1) Assumptions capture necessary conditions for environmental situations
2) Alternative decompositions encompass alternative system realizations
3) Computable assumptions "drive" the adaptation

From IRM to IRM-SA:

**GroupMember - GM**
- id
- groupleaderId
- sensorData
- position
- temperature
- acceleration
- oxygenLevel
- nearbyGMInDanger

**GroupLeader - GL**
- id
- sensorDataList
- GMInDanger

**Message**
- alert

**Monitored**
- environment

**Assumption**
- condition

**Invariants**
- relationship

**monitor**
- data

**GMInDanger**
- GL's belief over the GM's condition

**GM**
- id

**NearbyGMInDanger**
- GM's belief over the nearby GMs' conditions

**NearbyFFsPositions**
- FFs' positions

**SA**
- system's actions

**Process**
- activity

**Exchange**
- interaction

**Relation**
- association

**Newcy**
- context

**Dependency**
- interdependence

**When GPS breaks, system is re-designed to dynamically cope with future occurrences of the same situation**