}_{\mathfrak{B}}\mathcal{P}_E$, define the object-set of the subsystem and the background population affect relations defined by all human components not in any other affect-relation partition, $\mathcal{A}_{\mathfrak{B}\mathcal{P}}$, defines the relation-set of the subsystem.

Key Terms: system, subsystem, partition, population components, object-set, relation-set.