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Acces to Fiction: A Problem in Classification Theory and Practice. Part I.

Bibliographic classification theory and practice have not been as fully developed for the humanities as for the sciences. In particular, classification systems have not been generally adopted for content elements of primary works of fiction. Analysis of the kinds of exceptions that have been made for these works shows that they arc often grouped by a principle that may be called "classification-by-creator" instead of by the more usual principle of "classification-by-subject". This paper explores some implications of the "classification-by-creator" principle and the potential usefulness of more detailed content access to fictional works. Some previous classification systems for fiction are described and a list of fiction analysis systems is included. It is concluded that further investigation of methods of providing users with access to fiction is warranted.   (Author)

If we admit the validity of the principle of classification in our libraries, there is no logical bar to the inclusion of fiction within the scope of its operation: indeed, if classification is really a "Good Thing", why should not the fiction-reader share its benefits?"

L.A. Burgess (1, p.179)

This question and the corollary question of whether it is possible and useful to design a fiction classification system have received relatively little attention. To consider some issues of fiction classification, we may begin by investigating how conventional assumptions in literature classes may have arisen. Next, some existing fiction analysis systems are described. Finally, the question of whether user needs warrant further research into fiction analysis is examined.

1. Classification of Literature

Classification theorists have not concentrated on the problems of creating bibliographic classification systems for the fine arts and humanities. Instead, science and technology have virtually monopolized the attention of classificationists both in theory and in the development of systems. The attraction of science appears to arise from the modern preoccupation with scientific thought; increased reliance on scientific research has created a strong perception of the need for access to scientific documents. It seems a fairly straightforward task to study the literature of a science, to ascertain its premises and trends and to develop a classification system in response to the structure of the literature and the consensus of its authors and users. The Classification Research Group (CRG), for example, found the theories of integrative levels and of general systems moderately productive for the science classes of the general system they sought to develop, but the Group made no extensive attempts to apply the theories to the fine arts and humanities.

At least two difficulties arise when one considers the problems of bibliographic classification systems for non-science areas. First, it can be argued that an initial division of the world of knowledge into the three traditional academic areas of science, social science and the humanities violates one of the first principles of modern classification theory. Facet analysis, the principle of dividing a universe by only one characteristic of division at a time, has not operated at the level of dividing the whole world of knowledge into the three discipline areas because more than one characteristic distinguishes them from one another. For example, one cannot argue that the operative characteristic of division between the natural and the social sciences is the difference between physical and behavioural studies because, among other things, human physical chemistry has been found to influence human behaviour. The absence of an initially consistent principle of division hampers classification research for all three major discipline areas because mutual exclusivity cannot be assumed to be present at even the highest hierarchical level. Conceptual overlap between and among classes on one level inevitably influences classes lower in a hierarchy.

Second, agreement about which academic disciplines belong to "the humanities" does not exist. History, for example, can be claimed by both the social sciences and the humanities. This lack of consensus may be seen as one of the lasting effects of dividing the world of knowledge by more than one initial characteristic. The only full-scale work on humanities classification, Langridge's *Classification and Indexing in the Humanities* (2), devoted a chapter to identifying putative humanities disciplines and compared philosophical and practical arguments for including or excluding this or that discipline. It is generally agreed, however, that the humanities include the fine arts -- traditionally works of the visual arts, music and literature. Works in the fine arts consist of two distinct document types: primary works or sources of the discipline and secondary works of history, interpretation, commentary and/or criticism[1].

Primary works arc the phenomena of humanistic research in the same way that works of nature are the phenomena of the sciences: "the library is to (the humanist) what the laboratory is to the scientist" (3, p.309). The disparate forms of primary works appear to require a unique approach to each in the same way that each science demands its own taxonomy. Fictional works use prose language as a vehicle of expression, and this characteristic makes fiction closest to documents for which subject analytic techniques have already been developed and tested.

1.1 Usual Treatment of Fictional Works

Classificationists have traditionally analyzed works about fiction into basic groups of language, form, period, and author. Some major systems (e.g., Dewey Decimal (DDC) and Library of Congress (LCC)), arrange these elements in fixed citation orders. Others (e.g., Universal Decimal Classification (UDC)) allow more flexible citation arrangements. These basic divisions seem suitable for physical and intellectual access to secondary works and also for shelf collocations of primary works, but it has not been consistently noted that when such divisions are applied to primary works they cease to be subject-related.

The overall aim of classification systems has been to group documents according to their similarity to subjects that have been named and notated in controlled stereotypic terminologies (e.g., "Organic Chemistry", "Sociology", or "English Literature"). For fiction, however, this principle has traditionally yielded to a principle that might be called "classification-by-creator". Application of this principle produces alphabetic and/orchronological arrangements of the works of single authors by means of various Cuttering methods. In practice, secondary documents are arranged near a work so that any work may accumulate a cluster of secondary works that are classified by reference to that work-as-subject. Ranganathan's Classic Device regularized this common practice by allowing a primary work to create a kind of second-level classification of its own. A work of fiction, then, is not grouped with others with similar content, but with works by the same creator. Secondary works, however, are arranged by subject: that is, by the work-as-subject.

The classification-by-creator solution seems intuitively attractive for at least two reasons. First, fictional works are not "about" a "subject" in the commonly recognized sense. We do not associate fiction with certain topics in the sense that a work of botany can be sensibly assumed to be about plants. A novel by Margaret Laurence is not usually said to be "about" a subject, although a critical analysis of the novel is "about" it. Second, library users want access to "works by" as well as to "works about". It has seemed convenient and satisfactory to provide shelf and catalogue access to fictional works by creator and not by content. Thus, the principle of classification-by-subject has yielded to that of classification-by-creator. Although the practice is widespread, little theoretical attention has been given it. Is seems justifiable to try to extract unstated assumptions that underlie the practice, if only to speculate on why systems have been developed as they have and to open the possibility of discovering by extension the probable cultural and temporal limits of their viability.

1.2 Examination of Assumptions

We may postulate tentatively a relationship between the principle of classification-by-creator and a concept of classification that has apparently not been specifically explored in bibliographic classification theory. Nozick (4) posited two opposing classificatory processes. The first, "entification", produces entities, i.e., classes of one that may admit only one member[2]. Entification specifies the differences among the things-to-be-classified so completely that any similarities among them are deliberately excluded from consideration. Bibliographically, entification effectively negates all principles of collocation because in an entified documentary universe no principle of similarity (e.g., of authorship) could override the uniqueness of each document.

The second process, which Nozick did not name, might be called "unification". Unification consists of putting the entire universe of the things-to-beclassified into one class. Here, the similarities among things-to-be-classified are recognized to the absolute exclusion of any differences. In bibliographic terms, unification would produce something like the previously-noted "class of the whole" that could be called "Documents on Subjects". Neither of these polarizing cognitive processes alone is particularly informative, according to Nozick: "an informative classification will classify somewhere in between" the extremes of entification and unification (4, p.84). That is, an informative classification will be capable of recognizing both salient similarities and salient differences.

In Nozick's formulation, the general criteria under which things may be informatively assigned to the same class are, first, that they be similar, and, second, that "there is no third thing not in the class which is closer to one of them than each and every other thing in the class is" (4, p.85). These two criteria for class inclusion mean that one must not only decide whether a thing is like members already in the class to which it may be assigned, but also whether things already assigned to other classes are sufficiently different from the thing-being-classified to allow it to join the class for which it is potentially a candidate.

For example, let us suppose there is a thing that appears to be a candidate for Class A. We may call this thing "4". Suppose also that Classes A and B are already established.

Class A			*Class B*		
A1	A2	A3	B1	B2	B3

Here, in order to join Class A, 4 must be:
1) similar to things already in Class A; and also
2) dissimilar from things already in Class B (or in another existing class) to the extent that no member of Class B (or of another existing member of Class A) than the current members of Class A are to each other.

For example, if 4 is sufficiently similar to A1, A2, and A3 *and* sufficiently dissimilar from B1, B2, and B3, then 4 can be placed in Class A and become A4. Thereafter, new candidates for Class A must fulfill the same set of dual conditions, including similarity to A4. Likewise, potential candidates for Class B must be sufficiently similar to things already in Class B *and* sufficiently dissimilar from things in Class A or any other existing class in order to join Class B.

Unlike traditional bibliographic classification theory, which generally assumes that the segregation of things that are different arises automatically from the identifica-

tion of things that are similar, Nozick's formulation suggests that positive and negative criteria enter equally into the decision about whether assignment to a certain class is appropriate for the thing-being-classified. The implications of these dual criteria for determining class inclusion and the isolation of the concepts of entification and unification may be fruitful for at least a tentative explication of traditional methods of classifying works of fiction[3].

In applying Nozick's concepts to bibliographic classification systems, we may note that classificationists appear to have used the process of entification intuitively in grouping primary works of fiction with their creator instead of with their subject(s). In this practice classificationists have emphasized the uniqueness of each work by recognizing its differences from all works by other creators and by excluding from consideration any similarities it may have with others of its kind. Thus, alphabetic arrangement of the works of one creator may be considered a process of entification in that each work becomes in effect a class of one to which no other members may be admitted. In addition, however, it follows that grouping all of one creator's works together is like Nozick's process of unification because all the entities (classes of one work) are treated as subclasses to be unified on the next highest hierarchical level by the fact of having been created by the same person. In this sense, classification systems treat the works of an author as examples, not as subclasses containing documents on subjects narrower than those in the superordinate class.

For example, one writer noted that "a particular work of a named artist would seem to be a subdivision of that artist" (5, p.60). Another set up of a classification system in which primary works in the performing arts "are considered to be about the creators for they (the works) are the expression of their (the creators') personality" (6, p.14)[4]. In the practice of grouping works by one creator as a subdivision of the creator, differences among entified classes each containing one work of art are set aside in favour of similarities thought to exist among these works by virtue of having been created by one person. In this, a negative criterion has been applied.

For example, all works by Pearl S.Buck, no matter how dissimilar among themselves, are assumed to be more similar to each other than they are to any work of, for example, George Eliot. All Buck's works taken together may then be said to constitute a unit and each individual work (entity) belongs within the class (unity) that may be meaningfully named and notated as "Works by Buck". For example,

Works by Buck			Works by Eliot		
B1	B2	B3	E1	E2	E3

Here, all the works of Buck are classed together on the assumptions that
1) they are similar because they were written by Buck; and also
2) no work by Eliot is more similar to a work of Buck's than the works of Buck are to each other.

In general, classificationists have treated fictional works as not amenable to classification-by-subject and seem to have used (probably unconsciously) the classificatory processes of entification and unification to provide places within a subject classification system for works best treated in two ways: first, as unique humanly created entities, and, second, as parts of the finite unit of the total output of one creator. Nozick's categories thus provide a kind of explanation and perhaps a justification for switching from one principle (classification-by-subject) to another (classification-by-creator) when faced with the problem of classifying fiction.

Cataloguing codes have generally based the main entry for a work on concepts of personal authorship or responsibility, but all works by one author may thereafter be classified in diverse subjects. Fictional works, however, have been exempt from this principle of classification-by-subject. That we automatically think of the works of a creator as an exclusive unit may reflect the same kind of cultural individualism that makes it seem as important to establish who created what as it is to interpret the works of a particular period, no matter who the creators may be, as a common expression of a contribution to that culture.

This attitude is interesting in view of the definitive classificatory question of whether one classifies according to similarities or according to differences or according to both. A more extended analysis of the assumption that fictional documents should be treated differently from secondary works about them might illuminate what Lee (7) called the "cultural warrant" of bibliographic classification systems. In general, "cultural warrant" comprises assumptions, biases and documented interests of the culture that produced the classification system. Cultural warrants of bibliographic systems have not been studied in depth, although Hulme (8) described rougly the same idea in his discussion of "statistical bibliography" and de Grolier (9) called attention to classification systems as "cultural artefacts".

An approach to cultural warrant might start with Toulmin's arguments that the fine arts are non-disciplinable in the academic sense. In Toulmin's view, each art has a quasi-disciplinary continuity in its historical development and a recognizable unity in its basic techniques, so in this sense each art may be helpfully analyzed as a collective enterprise. Still, this collective aspect is offset by the unique artistic activities of the individual creator. Each creator remains free to use techniques of the art in pursuing his or her own goals (10, p.399). Thus, each fine art has historical and technical continuity, but the activities of individual creators remain outside the control of this process because creators do not focus on and often show no interest in such a common goal. This view is reminiscent of T.S.Eliot's description of some of the tensions between collective literary traditions and a creator's own aesthetic goals (11).

Toulmin's view can be related to Nozick's concepts of entification and unification. Historical and technical aspects of an art are more or less amenable to classification-by-subject in the conventional way because these are disciplinable features; but works of individual creators,

which arise from individual aims and not from a desire to advance the collective goals of the particular art, are non-disciplinable and cannot be classified by subject. Instead, the creator him- or herself stands as the unifying force behind his or her own corpus of works. Thus, the unified whole of each creator's work may be entified into the works themselves, not into subjects imposed from the outside, because subjects that are defined, named and notated as classes in a system suitable for a collective disciplinable enterprise (e.g., the study of fiction) are immaterial for works that have not been generated and are not governed by such collective goals. These must instead be treated first as entities, i.e., classes with one and only one possible member, and, second, as a group of works unified by virtue of being the output of one creative mind.

2. Existing Fiction Analysis Systems

In spite of assumptions that have been made about fiction, any documentary work may be assumed to have content. The general question is, then, whether the content of a work of fiction can be analyzed in the relatively consistent manner necessary to provide access to the details and elements of its construction. Several substantial attempts to provide content access to fiction have been made, but they are not well-known. Existing fiction analysis systems may be categorized thus:
1) adaptation of a general non-fiction system;
2) development of special systems:
2a) systems of genre identification;
2b) systems for a single genre;
2c) systems for all fictional works.

Examples of each of these are discussed below, and a list of other fiction analysis systems is appended.

2.1 Adaptation of an Existing System: Haigh (DDC3) (12)

Haigh's adaptation of DDC seems to be the only extensive adaptation, although others may have been made (e.g., 13). Haigh classified about 5000 novels in a new branch of the Central Public Library, Halifax, U.K. with the forty-year-old "1889 edition" (12, p.78) of DDC. DDC3 was published in 1888, so one may assume it was the one Haigh used, although DDC13 was available. Books were shelved by the classification, and a classified catalogue with an index was provided.

Pejtersen and Austin criticized Haigh's work as "an incoherent mixture of familiar genre headings and newly invented subject categories, interspersed with some of the original subclasses" (14, p.231), but comparison of DDC3 class names and notations with the 59 examples[5] in Haigh's article reveals little evidence for these strictures. Haigh's most common change was to drop parts of the class name (e.g., 218 Future Life. Immortality. Eternity became 218 Future Life). Sometimes he added a term (e.g., Pauperism became Poverty and Pauperism). Occasionally, he changed a class name slightly (232 Christology became 232 Christ). Sometimes he gave a more general notation (e.g., 533.6 Aeronautics became 533 Aeronautics). In no case did he change the essential meaning of the class name, so his deviations seem no more incoherent than DDC3 itself. It is helpful to remember that using an 1888 scheme in 1933 would create problems even for non-fiction. For example, there was naturally no place for World War I in the DD- C3 900 class. Still, Haigh's adaptation of DDC3 has questionable features. One was to classify novels on Novelists and Writers in 029 (Literary Methods and Labor Savers) when the 800s were available. A second was to create a special Biography class, which included "biography" of fictional (e.g., *Jane Eyre*) and non-fictional characters (e.g., *Messer Marco Polo*). The class seems redundant because the 800s contained some novels about "characters from the classics" (e.g., *The Private Life of Helen of Troy*). It could be argued that novels contain biographical accounts, in an extended sense, of fictional characters, but then a special biography class would be redundant. Even if it were created, fictionalized accounts of historical figures would be more reasonably placed in the DDC 900s. With these exceptions, Haigh's use of DDC3 seems a valiant if unsatisfactory effort at classifying fiction. Unfortunately, there appears to be no account of how the system was received or of how long it remained in place.

2.2 The Development of Special Systems

2.21 Genre Identification Systems

Genre systems consists of loosely-defined non-exclusive groups such as "mystery", "romance", "historical", "western", or "adventure" novels. Some methods of grouping fiction in public libraries are discussed in Baker and Shepherd (15). The British attitude to fiction and attempts at fiction classification are described in Walker (16); Carrier (17) did similar work for North America. Harrell (18) found that 46 of 49 large U.S. public library arranged fiction by genre. Overall, 26 categories were used among the libraries, but some categories were not subject-related (e.g., Classics, High interest-low vocabulary, Movie and TV). Baker (19) found that such arrangements improved service to public library users. These arrangements have not contributed substantially to fiction classification and are too numerous to be discussed here. A number are referred to in the attached list.

2.22 Systems for a Single Genre: Science Fiction Systems

2.221 Fantasy Classification System (FCS): Cameron (20)

Cameron's FCS was issued in an edition of 500 copies by the Canadian Science Fiction Association of St.Vital, Manitoba. The system has a decimal hierarchical notation and was intended for a classified catalogue. According to Cameron, fantastic fiction includes "unusual" treatment of at least one of the elemental features he postulated for fiction in general, i.e., Characters; Locale and Time; Background; Plots and Incidents; and Attitudes. "Unusual" treatment is defined mainly through examples[6].

FCS consists of two parts, one is a subject classification and the other is the "Literary Information Profile".

Each part has a different notation, so each fictional work receives two notations, one numeric to describe the novel's content and the other alphabetic to describe a few attributes, some subject-related and some not. The two notations are joined to create a final composite notation.

The subject classification consists of ten main classes[7], and the enumerated classes may be unique for their extensive explanations[8]. When synthesis is required, the most important element should be cited first and others cited in order of decreasing importance. Decisions about relative "importance" are left to the classifier; lack of a fixed citation order is among the questionable features of FCS. If elements to be synthesized are considered to be independent of each other, they are joined by a plus (+). If various factors are considered different elements of one situation, they may be joined by a colon (:). In addition, some devices are available for shortening notations. Although FCS was developed for a classified catalogue, Cameron did not discuss the filing order of these syntactic devices and their compounds or the effects upon collocation of potential filing orders.

After subject elements are notated, the Literary Information Profile is applied. The Profile for individual works has six elements: Length (e.g., Short-short, up to 5,000 words); Type of Plot (.e.g., War); Appeal (e.g., Intellectual); Stress (e.g., Personalities, characterization, psychology); Fantastic Orientation (e.g., Fantasy dominant); Subsidiary considerations (e.g., Story associated with a series). Each position in this six-slot string has a constant meaning, and each place must be filled so the position of each slot relative to the others is maintained. The meaning of a notation in a slot thus arises from the meaning of its position within the six-slot string. All notations must, then, be one character long and cannot be expressive. There are also three place-holding notations. If no enumerated possibility applies, "x" is entered in that slot; if more than one possibility applies, "y" is entered; if the information is unknown, "z" is entered. Thus, a meaning is permanently assigned to each place; if one slot were left empty and the notation closed, the meanings of following slots could not be accurately ascertained. This device seems to be unique in that a classifier is both forced to make an entry in a positional notation and is also allowed to refrain from specifying an element of the work[9].

One of Cameron's examples of a completed notation is:

van Vogt, A.E.: *Slan.*
22.5,1 + (31.8:52.8:36.7):34.2 + 65.2dbudbh.

"Telepathy and the development of ordinary senses: society of mutants on Mars from an expanding culture in conflict with a totalitarian government; nuclear energy and applications is an important element; 50 000 to 105,000 words; hero struggles continuously for his life; action appeal; plot stressed; fantasy important; story told from a non-human viewpoint." (20, p.40)

The change from numbers to letters in this notation signals the change from the numeric notation of the subject classification to the alphabetic fixed-place notation of the Profile.

FCS is complex, the notation is unwieldy, there is no preferred citation order, a filing order has not been established for synthetic devices, and application of these devices is not entirely explicit. Nevertheless, FCS can be defended against charges that Lerner made and that seem to arise more from a conviction that existing tools provide enough subject information for users (21, p.153-154) than from a careful reading of FCS[10]. In Lerner's opinion, FCS is unsuitable for a "library classification" (22). If by that he meant a shelf classification, he was correct. He misread Cameron, however, in stating that FCS is "intended for classifying stories, rather than books" (22, p.5). Cameron consistently used "story" in the way "fiction" is sometimes used, that is, to refer to a work of any length. The Profile for Single Stories contains five length categories from "Short-short: up to 5,000 words" to "Long novel: over 105,000 words" (20, p.35); works of that length may be called "books".

Lerner's main cricicism was that FCS provides

"over 500 categories into which fantasy and science fiction stories might be classified by subject; yet not one of these categories is appropriate to a novel widely considered to be the most important science fiction novel in the last twenty years -- Ursula Le Guin's *Left Hand of Darkness*" (21, p.170, n.3)

Several objections may be made. First, Lerner believed that FCS was developed for "stories", not for "books. That this assertion is false was demonstrated above, but Lerner believed it to be true. Thus is is unreasonable to complain that FCS cannot deal with a specific book. If FCS is not for books, it may not be criticized for a putative inability to accomodate one. Second, Cameron did not claim that "one" FCS category would be appropriate for a novel. FCS is elaborately designed so that any number of categories may form a composite statement. One may criticize FCS for lacking a fixed citation order, but not for inhibiting synthesis. In addition, to criticize a system for lacking "one" category is to misunderstand modern classification theory; no modern system strives to be entirely enumerative.

In spite of its deficiencies, FCS is inventive, and even Lerner considered FCS "fascinating" and "the most elaborate ostensive approach to a definition of fantasy fiction that we have" (21, p.157-158).

2.222 Classification for Science Fiction (CSF): Croghan (23)

Unlike FCS, Croghan's CSF was not designed solely for the content classification of primary works, but for both primary and secondary fiction works in any medium (e.g., art, music, architecture, film). The system is meant as a shelf classification and/or for a classified catalogue. Discussion here mainly concerns options for classification-by-subject in Classes O-WZ, Themes of Science Fiction. According to Croghan, "Fiction is a statement of imaginary events made with an Aesthetic intent" (23, p.6). Science fiction exists within this larger area and "is essentially about ideas rather than emotions. The Reason and not the Instincts governs the content of S.F." (22, p.1-2).

CSF prefers classification-by-creator in Class Z for works by individuals, but classification-by-subject in O-WZ may be used. It has a retroactive mostly alphabetic non-hierarchical non-expressive notation. The

introductory section states that the facets for science fiction themes in O-WZ are "The universe - societies - peoples - their activities and their technology" (23, p.15). The exact terms used at O-WZ are: WZ Time; U Physical universe - Space; RY Sociology; R Non-human life: aliens in general; PWY Life; P History; OX Metaphysics; OV Terrest(r)ial activities; OP Technology - general. Thus, O-WZ facets identified in the introductory sections have no exact counterparts in the schedules. The two sets of terms can be related to each other in a somewhat loose way, but the schedules offer more numerous and more exactly named facets.

A similar lack of harmony obtains between different sections of the schedules. Examination of options available at O-WZ reveals major problems in CSF. Directions at O-WZ offer two possible arrangements. The preferred arrangement is to "class works by a single Creator in Z" (i.e., classification by-creator), and "general works by more than one creator" in O-WZ (i.e., classification-by-subject). The less preferred option is to class all works "with a single theme" in O-WZ (i.e., classification-by-subject) and to subarrange these thematic classes by "Creator, or, if general, by date (of) publication" (23, p.35). Directions at Z, however, are somewhat different. There, the classification-by-subject option is modified by an instruction that "General works with many themes are classified with their Creator" (23, p.37). Clearly, problems arise with what is meant by "general work" and "theme" and how one is to tell if a work has "a single theme" or "many themes".

At O-WZ a "general work" has more than one creator. This seems to imply a collection by a number of writers with an overall theme specifiable in O-WZ (e.g., one may imagine a title like *Best Stories about Clones*. At Z, however, a "general work" has one creator but many themes, perhaps an anthology of works by one writer (e.g., *The Best of Ursula K. Le Guin*). Instructions at neither place cover a collection with a number of creators and no overall theme (e.g., *Best Science Fiction Stories of the Decade*). Croghan did not discuss these problems, although he mentioned a few themes in the introduction (e.g., 'Alternative Histories', 'Alternative Futures', and 'Science-for-the-Fun-of-it' (23, p.3). These particular themes have no exact counterparts in the schedules.

Instructions at O-WZ and at Z seem to mean that if one chooses the less-preferred option of subject classification for separate single theme works by individual creators, anthologies of that creator's works with many themes (e.g., volumes of short stories) should still be classified in Z by creator. It remains unclear, however, what is meant by a "single theme"; this problem arises from the absence of a definition of "theme" for use with CSF. Most novels could be said to have more than one theme, however defined.

Croghan's science fiction system is less satisfacotry than Cameron's. The introductory sections fail to set forth the theoretical basis of the scheme with rigour, and it seems impossible to ascertain exactly when and how one is to use CSF for content analysis. Instructions are often incomplete and sometimes potentially confusing. In addition, the clarity of CSF is marred by a number of

misprints or errors. For example, classes MT-MY are listed after NP-NU. Key definitions (e.g., "theme" and "general work") are absent. Both systems are flawed; still, Cameron's is the more substantial and would probably be the easier to use.

To be continued.

Notes

1 The sciences, too, deal in primary and secondary materials, but their primary materials are works of nature (e.g., trees), not works of human-kind (e.g., novels). Although taxonomies of natural phenomena are essential for scientific research, bibliographic analyses are inappropriate for primary scientific resources. The CRG, for example, distinguished between human-made and naturally- occurring phenomena. Within human-made phenomena, the Group distinguished further between physical products ("artefacts")- and intellectual products ("mentefacts") (59). The sciences habitually study naturally-occurring phenomena, but the humanities study human-made phenomena, both artefacts (e.g., sculpture) and mentefacts (e.g., fiction).

2 "Class of one" can be used in two distinct senses. First, a "class of one" can be a class that happens to have only one member at the moment, but that can contain more should circumstances alter. Such a class might be the class of "people in this room". Second, a "class of one" can be a class which will never contain more than one member. Such a class might be the class of "authors of this paper". Strictly, the second kind of "class of one" is not a class at all, since a class is by definition a group of things. Nevertheless the term is used in this paper to mean a group with one and only one possible member.

3 For the purposes of this discussion, the relationship between a primary documentary work and its cognate manifestations (e.g., editions, translations, adaptations, abridgements) will not be considered. These relationships are sometimes studied as aspects of "intertextuality" (e.g., 60).

4 The view that a fictional work expresses the author's personality may have been first used to argue against the subject classification of fiction. According to Jast: "It is surprising that Mr.Baker (61) should so mistake the nature of the interest in the personality of the novelist as to confuse it with the "popular curiosity about personalities" which is responsible for that nineteenth century vulgarism, the illustrated interview. It is no such thing, but simply the legitimate recognition that the author *is* the novel, and that the book derives its main value and interest for the reader as an expression of him or her; plot, period, place, being altogether subordinate to the purely personal element, which dominates all this "literature of power" as distinguished from the "literature of knowledge", to quote De Quincey's brilliant nomenclature." (62, p.206, original emphasis).
Jast thus reasoned that the best arrangement for fiction was by author so readers could find books by personalities they liked.

5 E.g., Useful Arts: "Home Life (640) ... is an extremely large class, and its meaning has been somewhat extended to cover hotels and boarding houses, including such work as Bennett: *Imperial Palace*; Jerome: *Passing of the Third Floor Back*, and the like. Children, Studies of Boys and Girls (649), Sea Tales (656), Pets and Domestic Animals (636), Farming and Farm Life (630) are well represented, while Advertising (659), Business (658), Surgery (617), Public Health (614), and Medicine (610) have provided the background or theme of some novelists". (12, p.79).

6 A typical instance appears for characters: "Most characters in mundane fiction are human beings, but they are quite often unusual human beings in the sense of being talented, intelligent, warped, over-emotional, etc. These qualities are not fantastic. However, if the characters possess mental powers or qualities not possessed by ordinary human beings (except perhaps in a rudimentary or sporadic form), or some superhuman development of their physical powers, then such characters are fantastic. Mundane fiction sometimes includes animals, plants or inanimate objects as characters which do not possess other than normal qualities (except in exceptional cases in which a normal human viewpoint is as-

sumed in telling a mundane story from the viewpoint of such a character). Any other power or quality exhibited by such characters renders the story fantastic. Of course any alien type of entity or being is fantastic, since it is not encountered in the real world." (20, p.4)

7   I.e., 00 Aberrations; 10 Supernatural Beings; 20 Extrapolations on Life and Mind; 30 Extrapolations on Living; 40 Supernatural Places and Things; 50 Extrapolations on Space; 60 Extrapolations on Technology; 70 The Past; 80 Extrapolations on Time; 90 Supernatural, Unrationalized, and Distorted Powers and Themes.

8   E.g., "01.4 PERSECUTION COMPLEXES: The subject feels that there exists an organised plot among his associates to harm him, or that some evil, perhaps immaterial entity is out to get him. Real persecutions also go here if the treatment of them is subjective" (20, p.14).

9   In early versions of CC, it was necessary to repeat the facet indicator (:) if a facet was deemed to be "vacant" so that the meaning of subsequent notational elements could be ascertained. The repetition of the colon, however, had no semantic content.

10 Lerner's own Fantasy Collection Classification Scheme (FCCS) (21), which is to be interpolated at the empty LC Class PX, was intended only for classifying secondary science fiction works and devoted no attention to analysis of primary works.

(To be continued in Part 2).

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(To be continued)

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