Letters to the Editor

Welcome to a new section of Knowledge Organization: Letters. This issue includes two letters in response to the editorial: "Classification or Organization: What's the Difference?" in volume 28, no.1 (also available at: http://www.ualberta.ca/~holson/ko/ 281editorial.html). Thanks are due to the two distinguished colleagues who have sent these first letters. I sincerely hope that they begin a long and fruitful conversation on definitional and other issues related to the field of knowledge organization. Future letters may be sent in RTF, WordPerfect or Word by e-mail to ko@ualberta.ca or in print by post to: Hope A. Olson, editor-in-chief; Knowledge Organization; School of Library & Information Studies; University of Alberta; Edmonton AB T6G 2J4 CANADA. Letters will normally be published in the issue immediately following their receipt.

Hope A. Olson, Editor-in-chief, Knowledge Organization

Classification or Organization - What is the difference?

Dear Dr. Olson,

With reference to your editorial in KO 28, n.1, I appreciated your analysis of the terms concerning *Classification* and *Organization*. I consulted the New Oxford Dictionary of English [Pearsall J. (ed.), Hanks P. (chief ed.), Clarendon Press, Oxford, 1998], and found that it provides very different definitions for the two terms. The definitions appeared to be clearer and more precise than those you reported:

Classification (noun): The action or process of classifying something according to shared qualities or characteristics.

Classify (verb): To arrange (a group of people or things) in classes or categories according to shared qualities or characteristics.

Class (noun): 1. A set or category of things having some property or attribute in common

and differentiated from others by kind, type, or quality.

Class (verb): To assign or regard as belonging to a particular category.

These definitions introduce the concept of "category" as synonym of class. Four elements are present: "arrange"; "something"; "class/category"; "shared qualities/characteristics".

Organization (noun): 1. The action of organizing something;

- The structure or arrangement of related or connected items;
- An efficient and orderly approach to tasks. Organize (verb): 1. To arrange into a structured whole; order.

Four elements are present: "arrange"; "something"; "structure"; "related or connected items".

By comparing the elements in these entries we can deduct the following.

- Both Classification and Organization encompass the action of "arranging".
- Both Classification and Organization arrange "something" which has to be decomposed.

The act of arranging, however, is not the same for both. In the case of Classification, arranging consists in: a) the identification of the "shared qualities/characteristics" of something; b) the attribution of this something to classes or categories characterized by the same "qualities/characteristics". In the case of Organization, arranging consists in the creation of the "structure" of something. This creation requires: a) the identification of all "items" (or parts) of the something; b) the establishment of logical relationships between "items" so that the something may become a structured whole. Organization entails the analysis and complete decomposition of the something; it should identify typologies of relationships, the categorization process and, generally, a way of structuring a whole set of items so that each may find its own location in the structure. An organization process includes the classification process. Classification principles and methods are fundamental for Organization, which is a more general and complex process.

The purpose of my remarks is to stress how important the source is for the creation of a correct and reliable definition. The choice of the source is the first step in the terminological analysis. Scholars of specific domains know very well how dictionaries of common language can overlook fundamental aspects of a specific term.

The titles you compared are International Classification and Knowledge Organization. Your analysis concerns Classification and Organization. The title of our journal is "Knowledge Organization", i.e. the organization of all that which is known by human beings. Indeed, the purpose of the journal is to publish results, methodologies and projects that are aimed at solving the problems of organizing knowledge. A knowledge field is the something, a single term that we must understand as encapsulating the many concepts that need to be structured. Ontology, the Theory of Concepts, and Terminology, as well as Formal Logic, Cognitive Sciences, Artificial Intelligence and other disciplines all contribute to Knowledge Organization which reciprocates by supplying various principles and methodologies that are useful in these disciplines.

Finally, an answer to the question you posed about our use of the former title on the cover. The answer lies in your observation that "our roots in classification are very strong." I should like to add that these roots are fundamental, and the former title has to stay because: a) it recalls the prestigious history and evolution of our journal and, consequently, its nature; b) it lends transparency to the knowledge organization process.

Yours sincerely, Giliola Negrini ISKO National Coordinator for Italy

Dear Dr. Olson:

I was very please to read your editorial "Classification or Organization - What's the Difference?" in Knowledge Organization 28/1 (2001): 1-3 in which you start a discussion about basic ideas concerning the aim of our society. I hope that discussion of the problems facing our field will be continued in future issues. Talking with colleagues and exchanging opinions are the best forms of information!

There are some points on which I disagree with you. I do not consider the difference between "classification" and "organization" to be the crucial ques-

tion; rather, for me, the question is: how can knowledge be organized in a world where different parts of knowledge are woven together into a new discipline and how can knowledge be organized advantageously, when traditional disciplines such as chemistry, biology, medicine, and many others have in the course of time changed into multidisciplinary fields?

Classification systems, such as UDC, Colon-Classification, and similar universal classifications, are insufficient for solving problems relating to the multidisciplinary character of modern knowledge. The use of categories and facets as in Faceted Classification can help in building a <u>discipline-independent</u> ordering system.

In the meantime, the use of categories (facets) has been very successful not only in classifications and thesauri. The principle has also been developed in graphical methods of representing textual knowledge in a structure-like form in problem solutions and other creative processes for instant inventions.

The improvement and further development of Faceted Classification must be at the heart of our future efforts toward better cognition, explanation, and organization of knowledge.

Now to the definitions you mentioned. The definitions of "classify" in the Oxford English Dictionary are, in my opinion, little suited to clarifying the meaning of the compound term "knowledge organization." A better term is "organize" in the sense of "Organon" (Aristotle). In this point I agree with you about finding a direct link to "knowledge." I think that "to classify" is one of several aspects of "order." But "organization" is the broader term, a concept with more features and, therefore, more suitable than the compound "knowledge organization."

But, what about "knowledge"? What is "knowledge" in knowledge-based computer systems? What is "knowledge" in systems of artificial intelligence? What is the meaning of "knowledge" in cognitive psychology?, etc. In books we find "textually formulated knowledge." In each field "knowledge" is defined in another way but the name of the term remains the same. What a grand example of terminological confusion! Can you please tell me the meaning of "knowledge" in "Knowledge Organization"?

I'm assuming that the best starting point would be to explain "human knowledge" and how it is stored and processed in the human brain (memory). If we start from the characteristic features of human knowledge, we can better understand what "Knowledge Organization" should be. In the human memory, knowledge can only be recalled if it is put in a meaningful order. Good knowledge organization is the condition for easier understanding of new information if present knowledge is already ordered.

The transformation of information into knowledge in the human brain is a dynamic process and is the precondition for producing new information. It is very important to point out that knowledge has a <u>dynamic structure</u> which is permanently changed by thinking and learning processes. The human brain (the memory) is the place where knowledge is processed, not the computer! The computer can be a use-

ful aid but is not a "thinking machine"! Therefore, ISKO must concentrate upon <u>human knowledge processing</u> and everything that can help promote creative processes where knowledge is needed.

This should be the main task of the Organization of Knowledge.

Yours sincerely,

Dr. Dr. Gerd Bauer Rudolfsberg, Schleswig, Germany