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International Journal devoted to Concept Theory, Classification, Indexing and Knowledge Representation

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Abstract: Traditionally connected to philosophy, the term ontology is increasingly related to information systems areas. Some researchers consider the approaches of the two disciplinary contexts to be completely different. Others consider that, although different, they should talk to each other, as both seek to answer similar questions. With the extensive literature on this topic, we intend to contribute to the understanding of the use of the term ontology in current research and which references support this use. An exploratory study was developed with a mixed methodology and a sample collected from the Web of Science of articles published in 2018. The results show the current prevalence of computer science in studies related to ontology and also of Gruber's view suggesting ontology as kind of conceptualization, a dominant view in that field. Some researchers, particularly in the field of biomedicine, do not adhere to this dominant view but to another one that seems closer to ontological study in the philosophical context. The term ontology, in the context of information systems, appears to be consolidating with a meaning different from the original, presenting traces of the process of "metaphorization" in the transfer of the term between the two fields of study.

Abstract: The knowledge organization systems (KOS) in use at libraries are social constructs that were conceived in the Euro-American context to organize and retrieve Western knowledge materials. As social constructs of the West, the effectiveness of library KOSs is limited when it comes to organization and retrieval of non-Western knowledge materials. How can librarians respond if asked to make non-Western knowledge materials as accessible as Western materials in their libraries? The accessibility of Western and non-Western knowledge materials in libraries need not be an either-or proposition. By way of a case study, a practical way forward is presented by which librarians can use their professional agency and existing digital technologies to exercise social justice. More specifically I demonstrate the design and development of a specialized KOS that enriches digital collections with hypertext features to enhance the accessibility of non-Western knowledge materials in libraries.

Abstract: The *Basics Concept Classification* (BCC) is a "universal" scheme: it attempts to encompass all areas of human understanding. Whereas most universal schemes are organized around scholarly disciplines, the BCC is instead organized around phenomena (things), the relationships that exist among phenomena, and the properties that phenomena and relators may possess. This structure allows the BCC to apply facet analysis without requiring the use of "facet indicators." The main motivation for the BCC was a recognition that existing classifications that are organized around disciplines serve interdisciplinary scholarship poorly. Complex concepts that might be understood quite differently across groups and individuals can generally be broken into basic concepts for which there is enough shared understanding for the purposes of classification. Documents, ideas, and objects are classified synthetically by combining entries from the schedules of phenomena, relators, and properties. The inclusion of separate schedules of—generally verb-like—relators is one of the most unusual aspects of the BCC. This (and the schedules of properties that serve as adjectives or adverbs) allows the production of sentence-like subject strings. Documents can then be classified in terms of the main arguments made in the document. BCC provides very precise descriptors of documents by combining phenomena, relators, and properties synthetically. The terminology employed in the BCC reduces terminological ambiguity. The BCC is still being developed and it needs to be fleshed out in certain respects. Yet it also needs to be applied; only in application can the feasibility and desirability of the classification be adequately assessed.

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Abstract: "Discipline" is commonly used to denote particular areas of knowledge, research and education. Yet, the concept is often not very well defined or even explicitly discussed when used in knowledge organisation and related fields. The aim of this article is to encourage and facilitate further reflections on academic disciplines, while at the same time offering insights on how this elusive concept might be understood. An overarching argument is that "discipline" should foremost be understood in relation to institutional and organisational features, and this is what distinguishes it from related terms such as, field, domain or topic. The etymology and history of the concept are reviewed along with a discussion of attempts to define and conceptualise disciplines. Insights are offered on how disciplines might be studied. Regardless of our views of disciplines, either as inherently out-dated constructs or as important features of a well-functioning academia, it is concluded that further precision or care in explicating the concept is needed.

Abstract: PhySH (Physics Subject Headings) was developed by the American Physical Society and first used in 2016 as a faceted hierarchical controlled vocabulary for physics, with some basic terms from related fields. It was developed mainly for the purpose of associating subjects with papers submitted to and published in the *Physical Review* family of journals. The scheme is organized at the top level with a two-dimensional classification, with one dimension (labeled "disciplines") representing professional divisions within physics, and the other dimension (labeled "facets") providing a conceptual partitioning of terms. PhySH was preceded in use by PACS ("Physics and Astronomy Classification Scheme"), which was in turn preceded by more ad hoc approaches, and this history and related vocabularies or categorizations will also be briefly discussed.

Abstract: Charles Peirce's classification of the sciences was designed shortly after the turn of the twentieth century. The classification has two main sources of inspiration: Comte's science classification and Kant's theoretical philosophy. Peirce's classification, like that of Comte, is hierarchically organised in that the more general and abstract sciences provide principles for the less general and more concrete sciences. However, Peirce includes and assigns a superordinate role to philosophical disciplines which analyse and provide logical, methodological and ontological principles for the specialised sciences, and which are based on everyday life experience. Moreover, Peirce recognises two main branches of specialised empirical science: the natural sciences, on the one hand, and the social sciences, the humanities and psychology on the other. While both branches share logical and methodological principles, they are based on different ontological principles in studying physical nature and the human mind and its products, respectively. Peirce's most basic philosophical discipline, phenomenology, transforms his early engagement with Kant. Peirce's classification of aesthetics, ethics and logic as normative sub-disciplines of philosophy relate to his philosophical pragmatism. Yet his more overarching division between theoretical (philosophical and specialised) sciences and practical sciences may be seen as problematic. Taking Peirce's historical account of scientific developments into consideration, however, I argue that his science classification and its emphasis on the interdependencies between the sciences could be seen as sustaining and supporting interdisciplinarity and interaction across fields of research, even across the divide between theoretical and practical sciences.