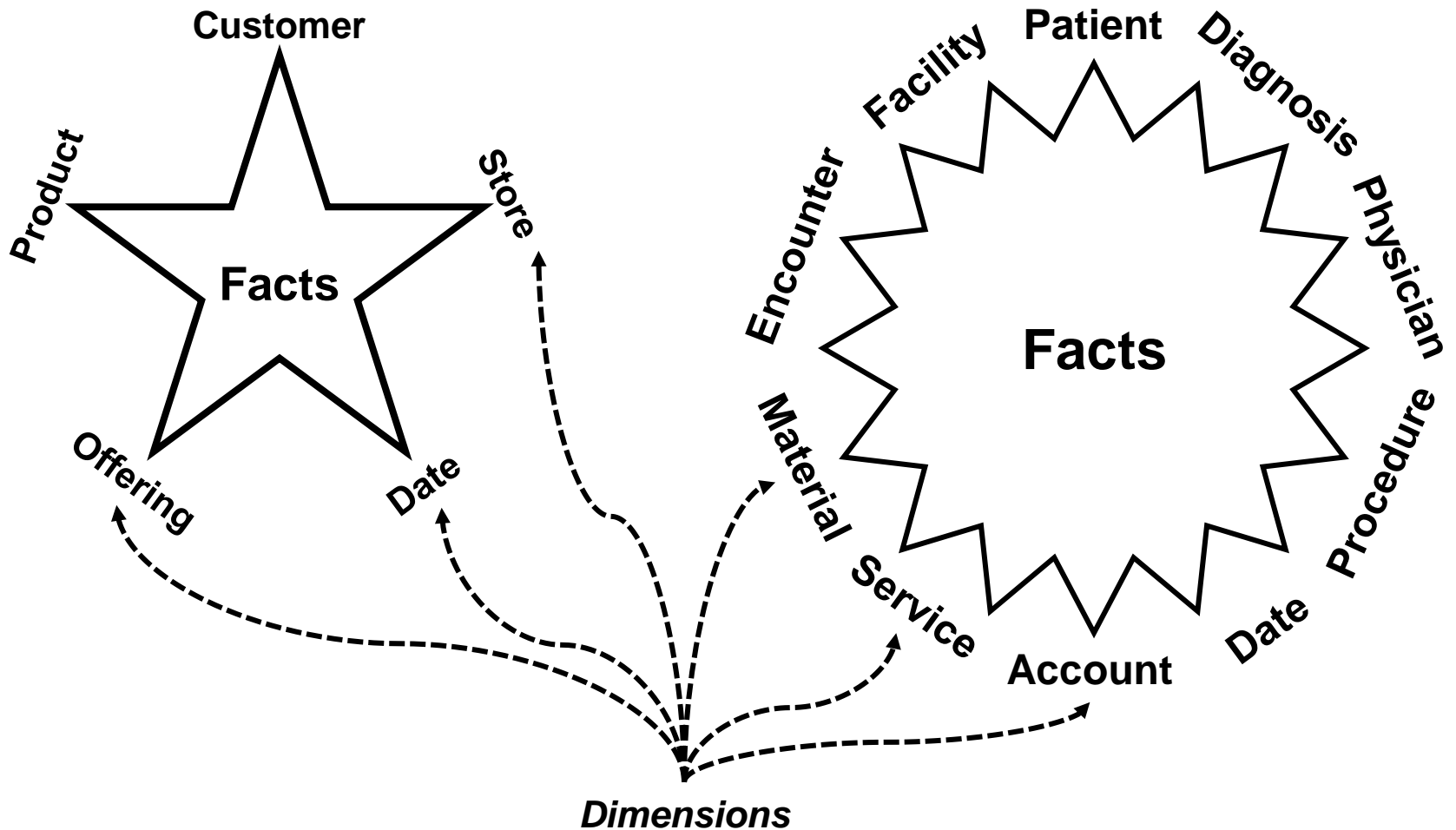


Ontology-Based Dimensional Data Warehouse Design

International Workshop on Ontology-Driven
Software Engineering (ODiSE)

Orlando, Florida, USA - 25 October 2009

Evolution of the “Star”

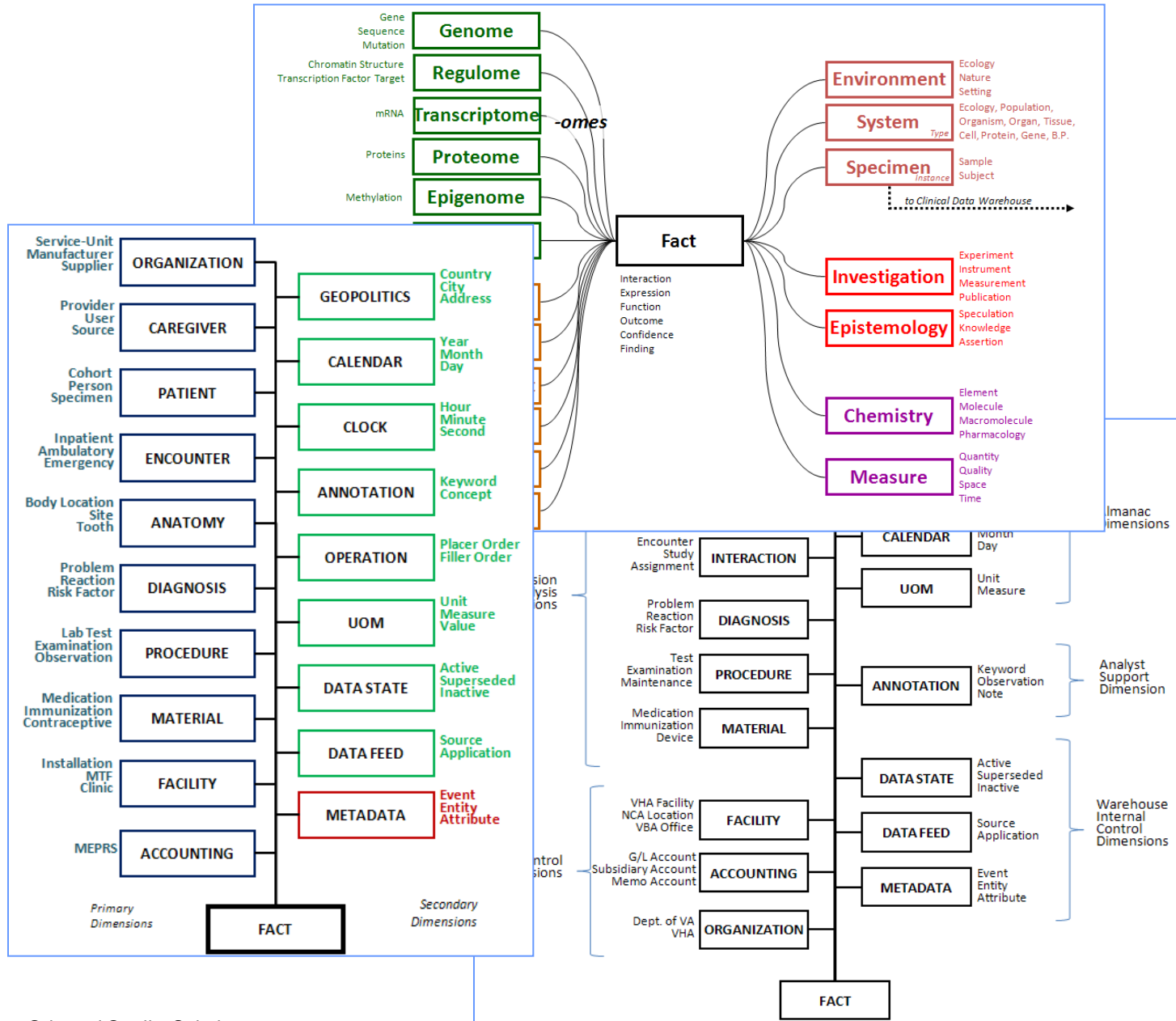


(a) Sales Data

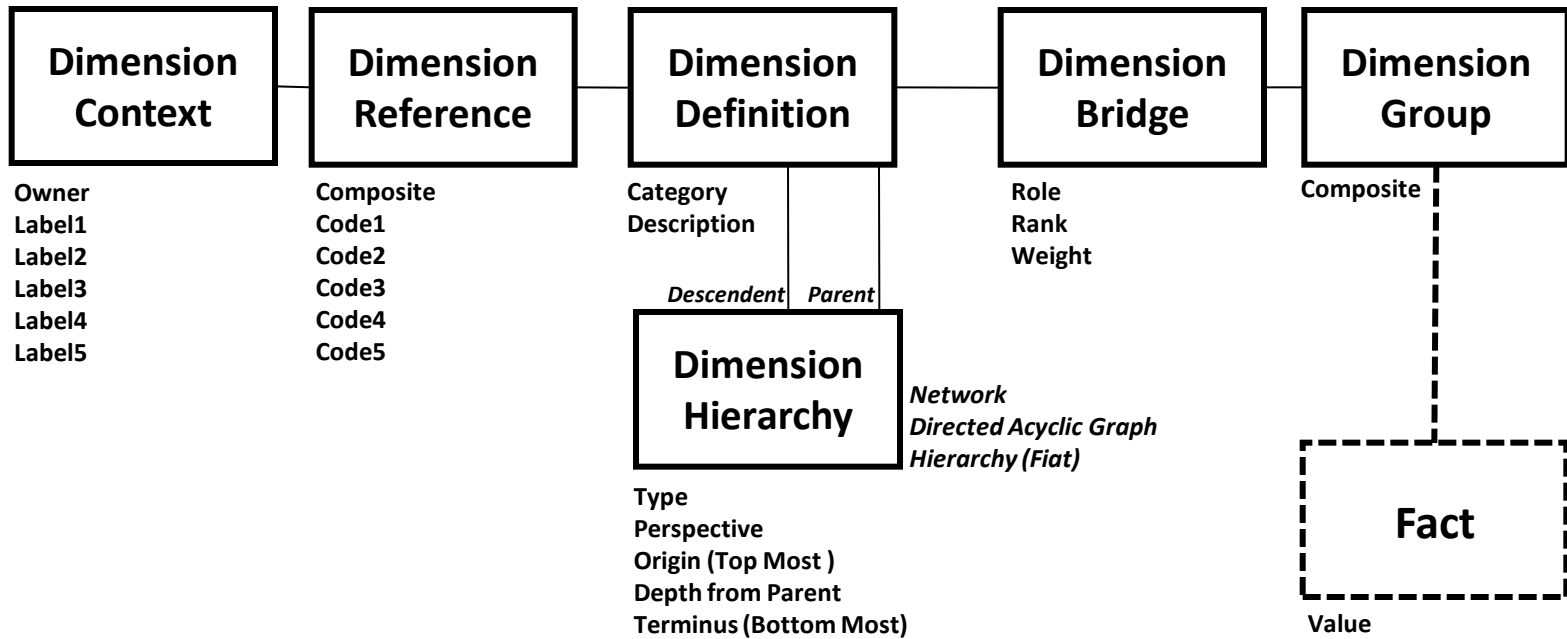
(b) Clinical Data

Clinical Data Warehouses

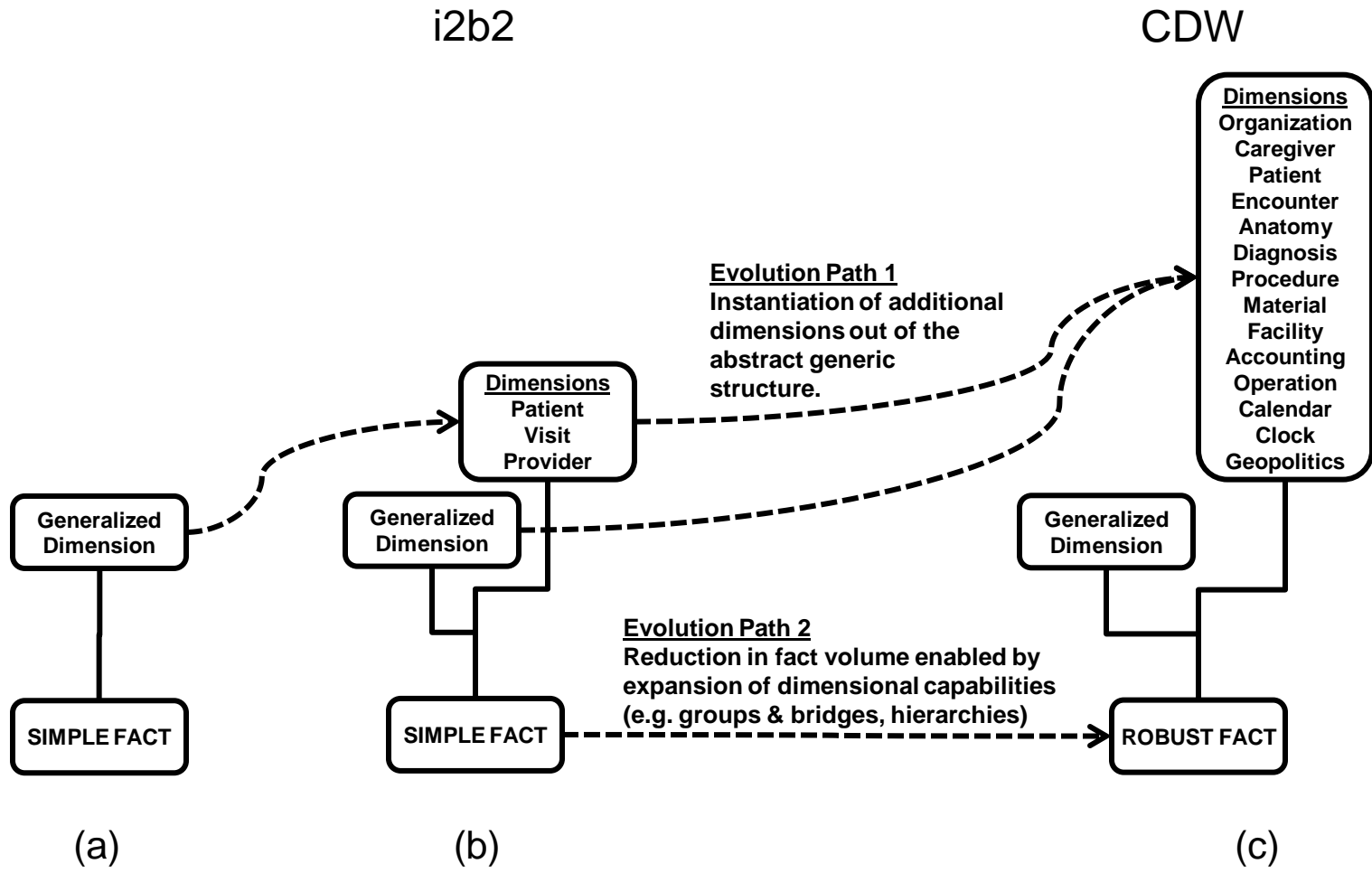
based on star schema dimensional models



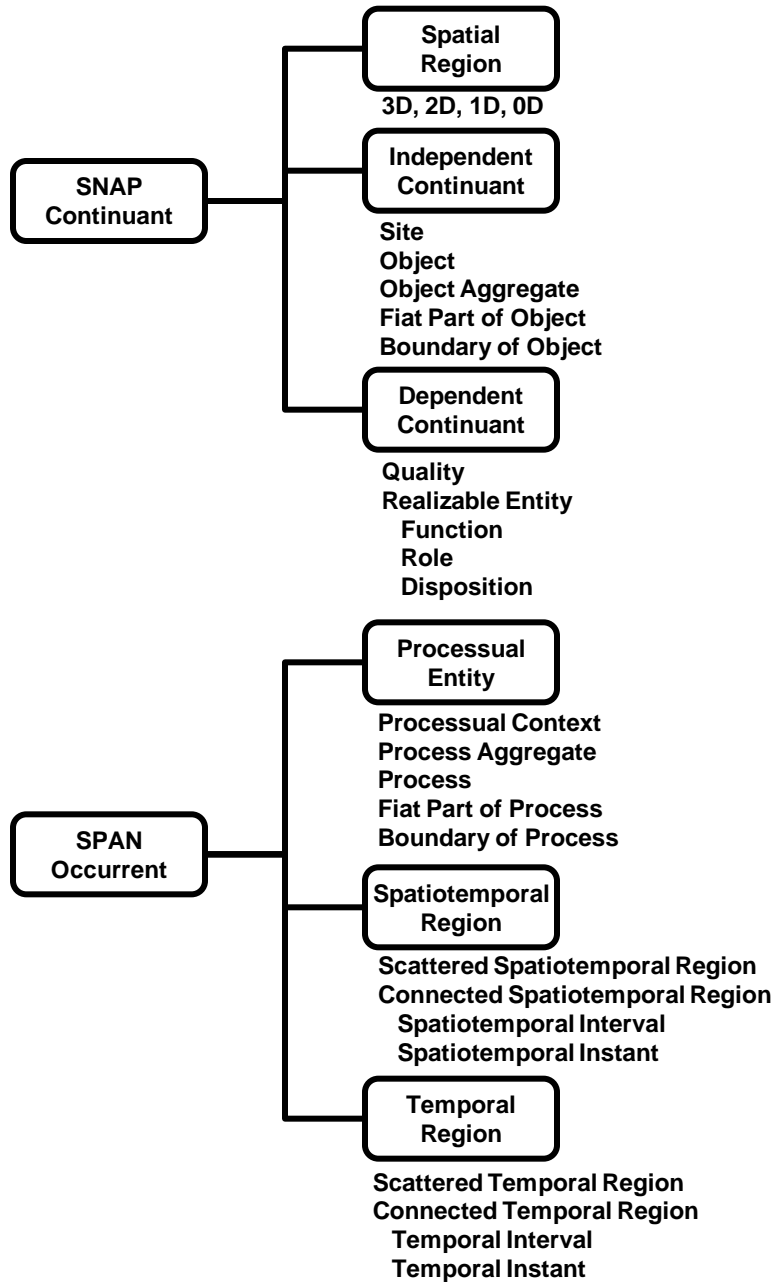
Dimensional Anatomy Pattern (Structure)



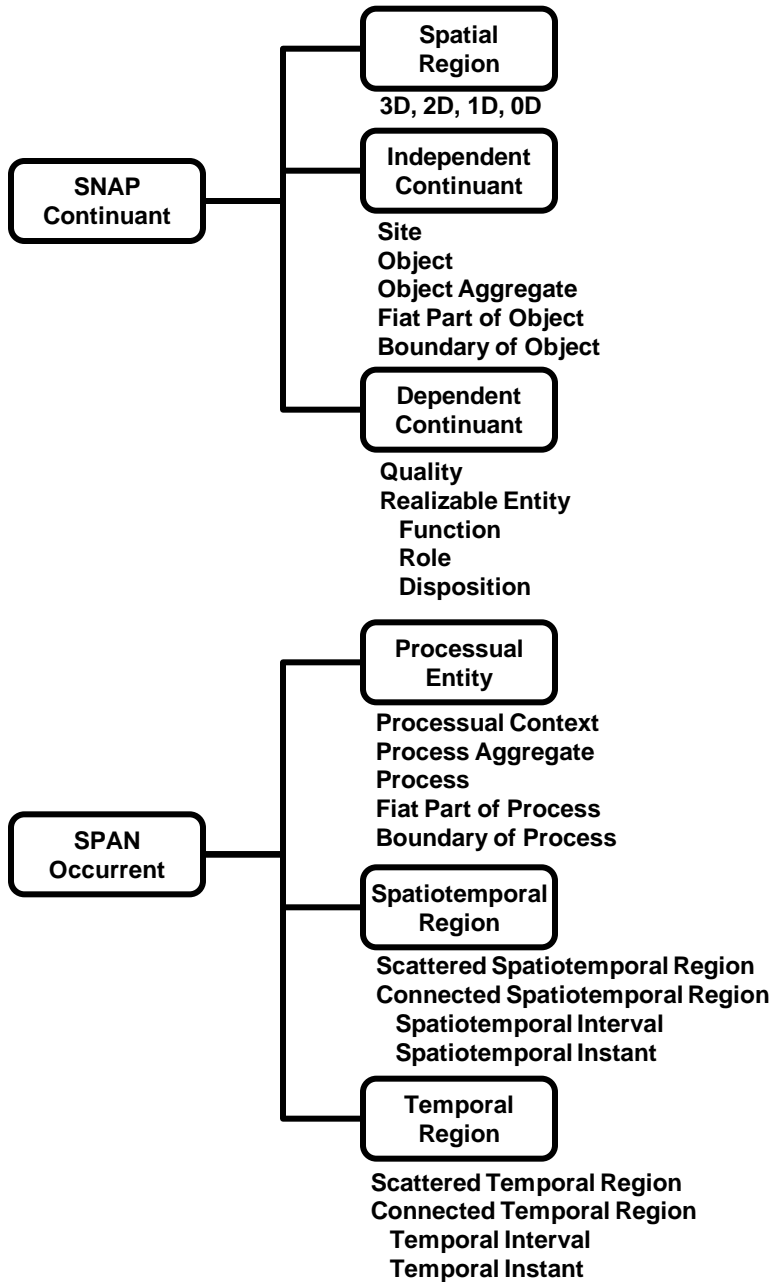
Data Warehouse Architectural Maturity Pathway



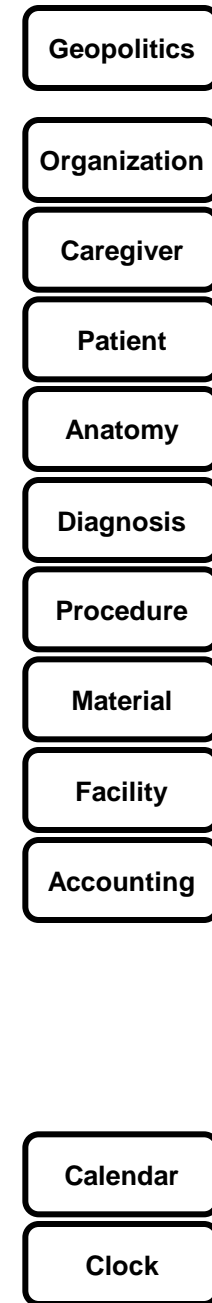
Basic Formal Ontology (BFO)



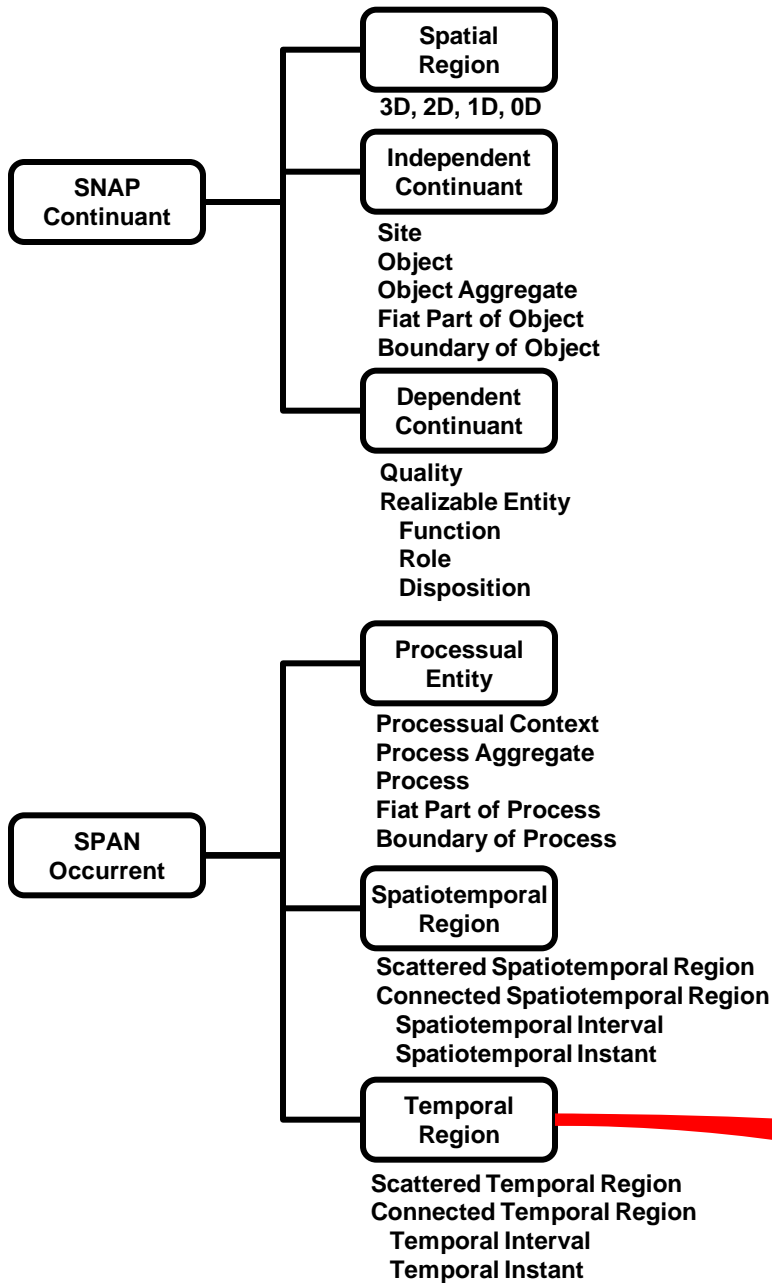
Basic Formal Ontology (BFO)



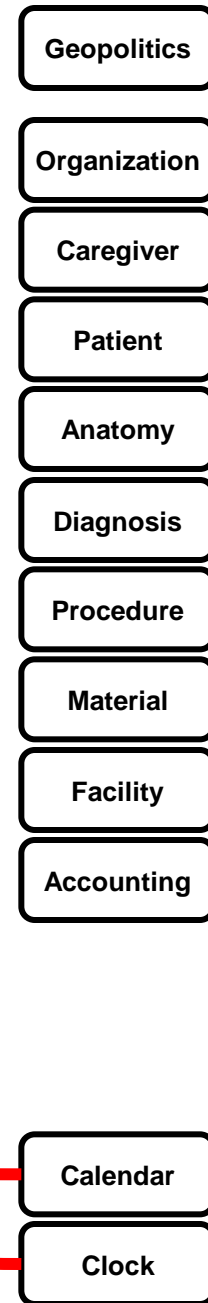
Clinical Data Warehouse (CDW)



Basic Formal Ontology (BFO)



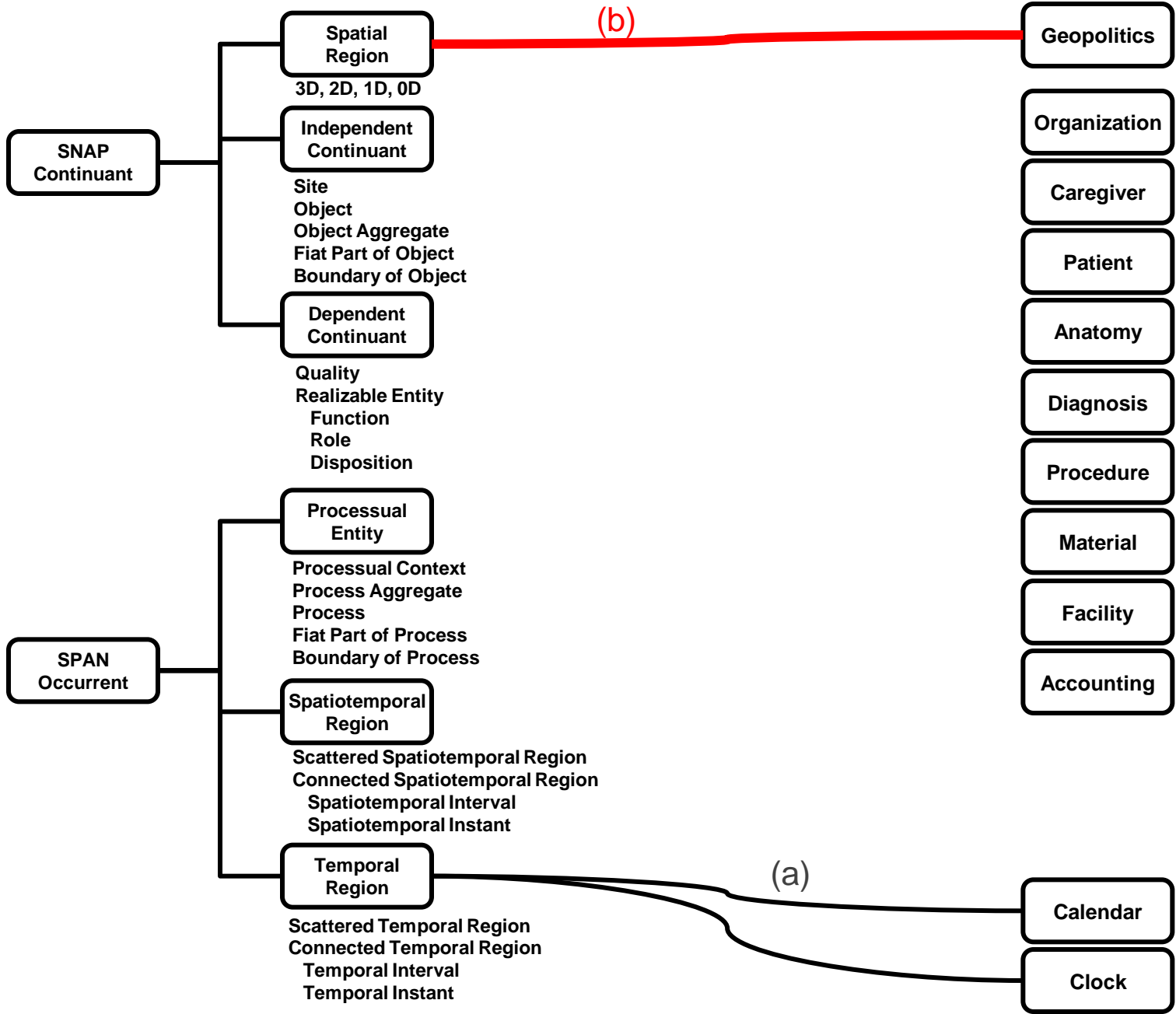
Clinical Data Warehouse (CDW)



(a)

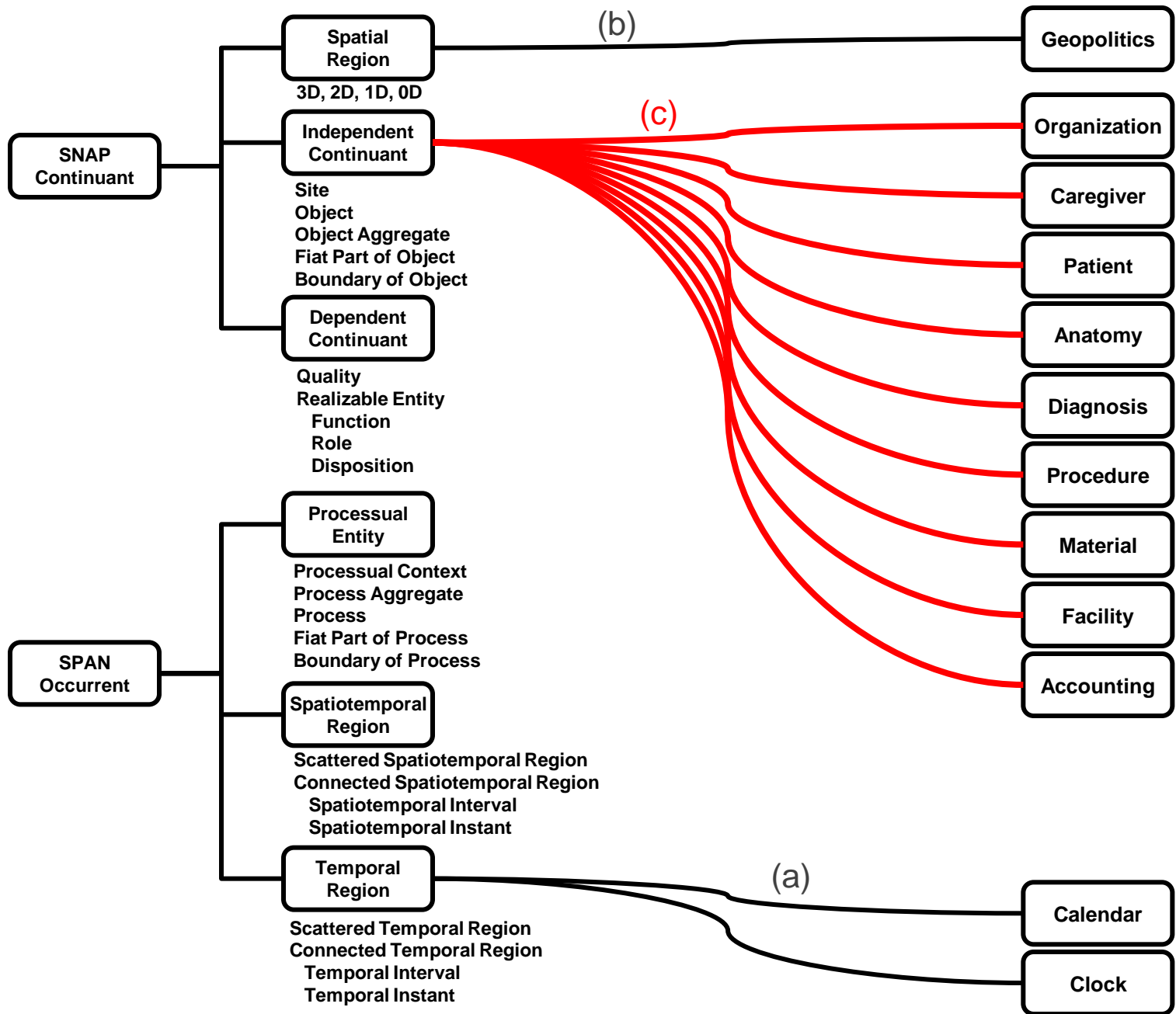
Basic Formal Ontology (BFO)

Clinical Data Warehouse (CDW)



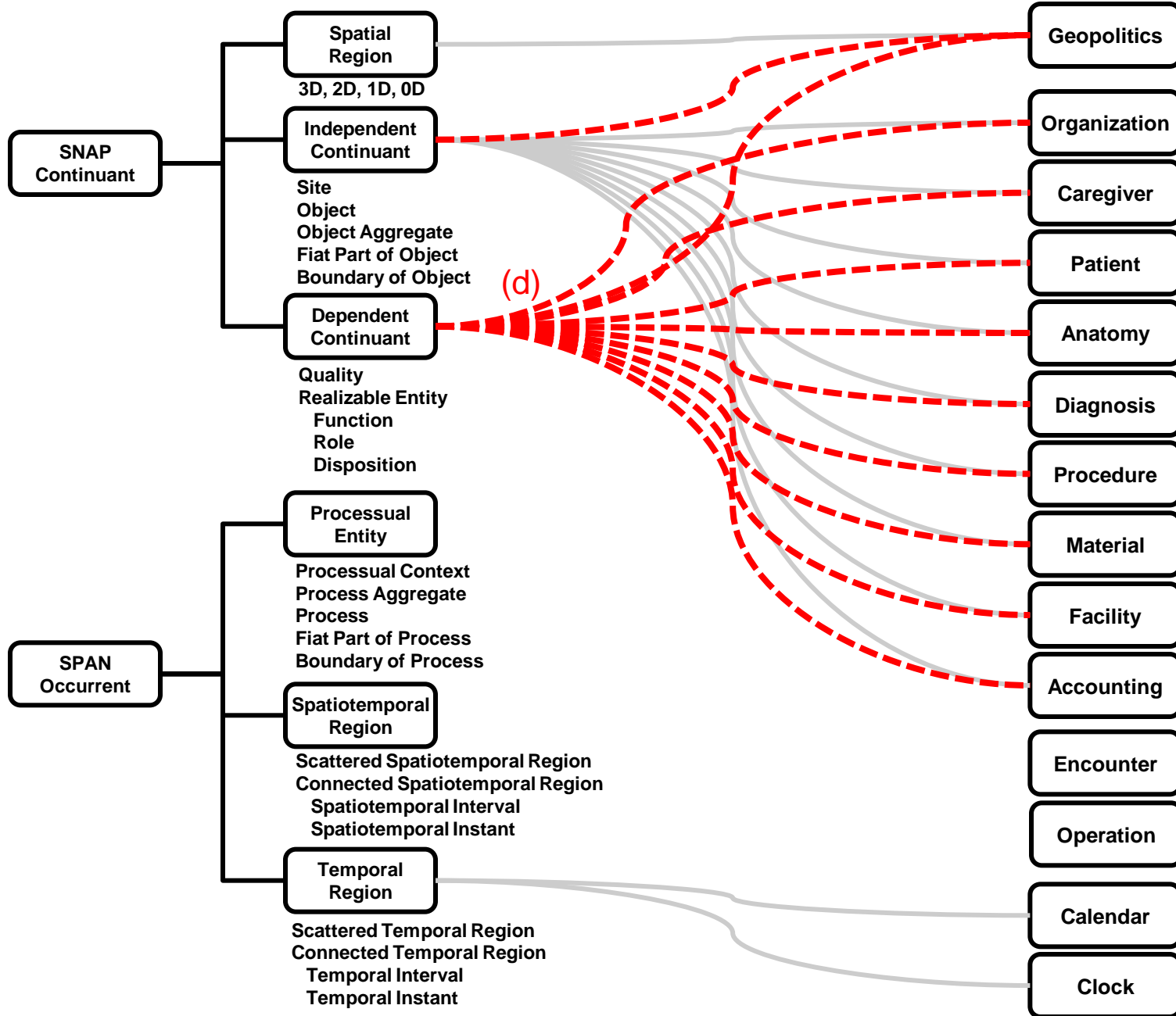
Basic Formal Ontology (BFO)

Clinical Data Warehouse (CDW)



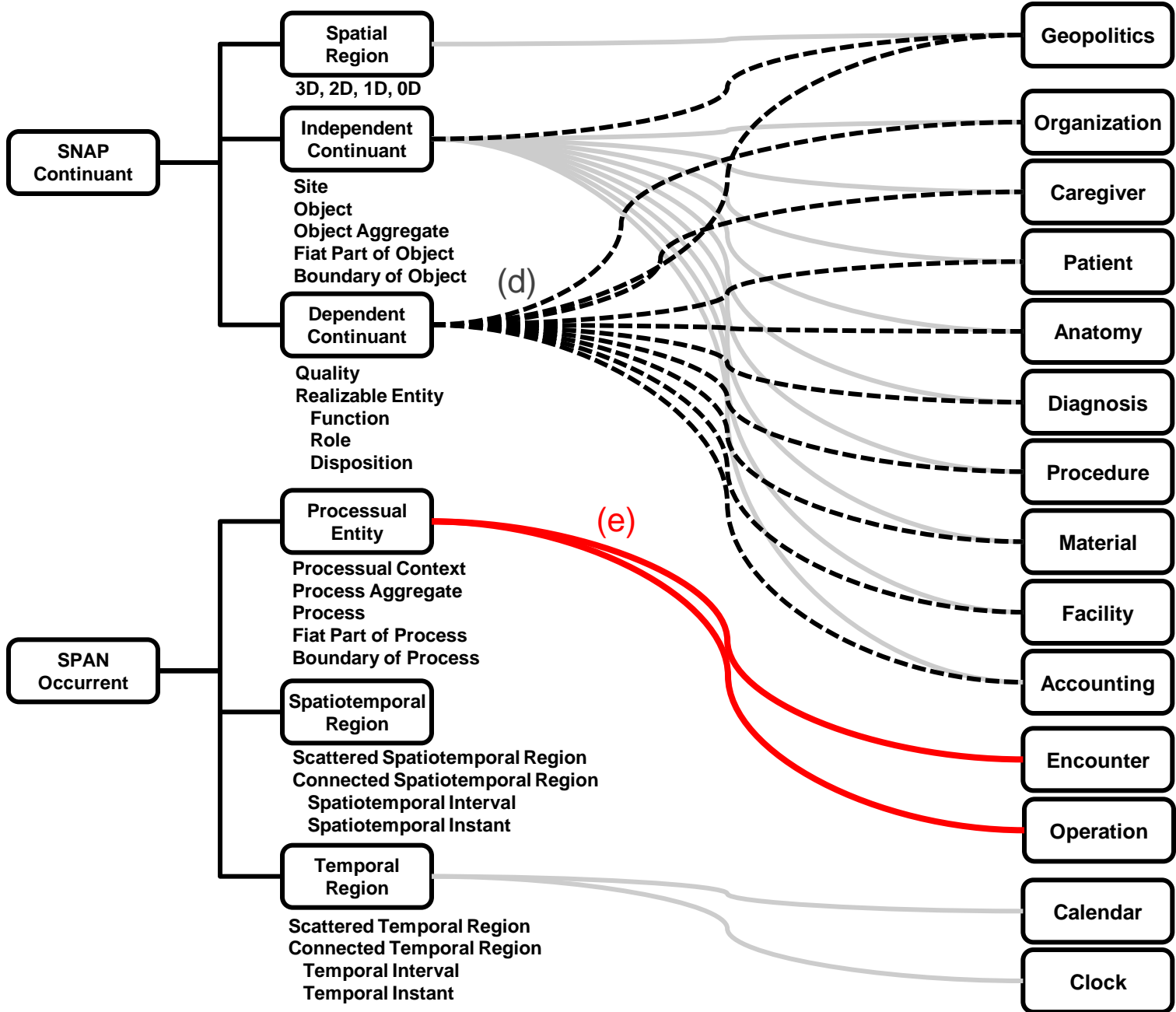
Basic Formal Ontology (BFO)

Clinical Data Warehouse (CDW)



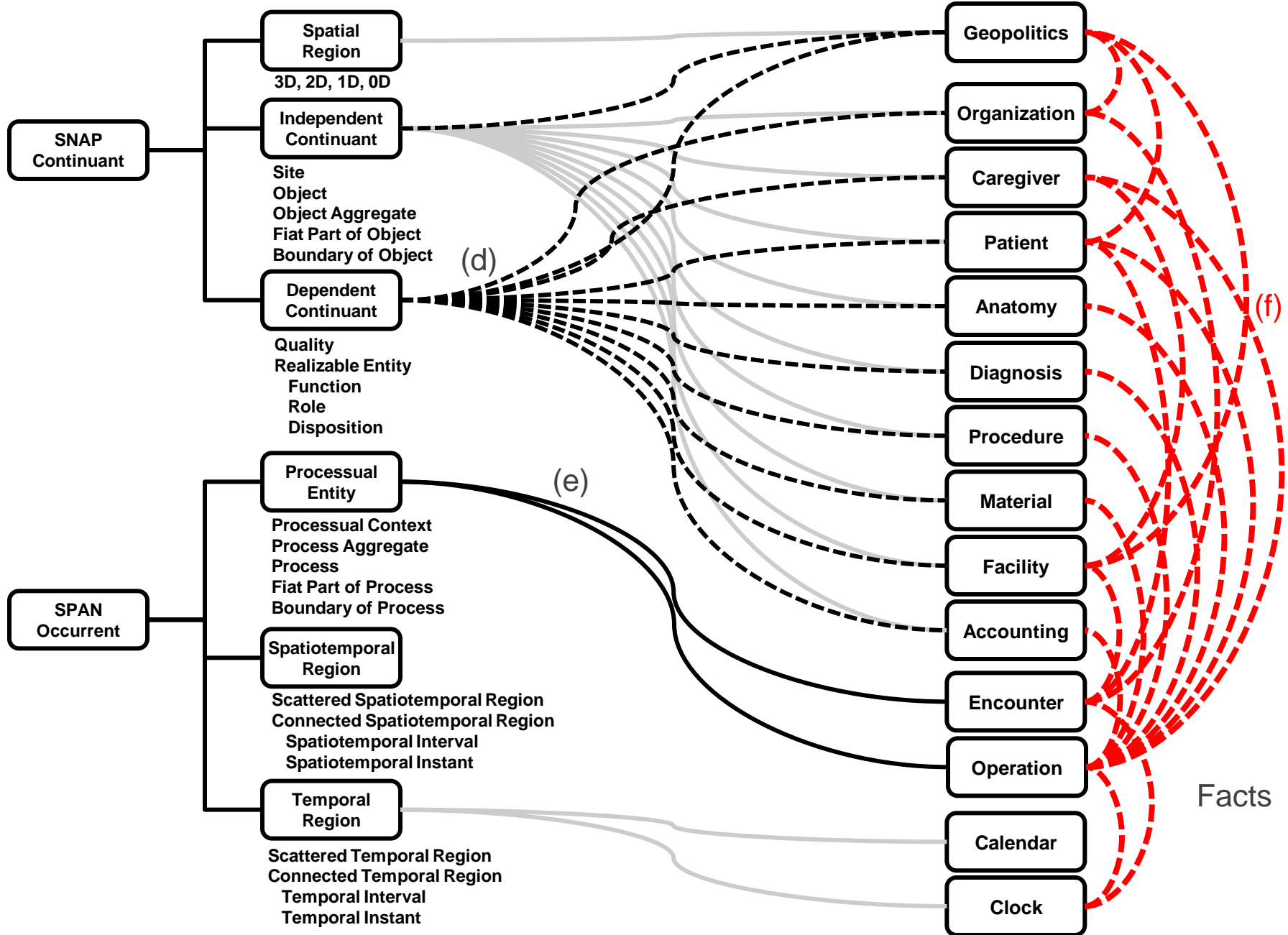
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Clinical Data Warehouse (CDW)



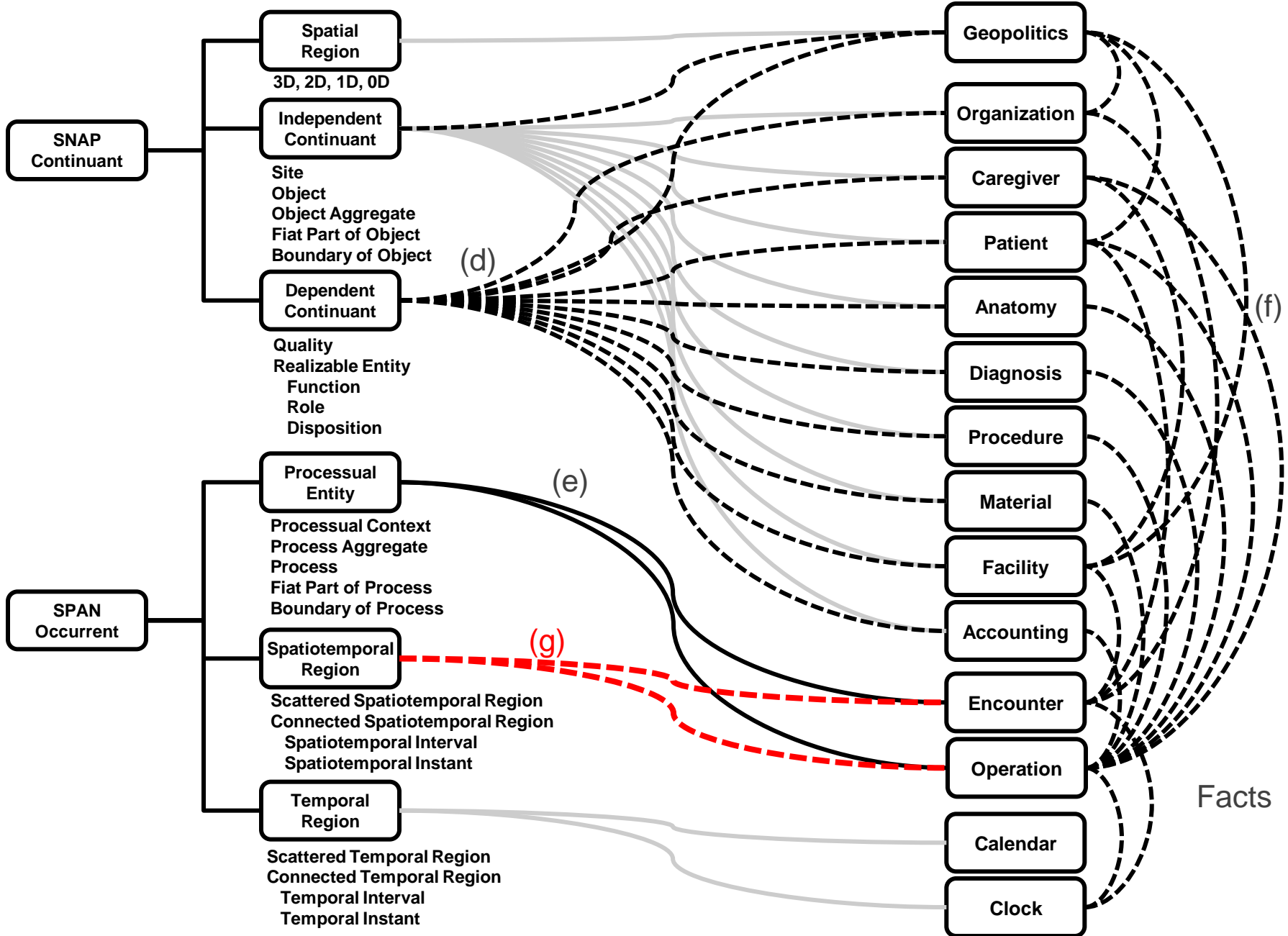
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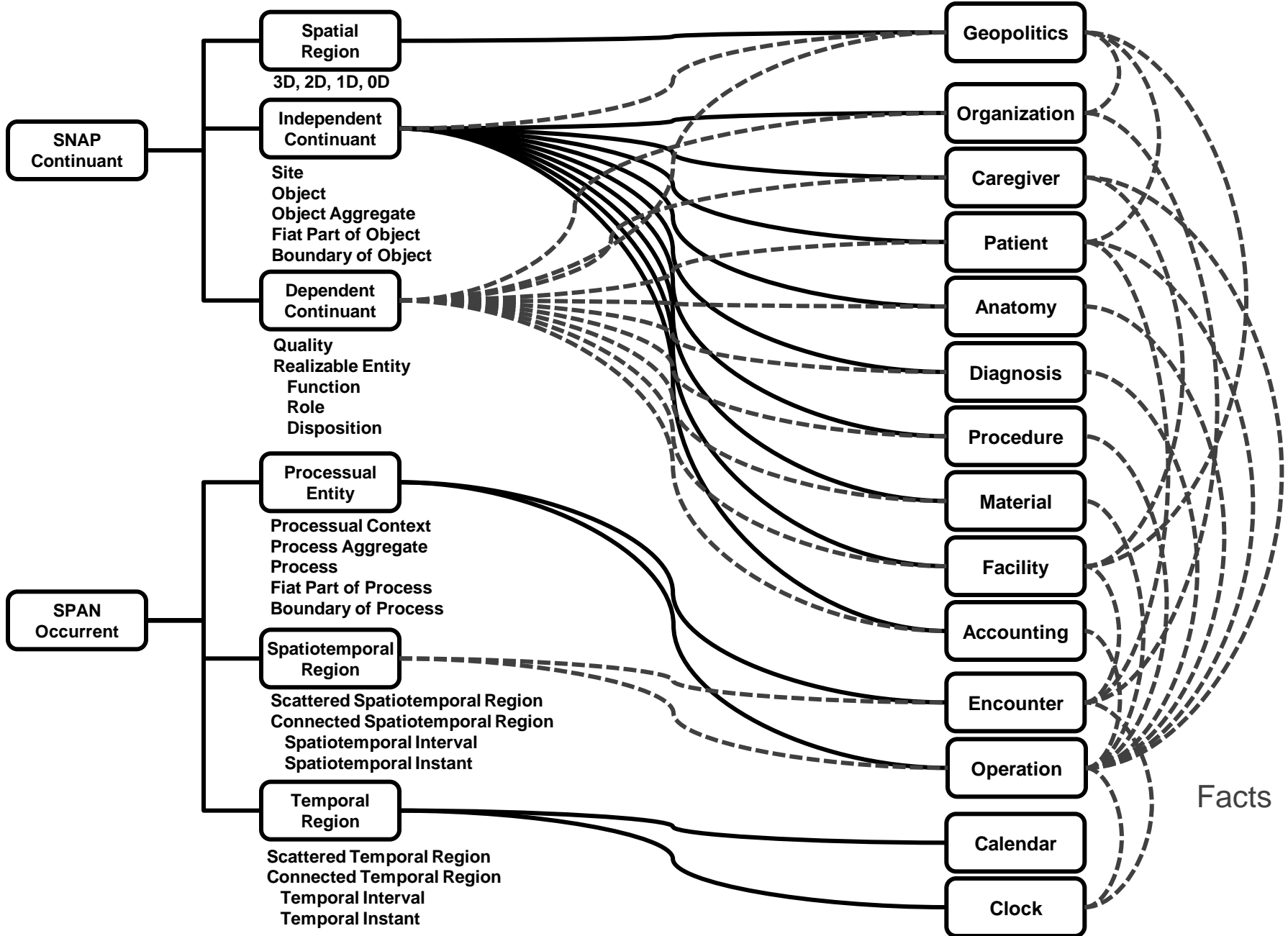
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Clinical Data Warehouse (CDW)



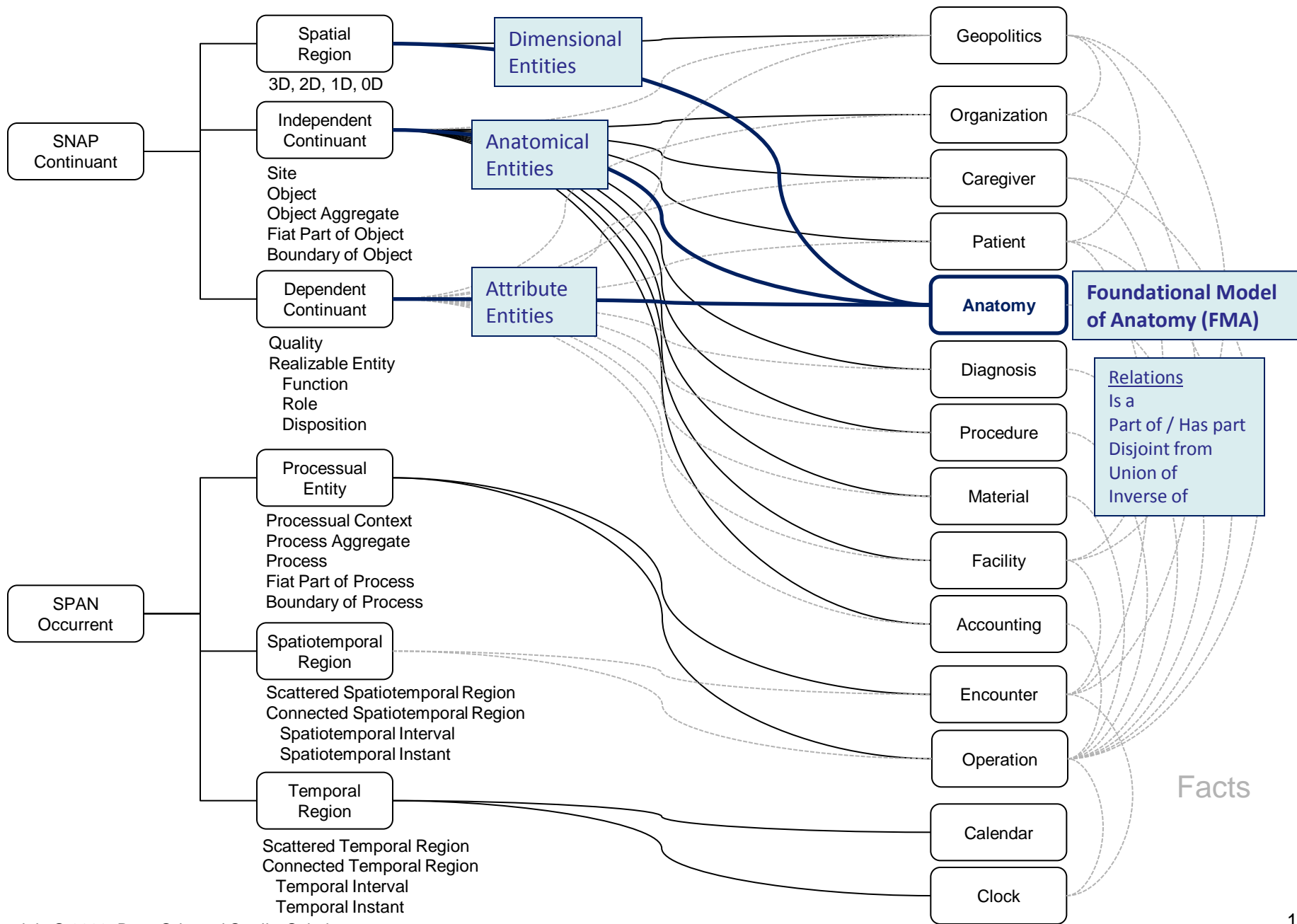
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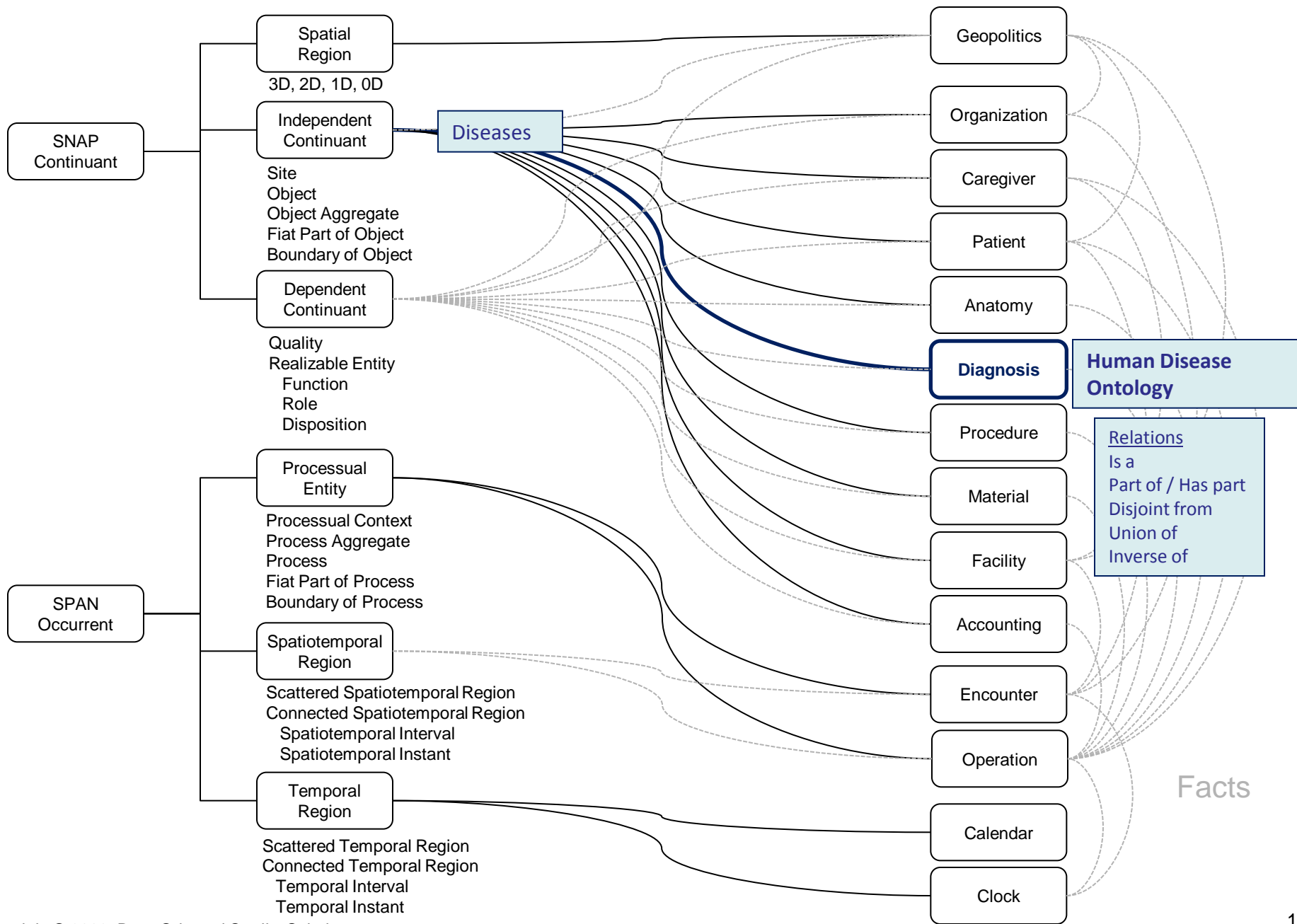
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Clinical Data Warehouse (CDW)



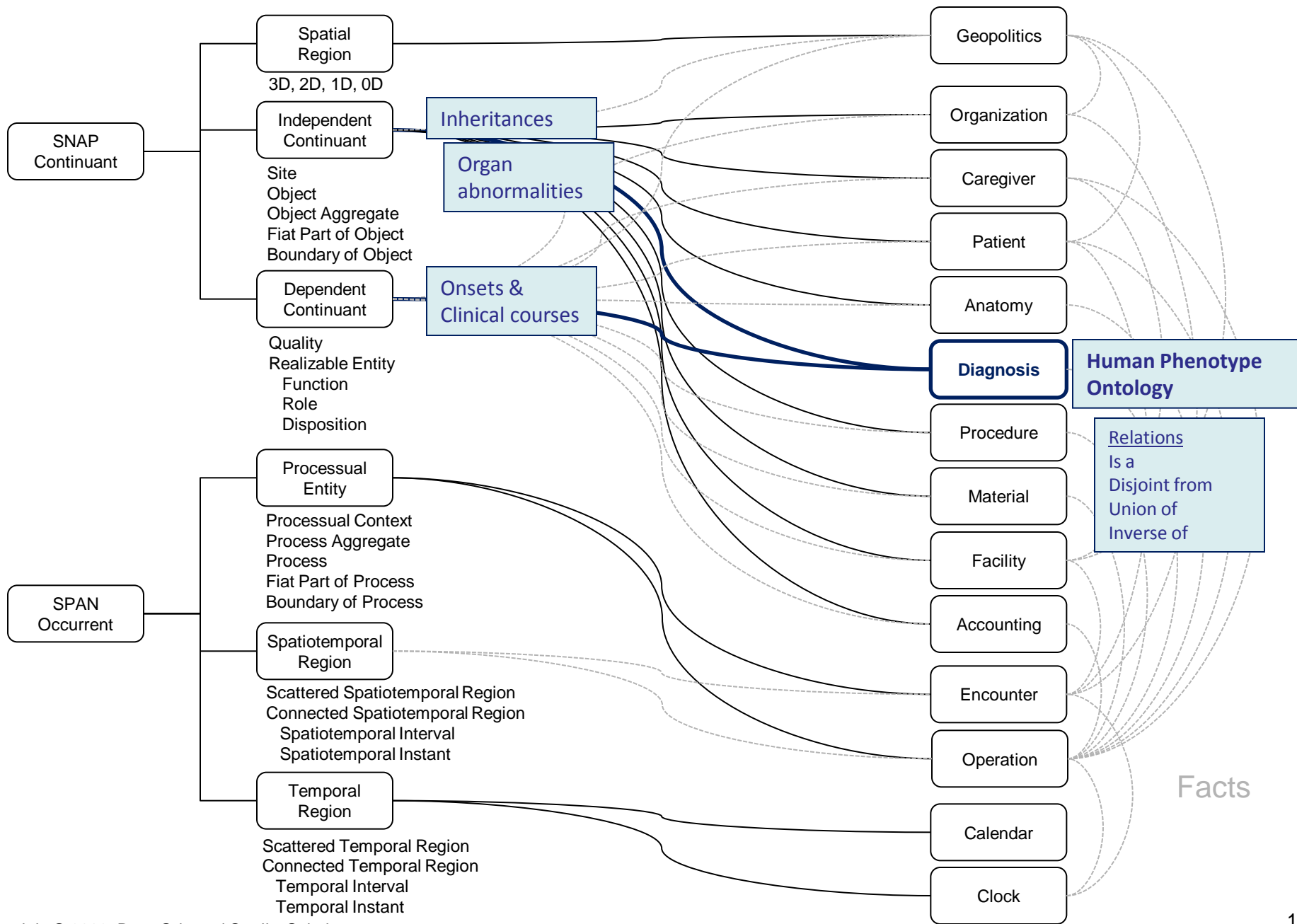
Basic Foundational Ontology (BFO)

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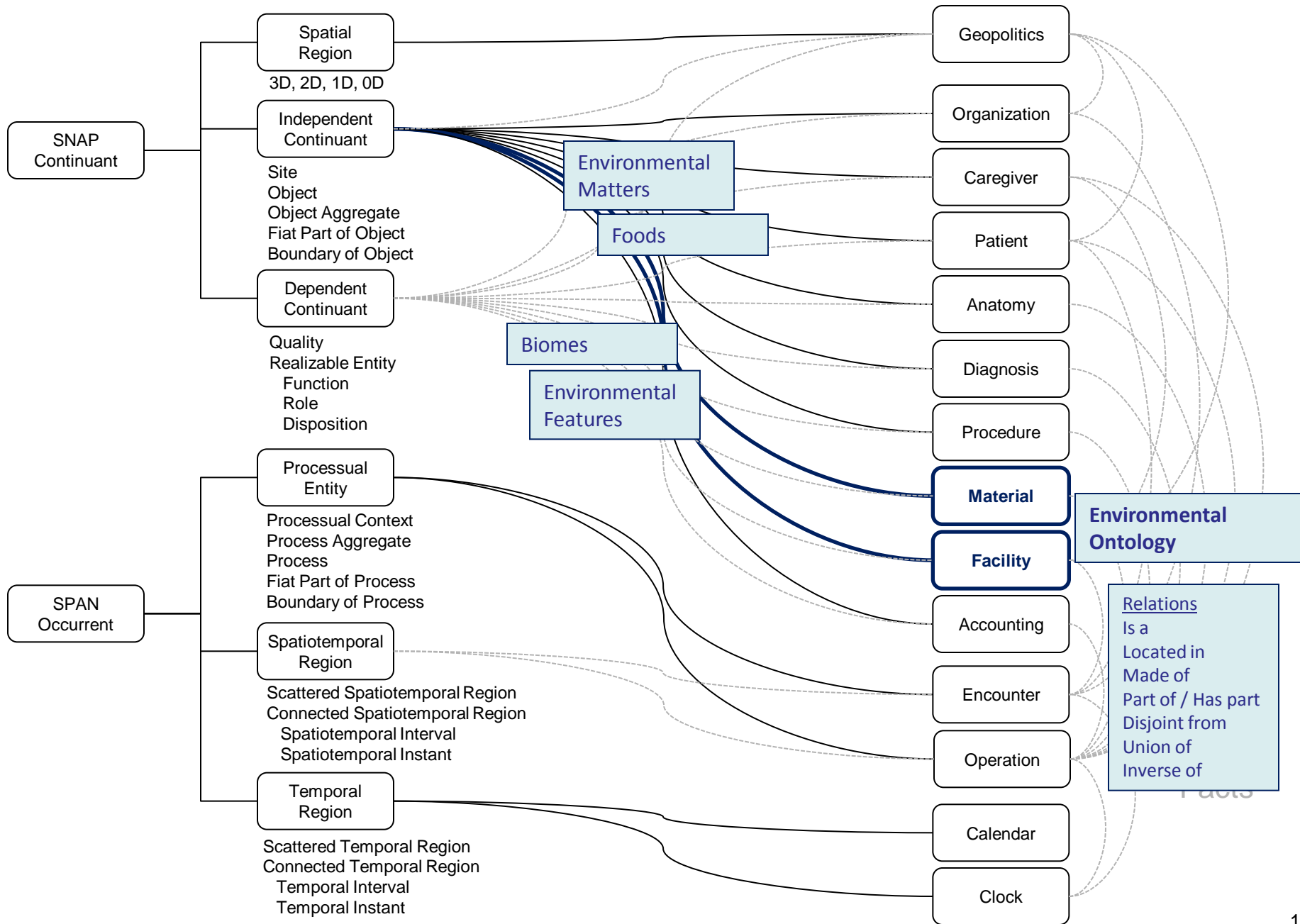
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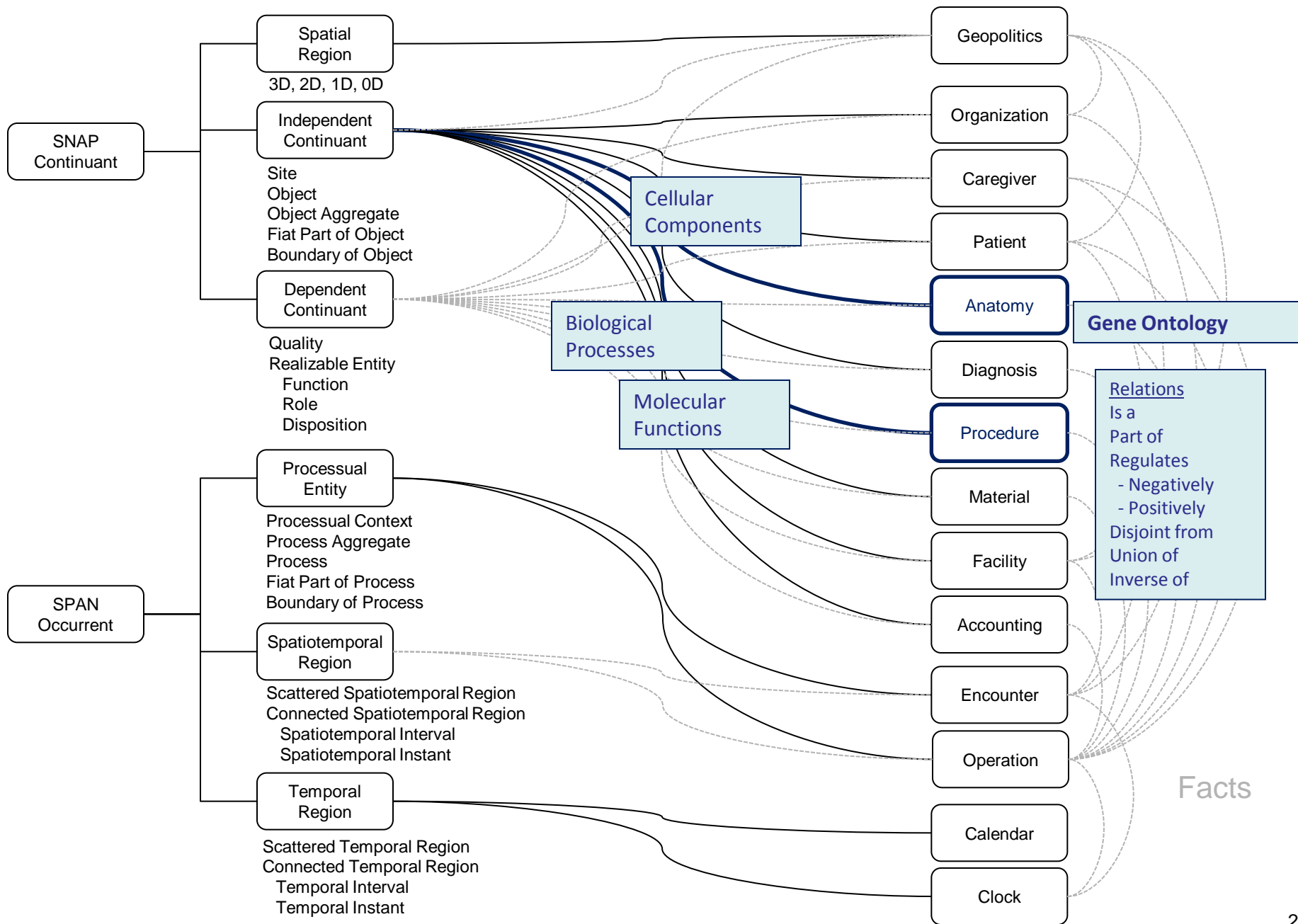
Basic Foundational Ontology (BFO)

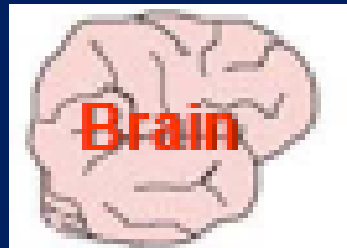
Clinical Data Warehouse (CDW)



Basic Foundational Ontology (BFO)

Clinical Data Warehouse (CDW)





Adapted from Mejino, O. (2007). The NeuroFMA: Ontological Framework for Neuroanatomy. Structural Informatics Group, University of Washington.

Dimensional Taxonomy

Anatomy Taxonomy

Boundary Network

