The SIP System: A Design Research Concept at the Paris Centre Beaubourg, 1973–1992

François-X. N.I. Nsenga

The Institutional Beginnings of the SIP System

In 1978, during six intensive months as an intern, I was the only direct participant to have the privilege of observing, for a long period, the implementation of a short-lived Paris initiative in design research, the Système d'Information sur les Produits (SIP System). The following is a brief account of my observations, 30 years later. The account is my contribution to the ongoing debate on Design practice that some consider as an Art, others as a Technique, and others as a Science.

The SIP System was initiated in 1973. That year, Michel Millot, a Paris-based practicing industrial designer and a graduate of the Hochschule für Gestaltung in Ulm, Germany, was hired to chair a 12-member consulting team, the Groupe DIAS (Design Industriel, Analyse et Sélection). This group was formed under an agreement signed between two institutions: the Conseil Supérieur de la Création Esthétique Industrielle, a division of the then-French Ministère du Développement Industriel et Scientifique, and the Centre de Création Industrielle (CCI).

The CCI had been a division of the Union Centrale des Arts Décoratif, a showroom created in 1882 to promote the best (i.e., "beautiful and useful") of the booming nineteenth to twentieth-century industrial production in France. In July 1973, under the same agreement, the CCI became one of the four departments within the innovative Établissement Public du Centre Beaubourg.

The Centre Georges Pompidou, or Centre Beaubourg as it has come to be publicly known, was created in 1969, on the personal initiative of the late French President, Georges Pompidou. President Pompidou decided to make all facets of culture more accessible to the general public. The new CCI mandate was then established: to provide the public with pertinent information on "modern" material culture, within the fields of industrial design, architecture and landscaping, and visual communication and to showcase the avant-garde of French industrial production. There couldn't be a more appropriate building than the one hosting the Centre Beaubourg. Beaubourg was the quintessence of industrial (post-)modernist production, albeit not necessarily corresponding to the traditional canon of "beauty" and "good taste."

Right
Photograph CENTRE BEAUBOURG
courtesy of Victor Margolin

Within the CCI department at Beaubourg, the Groupe *DIAS* was asked to conceive and formulate, over a ten-month period, a protocol by which artifacts from the entire French manufacturing industry would be selected for display in the new national and public cultural space, the Centre Beaubourg. In France, production and selection of material artifacts for public display have always been the exclusive province of élite connoisseurs, belonging either to the Art Deco movement, or to Jacques Viénot's milieu of the Ésthétique industrielle,[1] or to closed circles of graduates from the École polytechnique.[2] Material artifacts have therefore always been considered primarily under the criteria of what, on the one hand, is socially considered to be "good taste" and (visually) beautiful; on the other hand, French industrial production is also world renowned for its high-level technology.

In addition to beauty, style, and technical feats, the Groupe *DIAS* proposed a fourth approach to material artifacts selection. At the Centre Beaubourg, the general public was invited to come and also browse information on artifacts with a view to eventually selecting those that could immediately be put to specific use in each individual's daily life. Thus, focusing exclusively on use criteria, the Groupe *DIAS* proposed to select and display artifacts in the new CCI with three formats: first, public shows were going to be organized in the traditional manner of a design center. New and old, manufactured and imported artifacts used in France would be displayed in a showroom. Artifact samples would be grouped in thematic exhibits depicting only attributes related to specific artifact use, their users, and their use contexts.

Second, as a complement to the showroom, the Groupe *DIAS* proposed to open a documentation center holding all the available information on how to use artifacts currently found on the French market, whether locally made or imported. In those early days of civil computerization, electronic information storage and a free

1 Jocelyne Le Boeuf, "Jacques Viénot and the 'Esthétique Industrielle' in France (1920–1960)," *Design Issues* 22:1 (Winter 2005), 63–80. Jocelyne Le Boeuf, *Jacques Vienot (1893–1959): Pionnier de l'Esthétique industrielle en France* (Rennes: PU Rennes, 2006).

2 The renowned institution founded in Paris in 1794 to train France's high elite civil and military engineers.

dossiersip
Système d'information sur les produits

5

Sommaire juin 1976 5 francs

conception et réalisation
centre de création industrielle
service design de produit

responsable et directeur de la rédaction
Michel Millot
rédacteur en chef
Michel Jullien
rédacteur
Alain Bosc
chef de produit
Sabine Berthier de Lioncourt
collaboration technique
Jean Dupeux
conception graphique
Pierre-Louis Hardy
secrétariat
Agnès Jacquet
et Marie-Christine Soudeer
imprimeur
SERG à Ivry
dépôt légal
2e trimestre 1976
commandes
centre national d'art et de culture
Georges Pompidou
adresse actuelle
35, boulevard de Sébastopol
75001 PARIS
508.25.00
centre de création industrielle
28, rue des Francs-Bourgeois
75003 PARIS
277.32.25
responsable de la publication
directeur-adjoint
François Barré

Figure 1
Dossier SIP No. 5, cover page and page1

public retrieval system and equipment were envisioned. Whether for immediate use or simply for some eventual future use, anyone wishing to learn more about the attributes of artifacts and their intended use would have immediate and complete electronic access to a database. This vision was another innovative aspect of the Groupe *DIAS* groundbreaking proposal, given that computer use, at the time, was still exclusive to a select elite.

The third format proposed that CCI would occasionally conduct special studies on certain categories of artifacts and their envisaged uses. Upon request by particular groups, corresponding print editions of such studies would be regularly published (see Figure 1).

The Rationale of the CCI Documentation Centre

As proposed by the Groupe *DIAS*, the CCI Documentation Centre was designed around the SIP System. This core information system was meant to provide the general public and private expert groups with more comprehensive information on artifacts that were manufactured industrially in France, as well as on all imports found on the French market.

More specifically, the information to be provided on manufactured artifacts through the CCI's SIP System was intended to supplement the information already provided by producers (designers and manufacturers) and vendors. This latter information category was judged by the Groupe *DIAS* team as "partial, scattered, and patronizing." The team viewed existing information on artifacts

as "patronizing" in the sense that, in the modern industrial system of artifact production, the group of producers and vendors are on one side, and they supposedly possess the entire body of knowledge about the product they provide. On the other side is the group of laborers and "consumers," who are mostly ignorant of what they produce and "consume." The total dependence and relative knowledge deprivation of the latter have thus been institutionalized since the early shift from individual and home craft production to guild and manufacturing plant systems.

As well, when looked at closely, the information actually provided on manufactured artifacts is indeed "partial" in many ways and "scattered" in many sources. Designers and manufacturers, and behind them investors, all claim to have brought to the marketplace the "best" of all artifacts. But traditionally (particularly in France, as mentioned), the "best" has meant only either the most beautiful (according to the elite taste and arbitrary preference) and "fashionable," or the most technically advanced. Also, for manufacturers, the "best" is the artifact that costs the least to produce; whereas for financial investors, the "best" is the artifact that yields the highest financial return on their investments. Finally, downstream for users, the compounded "best" of artifacts is supposedly conveyed through vendors' advertising discourse. The evidence, however, is that the sole purpose of sales statements is to conquer, secure, and maintain as long as possible the largest segment of the "free" market. Each of the stakeholders identified thus has its own partial conception of the "best" of artifacts—all attributes that do not necessarily communicate fully to end-users. In addition, there are market regulation agencies, as well as consumers' advocacy groups, which also intervene in the market each with their own kind of information on what should be considered the "best" of the same manufactured artifacts. The ultimate outcome is that, in such marketplace cacophony, neither sufficient nor clear enough information is available on how to select and use artifacts to derive from them the maximum level of life-enhancing qualities. In a worldview centered solely on market imperatives, neither the full range of artifact attributes nor all "consumer needs" have ever been substantiated with appropriate data—namely, those data pertaining to artifact use and ensuing outcomes for end users.

The real needs of all kinds of users—needs related to the ultimate *raison d'être* of artifacts—are still relatively unknown. No specific expertise has ever been fully developed on how artifacts are put to use in various contexts. With the exception of the Paris initiative, and some more recent attempts in informatics[3] and in graphic communications, [4] "consumers" are usually left on their own in the marketplace, relatively well understood as workers, as buyers, and eventually as apprentice technicians, but totally unknown and neglected in their role as users of artifacts.

3 Among the literature available in the past two decades in computer sciences on "user interface" with computers, see Harold Thimbleby's publications. His latest is: Harold Thimbleby, *Press On: Principles of Interaction Programming* (Cambridge, MA: MIT Press, 2007).

4 Alex Tyers, "Performance based design," *Case Histories*, the Communication Research Institute, Melbourne, Australia, http://communication.org.au/modules/smartsection/item.php?itemid=86 (Accessed 10/27/2008).

As the basis for their unprecedented proposal for a new kind of information according to which manufactured artifacts would be selected and displayed at CCI, and through which visitors to Beaubourg would select artifacts needed for immediate use, the Groupe *DIAS* posited the following double working hypothesis:

> There is obviously a need for a new kind of information on artifacts, different from the current and conventional types of aesthetic, commercial, technical, and regulatory information.
>
> This new kind of information should derive directly from use contexts and processes.

A third hypothesis was evoked by the Groupe *DIAS*: that those same use criteria related to artifact selection downstream would also be the ones most suitable to base the selection upstream, at the time when investors, designers, manufacturers, and vendors make their respective decisions to bring artifacts to the marketplace. However, members in the Groupe *DIAS* didn't have a chance to develop further this last hypothesis. Its immediate mandate was then limited to providing a selection protocol for artifacts to be displayed at the CCI Centre.

In the course of their reflections, members in the Groupe DIAS also submitted the following additional concrete proposal: to computerize the CCI Documentation Centre. Such a computerized system would allow a more comprehensive and methodical storage of data on the artifacts. It would also more suitably allow the general public to easily and independently search and retrieve data on artifacts needed for daily use. Again, the core of the proposed computerized Documentation Centre would be the SIP System, for which the team set out to immediately develop a working prototype, quite ahead of the now ubiquitous electronic data mining, processing, and dissemination modes.

The Prototype of the SIP System

In 1974, the Groupe *DIAS* presented its report. In it, members recommended that prototyping of the SIP System start immediately. The system was thus based on factual data drawn first from an extensive survey on most artifacts manufactured in France and in neighboring European countries (e.g., UK, Germany, the Netherlands). Second, the survey was supplemented with data drawn from an exhaustive questionnaire administered to about fifty regular users of the already existing CCI information stock. And third, other potential users of the projected SIP System, mostly professionals, were also consulted through meetings and discussion forums organized and administered by the Groupe *DIAS*.

With the completion of these preliminary surveys, members in the Groupe *DIAS* became aware of the wide scope and complexity of information data the proposed system was meant to collect, contain, and diffuse. Obviously, the range of material artifacts available in any given territory is quite large—even more so today than in the period prior to the mass consumption era. Furthermore, use contexts are indefinite in number. They can be either material contexts (e.g., transformed earth environments, socio-technical facilities) or immaterial contexts (e.g., psycho-social conventions and socio-cultural institutions), without losing sight of the virtual contexts (ideologies and, these days, computer software). As for users, be they direct artifact operators or any other group of users in direct and indirect interaction with the same artifact, they are numerous and notoriously unfathomable.

Figure 2
List of samples of beard shavers.

ANALYSE DES RASOIRS

Programme N°: 6 Rasage de près, à la maison, prenant peu de place

Produits analysés

BRAUN SIXTANT	: Electrique secteur
REMINGTON SELECTRO 3	: Electrique secteur
SUNBEAM SM7M 1	: Electrique secteur
PHILIPS PHILISHAVE DE LUXE	: Electrique secteur
BRAUN CASSETT	: Electrique à piles
PHILIPS PHILISHAVE COMPACT	: Electrique à piles
RIVIERA APPOLO	: A ressort
THIERS ISSARD 69 SHEFFIELD	: Sabre
GILETTE GII	: A lames chargeur
GILETTE TECHMATIC	: A lames chargeur
GILETTE EXTRA PLAT	: A lames standard
SCHICK INJECTOR	: A lames chargeur
REMINGTON	: Electrique à piles
GIBBS MICRO REGLABLE	: A lames standard
HELJSTRAND MAGNUS	: A lames affûtables

To render this complexity manageable, the Groupe *DIAS* decided to concentrate efforts and available resources for the prototype only on the most widely used and most immediately needed durable and semi-durable material products in private use and/or manufactured in France. Arbitrarily, only durable items used daily by individuals were going to be processed in the trial. A sample of 35 artifacts was thus selected out of 122 products drawn directly from the French market in the 1970s. The 35 items were grouped into the following four types, which were found more frequently in French homes:

Refrigerators (10 different samples)
Dishwashers (2 samples)
Coffee makers (8 samples)
Shavers (15 samples)

Of these product types, only samples in the shaver category, much easier to handle in the CCI laboratory-like set-up, were collected for the prototyping of the SIP System. Samples were randomly selected from the marketplace. In the early 1970s, it is reported that there were on the French market about 15 different kinds of electric and non-electric beard shavers (Figure 2).

The hands-on analysis started with comparative (practical) use tests on each of the selected 15 sample shavers, with observations continuously annotated following a predeveloped protocol. Real human hair was actually shaved using each sample, in real or in reproduced familiar use contexts, both by the Groupe *DIAS* members themselves and by professional barbers, hairdressers, and private individuals. The immediate twofold outcome of the operation was, first, a standard protocol that would be applied when conducting subsequent tests on any other artifact. Second, data on the use value of each of these shavers were systematically registered. The intention was for these data to be made available in the form of fact sheets, presented in three information subsystems that would more fully inform the selection of all kinds of artifacts:

Educational information on each of the tested artifacts, on use attributes as an addition to the already evoked aesthetic, functional, and socio-economic functions;

Information on corresponding brands for each artifact type, with publicly available market data and information on respective manufacturers and distributors; and

Compounded information on each sample, stored in an easily accessible format, such as an alphabetical list in the computerized system.

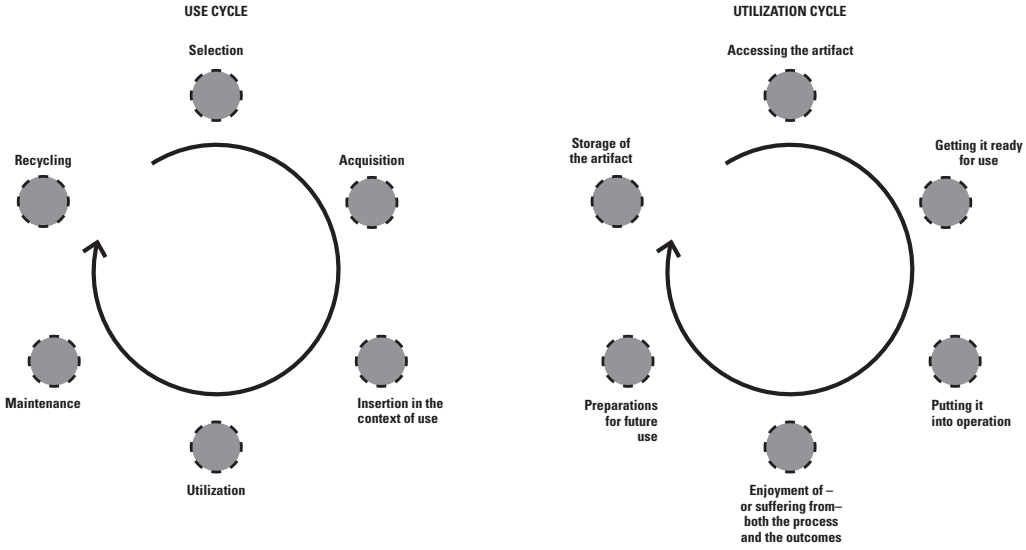
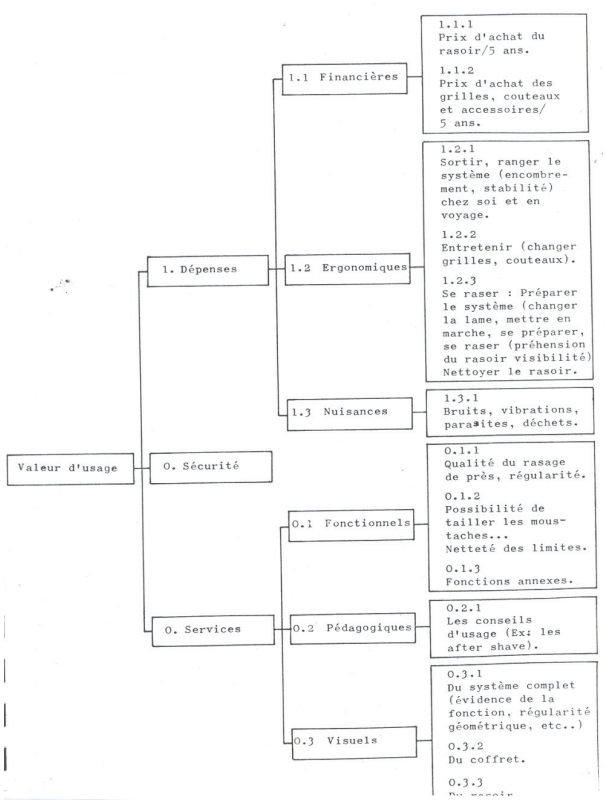


Figure 3
Artifact use and utilization cycles.
Copied with permission from: IF Vol.9, (1978), No. 2-3; Cahier de l'Isuc No. 1, p. 8. Captions have been freely interpreted from the original in French.

Just as the SIP System was meant to be the backbone of the CCI Documentation Centre, the comparative use tests and functional use analysis were intended to be the backbone of the SIP System. These tests and analysis, conducted according to the protocol in 12 successive and sometimes iterative stages, occurred in 2 cycles: The use cycle was an overall view of all stages through which an artifact would go during its entire useful life, and another nested cycle would depict the routine of the main stage, that of utilization (Figure 3).

Figure 4
Shavers topological tree.



Each of the 12 use phases constitutes a research phase within the protocol: in a specific context, on a given artifact, and with one or more users acting either separately, successively in series or in relays, or concomitantly. The Groupe DIAS conceptualized those users, both human and possibly other, non-human, living entities (e.g., domesticated animals and decorative plants), in five groups under the following self-explanatory headings: acquirers, operators, para-operators, beneficiaries, and counter-beneficiaries.

In protocol as established by the Groupe DIAS, a functional use analysis followed the comparative (practical) use tests. The analysis included the establishment of a hierarchical topological tree of attributes of the category of artifacts sampled (Figure 4). These attributes were sorted starting with those related to safety.

According to the Groupe DIAS, safety features are a particular kind of attributes, compared to all other artifact attributes. The ultimate essence of an artifact is indeed to be totally safe throughout all phases of its use and utilization. This paramountcy of safety explains why no value is assigned to the safety factor (as in Figure 4) or the deleterious potential of artifacts. As attested by the Groupe DIAS, the highest value in services afforded through the use of artifacts is, by far, outweighed by the slightest apprehended potential hazards that may result from use of the artifact. There is no intermediate value in use safety analysis. An artifact is simply safe or unsafe to use. The variables first considered in comparative safety analysis are those

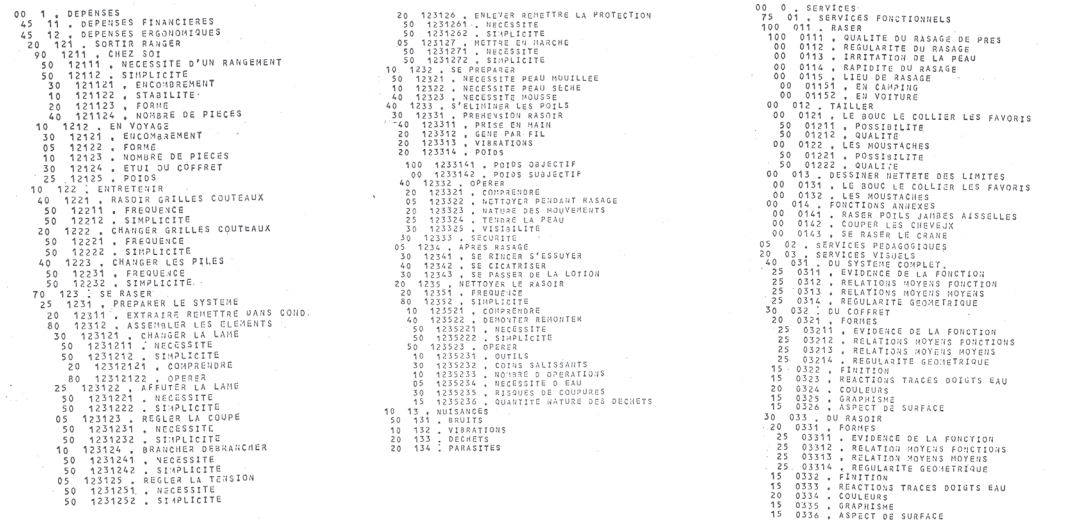
pertaining to composition and functional characteristics. Then, in addition, the following parameters also should be taken into account during a safety analysis of the use cycle of artifacts: the time factor (immediate or long-run deleterious potential of artifacts and contexts), in relation to various levels of precaution taken by users (carefulness or carelessness related to users, to artifacts, and to contexts). For example, a razor blade is not *per se* safe or unsafe. Rather, it is the physical and chemical composition of the blade—the format given to it—together with certain manners of use, in certain kinds of physical and socio-technical environments, that may be more or less safe than others.

In addition to safety testing, the analysis continued by sorting samples according to the classic economic model of the ratio of services over costs. In a broader perspective, the category of Services would include all services that could be enjoyed by all users. And the category of Costs would include all kinds of costs that might be incurred by every one of those users. For instance, the overall costs while using any shaving implement are not limited only to immediate monetary costs directly related to the purchase of the main unit and its accessories. Costs also include all other financial expenditures necessarily incurred through the life cycle of the implement: expenditures related to repairs, energy costs, replacements, disposal, etc. Also taken into account are ergonomics "costs," (e.g., the physical energy and mental tension exerted while manipulating the implement, responding to inconveniences, and establishing comfort in use), as well as the amount of muscular and psychological energy exerted to counter all sorts of nuisances suffered throughout the use of the implement. Such nuisances might include noise and vibration in case of electric shavers or, in the case of blade shavers, cuts to the operator's skin and possibly to para-operators' and counter-beneficiaries' body parts.

These days one would also include in the account all the socio-cultural costs and environmental costs related to extracting and processing raw materials used to manufacture razors (e.g., resource depletion, greenhouse gases, and public health expenditures). These "cradle-side" costs would be added to all other community costs related to manufacturing, distributing, and disposing of shavers—the "grave-side" costs. Disposal would include all environmental costs incurred or anticipated that are related to the after-use life of shavers. At the end of the entire use process analysis, all these findings were compounded under the overall heading of estimated costs, at the same hierarchical level as apprehended safety issues and anticipated services.

Under Services, there are functional services, such as having whiskers removed or trimmed, and being clean-cut. Also considered by the Groupe DIAS were the "educational services" provided: information given on types of skin and types of hair; on physical and chemical reactions of the skin before and after the passage of the

Figure 5
Shavers functional analysis and estimated use factors.



shaving item; on the shaving implements and related accessories, the material of which they are made, the fabrication process, and their anticipated after-life; and on various shaving contexts. The educational services category thus included all features related to any kind of knowledge on how best to select shavers and to use them safely and intelligently—before, during, and after the entire operation of shaving. The visual clarity of potential dangers resulting from misuse of the implement, or clarity related to optimal prehension for optimal service were also featured in the educational services category. Through this analysis, for example, respective levels of clarity of visual evidence of different functions of the shaver and its accessories were compiled.

Following the selection of samples to be analyzed and the identification of product properties or attributes hierarchically arranged, as in Figure 4, the third step in the proposed comparative use tests method, as shown in Figure 5, consisted of estimating and assigning a certain value or *use factor* to each artifact attribute. The use factor corresponded to the estimated relative importance of the function in a specific total use process. It reflected a quantified estimate of the expected end results, a percentage of either costs to be incurred or services potentially deriving from the use of other artifacts, as compared with use of other artifacts in the same category.

For instance, in the excerpt shown in Figure 5, for an average French person shaving in the early 1970s, at home and not during travel, monetary expenses on electric shavers were estimated at 45% (feature 11) of all possibly incurred costs; and ergonomic costs were also estimated at 45% (feature 12). Within this last percentage, 20% of costs was attributed to ergonomic costs incurred when accessing the shaving unit (feature 121); 10% to ergonomic costs while maintaining the unit in proper operating condition (feature 1212), and 70% to costs incurred while shaving a beard (feature 123). The operation of shaving at home (feature 1211) was estimated to be more ergonom-

5 Personal interview with Marc Girard, then acting as head of the "Design de Produits" Department at CCI. In 1978, the operating costs totaled 700,000 Francs, or 60% of the entire CCI budget. More than half of this amount, 400,000 Francs, was spent on electronic data processing alone! And the salaries of the 12 employees were not counted in this amount!

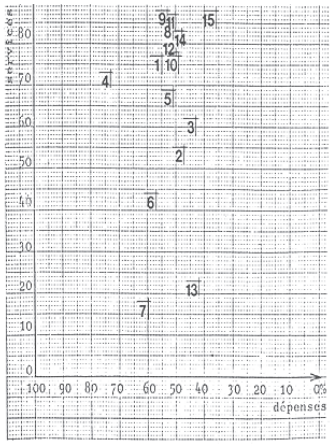


Figure 6
Estimated total comparative value of the 15 samples of beard shavers tested.

Shaver No. 9 insures clean cut, at home, with the smallest storage space. Safely used, it has the best value ratio for a certain category of users: 83% services over 50% expenses.

Shaver No. 7 has the worst ratio of 18% services over 60% expenses.

ically "costly" (90%) than shaving while traveling (feature 1212: 10%). At home, appropriate storage of the razor (feature 12111) is usually available (50%) and easily accessible (feature 12112: 50%). The ergonomic costs of each feature that conditions easy access to the razor were estimated as follows: awkwardness (feature 121121: 30%); stability (feature 121122: 10%); easy grip shape (feature 121123: 20%); and number of accessories (feature 121124: 40%).

Respective mechanical, physical, chemical, psycho-social, and environmental measurements would thus similarly be determined, together with all potential services weighed. Each attribute was weighed according to its relative importance in the entire use function of the item. Ultimately, the total use value of any given item was compared to that of other items in the category of artifacts in which it belongs. The ultimate aim of the entire exercise was to determine the *best*—meaning the most suitable (i.e., totally safe, with the highest ratio of services over costs)—artifact for a given use in a given context. Figure 6 illustrates results obtained following the analysis of shavers.

Obviously, the estimates in Figure 5 are different for different kinds of users (e.g., handicapped, aging individuals, non-French or non-European users, users who focused on different body parts) and in different contexts of use (e.g., other countries or other kinds of home layouts).

In summary, the following foundational question was proposed as the right "weighing scale" to apply in all use dynamics under analysis: in which range is such-and-such an artifact characteristic, attribute, or a group of features, important throughout each one of the 12 use stages? Again, the importance is established first with regard to ensuring safety to users, and then with regard to minimizing costs eventually incurred and maximizing anticipated services.

The Groupe DIAS posited that artifact value was thus not derived only from the labor involved in producing artifacts, as in Marxist economics. Neither was it derived only from the manufacturing and distribution costs and from the "freely" negotiated purchasing price, and the purchasing price as in classical liberal economics. Nor was value attribution to be derived from fashion and "taste" only. Artifact value is not only the attribute of subjective aesthetical and ethical considerations; of eventual logical, mathematical, and mechanical derivations; or of rhetorical justifications by the elite and connoisseurs in influential socio-cultural positions. In addition to all those various kinds of value attributions, the Groupe DIAS proposed also to "e-valuate" (i.e., draw value out of) artifacts in their respective and concrete use contexts. This research method shows how the total value of artifacts can thus be more accurately established. And the outcome seems to be the most appropriate tools (clearer, relatively simple, with a more extensive use) for artifacts selection, any kind of artifact and for whatever purpose.

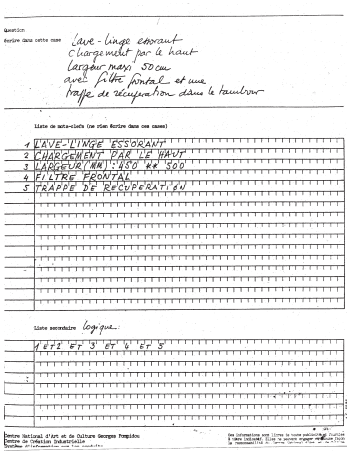


Figure 7
Example of information request on clothes washers.

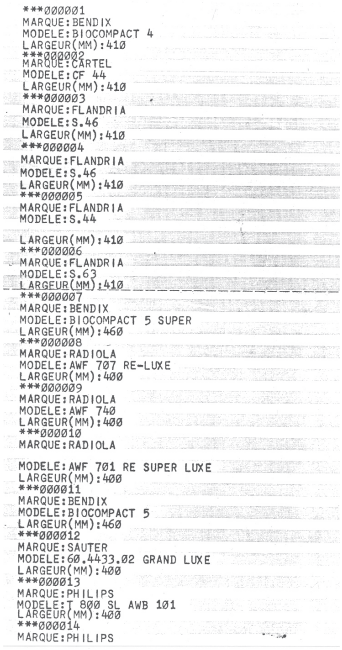


Figure 8
Retrieved brands of clothes washers retrieved.

The Trial of the SIP Prototype

In accordance with the Centre Beaubourg mission, the Groupe DIAS proposed to make widely available, under all three kinds of information formats already mentioned, the calculated results of the total use value for various artifacts as the prime criteria for their selection.

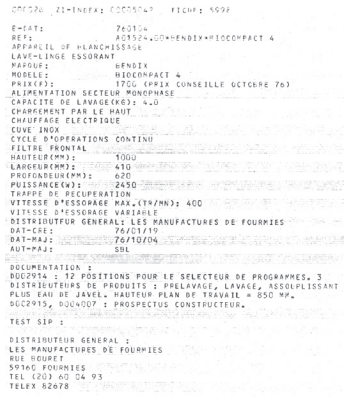
All artifact specifications, use value included, were thus stored in electronic files, making the data much easier to preserve, research, and retrieve whenever needed. Results of the SIP experimental prototype were programmed and fed into the computer (one of the early mainframes) of the public library at Centre Beaubourg. Henceforth, any expert or any member of the general public could come to Beaubourg and, on a video display terminal or with the help of a "use guide or counselor," search any of the stored artifacts and its use values (see Figure 7, an example of a request on clothes washers). On the computer video display monitor, the corresponding data would then immediately appear, either as summary information (Figure 8) or in detail (Figure 9), which the patron could print and take away, if so desired.

In addition, traditional brochures and leaflets were produced, printed, and circulated (as illustrated in Figure 1). Eventually, artifact samples were also displayed, as in any traditional design center showroom.

In 1975, the Groupe DIAS had planned to process about 50 artifacts in the following three generic categories: those in use in kitchens (e.g., refrigerators, clothes washers, electric knives, etc.), in transportation (e.g., motorcycle helmets, children's cycles, children's car seats, etc.), and audio-visual media (e.g., high-fidelity tuners, cameras, slide projectors, etc.).

Project Interruption and Abandonment

The SIP prototype was completed and installed at the Centre Beaubourg sometime in 1975 or 1976, soon after the Groupe DIAS report was submitted and adopted in the CCI Department. The prototype was publicly tested at the public library of the Centre in 1977 and during the following two or three years (no exact date of the abandonment of the SIP System was available to the author at the time of drafting his manuscript). However, the administrators soon realized that the daily costs of the department, and particularly the cost of conducting comparative studies and tests on artifacts, were running far beyond the allocated budget.[5] They therefore decided that, starting in 1979, the excessive expenditure would be cut off. Members in the Groupe DIAS no longer had the means to realize their ambitions. And the SIP System completely shut down in 1992, when the CCI Department was finally merged into the National Museum of Modern Art as the mere artifacts showroom it should always have been, according to some.



E-DAT: 76Q104
REF: AQ952A,BOM+ENDIX+BIOCOMPACT 4
APPAREIL DE BLANCHISSAGE
LAVE-LINGE ESSORANT
MARQUE: ENDIX
MODELE: BIOCOMPACT 4
PRIX(F): 1700 (PRIX CONSEILLE OCTOBRE 76)
ALIMENTATION SECTEUR MONOPHASE
CAPACITE DE LAVAGE(KG): 4.0
CHARGEMENT PAR LE HAUT
CHAUFFAGE ELECTRIQUE
CUVE INOX
CYCLE D'OPERATIONS CONTINU
FILTRE FRONTAL
HAUTEUR(MM): 1000
LARGEUR(MM): 410
PROFONDEUR(MM): 620
PUISSANCE(W): 2450
TRAPPE DE RECUPERATION
VITESSE D'ESSORAGE MAX.(TR/MN): 400
VITESSE D'ESSORAGE VARIABLE
DISTRIBUTEUR GENERAL: LES MANUFACTURES DE FOURMIES
DAT-CRE: 76/01/19
DAT-MAJ: 76/10/04
AUT-MAJ: SBL

DOCUMENTATION :
BQC2914 : 12 POSITIONS POUR LE SELECTEUR DE PROGRAMMES. 3
DISTRIBUTEURS DE PRODUITS : PRELAVAGE, LAVAGE, ASSOUPLISSANT
PLUS EAU DE JAVEL. HAUTEUR PLAN DE TRAVAIL = 850 MM.
BQC2915, BQC4007 : PROSPECTUS CONSTRUCTEUR.

TEST SIP :

DISTRIBUTEUR GENERAL :
LES MANUFACTURES DE FOURMIES
RUE BOURET
59160 FOURMIES
TEL (20) 60 04 93
TELEX 82678

Figure 9
Detailed data and information on selected washer.

It seems, however, that was the suspicion by many, that the financial factor was not the only reason for the abandonment of the SIP System. The experiment was brought to a halt also because, apparently, the top administrators at the Centre Beaubourg at the time simply did not share the vision of the trend initiated by the Groupe DIAS. They were not very enthusiastic, from the outset, seeing a "showroom" of "common" (*vulgaire*) manufactured products and "purchasing aid" services in an elite "decorative arts" department and institution. Such a lack of enthusiasm probably explains why, compared to other departments at the innovative "presidential" Centre Beaubourg, no promotion had been done to widely publicize the SIP System and the consultation services it briefly offered, on a trial basis, to users in the Documentation Centre. And most symptomatically, prior to closure, no systematic evaluation of the pertinence of the SIP project was ever carried out. At least to the knowledge of the author of this account.

Conclusion

The mandate fulfilled by the Groupe DIAS had been to generate criteria for the selection of artifacts. The criteria proposed were exclusively those derived from a real and/or simulated use process of artifacts. They were criteria derived downstream from the concrete "daily life" of artifacts, as opposed to upstream mental and purely speculative specifications by marketers and managers, handed over in briefs to designers. According to the terms of the assignment as given to the Groupe DIAS, those criteria were meant to be used as pointers for artefacts selection. And the only selection purpose the Groupe commissioners had in mind was that of artefacts samples destined for display at the new Beaubourg – CCI Centre, to showcase the "best" products available on the market in France. But the Groupe DIAS proposed further to provide those same use criteria to the Beaubourg public as information for artifact selection for personal use. Additionally, the Groupe DIAS did not survive long enough to reflect and practically conduct research on the hypothesis of eventually referring to use criteria when selecting artifacts to be designed in the first place.

Around 1977–1978, alerted of the possible imminent abandonment of the SIP System, Michel Millot and two other colleagues, Michel Jullien, an architect, and Bernard Grenier, a civil engineer, tried to carry on the project on a private consultancy basis, under the Institut des Sciences de l'Usage et de la Conception (ISUC). The trio thus analyzed for fees a few more artifacts, including home dust removers, which I personally observed while participating in the analysis. They soon realized, however, that the venture would not be financially viable in the context of Paris, France, and Europe in the 1970s and 1980s. The SIP initiative was thus finally halted altogether.

6 Simon Herbert A., *The Sciences of the Artificial* (Cambridge, MA: MIT Press, 1969).

The teams both at CCI and ISUC nonetheless had proposed quite an innovative view of material artifacts, emphasizing that artifacts are essentially for use, prior to any other consideration, commercial or socio-political. Therefore, for any artifact selection, including for design purpose, use attributes ought to be the ones considered first. Both teams, Groupe DIAS and ISCU, under the directorship of Michel Millot devised, evidenced, and refined a comparative use test protocol and a functional analysis method to generate use data on artifacts. To the general public visiting Beaubourg, those data were delivered as mere information; but for expert groups, such as designers, those data constituted an invaluable body of knowledge on artifacts.

The SIP System is still waiting to be pursued and developed further as a "scientific" method to generate a specific kind of knowledge, in a domain that is beyond draughtsmanship, beyond style and aesthetics, and beyond physico-chemical functionalities of artifacts. The domain that was unveiled 30 years ago by the Groupe DIAS is that of use value of artifacts embedded in the use and utilization cycles. The method proposed to generate knowledge on such value was that of comparative tests of artifacts by the way of quantification of their respective use processes as performed in each of the five categories of users. The ultimate goal was to promote a more reasoned, objective and generalized way to select artifacts, both by the layperson and by experts. For designers (*concepteurs*), dwelling into this domain by the way of the proposed method would result in a systematic scrutiny (organized and measured observation) into how things—artifacts use processes—really are (in accordance with the classical scientific approach) in order to devise how they ought to be.[6] This teleological aim, specific to the artificial and the Design profession, is the realization of the optimal fit between artifacts, the users, in appropriate contexts, as posited by the Groupe DIAS. Both the domain and the method above still remain to be evidenced as the exclusive and distinctive scientific approach to the entire design field, as also hinted at by members in the Groupe DIAS.

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None of the above named persons is liable of any error or omission in the account above. I, alone, the author, bear full responsibility of its content.