Appendix 1

The formalized Ostrom SES framework (SESF)

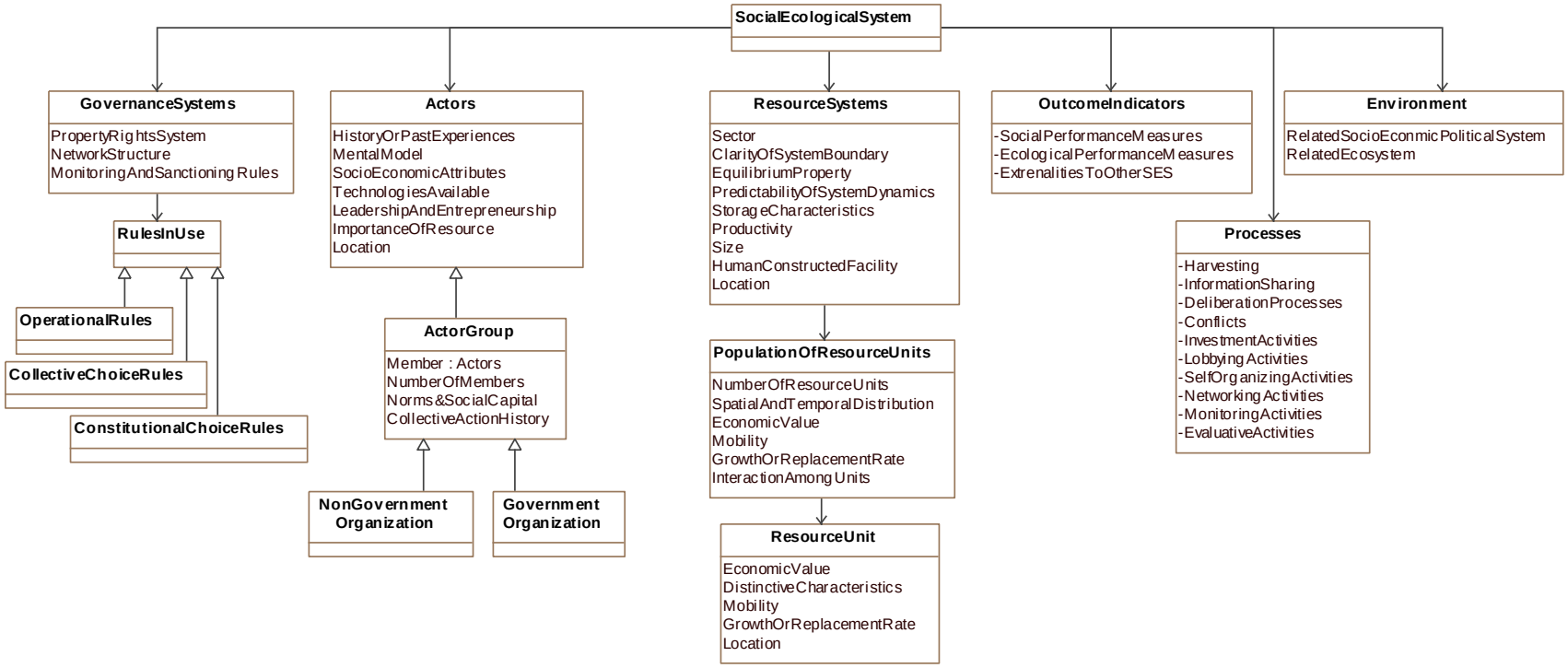

Figure A1: The SES framework (McGinnis and Ostrom 2014) in UML (Unified Modelling Language) including semantic relationships (attribution and subsumption, see Hinkel et al. (2014)) to make explicit relations between variables. Downward arrows represent attribution relationships where a variable is attributed to a concept, upward arrows represent subsumption relationships where sub-concepts are a type of the more general concept, e.g., an actor group is a type of actor.