

workshop on domain theory connected to the notion of levels of reality, a still emerging paradigm in knowledge organization. The idea of levels of reality is modeled on biological imperatives such that cells constitute organisms, which are living entities, which are biological entities, and so forth. Rather than a hierarchy of mutual exclusivity genus–species relationships, levels of reality are incorporated both from top-down and bottom-up. Thus, a domain theory based on the idea of levels of reality suggests analysis of domains at different levels posing different requirements for knowledge discovery. Poli suggests that domains can be defined by their “natural boundaries” (p. 146). Domains that are “categorically closed” require a different framework from those lower levels which they incorporate. Another principal (p. 147) is “maximal partition of reality” meaning that the domain includes all “entities selected by its categorical framework.” We can see easily here an echo of Tennis’ notions of two axes for domain analysis—extension and intension. Extension parallels the natural boundaries of a categorically closed domain, and intension defines the entities selected for inclusion in a bounded domain’s categorical framework.

Poli also proposes two facets to define the “dimensions” of domain analysis (pp. 148–149), which he summarizes in a table ([Table 1.1](#)). We could draw several parallels from this table to components of knowledge organization. We could see “items” as parallel to “concepts” or “phenomena,” which can be analyzed from various epistemic stances. Poli’s work is not widely cited in the domain-analytical studies that follow it chronologically, but it shows how the larger domain of knowledge organization has embraced the domain-analytical paradigm, which has begun to mature and evolve. In the next chapter, we will review nearly 100 domain-analytical studies conducted in the KO domain, with the purpose of informing KO and KOSs, since the catalytical papers by Hjørland and his colleagues.