
The Ubiquitous Hierarchy: An Army to Overcome the Threat of a Mob

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ABSTRACT

THIS ARTICLE EXPLORES THE CONNECTIONS between Melvil Dewey and Hegelianism and Charles Cutter and the Scottish Common Sense philosophers. It traces the practice of hierarchy from these philosophical influences to Dewey and Cutter and their legacy to today's *Dewey Decimal Classification* and *Library of Congress Subject Headings*. The ubiquity of hierarchy is linked to Dewey's and Cutter's metaphor of organizing the mob of information into an orderly army using the tool of logic.

INTRODUCTION

Much of Western philosophy implies or expounds directly a notion of hierarchy. From Aristotle through Francis Bacon to Hegel and beyond, logic, in particular, bears a hierarchical stamp. At the same time, systems for topical organization of information typically exhibit hierarchical structures. The pervasiveness of hierarchy is not surprising in a culture such as our Western culture derived from Greek and later European thought and further developed in the settler cultures such as those of the Americas. However, examining it more closely helps us to understand both its operations and its ramifications. This paper will examine two schools of philosophy and two streams of organization of information to trace the influence of philosophy on the founders of our systems of subject access and on current standards with an emphasis on their hierarchical structures.

THE ARMY AND THE MOB IN DEWEY AND CUTTER

Melvil Dewey and his *Dewey Decimal Classification (DDC)* show the influence of Hegel and American Hegelians while Charles Cutter and his

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legacy, the *Library of Congress Subject Headings (LCSH)*, show the influence of Thomas Reid and the Scottish Common Sense philosophers. In doing so, both Dewey and Cutter, the two “fathers” of modern subject access practice, used the metaphor of an army to justify their imposition of a hierarchical structure to order the chaotic mob of information.

Dewey was particularly dramatic in his use of the mob/army metaphor. He asserted (in his “simplified spelling”) that:

A larj business or work unclasifyd or uncharted is not a worthy organization but **mere material** from which a **clever brain** may construct one. It differs in efficiency from the ideal **as a mob of men differs from a wel disciplind army**. Piles of brik and mortar ar not a templ any more than heaps of typ ar Shakspere’s works, tho if “clasifyd” and set, each in ryt relation to the rest, the transformation is bro’t about. (Dewey, 1932, hereafter *DDCI3*, p. 44—emphasis added in all quotations)

Dewey viewed information as a chaotic jumble needing order. He used a variety of metaphors to bring home this point. Taking examples from business, the military, religion, and literature, Dewey asserted that classification, broadly conceived, is necessary for overcoming chaos. In each instance, Dewey offered only two choices: mob or army, bricks or a building, miscellaneous words or a masterpiece. Order, in Dewey’s view, comes from “a clever brain”—which I interpret to mean one that employs reason or logic.

Charles Cutter, on the other hand, was not creating a classification. He was creating a dictionary catalog to assign names to information. The chaos addressed by Cutter comes from the alphabet rather than from a mob of raw material. Cutter wanted to change the mob for an army, absurdity for logic:

The dictionary catalog sets out with another object and a different method [than the classified catalog], but having attained that object—facility of reference—is at liberty to try to secure some of the **advantages of classification and system** in its own way. Its subject-entries, individual, general, limited, extensive, **thrown together without any logical arrangement, in most absurd proximity**—*Abscess* followed by *Absenteeism* and that by *Absolution*, *Club-foot* next to *Clubs*, and *Communion* to *Communism*, while *Bibliography* and *Literary history*, *Christianity* and *Theology*, are separated by half the length of the catalogue—are **a mass of utterly disconnected particles** without any relation to one another, each useful in itself but only by itself. But by a **well-devised net-work of cross-references the mob becomes an army**, of which each part is capable of assisting many other parts. The effective **force** of the catalog is immensely increased. (Cutter, 1904, p. 79)

As with Dewey, the choice that Cutter offered is a limiting duality. Either the catalog can be made up of individuals (a mob of individuals) or it can be a highly restrictive hierarchical structure (an army). No other options were considered. Cutter identified two options for a structure: the logical and the absurd. The absurd juxtapositions of alphabetical structure are like

a mob. A logical structure, however, creates an order as efficient as that of an army. Cutter's implied presumption is that there are only these two options: logic or absurdity, the army or the mob. His acceptance of this dualism led him to adopt a hierarchical structure for his universal language. The structure that Cutter devised to arrange entries so that they may be easily found is a hierarchical structure formed by cross-references.

Cutter and Dewey may well have chosen as they did without specific philosophical influences. Western philosophy has hierarchy as one of its underlying themes. However, the entrenched and ubiquitous nature of hierarchy in Dewey's and Cutter's writings and in *DDC* and *LCSH* suggests a particularly intense operation of the discourse of hierarchy. Their linking of reason or logic with the structure of an army invites further exploration of such strong hierarchical tendencies.

HEGEL AND DEWEY

G. W. F. Hegel has been specifically linked to Dewey (Wiegand, 1998). Dewey's philosophical mentor at Amherst College, Julius Seelye, was a follower of Hegel (Wiegand, 1998, p. 185) and William T. Harris, whose St. Louis Public School Library's classification was a basis for *DDC* (Wiegand, 1996, p. 23), was a leader of the American, or St. Louis, Hegelians, publisher of their *Journal of Speculative Philosophy*, and author of a book explicating Hegel's logic (Harris, 1895).

Seelye was not only a professor and later president at Amherst. He translated Albert Schweigler's *History of Philosophy*, viewed by Harris as a significant work in the study of Hegel (Harris, 1867, p. 250). Wayne Wiegand traces Seelye's Hegelianism and its influence on Dewey and his classification in his article on the "Amherst Method" (1998), including the impact of texts used by Seelye and others in Dewey's subarrangement of classes. Wiegand illustrates that Dewey was clearly subject to influence, with Hegelians high on the list of his authority figures.

Harris's classification for the St. Louis public schools is widely credited for the choice and sequence of main classes in *DDC*. In the acknowledgments from the first edition to the thirteenth (the last to which he personally contributed), Dewey notes that although he did not see Harris's scheme before he had completed the most important parts of his own, "In filling the 9 classes of the skeme, the inverted Baconian arrangement of the St Louis Library was followed" (Dewey, 1932, p. 46). Harris, in turn, served as a cooperating editor of Dewey's *Library Journal* and used *DDC* at the United States Bureau of Education's library when he was head of the Bureau (Leidecker, 1946, pp. 341, 468). Harris (1895) wrote an explication of Hegel's logic credited with being more Hegelian than Hegel. In a tribute to Harris, Edward E. Richardson describes Harris's Hegelianism as characterized by a devout belief in rationalism and its reliance on logic alongside a belief in history as a progress toward the ideal of freedom and individuality (1936, pp. 33–35).

The actual progression of main classes in *DDC* seems to be drawn from Hegel, probably via Harris (Graziano, 1959; Comaromi, 1976, pp. 25–29; Olson, 2001). Harris’s biographer, Kurt Leidecker, accepts that Harris influenced Dewey in this regard (1946, p. 340). Given earlier Hegelian influences on Dewey, it is altogether likely that Dewey and Harris were sufficiently in tune to share ideas about classificatory structure consonant with the fundamental logic that Hegel propounded.

Hegel’s system of logic implies hierarchy. He defined three quantitative “moments”: individual, particular, and universal in increasing order of generality. Each of these moments characterizes an element in each figure of the three syllogisms Hegel proposed in his system of logic. As an example, the first is the commonly identified syllogism linking the individual (I) instance of “Gaius” to the universal (U) notion of mortality via the particular (P) category of “man”:

All P are U	All men are mortal
I is P	Gaius is a man
∴ I is U	∴ Gaius is mortal

In classificatory terms, “mortal beings” is the main class, which is subdivided by various species including “man,” and “Gaius” is a further subdivision of “man.” This syllogism follows the pattern of deductive logic in which a conclusion is inferred from accepted premises. Hegel used the whole/part or genus/species hierarchy of universal/particular/individual to structure the inference. Hegel’s syllogism reflects basic Aristotelean logic—part of the Western philosophical tradition (see Olson, 1999 for a related discussion of Aristotle and classification).

The syllogisms that Hegel proposes in his system also include an inductive syllogism as a subclass of his syllogism of allness. The inductive syllogism follows the following pattern:

$I_1, I_2, I_3, \dots, I_n$ are P	Gaius <i>et al</i> are mortal
All P include $I_1, I_2, I_3, \dots, I_n$	All men include Gaius <i>et al</i>
∴ P are U	∴ Men are mortal

The operation of induction, like the deduction of the first syllogism, rests on a hierarchy. But in the inductive syllogism, it is a hierarchy in which the individual instances are the evidence that implies the link between the particular and the universal. In either instance, the three moments—individual, particular, universal—relate to each other via hierarchical genus/species or whole/part relationships. “Everything is a *sylogism*, a universal that through particularity is united with individuality. . . .” (Hegel, 1969, p. 669).

Hegel built on the three moments of definition through a second process, division. Harris interpreted Hegel’s “division” as “classification”: “Classification is a synthetic operation in which is expressed the necessary

relation of all the determinations of the universal. The contents are exhibited exhaustively" (Harris, 1895, p. 394). Or as Hegel put it: "The universal must *particularize* itself; . . . the individual content of cognition ascends through particularity to the extreme of universality. . . ." (Hegel, 1969, p. 800). This pattern is identical to W. C. Berwick Sayers' description of how traditional classifications are structured: "The major principle originally expounded was that classification should start with knowledge in its totality and divide it up into classes . . . the idea of starting with large subject fields and dividing them up, using one characteristic at a time, so that eventually they had attempted to list all departments of knowledge in a systematic sequence moving, from the very general to the highly specialised, in a series of regulated steps" (Sayers, 1967, pp. 43–44).

The dialectic to which this cognitive technique contributes is a method that proceeds through stages to an absolute. "The dialectic is no infinite progress, but it brings us to a final category. . . ." (Harris, 1895, p. 402). Hence, the pinnacle of the logical progression that depends on the link of individual, particular, and universal is an absolute idea or absolute knowledge.

Harris and his fellow St. Louis Hegelians applied Hegel's dialectic in their everyday concerns. They used it to explain what they saw as the necessary evil of the Civil War as well as a means of reforming education and even improving turkey and squirrel hunting (Pochmann, 1948, p. 33). So applying it to a library classification as Harris and then Dewey did was no far stretch.

Dewey created his hierarchical arrangement by gathering like entities in a structure that progresses through ranks of relationships between things, much like a syllogism:

The field of knowle[j] is divided into 9 main **classes**, numberd 1 to 9, and cyclopedias, periodicals etc. so jeneral as to belong to *none* of these **classes** ar markt 0 (naught) and form a 10th **clas**; e.g. **clas** 1 is library of Filosofy; **clas** 5, library of Syence; **clas** 9, History, etc. These **special classes** or libraries ar then considerd independently, and each is separated again into 9 **special divisions** of the main subject, numberd 1 to 9, as wer the **classes**, jeneral works belonging to *no* **division** having 0 for their **division** number. Thus 59 is **division** 9 (Zoolo[jy]) of **clas** 5 (Syence). A 3d **division** is then made by **separating** each of these **divisions** into 10 **sections**, numberd in same way with 0 and the 9 dijits; and this decimal **subdivision** is repeated, til it secures as many **subsections** as may be needed in any topic. Thus 513 is **section** 3 (Jeometry) of **division** 1 (Mathematics) of **clas** 5 (Pure syence). (Dewey, 1932, p. 15)

Dewey's use of classes, divisions, and sections recalls the hierarchy of an army (indeed, his tens and hundreds recall the Roman army). The *Oxford English Dictionary* defines them as:

class . . . A **division** or order of society according to status; a **rank** or grade of society. . . . A **division** of things according to grade or quality, as high or low, first, second, etc. . . .

division . . . The action of dividing or state of being divided into parts or branches; partition, severance. . . . The fact of being divided in opinion, sentiment, or interest; disagreement, variance, **dissension**, **discord**; . . . **classification**; . . . A portion of an **army** or fleet, . . . **section** . . . A part separated or divided off from the remainder . . . *Mil.*
A fourth part of a company. . . .

Each differentiation of the hierarchical arrangement compounds the separation of classes, dividing *same* from *different* as more levels are added in a chain of facets like a chain of command. Instead of the chaos of a mob, Dewey introduced the rigidity of an army. "Thus all books on any given subject stand together, and no additions or changes ever separate them" (Dewey, 1932, p. 22).

Nonetheless, one of the problems that Dewey addressed was the inflexibility of everything being in its place if that place was a specific position on a library shelf. His hierarchical arrangement possessed another attribute of an army:

In relative location it is like finding a soldier if you know his army, division, regiment and company. If John Smith is 3d man in 2d row of Company B, regiment 69, 4th division, whether the regiment is in camp, on parade or on march, his place is not determined by the bit of ground on which he stands, but by his relation to the rest of the army. If soldiers are dead and in the cemetery they are as easily found by fixt as by relative location. But if the army is alive and militant, as every library or private working collection ought to be, its resources should be *findable* whether in camp, on march or in action. (Dewey, 1932, p. 22)

Having lived through both the American Civil War and World War I, by the time these words were published in the last edition of *DDC* during his lifetime, it is not surprising that Dewey wanted to link his classification to the living soldiers as opposed to the dead. He will have been familiar with the image of mass cemeteries of both wars in which individuals were named on row upon row of white crosses. However, his living soldiers are "in camp, on parade or on march," not in battle where even decimal systems cannot overcome chaos.

THE SCOTTISH COMMON SENSE PHILOSOPHERS AND CUTTER

Charles Cutter's use of the mob *vs* army metaphor is present in his *Rules for a Dictionary Catalogue* from the first edition (1876) to the generally cited fourth edition (1904). Cutter's educational and social contexts reflected the American version of the Scottish common sense philosophical tradition (Miksa, 1977, pp. 32–34; Miksa, 1983, p. 40). As a student at Harvard, a Unitarian, and a member of Boston's intelligentsia, Cutter was exposed to the ideas of Scottish philosophers such as Thomas Reid¹ and Dugald Stewart, especially through the interpretation of Ezra Abbot, textual scholar, assistant librarian, and chief cataloger at Harvard at the time (Miksa, 1977,

pp. 19, 32). Cutter was at Harvard as a student and then a librarian from 1851 to 1868 (Miksa, 1977, pp. 19–20). Before and during that time, the Scottish Common Sense philosophers were required reading at the major colleges in the eastern United States. Their views were widely popularized and became a pervasive influence on American society (Martin, 1961, pp. 13–39; Bryson, 1968, p. 3; Miksa, 1977, p. 34; Miksa, 1983, p. 40). Even in the 1870s the Scottish school was still influential enough to be the old guard (Martin, 1961, p. 162). Abbot helped Cutter translate the Scottish philosophy prevalent at the time into the concept of systematized library cataloging (Miksa, 1977, p. 49). Cutter developed from this influence the notion of three levels of subject: individual, lower order abstractions, and first principles (Miksa, 1977, p. 52). These levels are parallel to Hegel's individual, particular, and universal moments.

The Scottish common sense school began as a reaction to David Hume's skepticism—a concern held in common with Hegel.² Reid described this skepticism as “absurd” (1997, p. 32), just as Cutter described the mob of the alphabet as analogous to absurdity. Philosophy had built up to such a level of esoteric argument in Hume that Reid found its artificiality more than he could bear. Further, Reid suggested that Common Sense should be the measure of sound philosophy and that its opposite is absurdity:

If there are certain principles, as I think there are, which the constitution of our nature leads us to believe, and which we are under a necessity to take for granted in the common concerns of life, without being able to give a reason for them; these are what I call the principles of **common sense**; and what is manifestly contrary to them, is what we call **absurd**. (Reid, 1997, p. 33)

In the service of common sense, Reid (along with Dugald Stewart) endorsed inductive reasoning on the basis of mutual causation of particular effects (Olson, 1975, pp. 46ff, 115; Marcil-Lacoste, 1982, pp. 149–150). That is, the common cause of particular phenomena can be identified inductively by drawing generalizations from these specific instances. Francis Miksa explains: “Given this way of relating kinds of ideas, all ideas could be viewed as elements of a single classificatory hierarchy. . . .” (1983, p. 43). As described above in relation to Hegel's second syllogism, induction depends on a whole/part or genus/species hierarchical relationship between concept and evidence.

Cutter was following just such a model when he created a structure he termed “syndetic” to achieve a hierarchical arrangement in the dictionary catalog. His definition belies the primacy he gave to hierarchical relationships:

Syndetic, connective, applied to that kind of dictionary catalog which **binds its entries together by means of cross-references so as to form a whole**, the references being made from the most comprehensive subject to those of the next **lower** degree of comprehensiveness, and from each of these to their **subordinate** subjects, and vice versa. These cross-

references correspond to and are a good substitute for the arrangement in a systematic catalog. References are also made in the syndetic catalog to illustrative and coördinate subjects, and, if it is perfect, from specific to general subjects. (§§ 187–188.) (Cutter, 1904, p. 23)

Only as an aside in the last sentence of his definition did he mention the possibility of relationships other than hierarchical ones. He imposed a hierarchy on the chaos of language as if it had no order already. He rejected the structure of the alphabet and, instead, chose the only other option he saw: hierarchy.

Cutter's notion of a dictionary catalog fit logically with Reid's "common theory of ideas," which followed an empiricist line in linking ideas to material things (Seth, 1890, p. 18; Broadie, 1990, p. 113). Reid also believed that language reflects our experience, with words having "a just foundation in nature" (Reid, 1785, p. 22). In addition to the senses as a source of empirical knowledge, Reid and other Scottish Common Sense philosophers recognized certain powers innate to humanity, including "memory, conception, abstraction, judging, reasoning, taste, moral perception [and] consciousness" (Bryson, 1968, p. 132). The Scottish Common Sense philosophers did not develop a full-blown system of rational logic as Hegel did, but rather focused on intuitional principles and knowledge as a reflection of the world around them (Seth, 1890, pp. 196–197). These characteristics seem to foster principles more suited to a dictionary catalog such as literary warrant. However, the simple occurrence of a topic does not make it a valid subject in this sense. It must have its place in the inductively determined hierarchy (Miksa, 1983, p. 60).

Another Scottish Common Sense philosopher widely studied in the United States in Cutter's time, Adam Ferguson, suggests that "In other classes of animals, the individual advances from infancy to age or maturity; and he attains, in the compass of a single life, too all the perfection his nature can reach: but, in the human kind, the species has a progress as well as the individual; they build in every subsequent age on foundations formerly laid; and, in a succession of years, tend to a perfection in the application of their faculties, to which the aid of long experience is required, and to which many generations must have combined their endeavours" (1995, p. 10). In his *An Essay on the History of Civil Society* (1995), Ferguson described the progress of "rude nations" as they developed systems of property ownership and the arts (including the "civil and commercial arts") as having standard progressions from one stage to another. Reid was less explicit about historical progression, but seems to be following the same kind of logic linking hierarchy and teleology: "The chain of natural causes has, not unfitly, been compared to a chain hanging down from heaven: A link that is discovered supports the links below it, but it must itself be supported; and that which supports it must be supported, until we come to the first link, which is supported by the throne of the Almighty. Every natural cause must have a cause,

until we ascend to the first cause, which is uncaused, and operates not by necessity but by will" (Reid, 1785, p. 115).

In Cutter's dictionary catalog, the chain is forged by references until a general heading is reached that has no broader concept. The references proceed only one level at a time. As Reid put it in a letter: "Human knowledge is like the steps of a ladder. The first step consists of particular truths, discovered by observation or experiment: the second collects these into more general truths: the third into still more general. But there are many steps before we come to the top. Ambitious of knowledge, and unconscious of weakness, we would fain jump at once from the lowest to the highest. But the consequence of this is that we tumble down and find that our labor must begin anew" (Olson, 1975, p. 36).

LEGACY OF A METAPHOR

The standards that follow from Cutter's and Dewey's work reflect the hierarchical structures of the army. The *Dewey Decimal Classification* (DDC) and the *Library of Congress Subject Headings* (LCSH) are their legacy. These structures are as arbitrary as the alphabetical proximities that concern Cutter in that they privilege hierarchical relationships over all other types of relationships. They also embody a rigidity that inhibits LCSH and DDC in their ability to adapt to changing contexts.

Hierarchy in DDC

The hierarchical nature of DDC is still as Dewey described it. In the introduction to the twenty-first edition, there is an explanation of DDC's "principle of hierarchy" manifested in both the structure and notation of the classification. "*Structural hierarchy* means that all topics (aside from the ten main classes) are subordinate to and part of all the broader topics above it" (Dewey, 1996, hereafter *DDC21*, p. xxxiii). This arrangement is a clear indication of classification as an inductive tool. If one is to use the lower levels of the hierarchy as evidence of the generalization, then it is imperative that those lower levels carry the characteristics of the generalities they represent.

The introduction also points out that "The corollary is also true: whatever is true of the whole is true of the parts. This important concept is sometimes called *hierarchical force*. Any note regarding the nature of a class holds true for all the subordinate classes, . . ." (*DDC21*, pp. xxxiii–xxxiv). As a result, the hierarchy shapes the topics within it as Hegel's universal shapes the individual through the particular. The multitude of commonalities that offer possibilities for classification are represented in the rigidity of a chain of facets rather than as they might relate in different ways. The rejection of relationships other than hierarchical ones is apparent in the need to instruct classifiers in handling them. If, for example, a document has more than one subject in the same discipline: "Class a work dealing with interre-

lated subjects with the subject that is being acted upon. This is called the *rule of application*, and takes precedence over any other rule. For instance, class an analytical work dealing with Shakespeare's influence on Keats with Keats" (*DDC21*, p. xxxvi).

There is not a way to represent the relationship between Shakespeare and Keats as there is to represent the relationship between dogs and poodles. Of all of the nonhierarchical relationships possible, the best that *DDC* can do is to offer a "table of last resort" for deciding which of the dismembered aspects of an unrepresentable topic one should choose to represent (*DDC21*, p. xxxviii). In a system grounded exclusively on hierarchy, there is not room for other influences.

Hierarchy and LCSH

A similar situation holds for the *Library of Congress Subject Headings (LCSH)*. In assigning subject headings, the cataloger is instructed in the *Subject Cataloging Manual: Subject Headings* to assign the most specific heading available (Library of Congress, 1996, hereafter *SCM:SH*, H 180, p. 2). The cataloger finds this specific heading by following the reference structure of NARROWER TERMS (NT) down the hierarchy as far as it applies. Given the hierarchical structure of *LCSH*, this dictum is logical. However, it presumes that all headings and, therefore, all topics fit neatly into hierarchies. If they do not fit, then the cataloger will be led astray by the NT references. This rule also presumes that all catalogers think in the same hierarchies. Miksa (1983) explicates a change in the concept of a subject between Cutter and his successors, losing its "classificatory referent." However, the presence of hierarchy is still clear in the current *LCSH* (see, for example, Weinberg, 1993).³

The construction of the hierarchical NT/BT (BROADER TERM) references is governed by strict rules. Three types of hierarchical relationships require references: genus/species, whole/part, and instance (*SCM:SH*, H 370, p. 1). Further, all headings are required to have a BT unless they fall into one of five categories of "orphans" (*SCM:SH*, H 370, pp. 3–4). Every heading must be part of a hierarchical genealogy with that context affecting the meaning of headings similar to hierarchical force in *DDC*. Another telling instruction for showing hierarchical relationships requires that an intermediate heading be established if needed to fill a hierarchical gap created by a new heading (*SCM:SH*, H 370, p. 5). This requirement avoids unnecessary "orphans" by making certain that all headings in a hierarchy have a BT without jumping the chain of command. What is interesting about this rule is that *LCSH* operates on the basis of literary warrant, which requires that a subject heading be established "for a topic that represents a discrete, identifiable concept when it is first encountered in a work being cataloged, . . ." (*SCM:SH*, H 187, p. 1). Headings are not to be created for new topics not yet identifiable and topics for which there is

not consensus on terminology. It is surprising to find, in the context of rules governing the creation of references, a clear contravention in the cause of avoiding "orphans" of this principle of literary warrant. It is another indication of the primacy of hierarchy in subject access.

Another reinforcement of the hierarchy comes in the rules for creating associative references (RELATED TERMS—RT) representing all nonhierarchical relationships. RTs are to be minimized "to focus emphasis on hierarchical references" (*SCM:SH*, H 370, p. 10). There are only three instances in which associative references are allowed: linking overlapping terms, linking a discipline with its object of study, and linking a person with their field. However, RTs may be made for these relationships only if they do not begin with the same word stem, have a BT in common, or have broader terms that are already associatively linked (*SCM:SH*, H 370, pp. 10–11). The second and third exclusions once again demonstrate hierarchical relationships overriding other considerations.

The requirements for making hierarchical references, the overriding of literary warrant, and the minimizing of associative references for the stated purpose of focusing on the hierarchical leave no doubt about the intended structure of *LCSH*. It is as unrepentantly hierarchical as *DDC*.

CONCLUSION

Although Sayers said that for Dewey and Cutter "classificatory practice forged ahead of theory" (1967, p. 43), it seems that they did draw at least the hierarchical aspect of their practice from the prevailing philosophies of their day. Reid and the Scottish common sense tradition were interested mainly in theories of perception. Hegel and the American Hegelians espoused a system of dialectical progress toward an absolute knowledge or ideal. However, both perspectives offered a structure of hierarchy ingrained in Western philosophy and derived anew by Dewey and Cutter as armies of information, even though from two quite different schools of thought.

The choice that both Dewey and Cutter made was clearly the army rather than the mob. The idea that it was a binary choice is one of the problems we continue to confront. Even as *LCSH* tries to implement literary warrant, it is held in check by the discipline of the hierarchy. An army represents a particular type of regimented, circumscribed, hierarchical organization. As we face the continuing complexities of organizing information in our hybrid environment of traditional, digital, and multimedia resources, it behooves us to bear in mind that our one pervasive basis for organization is not the only one.

NOTES

1. Reid was at one point college librarian at Marischal College in Aberdeen, Scotland (Broadie, 1990, p. 105).
2. For a comparison of Hegel and the Scottish Common Sense philosophers, see Seth (1890).
3. See Dykstra (1988) for a critical discussion.

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