Karl Ostarhild
Deutsche Gesellschaft für Warenkunde und Technologie

Problems of Commodity Classification*

Ostarhild, K.: **Problems of commodity classification.**

In: Intern. Classificat. 5 (1978) No.1, p. 27—29

The classification of commodities must be seen as a subarea of the general structure of economics. Its objects of concern being both commodities and data on commodities, yielding material characteristics and management data. The "service life" of the commodity monitored by data is marked materially by function and organizationally by "agencies". Concludingly the weak spots in a commodity's "service life" are pointed out.   I. C.

1. On the concept of "Commodity Classification"

1.1 A universally recognized, scientifically well-founded definition of the concept "commodity classification" does not exist. Quite generally, as a matter of fact, research and teaching find themselves confronted here with a vast and, as I see it, rewarding field of activity.

At this time and place we will neither try to catch up with this backlog of unfinished work, nor indulge in any quarreling about words. Quite simply and pragmatically, we will deal only with the matter in actual need of order and classification as far as the practice is concerned: "The problem of putting the handling of commodities and commodity data on a transparent, unequivocal and rational a footing as possible, both within one's own business administration and in one's dealings with business partners."

1.2 Hierarchically speaking, the classification of commodities constitutes a subarea of the general structure of economics.

This latter structure can be narrowed down, as far as commodity data are concerned, to the special field of economic information, documentation and communication.

It should be pointed out here that the general foundations and changes of the overall economic structure, for all their decisive importance particularly in times of technical and scientific revolution, regrettably do not rank among the explicit and joint concerns of government authorities and economic agencies, which pay great attention, on the other hand, to problems of economic policy in specific regions or sectors.

1.3 The task of improving the classification of commodities is to be regarded as something in the nature of a "land consolidation" project, hence as an infrastructural measure.

2. On the objects of a commodity classification

The objects with which a classification of commodities has to deal are the commodities themselves and the data on these commodities.
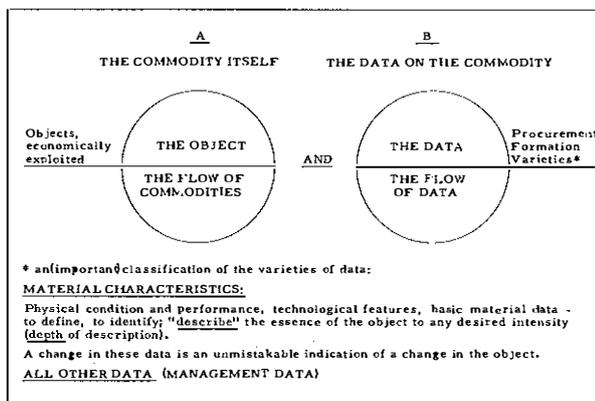

Fig. 1: *The Objects of Commodity Classification*

2.1 The commodities themselves comprise both the commodities as physical objects and the flow of commodities, i.e. the stationary and the moving traffic of commodities.

Regarding the data we are likewise dealing both with these data themselves, their procurement, formation, varieties, and with the flow of data, i.e. with the furnishing of information and with communication.

2.2 The *"commodities"* as meant here comprise all physical objects as soon and for as long a time as they are objects of economic activity, and this regardless of their state at any given moment, hence covering the entire range from e.g. a pebblestone to a lunar module, and regardless of the user and of the purpose of use.

2.3 That any commodity is linked up with *data on that* commodity would appear to be a matter of course. This duality of aspects cannot be stressed enough.

Nevertheless the prevailing knowledge on the manifold varieties of commodity data (*width* of the data spectrum), on the laws governing them and on their rational treatment is still in a most backward state. Suffice it to mention only this:

A matter of decisive importance for the classification of commodities is the differentiation between commodity data indicating *material characteristics* and other commodity data (to be termed here: *management data*). For, with the aid of the material characteristics it is possible to describe a commodity in terms reflecting its very essence, i.e. to "identify" it to any desired degree of intensity (*depth* of description).

Such descriptions assumed, any commodity can, on the basis of common characteristics, be reliably compared with others, unmistakably differentiated from them, brought together with similar ones, classified from any desired point of view and thus on the whole be made wholly fit objects for a system of order and classification.
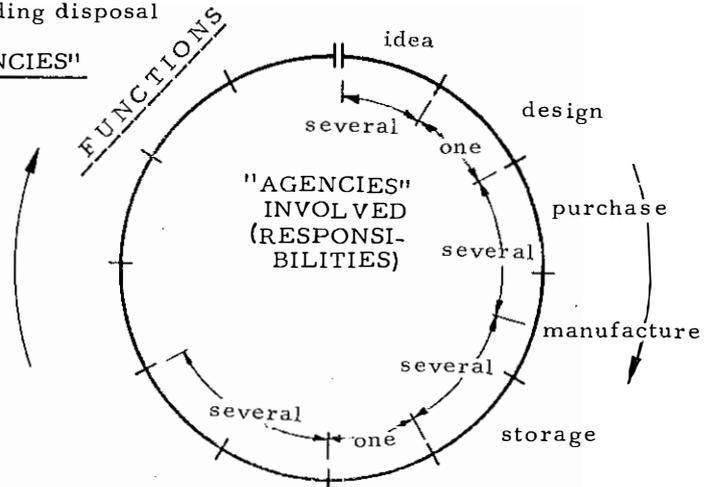
A COMMODITY'S SERVICE LIFE IS MARKED

MATERIALLY BY FUNCTIONS

e.g., idea, design, procurement of raw materials, manufacture, purchase and sale, etc., up to and including disposal

ORGANIZATIONALLY BY "AGENCIES"

e.g., responsibilities

one agency - one function

one agency - several functions

several agencies - one function

FUNCTIONS

"AGENCIES" INVOLVED (RESPONSIBILITIES)

idea

design

purchase

manufacture

storage

several · one · several · several · one · several

THROUGHOUT ITS SERVICE LIFE, A COMMODITY IS ACCOMPANIED AND CONTROLLED BY ITS DATA. AS A RESULT, THERE ARE ALSO FUNCTIONS AND AGENCIES WHICH DEAL ONLY WITH DATA, NOT WITH COMMODITIES

Fig. 2: A Commodity's Service Life

These material characteristics are insofar unmistakable as any change in the object produces of necessity a corresponding change in the material data. All other commodity data, on the other hand, such as prices, manufacturing data, terms of delivery, etc. may also be changed without any accompanying change in the commodity itself.

Also of importance is the fact that the material data accompany the object without change during its entire service life and are therefore needed by practically anyone having any dealings with the object.

3. On the service life of the commodity

3.1 Any commodity, unless won as a raw material by mining or in any other way, is conceived and designed, manufactured, purchased and sold, used, maintained, and finally disposed of.

This service life is accompanied and monitored by data. One can put it this way:

"Anyone having any dealings of some economically relevant nature with any commodity or with commodity data fulfills one of the manifold *functions* of the commodity economy."

The sum total of these functions thus constitutes the *"commodity economy"*.

3.2 The aforementioned functions are performed by organizational units which I will call *"agencies"*.

These agencies deal either with the commodity itself and with the data required for the performance of the function in the given case, or only with commodity data and not with the commodity itself.

The *data* are the indispensable tools of the agencies for the fulfillment of each and every function of the commodity economy.

A given agency may fulfill either one or several functions. Several functions combined form an enterprise. Its

agencies are in mutual contact with one another (internal contacts) while corresponding with other agencies within the overall conglomerate (inter-company contacts) as well as with other economic entities (external contacts). (See Fig. 3).

4. Multiplication factors in commodity classification

The process underlying a commodity classification — so far only shown linearly — are to be viewed in the third dimension as mass provesses in which numerous factors are involved.

- TOTALITY OF COMMODITIES
  VARIETIES - NOVELTIES

- TOTALITY OF DATA
  DATA VARIETIES - WIDTH OF RANGE AND DEPTH
  OF DESCRIPTION

- TOTALITY OF FUNCTIONS
  WITH DIFFERENT DATA REQUIREMENTS

- TOTALITY OF "AGENCIES"
  DIFFERENT ORGANIZATION
  COMMODITY LANGAGE
  CLASSIFICATION SYSTEMS
  TOOLS
  MACHINE AND MANUAL PROCESSES

- TOTALITY OF COMMUNICATION PARTNERSHIPS

Fig. 4: Multiplication Factors in a Commodity Classification

It is only after consideration of these multiplication factors that the real picture of the objects and data to be classified, of the functions, agencies, organizational forms and processes emerges.
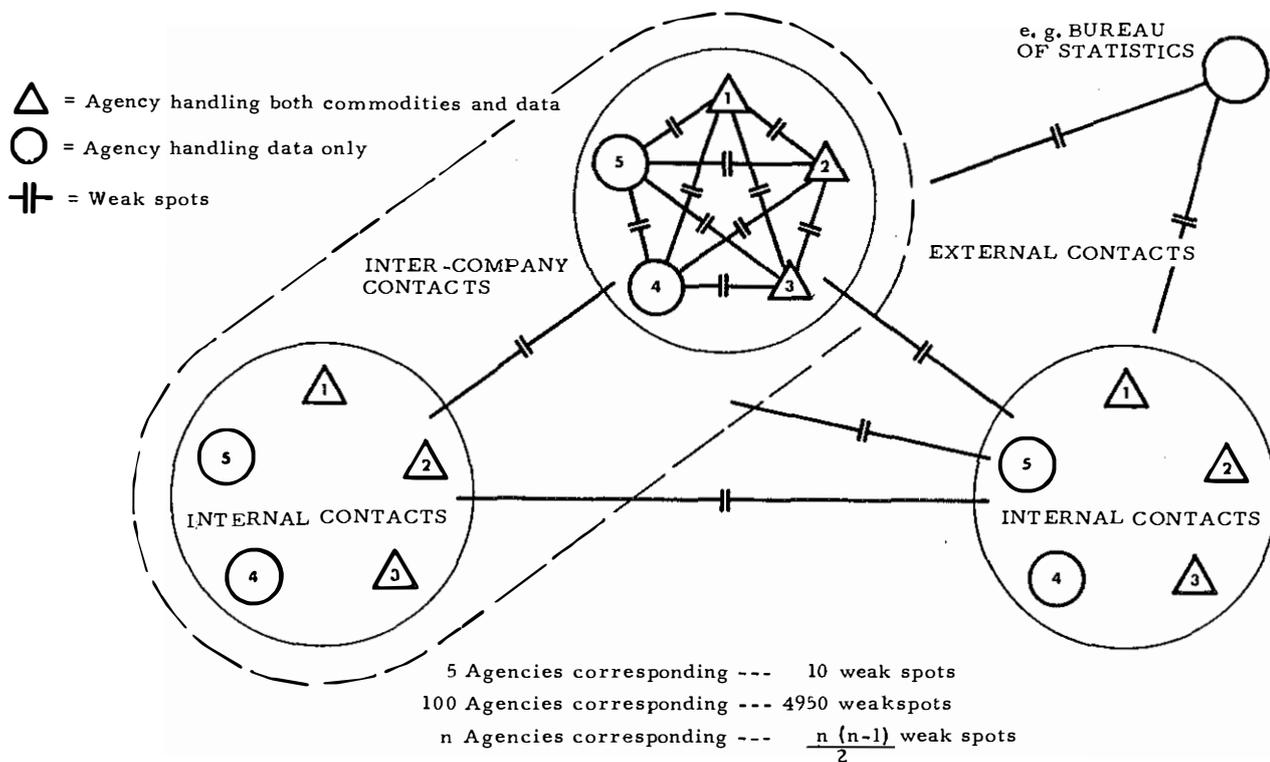
Fig. 3: „Agencies" involved in a Commodity's Service Life

In the figure:

△ = Agency handling both commodities and data
◯ = Agency handling data only
⊣⊢ = Weak spots

e. g. BUREAU OF STATISTICS

INTER-COMPANY CONTACTS

EXTERNAL CONTACTS

INTERNAL CONTACTS

INTERNAL CONTACTS

5 Agencies corresponding --- 10 weak spots
100 Agencies corresponding --- 4950 weakspots
n Agencies corresponding --- $\frac{n(n-1)}{2}$ weak spots

5. On the weak spots in a commodity's service life

So far it is the prevailing case that the various agencies are organizationally autonomous. As a result they order and classify the commodities they deal with in their own way, using their own systems, processes, numbers, classifications, catalogs, etc. and above all their own terminologies.

It is, therefore, obvious that the weak spots of commodity classification as a whole occur in the transition of commodities and data from one agency to another, in the search by an agency for commodities or data, and in the exchange of information on commodities or on commodity data among the agencies.

For these phenomena I coined at one time the expression *"threshold difficulties"*.

5.3 Questions such as: what problems occur in individual cases at the interfaces, whether and how often are they similar in nature, what costs are incurred through such obstacles, etc. should be given most serious consideration.

It is only on such a basis that a realistic study could be conducted as to whether it would be worthwhile to derive universally valid classification principles and methods from the known commodity classification systems of large institutions and enterprises, and to recommend these principles and methods, together with universally useful "tools", for large-scale application.

5.4 Now can a *prognosis* be formulated which will show a possibility of the threshold difficulties to be factually and organizationally overcome by applying economical means?

That successful action can be taken, at least, in the field of the internal contacts, is shown by the DAIS system of the Dornier company, who have developed both a "data concept" to serve as a basis for their decisions in the reorganization field, and a machine-operated commodity classification system.

On the inter-company and external planes, however, an improvement can only be achieved if a noble art is restored to honor which at various occasions — e.g., at the founding of the "Deutscher Normenausschuß", now the German Institute of Standards — was so successfully practical in the past, namely the art of raising common concerns above the realm of controversy and solving them jointly in a universally usable form: to the advantage of everyone and for the benefit of all.