
Introduction to Class A/AL Philosophy and Logic

- 1 This schedule is the result of a rigorous and detailed analysis of the vocabulary of philosophy and of logic using the techniques of facet analysis. As such, it represents a radical revision and expansion of Class A/AL Philosophy in the first edition of the Bibliographic Classification (BC1). The general reasons for making the revision so radical a one are given in the *Introduction and Auxiliary schedules* (Butterworths, 1977). The particular changes in this class are considered in Section 15 below.
- 2 The Outline on page 1 (after the preliminary pages) is designed to give a clear view of the basic structure. If it is remembered that the schedule is an inverted one (see Section 8) the outline will be seen to show not only the general sequence of categories and their classes but also the basic operational rule in applying the classification. This is the rule that compound classes (those reflecting the intersection of two or more simpler classes) are located under the class appearing *later* (lower down) in the schedule. For example, Thomist view of cognition (AGV DBD THO) is located under Cognition (AGV D) and not under Thomist viewpoint (ABD THO).
- 3 **Scope of Class A and its place in BC2**
- 3.1 Class A sees the beginning in BC2 of that part of the system (and much the greater part) which is based primarily on the broad disciplines within which study and writing have been and continue largely to be carried on. The classes 3/9 may be said to reflect *objects of knowledge* rather than *forms of knowledge* (how the objects of knowledge are regarded). They include also those conspicuously interdisciplinary studies in which the object is knowledge itself and its communication — how it is produced and organised for distribution and consumption, how data may be processed irrespective of disciplinary viewpoint. Here, in Class A, will be found two major disciplinary approaches (Philosophy and Mathematics) and the beginning of a third — that of empirical science.
- 3.2 Bliss in his Introduction to Volume 1 of the first edition of BC wrote:¹

¹A bibliographic classification, Vols. I-II, Wilson, 1952, p. 73.

... the distinction between science and philosophy is not clear. ‘Abstract science’ is less distinct from the philosophy of knowledge (Epistemology) than from the natural sciences; and the philosophy of science is hardly distinct from the philosophy of knowledge. The principles of science merge into the principles of philosophy. Yet science is distinct from knowledge and knowledge from philosophy. The history of science is usually regarded apart from the history of philosophy. This is especially true of the history of the natural sciences as compared with the history of the philosophy of nature. Here again, however, the two studies overlap. The close relation of General Sciences to Philosophy is evident. It is so fundamental that they are placed together in Class A. The History of Philosophy will contain much of the history of science in general and of the history of the philosophy of science.

3.3 He then proceeded to consider the different classes in philosophy before considering the question of ‘Abstract Sciences and general methods of philosophy and science’:²

Formerly the distinction between Abstract Sciences and Concrete Sciences obtained in the writing of Spencer, Bain and Pearson; but this distinction we have found to be untenable. Still we use the term Abstract Sciences as comprising Logic and Mathematics tho properly these are not sciences but general methods in science and in philosophy, Logic being more closely related to Philosophy, and Mathematics to Science ... Logic is not a branch but a *general method* of philosophy and of science, available in reasoning and inference. Logic leads to Methodology, the study of Method in itself, the methods of reasoning and of inference. In the most general aspect Logic and Methodology are philosophical ‘disciplines’. Also in science logic avails, but method is essential. By Pearson method was considered as the distinctive characteristic of Science. Scientific method is indeed distinctive, but science is definable in other terms also ...

3.4 Virtually all that Bliss said above is accepted in BC2 and only in one or two minor points (e.g. the relations between methodology and logic) has it been amended. But in order to define more clearly the exact scope of these extensively overlapping classes it has been necessary to draw a number of more precise distinctions. The chief distinctions drawn are as follows.

3.41 Between truly *general* methods of enquiry (located under Universe of knowledge in Class 3 and including *general* methodology) and *rational* enquiry.

3.42 Between philosophy and logic, so that the latter is defined as an autonomous science. Whatever its connotation may be in some countries, in the British tradition certainly it is not acceptable to regard philosophy itself as a science. But logic can be so regarded and this reinforces the separation which Bliss in fact settled on.

²Ibid., pp. 76–77.

- 3.43 Between formal or abstract science (for which a term widely used on the continent — *Scientia* — seems appropriate) and empirical science — which is in fact what is usually meant when scientific method is considered in its central role.
- 3.44 Between logic and mathematics. As Bliss acknowledged, many modern writers see logic as the fundamental discipline underpinning mathematics. But it is not confined to mathematics and parts of it are not ‘mathematical’ in any accepted sense and therefore it cannot be subsumed under mathematics.
- 3.45 Between mathematics and science. Mathematics is not a science in that sense of the term which is by far the most commonly used — that of empirical science, based on the observation of nature.
- 3.46 These distinctions can all be seen clearly from the Outline of Class A on page xli.

4 Structure of classes in BC2

- 4.1 All classes in BC2 are designed consistently according to a basic pattern which reflects the six fundamental features of a modern documentary classification. In the design operation these six features are taken in an invariant order in which each step depends on the preceding ones. The steps are, in order: (i) organizing the terms into broad facets; (ii) organizing the terms in each facet into specific arrays; (iii) deciding citation order (between facets and between arrays); (iv) deciding filing order (of facets, of arrays); (v) adding notation; (vi) adding an alphabetical index.
- 4.2 The theory underlying these features is explained in detail in the Introduction to BC2 (chapters 5 and 6). Here the structure of Class A/AL is described in the same order of fundamental features and it is assumed that users of this class will familiarize themselves with the essentials of the theory explained in the Introduction.

5 Facet structure of Class A/AL Philosophy and Logic

- 5.1 The main feature of the schedule is a strict adherence to the principle of facet analysis. A facet consists of the sum of classes produced when the vocabulary is divided by one broad principle of division. So the terms making up the vocabulary of Philosophy are initially organized into (‘divided into’) broad facets, so that terms representing concepts which all stand in the same broad relationship to the containing class are found in the same facet. For example, all terms representing the notion of a *Branch of philosophy* (metaphysics, epistemology, etc.) are brought together in one *Branches of philosophy facet*; all terms reflecting the notion of an *Historical school of philosophy* (Ancient Greek, Scholastic, 18th century German, etc.) are brought together in an *Historical schools facet* — and so on.
- 5.2 Strictly speaking, a single, comprehensively applicable citation order is only effective within a homogeneous class — i.e. a class in which every concept can be seen to be

in a definite relationship to that containing class, and this relationship then defines a particular facet of that class.

5.3 Class A/AL is not a completely homogeneous class by this definition, insofar as logic is treated as an autonomous science, not a subclass of philosophy. The two classes are, of course, very closely related. Although compounding is more extensive within each homogeneous class it still occurs frequently between the two and this is provided for in the schedules.

5.4 Facets in Philosophy A/AJ

5.41 The facets identified in this analysis are summarized below; their scope and relation are considered in more detail under citation order (Sections 7.3–7.6).

[1] Branches of philosophy — metaphysics, epistemology ...

[2] Philosophical problems, topics, etc. — reality, particulars and universals ...

At first these seemed to reflect a separate facet; but on further consideration these proved in nearly all cases to be special to a particular branch of philosophy. They were therefore treated as the particular subclasses of the branches — i.e. they constitute a completely ‘dependent facet’.

[3] Broad traditions — Western philosophy, Eastern philosophy.

[4] Historical schools — Ancient Greek, Alexandrine, 17th century British ...

[5] Individual philosophers — Parmenides, Plato, Hume, Kant ...

[6] Viewpoints, standpoints — Rationalism, Existentialism, Catholic ...

[7] Common facets — of Place, Time, Form of presentation ...

5.5 Facets in Logic AL

5.51 The scope and relations of these are considered in more detail under citation order (Section 7.7).

[1] Types of logic, forms of argument — deductive, inductive, modal, deontic ...

[2] Formal structures and elements — calculi, propositions, proofs, models ...

[3] Processes — reasoning, interpretation, problem solving ...

[4] Properties, attributes of structures and processes — syntax, semantics, effectiveness, completeness ...

[5] Philosophical aspects — Stoic school, phenomenology . . .

These reflect a number of different facets — those which apply to logic when it is regarded as a branch of philosophy.

[6] Common facets — of Place, Time, Form of presentation . . .

6 Arrays within facets

6.1 Most facets contain terms which reflect more than one specific principle of division (whereas a facet as a whole reflects only one broad principle of division). For example, within the broad Viewpoints facet, division may be by doctrine or standpoint (to give subclasses such as rational, empirical, etc. — the standpoint reflecting an intellectual and methodological viewpoint). Or it may be by religious viewpoint (to give Catholic, Judaic, etc.) or by viewpoint associated with individual philosopher (to give Thomist, Austinian, etc.).

6.2 The terms resulting from division by one specific principle form an array ('subfacet') and a given facet may be made up of a number of different arrays. In some cases the principle governing arrays is named in the schedules.

6.3 Terms in an array are mutually exclusive, so there is no problem of compounding between them (there can be no literature on a Christian Islamic view or a rationalist empirical standpoint, for example). So the crucial problem of citation order (see Section 7) no longer arises within arrays — only between arrays.

7 Citation order (combination order)

7.1 This refers to the order in which the elements of a compound class (one consisting of more than one element, whether from different facets or from different arrays) are combined (or cited) in a heading; e.g. whether the heading should be

Western philosophy — Empiricism — 18th century — British

or

Empiricism — Western tradition — British — 18th century

(*or one of the 22 other permutations possible here*).

Combination order reflects the order of application of the principles of division and determines which concepts are subordinated to others; for example, the first heading would mean that the philosophical standpoint (empiricism) is subordinated to the broad tradition — and therefore the literature on empiricism would be scattered to some extent, according to the various traditions which have used it. Literature on the other elements (the period 18th century and the British school) would be even more extensively scattered. On the other hand, the second heading would imply the keeping together of the literature on the standpoint (empiricism) but with consequent

scattering of literature on the broad tradition — and of course on the 18th century and British philosophy, as before.

The result of any consistent citation order is that the scattering of some subjects because of their subordination to others (a major and inevitable feature of bibliographic classification) is strictly controlled and the location of quite complex classes (reflecting several facets or arrays at the same time) is always predictable.

Citation order is the most important feature of a classification system. But clear and consistent rules for it can only be expressed in terms of the facets and arrays involved — hence the prior need to organize terms into facets and arrays.

7.2 Citation order between facets

7.21 In all its classes BC2 seeks to observe as far as possible the ‘standard’ citation order. This takes as the primary facet (the first-cited one) that facet which reflects the ultimate purpose or object of study, manifested in the overall system or systems which embody the subsystems, processes, etc., making up the whole subject.

Each class in this primary facet is then divided successively into its *types, parts, processes, agents of processes, actions on it, agents of action* (in that order). *Properties* of anything are subordinated to that thing whatever category it belongs to (type, part, process, etc.). Common facets (Place, Time etc.) are usually cited last.

7.22 For the application of these principles to philosophy and logic, see Sections 7.3–7.7 below.

7.3 Citation order within facets (between arrays)

7.31 There are no general principles (at least, as yet) for deciding citation order between arrays. Decisions are largely empirical, based on consideration of where any given compound (reflecting more than one array of the same facet) would most helpfully go.

7.32 Knowing what citation order to follow between arrays

7.321 The number of different arrays is so large that it is quite out of the question to list them in citation order as has been done for the main facets (in Sections 7.3–7.7). However, the order in which they should combine if the need arises is the reverse of the filing order in which all schedules are displayed — see Section 8 for full explanation. This means that an array filing later in the schedule (further down) is cited before one filing earlier (higher up); e.g. in the sequence given in Section 8.25 below, the fact that Jewish viewpoints (reflecting the array About the viewpoint of a religious belief) files before Rationalism (reflecting the array Doctrines, standpoints, etc.) implies that the compound Jewish rationalism is subordinated to Rationalism (at ACG CCL) and not to Jewish viewpoints (at ACC L).

7.4 Citation order in Philosophy

7.41 The *Broad tradition* is the primary facet. The choice of this raised a number of problems.

7.42 It was stated in Section 7.21 that BC2 always seeks to determine first that facet which reflects the ultimate purpose or object of study in the subject concerned. It does this by looking for the overall system which embodies the elements, properties and processes peculiar to that class, on the principle that the whole contains its parts and gives them meaningful relations. Different definitions of the subject are usually reviewed in this search. Reasonably brief definitions of philosophy are not easy to come by. A recent one is that of Antony Flew in his introduction to 'A Dictionary of philosophy' (2nd ed. Macmillan Press, 1983). Part of this states that philosophy

... is characteristically argumentative and essentially directed towards the determination of what logical relations do and do not obtain...

Flew also states that

... strictly philosophical questions ask what is logically presupposed and logically implied by various kinds of discourse and whether these presuppositions are or are not logically compatible with one another.

This certainly reveals the importance of logical method in philosophy; but its reference to philosophical questioning being directed at 'various kinds of discourse' reveals also the wider scope of philosophy. At the same time it is a pointer to where the ultimate objectives of philosophical enquiry lie. For all fields of human enquiry will display a metaphysics, an epistemology and axiology, however attenuated one or more of these constituents might be in some fields. These topics form the backbone of what we have called the Branches facet of philosophy. Insofar as these branches are extended in an application to particular types of knowledge (scientific, historical, religious, imaginative ...) the principle of BC2 is that these should be sought under those particular fields (science, history, etc.). But the basic topics (metaphysics, epistemology ...) belong, of course, to philosophy itself.

7.43 By the above reckoning the Branches facet would appear to constitute the primary facet in BC2's philosophy class. However, there are other considerations also. The definition of philosophy above reflects the objectives pursued by philosophy as an academic discipline. Another use of the term is, of course, a much looser one, reflected partly in the popular sense of someone having a certain 'philosophy of life'. In this use of the term (which was not ignored by Flew in the Introduction cited above) ethical principles and religious beliefs, as well as social and political doctrines, are often integral elements. These may also be considered in normative terms rather than those objectively analytical of their meaning.

7.44 When the distinction between Western and Eastern philosophy is considered it is clear that the rigorously intellectual, analytical approach of the former defines its objectives reasonably exactly. But in Eastern philosophy the objectives diverge more.

This is not to say that the major branches of philosophy do not feature prominently and pervasively in Oriental philosophy. But the objectives of the latter do seem to be qualified by considerations to a degree not found in the Western tradition — in particular, considerations reflected in the second use of the term noted above.

- 7.45** Another consideration which suggested that the two broad traditions might call for different facet structures was the much greater prominence in the Eastern tradition of culture and religion as sources of philosophy. The correlation between the three factors — culture (characterized by place), religion and philosophical school — is in fact so great as to justify the use of the former two to define the primary facet.
- 7.46** A further, although minor consideration is the difference in the nature of the literature reflecting the differing developmental histories of the two traditions. In the Eastern tradition an elaborate structure of ‘sutras’ (texts which develop in summary form the ‘formulae’ of a given doctrine) is supplemented by extensive commentaries on these, and then by commentaries on the commentaries; the situation is familiar to any indexer who has looked at the ‘classics’ in Ranganathan’s Colon classification.
- 7.47** It was on the above analytical grounds, rather than on the rather vague notion of ‘consensus’ which Bliss sought to observe, that the decision was taken to make the primary facet in philosophy the Broad tradition giving just two large classes at this level (Western and Eastern). These two classes are considered separately below (7.5 and 7.6).

7.5 Western philosophy citation order

- 7.51** The first-cited facet under Western philosophy is *Branches of philosophy*.

The basic reason for this (that the branches reflect the objectives of Western philosophy) is considered in Sections 7.42–7.43 above.

The treatment of philosophical problems, topics, etc. as a ‘dependent’ facet under branches is mentioned in Section 5.4. In this way, each Branch or Field is given a relatively strict and narrow definition by subordinating to it only those problems and topics belonging exclusively to it; for instance, under Metaphysics are enumerated only ontological and cosmological problems and a small number of special topics.

However, a given topic may be treated in the context of another Branch or Field (for instance, Truth, which is enumerated under Philosophy of language and logic, may be treated in a metaphysical context, or an epistemological context). In such cases, the special context is usually shown by ordinary retroactive synthesis; e.g. Truth — Metaphysics AGY RG. There are, however, exceptions to this (e.g. Universals — Epistemology AGK GR) when the special context appears later in the schedule and in such cases the classmark must be synthesised by building forward, not retroactively.

- 7.52** The second-cited facet is *Historical schools*. This reflects two facets — Place and Time, since any school defined historically (as distinct from one defined by doctrine or

viewpoint) inevitably embodies both concepts. The reasons which led to the primary distinction between West and East (ostensibly a *place* distinction) do not apply *within* the broad traditions, so there is not an automatic continuation of the principle (as would be implied by strict adherence to the old principle of logical division, which states that a given characteristic of division, once applied, is exhausted before another is taken up).

Within Western philosophy, the period is more significant than the place. The citation of Period before other facets raises serious problems of ‘cutoff’ — i.e. deciding at what point a given period is replaced by another (and hence where exactly the next characteristic of division — here, Place — is applied). These problems are discussed fully in the Introduction to Politics, Class R. Here it must suffice to say that the periods at first are very broad indeed (Ancient, Medieval, Modern) but that in the Modern period division approximately by centuries is then applied.

The net result of these considerations is that the schedule reflects the special development of the subject of philosophy rather than the crude application of the common facets of Time and Place (Schedules 4 and 2).

7.53 The third-cited facet is *Individual philosophers*. Since any individual implies, of course, a particular time and place, this facet is treated as a ‘dependent’ one. So each philosopher is located within a particular historical period and place.

Some philosophers are significant also as the founders of particular schools within a given period and place; e.g. the Pythagorean School in the Pre-Socratic period of Ancient Greek philosophy. In such cases the founder files first amongst the individual philosophers associated with the school.

It should be noted that this facet takes individuals only when they are themselves the subject of a document. If an individual x writes about a specific philosophical topic, the work goes under its subject — i.e. the topic. If a critical account is then written of x ’s treatment of the topic, this account also goes under the topic — but now qualified by ‘From the viewpoint of the philosopher x ’ (see Viewpoints facet below, Section 7.54).

7.54 The fourth-cited facet is *Viewpoints*. These reflect the intellectual frameworks of assumptions, beliefs, ‘models’, etc. within which the branches (representing the fundamental problems to be elucidated) are examined. In a very broad view the Historical schools above could be regarded as a major array within this facet; but because the literature on those schools usually includes extensive examination of the branches considered as well as the viewpoints they represent, it was thought more helpful to treat them as a special facet, midway between Branches and Viewpoints. The general concept of School in philosophy appears at the head of the Viewpoints facet, and files ahead of the specific arrays and of the Historical ‘schools’ facet. The Viewpoints facet is treated as having three main arrays (7.55/7.57).

7.55 Viewpoints derived from a particular religious belief

7.551 This array is obviously closely related to the Historical schools facet in that these viewpoints also reflect major, culturally determined frameworks. At some points the relationship is very close indeed — e.g. the historical school of Scholasticism is almost by definition one reflecting a Christian viewpoint. Nevertheless, it is necessary to have a separate array for religious views since these may occur in conjunction with any of the other arrays — e.g. Existentialist elements in Christian belief.

7.56 Standpoints, doctrines, methods of enquiry

7.561 This array contains most of the better-known ‘isms’ in philosophy — Empiricism, Idealism, Existentialism, etc. Some of these, such as Linguistic philosophy and Phenomenology are more akin to methods than viewpoints, but contain an overall viewpoint on the subject. Conversely, many viewpoints contain a method — e.g. Rationalism, Empiricism.

Therefore method and viewpoint are not distinguished in this facet and Philosophical method itself appears as a topic in metaphilosophy — in the Branches facet.

7.57 Viewpoints derived from a particular philosopher

7.571 The individual philosopher as a subject in Philosophy is treated as a separate facet, collocated with Historical schools (see Section 7.53). But a work which considers a particular philosophical problem as illuminated by a given philosopher goes under the problem, since the philosopher is now appearing in the role of an instrument or medium of enquiry. The views of some philosophers have achieved the status of a complete doctrinal standpoint (e.g. Hegelianism, Platonism), and are enumerated among the doctrines and standpoints. Other individuals may be regarded as reflecting the array Viewpoints derived from individual philosophers; so works dealing with viewpoints characterized by other individuals (e.g. Thomist) can be regarded as a residual class, to be cited after the major ones. So this array is cited after Doctrines, etc.

A rather special form of ‘viewpoint’ is found in the shape of theories on particular problems; these appear as dependent terms under the problem concerned (in the Branches and fields facet); for instance, Sense-datum theory as a theory of perception is subordinated to Epistemology at AGS MV.

7.58 Finally, the Common facets of Auxiliary Schedule 1 are cited insofar as applicable. It has already been seen that some of these (notably Time and Place) are used prominently as subject facets proper. But others (e.g. study and teaching, forms of presentation) may appear as qualifiers of philosophical classes in the usual way. Also, the truly common Time and Place facets may be needed to qualify these — e.g.

Philosophy — Study and teaching — France — 20th century (which is not, of course, the same thing at all as French philosophy in the 20th century).

7.6 Eastern philosophy citation order

7.61 The particular features of Eastern and Western philosophy leading to the choice of Broad traditions as the primary facet are considered in Section 7.4. That Section also indicated (at 7.43–7.46) that the two major traditions seemed to call for different citation orders. Whereas in Western philosophy the broad tradition was divided immediately into Branches then Viewpoints, this proved unhelpful in Eastern philosophy. Here the notion of different traditions or systems (within each of which the whole range of philosophical problems may be considered) continues to be a dominant factor. So we have a number of ‘levels’ of systems and subsystems before the facets of Branches and Viewpoints are applied.

7.62 The first-cited facet under Eastern philosophy reflects the interaction of two major features. One is that the philosophical system is so intimately bound up with a religious system (and may be equated roughly with the latter’s intellectual, rational and theological aspects) that it can almost be regarded as a subsystem of the religion concerned. The other factor is that these religion-defined systems (Hindu philosophy, Buddhist philosophy, etc.) are in turn very strongly associated with the place, and hence the culture, in which they originated and developed. So there is a very strong connection between (say) Hindu philosophy and Indian philosophy, or between Confucianism and Chinese philosophy — so strong in fact that it would be unhelpful to attempt a classification in which the defining religion and the place were quite separate classes. We concluded, therefore, that the primary facet is a ‘compound facet’ of Place and Religious system.

It may be noted that this situation (of two characteristics of division being combined to make one facet) is not new in BC2. It already occurs in Class J Education (where the primary facet combines the facets of Educands by age and Stages of education) and in Class Q Social welfare — where the facets of Persons receiving welfare and Causes of need are combined.

A further peculiarity of the Place/Religion duality is that Eastern philosophy is dominated by religious systems originating in India, China and Arabia and these have been transplanted into many other places. They are regarded as offshoots of the original systems and are subordinated to the system rather than to the adopting country.

Within each system defined by Place and/or Religion several arrays, each equivalent to a sort of subsystem, are recognised. Although these are probably seen operating fully only under Hindu philosophy, they all apply in varying degrees to other Eastern philosophies.

The first array (in citation order) is Period. Division by this principle is very broad indeed, reflecting the strong continuity of the systems over many centuries. In most

cases the only significant distinction is between Ancient and Middle period on the one hand and Modern on the other.

The second array is that of Classical systems within the broad system — e.g. Vedanta, Mimamsa, etc. in Hindu philosophy; Hinayana, etc. in Buddhist philosophy. These are defined by complexes of doctrinal viewpoints too diffuse to categorize more closely than by their status as ‘classic’ subsystems.

The third array consists of the ‘subsystems’ defined by the original historical texts (e.g. Vedas, Bhagavad-Gita, etc. in Hindu philosophy) on which elaborate commentaries, ‘sutras’, etc. have been written.

The fourth array reflects the systems of expositions, analysis, commentaries, etc. developed by particular writers. These may occur at different levels of the other subsystems noted; for example, a classic writer like Sankara will originate a corpus under the classic system Vedanta-Advaita, and again under original texts considered within that system — e.g. Bhagavad-Gita.

- 7.63** The second and third cited facets in Eastern philosophy are (respectively) the Branches and Viewpoints, in the same logical order as in general philosophy. The main problem here was trying to equate the rich vocabulary of Eastern philosophy with that of Western philosophy (from which these two facets were largely derived). An observation by Arthur Koestler (*The lotus and the robot*, 1960) is particularly apposite here:

[Any] attempt to translate it [Hinduism] into the verbal concepts and categorical structure of Western language leads to logical monstrosities. . .

This reinforced an opinion already reached, that exact equations were virtually impossible. Crucial concepts such as dharmas, avidya, maya, karma, nirvana, brahman, ch’i, t’ai-chin, te, etc. are translated in decidedly variable terms by Western writers. Moreover, in many cases the concepts at issue reflect not only complexes of Western ones (rather than showing a one-to-one correspondence) but also reflect elements from both the Viewpoints and the Branches facets together. Failing the resources to make a really thorough facet analysis of the vocabulary concerned, it was decided to give a number of the major concepts and locate them as a special array of viewpoints and doctrines at the end of the Viewpoints facet and the beginning of the Branches facet.

7.7 Citation order in logic

- 7.71** The relationship of logic to philosophy and to mathematics is considered in Section 3 and its facet structure in Section 5.5. Here it need only be said that although logic has traditionally been considered part of philosophy the citation order appropriate to the latter (in which the broad tradition is cited first) is not appropriate to logic. The central purpose of logic is to examine and clarify the processes of valid reasoning and it would be inconsistent with this purpose to admit cultural factors in determining the primary facets. So the citation order in logic is quite independent of that in

philosophy in general and reflects a reasonably straightforward application of the standard citation order to the field in question. Systems of logic (deductive, inductive . . .) give the primary facet; within each system division is first by subsystem (in the form of formal structures), then by operations and processes (reasoning, etc.) followed by the properties of the systems, structures and processes and then the special agents of the latter. Only after these facets, particular to logic, have been recognized is division effected by philosophical aspects. These are essentially those of the general philosophy class, except that the broad traditions of Eastern and Western are treated simply as particular ‘schools’ and do not form the first characteristic of division to be applied within the philosophical aspects.

The overall citation order is therefore the same as the order of listing in Section 5.5.

8 Filing order

8.1 This is the order in which the individual classes, simple or compound, file one after the other — whether in the schedule, on the shelves or in a bibliography or catalogue. It has two separate components, facet filing order and order in array.

8.2 Facet filing order

8.21 This is the order in which the individual facets (each one containing a block of different classes) file one after the other.

8.22 The schedule is an *inverted* one — i.e. the facets file in an order which is the reverse of the order in which they are cited when compounding terms. So the primary facet (Broad traditions) files last, the secondary facet (Branches) files next to last, and so on.

8.23 The reason for this (explained in the Introduction to BC, Section 5.742) is solely to preserve a consistent general-before-special sequence. For instance in Section 8.25 below, the compound class Rationalism in Western philosophy (ACG) files after *both* the more general terms to which it conceptually belongs — Rationalism (in general) at AACG and Western philosophy (in general) at AB.

8.24 Similarly, within each facet, the *arrays* are inverted; the first-cited array files last, the second-cited array files next to last, and so on. For example, in the Viewpoints facet, the array Doctrines, standpoints, etc. (AAC E) files after the array About the viewpoint of a religious belief (AAC C).

8.25 It has already been noted (in Section 7.32) that the filing order embodies within itself a comprehensive guide to the basic citation order. The sequence of classes in the example below demonstrates this as well as the points in Sections 8.22–8.24.

	General philosophy
AAA	Viewpoints
AACE	Doctrines

◇

BLISS CLASSIFICATION

◇

AACG	Rationalism
AAF	Branches
AAGR	Epistemology
	<i>Philosophy by broad traditions</i>
AB	Western philosophy
ABA	Viewpoints
ACC	About the viewpoint of a religious belief
ACCL	Jewish
ACE	Doctrines
ACG	Rationalism
ACGCCL	Jewish rationalism
AFAY	Branches
AGR	Epistemology
AGRCCG	Rationalist epistemology

8.26 The above sequence (from which many classes have been omitted, of course) implies, inter alia: (i) that the Broad traditions facet is cited before the Branches facet and the Branches facet before the Viewpoints facet; (ii) that the array Doctrines, standpoints, etc. is cited before the array About the viewpoint of a religious belief.

8.3 Order in array

8.31 The classes in an array are mutually exclusive and cannot normally be compounded; so the filing order within an array cannot be determined by citation order. Where there is an obviously helpful principle for systematic arrangement, that is used. Periods in the history of Western philosophy are arranged in chronological order at ADB/ADV, and Primary qualities of universals come before Secondary qualities at AGK R/AGK S. If there is no obviously helpful principle, the order is pragmatic, as in the sequence of Viewpoints by doctrine.

9 Alternative arrangements in Philosophy

9.1 A number of alternative arrangements are provided for — that is, the notation has been designed specifically to allow alterations to be made in the preferred arrangement. These alternatives arise mainly as a response to the dilemmas discussed under citation order — and in BC2 citation order is the main determinant of filing order. On some occasions, however, an alternative does not reflect simply a difference in citation order.

9.2 In all cases, the preferred arrangement is stated clearly in the schedules, and any special notational instructions needed to implement a non-recommended alternative are indented under the note describing it, to stress its subordinate status.

9.3 It should be noted that two penalties are incurred by the use of a non-preferred

alternative. First, the notation is usually lengthened slightly. Second, the basic principle of filing order reflecting ‘inversion’ of citation order is eroded and in such cases the general-before-special rule will be broken.

9.4 A further price incurred by BC2 for the flexibility it provides by its alternatives (which add substantially to the time spent in designing and notating the schedules) is that they make the schedules look more complicated than they really are. It is stressed in Section 13 (on Practical classification) that the very first thing users of BC2 should do, having decided to adopt the system, is to decide what alternatives (if any) they wish to use and then delete from the schedule those not followed. The easiest application of BC2 is undoubtedly to use the preferred arrangements throughout and to ignore *all* the alternatives.

9.5 Some prominent alternatives

9.51 Note that the range of alternatives is too large to justify listing them all here; so only prominent cases are given and these are listed in the order of the non-recommended alternative.

- AA7 Provision is made here for citing the Broad traditions facet after Branches and Viewpoints — i.e. disregarding the arguments for making the initial bifurcation into Western and Eastern philosophy.
- AA8 Provision is made here for keeping all works about individual philosophers in one alphabetical sequence by name of philosopher.
- AB Western philosophy has a number of further alternatives:
- AB7 For citing History after Viewpoints.
- AB8 For keeping all general biographies about Western philosophers together in one alphabetic sequence.
- ADK For collocating with Medieval philosophy both Arabic philosophy and the medieval period of Jewish philosophy. The interaction of both these with Medieval philosophy was very close.
- AE For keeping all works on Western philosophers together in one alphabetic sequence.
- AHB For collocating the Philosophy of formal logic and the Philosophy of linguistics with Philosophy of language and logic (AGW/AGX).
- AHI For collocating the Philosophy of psychology with Philosophy of mind and action (philosophical psychology).

- AHN For collocating Applied ethics with Philosophy of ethics (moral philosophy).
It is noted (in Section 12.55) that BC2 policy regarding the location of moral philosophy has been changed and that the preferred place for this is in Philosophy, not with Morals and ethics at PY. But the preferred place for Applied ethics is still in PY.
- AHR For keeping together in Philosophy the philosophy of special subjects.
- AHT For collocating the Philosophy of religion with the rest of philosophy.
The historical and conceptual ties between these two subjects are very close indeed and this is already evident in the History facet under both Western and Eastern philosophy.
- AJX Provision is made here for libraries wishing to make a special class for a particular national or other tradition of philosophy.

10 Notation

- 10.1 The notation is purely ‘ordinal’ — that is, it makes no attempt to express hierarchical relations but concentrates on the primary function of notation, which is to maintain the order of classes (already determined completely by the theoretical rules governing the classification) with symbols which are as brief and as simple as possible. For example:

AGG	Metaphysics
AGH	Ontology
AGHX	Being, existence
AGJ	Universals & particulars
AGK	Universals
AGKQ	Qualities
AGKR	Primary qualities

The above chain gives classmarks (AGJ, AGK, AGK R) which do not express the hierarchy to which the concepts belong. On the other hand, the classmarks are shorter than they would otherwise have been; e.g. AGK R would need a classmark nine digits long to express fully its subordination to AGG. In the case of many other subjects the saving is even greater.

- 10.2 The notation is *fully faceted* and *synthetic*. Compound classes formed by the coordination of two or more separate concepts or classes are given classmarks which are built (‘synthesized’) from the simpler constituent classes according to strict rules. These are described more fully in the Introduction — Section 7.4 — to the BC, but the essential ones are repeated here.

10.3 The chief method of synthesis is by direct retroactive notation: as a general rule, for any given class in the schedule all the preceding classes are available to qualify it by adding the earlier classmark, minus its initial ‘A’, direct to the classmark concerned. For example:

ACG	Rationalism
AGW	Philosophical logic
AGWCG	Rationalism in philosophical logic

10.4 The operation of direct retroactive synthesis (classmark building) normally involves the ‘reserving’ of all the letters introducing facets and arrays earlier than the class being qualified, and beginning with a later letter the enumerated subclasses special to the class in question. But as classmarks end in later and later letters, the number of earlier letters which need to be reserved gets larger and the number of letters left for enumerating subclasses special to the class gets smaller. This presents no problem to an ordinal notation because the next notational ‘array’ is drawn into service to accommodate these special subclasses; e.g.

AGR	Epistemology (in Western philosophy)
AGSJ	Knowledge
AGSL	Sources
AGSYF	Dogma
AGTB	Foundations of knowledge

In this example, partly because the first enumerated subclass only begins at J, the containment of all enumerated subclasses of AGS within the notational array AGSJ / AGSY would produce unnecessarily long classmarks. So the next letter in the notational array AGA / AGY (‘T’ to give AGT) is used to continue the subclasses. In a hierarchical notation, which cannot admit AGT to be a ‘division’ of AGS, such a procedure is not feasible.

10.5 Adding classmarks from preceding arrays

10.51 In some cases the two classmarks being linked share the same first two letters, not just the initial ‘A’. As a rule, both these letters may be dropped in such cases; e.g.

AGR	Epistemology
AGSJ	Knowledge
AGSL	Sources of knowledge
AGSU	Intuition
AGU	Kinds of knowledge
AGUS	Practical knowledge
AGUSSU	Intuition

Here, the compound Intuition as a source of practical knowledge drops both ‘A’ and ‘G’.

- 10.52** In Class A/AL, such synthesis is possible in AB, AF and AG, but not in AC, AH, AI, AJ or AL, within each of which synthesised classmarks may drop only the initial letter A. For example, a study of desires as dispositions involves the qualification of Dispositions (at AHG Q) by Desires (at AHE XM). As AH has its first enumerated class at AHD, where ‘D’ is earlier in filing value than the ‘H’ to which it is added, the dropping of two letters would be ambiguous. The synthesised classmark must therefore be AHG QHE XM, dropping only the initial letter ‘A’.

10.6 Forward building

- 10.61** In a very limited number of cases with the Branches, fields and subjects facet AF/AH, it is necessary to build classmarks forwards rather than retroactively. This is solely to allow for the accurate classification of subjects in which a concept listed in the schedule as a subdivision of one branch of philosophy is discussed in the context of another branch which appears later in the the schedule. For example, Universals appears within Metaphysics at AGK, Objects of knowledge within Epistemology at AGT X. So an epistemological study of universals as objects of knowledge would be AGK GTX, building forwards and dropping only the initial A.

10.7 Intercalators

- 10.71** Another method of synthesis is by the use of a particular letter (or number) to ‘introduce’ a facet or array at a particular desired position; for example, at ABB in the viewpoints facet of Western philosophy the second B is used to introduce the concept of broad tradition when this is used as a viewpoint rather than a system, as in a work on Eastern elements in Western Neo-Platonism (ACO SBB I). Such specially assigned letters or numbers are called intercalators, or facet indicators. They are used particularly to introduce concepts appearing in a role different from their usual one in the philosophy class. The special Auxiliary Schedule AA1 consists almost entirely of intercalators.

10.8 Alphabetization

- 10.81** A very simple form of synthesis is to allow the indexer to construct a classmark by adding a symbol securing a position in an alphabetical order of subclasses. This occurs quite frequently in the philosophy class, because of the prominence of individual philosophers appearing as classes. Alphabetization has been kept as simple and as brief as possible, but a word of explanation seems to be called for.
- 10.82** At ADD L, Individual philosophers of the Pre-Socratic period, for example, a set of classmarks is assigned (ADD L/X). Major philosophers are given their own brief classmark (e.g. Anaxagoras ADD LR) but all others require the indexer to make up

a classmark by adding two letters. If a classmark has to accommodate individuals whose names begin with different letters, the initial letter must be included; e.g. ADD N (Anaxim–Dem) accommodates four different initial letters; so Archelaus of Athens (say) would be ADD NAR. But if a classmark accommodates only individuals sharing the same initial letter, this can be dropped; e.g. ADD L (A–Anax) would allow Alcmaeon of Croton (say) to get ADD LL (i.e. using only the second letter of his name, since the initial A is common to all persons located at ADD L).

10.83 Qualification of classmarks for individual philosophers

10.831 Auxiliary Schedule AA2 provides for subdivision under an individual philosopher. The classmark for the philosopher, whether enumerated or alphabetised as explained in 10.8 above, may be directly qualified by concepts listed in AA2. For example, collected works in the original language is –3, the enumerated classmark for Plato is ADE J, and thus Collected works of Plato in Greek is ADE J3.

10.9 Enumeration of compound classes in schedules, with synthesized classmarks

10.91 In principle, a faceted classification consists of facets and arrays of relatively elementary terms; all compounds are formed by the classifier assigning classmarks to them by means of synthesis. So compound classes are not usually to be found enumerated in the schedules.

10.92 This principle is modified in BC2 in a number of cases; e.g.

AIM	Indian philosophy
	<i>Systems by originating work</i>
AIMR	Brahmasutra
AIN	Hindu philosophy
AIOB	Advaita Vedanta
AIOH	Suddhadvaita
	<i>By originating work</i>
AIOHR	Brahmasutra
	Writers
AIOHRI	Vallabhacarya

The reason for enumerating the compound at AIO HR is to give the context for the special subclass enumerated (here, the writer Vallabhacarya). In other cases, compounds are enumerated in order to indicate particularly prominent subclasses (as under AJD Indian materialism).

10.93 In such cases (of one or two enumerated compound classes appearing in the schedule) it should not be thought that the detail under that part is limited to the subclasses thus enumerated. When assessing the specificity of BC’s vocabulary in a given class

it must always be remembered that the class may be qualified by all earlier facets, whether this is hinted at by limited enumeration or not.

- 10.94** The different ways of building classmarks described above may give an impression of complexity at first reading. But so would the simplest action if described in terms of its basic operational steps; the detailed sequence of instructions we need to give a computer for it to process the simplest operation demonstrates this. Applying notation is a practical operation. The steps involved are basically simple and quickly become familiar after a little practice.

Detailed explanations and examples are given in the Introduction (Section 7.4) and a simple flowchart covering all the possibilities appeared in the *Bliss Classification Bulletin*, VI, 3, 1978.

11 Alphabetical subject index

- 11.1** The function of the alphabetical index in a classified indexing system is considered in the Introduction to BC2 (Section 6.5 gives general principles and Section 7.5 gives practical guidance to a library making its own alphabetical index to its own stock).
- 11.2** The basic points to be remembered for efficient use of the printed index to the schedules of this class will be found on the page preceding the alphabetical index.
- 11.3** The basic rules are those of chain indexing. If an entry term is qualified at all, it is by a superordinate class (which helps define it). An entry term is never qualified (followed by) a term representing one of its own subclasses in the BC2 classified arrangement; e.g.

Knowledge AGS J

but not

Knowledge, Practical AGU S

The latter will have its own entry under Practical knowledge (in which ‘knowledge’ represents the containing class, defining what the ‘practical’ is referring to).

- 11.4** The alphabetical index to Class A has been produced largely by automatic selection of terms from the schedules, using a computer program written to this end — and including, for example, rules for deleting ‘anti-chain’ entries. Entry terms are qualified only when necessary to distinguish the different contexts involved when the same entry term leads to more than one classmark.

12 Special problems in the classification of philosophy and logic

- 12.1** The main problems of deciding what is the primary facet in each case and then what the subsequent citation order should be have already been considered in Sections 5 and 7. Here, some of the problems relating to particular classes are considered.

12.2 Viewpoints in Western philosophy

12.21 One array in this facet is About the viewpoints derived from a particular philosopher (ACD). However, the largest array Doctrines, standpoints, ‘isms’ features a few key individuals as defining a standpoint (e.g. Kantianism and Hegelianism under Idealism). Although there might be a theoretical distinction between (say) Hegelianism and Hegel’s standpoint, this would be very difficult to maintain in practice. So those few philosophers enumerated under Doctrines, standpoints, ‘isms’ are excluded from the array About the viewpoints derived from a particular philosopher. Of course, in any work about the general views of Kant, Hegel, etc. the subject is the philosopher, and the work would be classed under the philosopher in the history facet (where individuals are enumerated).

12.3 Status of individual philosophers

12.31 A pervasive problem is the significance of individual writers in relation to particular branches or viewpoints in philosophy. It is arguable that the writings of a philosopher constitute something like a system in which numerous problems of philosophical enquiry feature and interact inextricably. Therefore it would be pushing classification further than is really justified to isolate some works from the others in order to subordinate them to specific problems.

12.32 This argument is in fact implicit in the treatment of individual writers in Eastern philosophy, where a given writer will be regarded primarily as an exponent of a particular system (e.g. Advaita Vedanta in Hindu philosophy) and his works will then form the basis of a series of interpretations of the system by means of further commentaries on them and so on. But in Western philosophy the more frequent emphasis on specific philosophical problems (which underlies the facet citation order in that class) has led to the rule that a work which focuses on a specific problem is classed under that problem. So Gilbert Ryle’s *The Concept of mind* goes under Mind; J L Mackie’s paper *A Conditional analysis of causation* goes under Causation; Plato’s *Timaeus* goes under Cosmogony; Moore’s *Principia ethica* goes under Ethics, and so on.

12.33 The examples above are all of concepts in the Branches facet. When the problem is one of viewpoint or doctrine further difficulties arise. The viewpoints facet is designed primarily to take works *about* the viewpoint (e.g. idealism), not works *from* that viewpoint. The distinction is clear enough when one viewpoint is treated as a subject from another viewpoint (e.g. Existentialism from an empiricist viewpoint). But when a work demonstrates a viewpoint without making it the primary subject, it is safer to class it under the philosopher if the subject is not itself quite specific. For example, any work by Hume is an obvious example of writing from an empiricist point of view. A book of selections from Hume covering a wide range of philosophical problems would normally be classed under Hume himself, in 18th century British

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philosophy, with the viewpoint unspecified. There is, however, an alternative, not recommended, which allows such viewpoints to be expressed if required.

12.34 See also a further note on the relation between viewpoints and individual philosophers at 12.2.

12.35 Libraries which nevertheless prefer to keep all the writings of a given philosopher together may do so by using the *alternative* provided at AE.

12.4 Metaphilosophy

12.41 Metaphilosophy is philosophical writing *about* philosophy, its nature, scope, relations with other subjects, methods, and so on. This has become one of the central fields within philosophy in recent years, particularly in the Anglo-American analytic tradition and as such is regarded here as an integral branch of philosophy rather than as a simple ‘common subdivision’ representing the study of the subject. The Branches facet represents those problems whose investigation is part of the fundamental and unique role of philosophical enquiry and modern metaphilosophy falls well within this definition.

12.5 Philosophy of special subjects

12.51 It has been noted (Section 7.42) that BC2 distributes this special array of the Branches facet throughout the classification. But a number of specific subjects have a very special relationship to philosophy and the provision of a simple alternative for collecting in this class the philosophy of all special subjects does not meet the problem.

12.52 **Philosophy of language and logic (philosophical logic).** The topics considered here are central to much twentieth century philosophy. This branch of philosophy is often loosely referred to as “Philosophy of language” or “Philosophy of logic”. But it must be clearly distinguished from the Philosophy of linguistics, i.e. philosophical problems about or arising from the discipline of linguistics. It must also be distinguished from the Philosophy of formal logic, i.e. philosophical problems about or arising from the discipline of formal logic. The works correctly classed here as Philosophy of language and logic (or Philosophical logic) are general philosophical studies of the topics enumerated (such as meaning, naming, truth, etc.) without extensive explicit reference to work in linguistics or formal logic.

12.53 **Philosophy of mind and action (philosophical psychology)** is analogous to Philosophy of language and logic above. This branch must be clearly distinguished from the Philosophy of psychology, i.e. philosophical problems about or arising from the discipline of psychology. The works correctly classed here as Philosophy of mind and action (or Philosophical psychology) are general philosophical studies of the topics enumerated (such as memory, other minds, intention, etc.) without extensive explicit reference to work in psychology.

- 12.54 Axiology** (the philosophical study of value) does not itself pose a problem since there is no other discipline or special activity whose concern it is. But this is not the case with its two major subclasses — ethics and aesthetics.
- 12.55 Ethics** could be interpreted as the application of philosophical enquiry to human social behaviour. In fact, this has so far been the interpretation favoured by BC2, which collocates ethics (the philosophical study — sometimes called ‘meta-ethics’) with moral behaviour in Class P (immediately preceding the special social sciences). But this separation of ethics from philosophy is undoubtedly repugnant to many philosophers and it could be argued that the pervasiveness of ethical questions in many branches of philosophy justifies its inclusion in philosophy as one of its integral branches. This is the view now taken in BC2; so what was envisaged (when Class PY Morals and ethics was published) as only an alternative for ethics is now regarded as the preferred position. The location in PY will remain, of course, as an alternative for libraries wishing to keep the philosophical treatment of ethics with the subject of Applied ethics.
- 12.56 Aesthetics** also presents a problem in that it is the philosophical treatment of a subject which constitutes an independent discipline. But in this case its collocation with the subject of study (in this case imaginative art) seems to give much the better arrangement and its preferred location is therefore with art.
- 12.57 Philosophy of religion** is very closely related to general philosophy and numerous concepts (e.g. theism, deism, origin and design of the universe) occur prominently in the Viewpoints and Branches facets. This is particularly the case in Eastern philosophy, where religious systems define a major facet of the subject. Historically, Theology (Knowledge of God) has been regarded as a major branch of philosophy. Nevertheless, its subject is religion and the preferred arrangement is to adhere to the general rule in BC2 and locate it under religion. But its alternative in philosophy is a particularly prominent one.
- 12.58 Logic.** Historically this has always been regarded as an integral part of philosophy. But in the past century and more it has assumed a crucial role in mathematics also. We now take its definition as an autonomous science as a more accurate reflection of its status. On the principle that it serves both philosophy and mathematics it should file ahead of both these disciplines. But this raises a difficulty already noted in Section 3.42 and so its original location in BC1 (following Philosophy and preceding Mathematics) is retained as the most helpful.
- 12.581** The facet structure and citation order in logic (Sections 5.5 and 7.7) should demonstrate the thinking behind the classification of logic more clearly than any verbal description. Some terminological problems arose, of course; e.g. whether formal logic can be distinguished helpfully from logic in general; whether symbolic logic is synonymous with mathematical logic. The solution to these may also be seen from the schedules.

**13 Practical classification in philosophy**

13.1 Practical classification is considered in the Introduction to the BC and only a summary of the main points as they apply to Class A appears here.

13.2 Decide first which alternatives are to be used and delete clearly from the schedule those which are rejected. It may be noted that once this is done it is done for good and henceforth alternatives are irrelevant to the library in question. It also results in a significant simplification of the schedule.

13.3 If several alternatives are adopted, try to be consistent in the decisions taken. If many modifications are made to the standard citation order, the overall predictability in the location of classes is jeopardized and it becomes less easy to explain the scheme to library users. Because of the regularity of pattern resulting from the consistent application of a few, simply explained basic rules, BC2 is much easier to explain to non-librarians than the sprawling and inconsistent arrangements so often found in the older, pre-Ranganathan schemes. Substantial parts of these can scarcely be called 'classification' in any strict sense of the term.

13.4 In general, the preferred order enjoys a slightly briefer notation than an alternative which is not recommended.

13.5 Practical procedure

13.51 For each document, three distinct operations are necessary.

13.6 Concept analysis

13.61 This means examining the document to decide which concepts provide for a statement of its overall specific subject. This statement (or sentence) should describe what the document is about using the classifier's own words or words taken from the document. It should not be restricted by the vocabulary of any particular indexing language. CIP (Cataloguing in publication) subject data should not be accepted uncritically and without a careful examination of the document itself. CIP data is often inaccurate and restricted to the limited vocabularies available in subject heading lists, etc.

13.62 In formulating these subject statements, it is helpful to ask various questions. For example, is the document restricted to a particular branch of philosophy, philosophical problem or viewpoint? Is it restricted to a particular tradition, place, period or individual philosopher? These questions relate directly to the facet structure in Class A/AL and will become second nature to classifiers using the schedule. Careful concept analysis is the essential basis of accurate subject classification by any scheme.

13.63 It is helpful to set down the choice of terms, representing each subject concept, in a list or line.

13.7 Deciding citation order

13.71 The second step is to decide the citation order of the constituent terms according to the rules given above (Section 7) to form a chain (a string of terms each of which is subordinate to the one preceding it). In the examples, we give in the citation chain the classmark of each term as it first appears in the schedule. Where a term does not appear in the scheme, other terms representing the same concept can often be found by reading down a schedule from a general to a more specific context.

13.8 Translating this chain into notation

13.81 The last step is to translate this chain into notation, observing the rules summarised in Section 10. This gives the finished classmark.

13.9 Examples

13.91 The following examples are chosen primarily to demonstrate problems of relations between constituent concepts in compound classes and the accompanying notational problems of synthesis. Most of them reflect relatively specific subjects and when the number of constituent elements gets large the classmarks get longer also. It should be remembered that a great deal of the literature, particularly at the book level, does not call for such extensive compounding.

[1] **Title:** *A Marxist critique of linguistic philosophy*

Concept analysis: Western philosophy — Marxist viewpoint — Linguistic philosophy

Chain: Western philosophy — Linguistic philosophy (ACU N) — Marxist viewpoint (ABK J)

Classmark: ACU NBK J

Comments:

1. This reflects the problem of one viewpoint or doctrine commenting on another and requires a distinction to be made between viewpoint as subject matter and viewpoint qua viewpoint.
2. The classmark is got by simple retroactive synthesis, dropping the single letter A.

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- [2] **Title:** *Modes of thinking and the British empiricists*
- Concept analysis:** Western philosophy — Metaphilosophy — Modes of thinking — British philosophy — Empiricism
- Chain:** Western modes of thinking (AFH) — British philosophy (ADA E) — Empiricism (ACH)
- Classmark:** AFH DAE CH
- Comments:**
1. Simple retroactive synthesis in three steps.
- [3] **Title:** *Plato's theory of forms and the theory of sets*
- Concept analysis:** Plato — Universals — Theory of forms — (compared with) — Set theory
- Chain:** Western metaphysics — Theory of forms (AGL L) — Platonism (ACO P) — Comparison (AA6 T) — Mathematics — Set theory (AM5)
- Classmark:** AGL LCO P6T AM5
- Comments:**
1. Comparison (6T) is a phase relation from the Common subdivisions and is added directly to the concept concerned.
 2. The notation for Set theory comes from the Mathematics class, and is the second phase of the comparison (the Philosophy class is the first).
- [4] **Title:** *Theories of cognition in Thomist doctrine*
- Concept analysis:** Cognition — St Thomas Aquinas — Viewpoints
- Chain:** Western philosophy — Epistemology — Cognition (AGV D) — Viewpoints, schools (ABA) — About the viewpoint derived from a particular philosopher (ACD) — St. Thomas (ACD THO)
- Classmark:** AGV DCD THO
- Comments:**
1. Simple retroactive synthesis dropping one letter.
 2. Alphabetering device, adding first three letters of name to intercalator (D).

[5] **Title:** *Logic of inconsistency*

Concept analysis: Rationality — Inconsistency in belief — Epistemology

Chain: Western philosophy — Epistemology — Belief (AGV N) — Rationality, reason (AGS S) — Inconsistency (AGS KN)

Classmark: AGV NSS SKN

Comments:

1. The term ‘logic’ is used loosely here to stand for rational enquiry.
2. Simple retroactive synthesis in 3 steps, dropping two initial letters (AG common to all elements in the compound).

[6] **Title:** *Philosophy of mind and action in medieval philosophy*

Concept analysis: Philosophy of mind and action — History — Medieval

Chain: Western philosophy — Philosophy of mind and action (AHD) — History (AD) — Medieval period (ADJ)

Classmark: AHD DJ

Comments:

1. Simple retroactive synthesis, dropping one letter.

[7] **Title:** *Values and intentions: a study in value theory and the philosophy of mind*

Concept analysis: Values — Intentions — Philosophy of mind

Chain: Western philosophy — Values (AHJ) — Philosophy of mind and action (AHD) — Intention (AHG T)

Classmark: AHJ HGT

Comments:

1. Simple retroactive synthesis, dropping one letter.
2. The ‘added’ classmark (AHG T) begins with the same two letters as AHJ. Usually, this would allow the two initial letters to be dropped. But the notational array AH has its first enumerated class at AHD (in which the ‘D’ is earlier in filing value than the ‘H’ to which it is added); so dropping two letters is not feasible (e.g. AHJ GT stands for the addition of AGT from Epistemology — a quite different subject).

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- [8] **Title:** *Ethical theory of Hegel: a study of the Philosophy of right*
- Concept analysis:** Ethics — Hegel
- Chain:** Western philosophy — Ethics (AHK) — Hegel (ADU KJ) — (Specific work) — Philosophy of right (64)
- Classmark:** AHK DUK J64
- Comments:**
1. This demonstrates the need to distinguish carefully between works about individual philosophers and the doctrines associated with them. The subject here is a specific work of Hegel's and this calls for the application of Auxiliary Schedule AA2 (which reinforces the decision to treat it as primarily about the philosopher rather than doctrines associated with or derived from him).
- [9] **Title:** *The question of being: East / West perspectives*
- Concept analysis:** Being — Eastern philosophy — (compared with) Western philosophy
- Chain:** Eastern philosophy (AI) — Ontology — Being (AGH X) — (comparison) (AA6 T) — Western philosophy (AB)
- Classmark:** AIG HX6 TAB
- Comments:**
1. Demonstrates use of class AB/AH (Western philosophy) to synthesize details of Viewpoints, Branches, etc. under Eastern philosophy. Strictly speaking, the general concepts at AAA/AAH should be used — but notationally it is easier to take them from AB/AH where they appear in detail. The order is not affected.
- [10] **Title:** *Islamic occasionalism*
- Concept analysis:** Islamic philosophy — Causality — Occasionalism
- Chain:** Islamic philosophy (AIK) — Causality (AGQ D) — Occasionalism (ACP T)
- Classmark:** AIK GQD CPT
- Comments:**
1. Simple retroactive synthesis in three steps.

14 Multiple entry in the classified catalogue or bibliography

14.1 This is described fully in the Introduction (Section 7.62); only the bare essentials of notational practice are given here.

14.2 Multiple entry means providing two or more subject entries for each compound subject, each entry reflecting a different citation order. The simplest way of doing this is to construct a basic classmark consisting of the classmarks of each elementary concept (i.e. from each separate facet or array) linked by a hyphen and then to vary the order of these to obtain entries with different citation orders.

14.3 Taking title 10 above, this could be represented notationally by the basic classmark given in the chain. This could now be ‘rotated’ (as though the three separate elements were on a cycle wheel) to give the three separate entries:

AIK — AGQD — ACPT (Islamic philosophy — Causality — Occasionalism)
 AGQD — ACPT — AIK (Causality — Occasionalism — Islamic philosophy)
 ACPT — AIK — AGQD (Occasionalism — Islamic philosophy — Causality)

14.4 A practice favoured by some libraries is to use the normal classmark (reflecting the economies of the retroactive notation) for the document physically (i.e. putting the relatively brief classmark on the back of the book, etc.) and to use the longer ‘articulated’ forms to secure multiple entry in the catalogue. If this practice is followed, each catalogue entry should carry a clear indication of the classmark under which the document is actually located on the shelf.

15 Philosophy and logic in BC2 compared with BC1

15.1 The reasons for the radical nature of the revision of BC1 are considered in detail in the Introduction to BC2. A comparison of BC2 with BC1 will quickly reveal that the revision has been radical indeed and that little remains of the original structure.

15.2 Facets and arrays

15.21 On the whole, the classes in BC1 Philosophy and logic are contained consistently within the boundaries of the homogeneous facets to which they belong. For example, the large History facet (AA/AD) is completely homogeneous and the two insertions of Viewpoints (isms) at ABC and ACP are clearly designed to be subordinated to the historical period and place. Similarly, the Branches facet (AH) is completely homogeneous. But the general Viewpoints facet at AF/AG includes some concepts from the Branches facet — e.g. Philosophical fictions, ‘as if’ at AFR; Philosophy of meaning at AFW. Also, it contains scattered elements of quasi-branches like Relation of philosophy to mathematics, to religion, etc. One of its classes (AGS Catholic philosophy) reflects a particular array in the Viewpoints facet (By religion) — but this is not developed beyond the one class.

15.3 Citation order

- 15.31** There is no comprehensive statement of citation order in BC1 — only a number of scattered references or examples which implicitly reflect some rule. For example, at AAH under Ancient Greek philosophy there is a class Special aspects with a note indicating that special aspects of a given ‘school’ (Period and Place) go with the school. At ABC, under Medieval philosophy and at ABS under Renaissance philosophy, some viewpoints are listed, implying a citation order: Broad period — Place — Viewpoint. There is no clear statement in the schedules or in the introduction of the place which the Branches facet (which Bliss called Metaphysics) should take in citation order. The distinction between Eastern and Western traditions (a major one in BC2) hardly registers in BC1. Provision is made in the History facet for ancient Indian and Chinese philosophy only and for medieval Arabic and Jewish philosophy (at AAW/AAY and at ABN/ABQ) but there is no general class for Western philosophy and Eastern philosophy per se.
- 15.32** A major feature of the new edition is, of course, its comprehensive citation order — explained in Section 7 above.

15.4 Filing order

- 15.41** Since BC1 gave no comprehensive citation order it could not therefore observe consistently the principle of inversion. Consequently, general-before-special, although an avowed aim in BC1, is often not observed; e.g. the History facet (AA/AD) is cited before the Viewpoints facet (AF/AG) but it also files before it — so a compound like Medieval philosophy — Realism (at ABH) files before the general class for the Viewpoint (here, Realism, at AGE). Order in array is also sometimes inconsistent; e.g. in Modern philosophy (AC) 18th century in general (ACM) files after specifically German 18th century philosophy (ACK). Also, individual writers sometimes file before their general period — e.g. ACF Francis Bacon, ACH English philosophers of 16th/17th centuries (general) — and sometimes after — e.g. ACK German 18th century, ACL German philosophers of 18th century.
- 15.42** Filing order in the new edition is a direct reflection of citation order (see Section 8 above). In those cases where BC1 fragmented a facet this principle has required that the fragments be brought together.

15.5 Alternative arrangements

- 15.51** BC2 preserves most of the alternatives provided in BC1; e.g. for Ethics, for collecting individual philosophers in one alphabetical sequence and at different points. But some have been dropped, as reflecting a now archaic collocation — e.g. for Psychology (a science) and for Occult philosophy (not a form of rational enquiry). However, BC2 has added some alternatives not found in BC1 — e.g. provision for broad traditions, for a ‘favoured national school’, for citing Viewpoints before History, and so on.

15.6 Notation

15.61 The changes in order described above, combined with the very large expansion in vocabulary, have inevitably resulted in an almost complete re-notating of the class.

15.62 In the matter of synthesis (classmark building) BC1 used the special auxiliary schedule 6 for subdivision of individual philosophers.

Otherwise, compounding between facets was minimal. Qualification of a History subclass by a Viewpoint was restricted to the very limited enumeration of a few viewpoints at ABC (for Medieval philosophy), at ABS (for Renaissance philosophy) and at ACP (for French 18th century). No provision appears to have been made for compounding between History and Branches or between Viewpoints and Branches.

15.63 The notation in BC2 is, of course, fully synthetic. Any term in any facet or array can be qualified by any other term if desired. The need to allocate notation carefully in order to preserve maximum economy in providing for such compounding has been another major reason for the drastic changes in notation.

15.7 Alphabetical index

15.71 The index to BC1 fails to observe the basic rule of alphabetical indexing, which is that all key words (terms likely to be sought by the searcher) should be brought into the lead position and not be subordinated to some more general class (which merely duplicates the access to be gained through the classified arrangement). For example, under the term Logic some 26 subdivisions are listed, all from AL. Moreover, not all of these subdivisions are entered under their own names (e.g. there is no entry for Mathematical logic ALT). BC2 remedies this and all keywords appear in the lead position at some point.

15.8 Vocabulary size

15.81 It is very difficult, if not impossible, to give a definite vocabulary size to a synthetic classification, since the number of classes which can be synthesized is enormous and many of them generate distinctive terms of their own. BC1 had something over 170 classes (i.e. with distinctive classmarks) in Class A. Often these classes enumerated under them a number of subclasses, but without specific classmarks. If these are included another 150 or so terms should be added. Systematic (auxiliary) schedules were provided, of course, for common subdivisions of form, of place, etc. and one for subdividing individual philosophers. These would add considerably to the specificity possible (which is the essential role of vocabulary when its size is being considered).

15.82 BC2 enumerates some 1170 terms in Class A/AL (not counting the Auxiliary Schedules). Nearly all of these are relatively 'elementary' terms which can be compounded indefinitely as the literature demands, to give precise specification to many thousands of classes.

16 Acknowledgements

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