

Basic Formal Ontology

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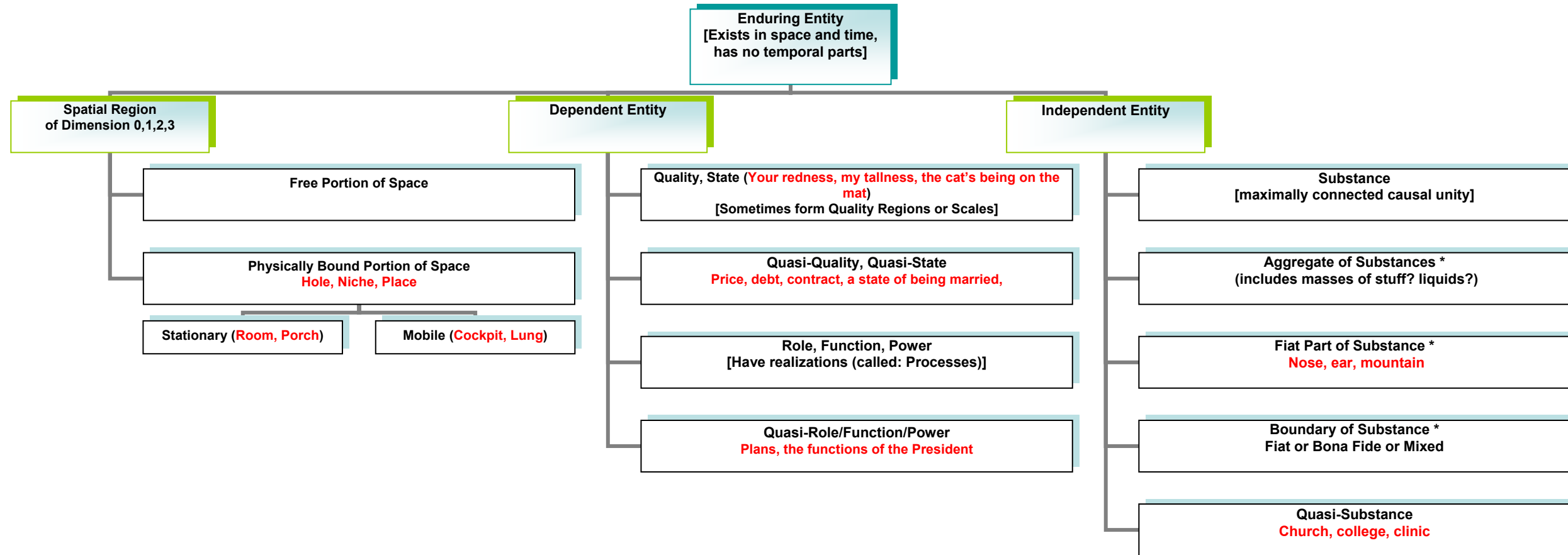
1. Basic Formal Ontology consists in a series of sub-ontologies (most properly conceived as a series of perspectives on reality), the most important of which are:

- i. **SnapBFO**, a series of snapshot ontologies (O_{ti}), indexed by times; and
- ii. **SpanBFO** a single videoscopic ontology (O).

Each O_{ti} is an inventory of all entities existing at a time. O_v is an inventory (processory) of all processes unfolding through time. (Each O_{ti} is thus analogous to anatomy; O_v is analogous to physiology.) Each snapshot ontology represents a presentistic assay of the entities existing at some given present instant. O_v is a (God's eye) partition of the totality of processes.

2. Both SnapBFO and SpanBFO will serve as basis for a series of sub-ontologies at different levels of granularity. The same portion of reality may appear at a plurality of levels of granularity. Thus masses at one level may be aggregates at another level. What counts as a unitary process at one level may be part of a process-continuum at another level.
3. Examples given here (**indicated in red**) are for the mesoscopic level of common sense.
4. Each ontology represents some partition of reality into categories or universals. Individuals are then located in the cells depicted in the diagrams below.
5. The ontologies here indicated are partial only (they are windows on just that portion of reality which is visible through the given ontology).
6. A cell labeled * within a given ontology represents a category division which involves some double-counting in relation to the categories within the same ontology represented by cells not so labeled.
7. The spatial regions acknowledged by SnapBFO are on the mesoscopic level of granularity the sorts of domesticated spatial regions referred to by expressions such as 'in the room', 'in the lung', 'on the table', 'in Poland' etc. (Thus they are not the abstract spatial regions investigated by physics.) Free portions of space are spatial regions with no boundaries or retainers such as walls, floor, or ceiling. Bound portions of space can be *bound* either completely, as in the case of a closed room or an air-bubble inside your body, or partially, as in the case of a birdcage or nostril. Free and bound portions of space retain their identity from one instant to the next even though they are projected in succession onto distinct abstract spatial regions in the physicist's sense (just as substances retain their identity from one instant to the next even though they are projected in succession on distinct aggregates of molecules).

SnapBFO (Ontologies O_{ti} indexed by time instants)



SpanBFO (Videoscopic Ontology O_v)

