

## Behavioral Affect Relation Qualifiers

The *Behavioral Affect Relation Qualifiers* are those qualifiers that refer to at least one human component. These qualifiers are derived from SIGGS, which introduced ten different types of behavioral affect relations that are shown below. The name of the affect relation is followed in parentheses by its nomenclature that will be used in the formalization of the axioms. One additional qualifier, ‘control’, is introduced that will be required in the development of *ATIS*.

Control ( $\mathcal{C}$ ): Affect Relations defined by components that are related in a manner qualified as “control.”

Development Inquiry ( $\mathcal{D}$ ): Affect relations defined by components of the Human Component Control Subsystem of the Leadership Subsystem that are related in a manner qualified as “developmental inquiring.”

Expert ( $\mathcal{E}$ ): Affect relations defined by components of the Population Subsystem that are related in a manner qualified as “expert.”

Facilitating ( $\mathcal{F}$ ): Affect relations defined by components of the Infrastructure Subsystem that are related in a manner qualified as “facilitating.”

Inquiry ( $\mathcal{Q}$ ): Affect relations defined by components of the Leadership Subsystem that are related in a manner qualified as “inquiring.”

Instructional ( $\mathcal{I}$ ): Affect relations defined by components of the Leadership Subsystem that are related in a manner qualified as “instructional.”

Legitimate ( $\mathcal{L}$ ): Affect relations defined by components of the Organic Essential Subsystem that are related in a manner qualified as “legitimate.”

Punishment ( $\mathcal{P}$ ): Affect relations defined by components of the Fielded Military Subsystem that are related in a manner qualified as “punishing.”

Referent ( $\mathcal{R}$ ): Specified affect relations.

Research Inquiry ( $\mathcal{S}$ ): Affect relations defined by components of the Human Component Intelligence Subsystem of the Leadership Subsystem that are related in a manner qualified as “research inquiring.”

Reward ( $\mathcal{W}$ ): Affect Relations defined by components of the Dynamic Teleological Subsystem of the Leadership Subsystem that are related in a manner qualified as “rewarding.”

Support ( $\mathcal{U}$ ): Affect Relations defined by components of a Subsystem that are related in a manner qualified as “support.”