Introduction

"Information design" has emerged within recent years as a distinct area of practice and investigation, bringing together—among principal participants—graphic and typographic designers, text writers and editors, computer engineers, psychologists, and lingustic scientists. Risking oversimplification, one might say that the information design movement (though movement may be too strong a term for it) has been concerned about discovering what is effective graphic and typographic communication. It has been concerned with the needs of users rather than with the expressive possibilities present in design tasks. This is its point of difference with graphic design as usually practiced and taught. The movement is an international one, though centered in Britain and the United States. It has generated a good deal of literature, including, as forums for discussion, two specialist journals: Visible Language (from 1971, formerly the Journal of Typographic Research, started in 1967) and Information Design Journal (started in 1979).

This essay has two broad intentions. First, to discuss, through detailed examination of some of the products with which information designers have been typically concerned, whether information can be neutral. And then to move on from this close criticism of examples to discuss the larger social and political dimensions present, even within the smallest and most mundane designed fragment. Thus, both explicitly and by example of the mode of argument employed, the essay makes some criticism of information design as it is so far developed.

Purity of information: some railway timetables

The starting point for this investigation is a passage in an article by Gui Bonsiepe that has been a principal source for recent work in visual rhetoric: "Informative assertions are interlarded [durch-setzt] with rhetoric to a greater or lesser degree. Information without rhetoric is a pipe-dream which ends up in the break-down of communication and total silence. 'Pure' information exists for the designer only in arid abstraction. As soon as he begins to give it concrete shape, to bring it within the range of experience, the process of rhetorical infiltration begins."


Oxford English Dictionary

This is a clear statement of position and one that seems unexceptionable. But then, three paragraphs further on, Bonsiepe apparently contradicts himself: "As examples of information innocent of all taint of rhetoric, we might take the train timetable or a table of logarithms. Granted this is an extreme case, but because it is an extreme case, it is very far from representing an ideal model. Fortunately communication is not tied exclusively to the perusal of address books [or directories]. It would die of sheer inanition if these were to be its exemplar."

Taking up one of Bonsiepe's suggested categories of information, London North-Eastern Region (LNER) railway timetables can be considered: the first from 1928 (figure 1) and the second from a redesign shortly after this date (figure 2). These examples come from a publication of the Monotype Corporation, which makes propaganda for their recently introduced Gill Sans typeface. The major change is, of course, that of typeface. A change of detail is the substitution of dashes for dotleaders in alternate rows; also, the two dots in each element of the leader are further apart.

Forty or so years later, in 1974 and now in the era of British Rail, things are much the same (figure 3): another variation on the theme of leaders, bold rather than medium as the standard for times, few horizontal rules, and station names now set in lowercase. These timetables, by the simple fact that they organize and articulate and give visual presence to information, use rhetorical means. A dictionary definition of the term rhetoric yields the following: "The art of using language so as to persuade or influence others; the body of rules to be observed by a speaker or writer in order that he may express himself with eloquence." It is the sec-

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Fig. 1) London North-Eastern Region timetable of 1928, as reproduced in Monotype Recorder 32 (Winter 1933).
Fig. 2) London North-Eastern Region timetable, redesigned after 1928, using Gill Sans, as reproduced in Monotype Recorder 32 (Winter 1933).

5) Oxford English Dictionary

ond sense (the body of rules for eloquence) that seems to describe the case of the timetables. The system of tabular arrangement that these examples employ is like a figure of rhetoric: a framework for eloquent articulation. But is there any rhetoric involved if another definition (chronologically later and also more popular), such as “language characterized by artificial or ostentatious expression”5 is considered? Not obviously, unless one regards the replacing of a leader composed of two dots by one made up of six dots as a sign of ostentation. And, perhaps, within the sober and hushed domain of the timetable, it is just that.

Another point of comparison is provided by the page from the Dutch railway timetables of 1970-71 (figure 4). The main feature is the use of color – lost, of course, in this reproduction. A green strip along the top of the page indicates that the user is in the section of the book that covers the northern and eastern parts of the country. Then red is used in the network diagram above the tables, to show further destinations after changing trains. In the tables, red is also used as the symbol for “Tempo” or intercity trains. Other differences from the British examples: the absence of any dotleaders, horizontal rules showing when a train stops for a minute or more, and the use of medium characters only – no bold – for the station names and the times.

Now, if small modifications in the form of dotleaders are regarded as ostentations, how can this deployment of color be described? It is hard to think of anything that is more like a rhetorical device than this use of color, especially within so tight and dry a context as a timetable. Color is perhaps like music: It can play on our senses. How, we do not quite know. But suddenly we are seduced. And is not this a rhetorical maneuver, in the sense of a set
of rules for making information eloquent and more easily understandable, and then - more than this - for sweetening it and slipping it down our throats?

At this point it is helpful to return to the meanings of the term rhetoric, and to point to its sense of "the art of using language so as to persuade or influence others." A distinction is customarily made between design for information, for example, timetables, and design for persuasion, for example, advertising, above all. The argument of this essay is that this distinction cannot be a clear one. Looking again at Bonsiepe's theses, it seems that on the evidence of the examples discussed, his first perception was correct. As soon as the move from concept to visible manifestation is made, and especially to a manifestation as highly organized as a timetable, then the means used become rhetorical. Here another definition of rhetoric might be tried, the art of directed communication - directed, that is, both internally to organize the material communication and externally to persuade an audience. For there is an element of persuasion here, which can be brought out just by asking, why do transport organizations go to the trouble of having their timetables designed and, even more significantly, redesigned? These timetables are designed to say something persuasive about the nature of the organization that publishes them. When quoting the two passages from Bonsiepe, an apparent contradiction is highlighted. The contradiction is between his asserting that information without rhetoric cannot exist in the real world and his excluding the possibility that timetables could be rhetorical. In his second passage, Bonsiepe is wrong. Even if one takes rhetoric to mean artful persuasion, timetables can still enter this arena.

Using metaphor, the fusty British trains of 1960 (plush seats, patterned fabrics, carpets, lights with conical shades, little curtains

![Table 8 Mondays to Fridays](image)

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**Fig. 3) From the British Railways Board Passenger Timetable, 1974-75.** Reproduced by permission of British Railways Board.
Fig. 4) Page from the Dutch national railway timetable (Spoorboekje) 1970-71; designed by Tel Design. Reproduced by permission of NV Nederlandse Spoorwegen.

Fig. 5) Page from a British Railways Eastern Region “Services to Germany” timetable, 1960. Reproduced by permission of British Railways Board.

– a substitute for the bourgeois interior awaiting the traveler at either end of the journey) can be contrasted with a Dutch train of the 1970s (seating of tubular steel, some tough synthetic seat materials, plain colors – a little severe but easy to construct and easy to keep clean). This is not, of course, to claim that these contexts can be inferred from the two timetables (figures 4 and 5); but it seems fair to say that the sense one has of each of these examples is of a piece with their respective contexts. And “the sense one has” of them is a consequence of the rhetorical devices they employ. All these examples impart information of times, destinations, buffet cars, and so on through the means of typography: typeface, type style, rules, dotleaders, symbols, spaces, and color. And these means constitute an “interlarding” (to use Bonsiepe’s word) of information, and this interlarding provides the data of cultural reference.

The resonance of typefaces
To address more specifically the theme of the rhetoric of neutrality, it is useful to isolate one component of these timetables: the typefaces in which they are set. This is not to suggest that style of letterforms – typeface – is the most important thing in typography (in practice, it often seems to be the least important element). But the choice of typeface is often telling, in that it indicates the ideas and beliefs that inform the process of design.

In the progression from the first LNER timetable of 1928 to its
redesigned version, the change was essentially one of typeface: from a nineteenth-century serif typeface to Gill Sans, the sans serif designed by Eric Gill for the Monotype Corporation. It is instructive to read the explanation put forward by the anonymous writer in the *Monotype Recorder*, from which these examples come. The typeface was chosen as a standard for LNER, the writer explained, as a way of giving all its printed matter and its signing a common identity. It was suggested that Gill Sans also possesses certain intrinsic virtues: It seems to perform well under the critical conditions of railway travel. To quote directly: “a passenger being jostled on a crowded platform on a winter evening, and trying with one eye on the station clock to verify the connections of a given train . . .”; without serifs and with lines of fairly consistent thickness, “it is so ‘stripped for action’ that as far as glance reading goes, it is the most efficient conveyor of thought.”

But the writer was careful to stop at this point. He or she (it may well have been Beatrice Warde, then in charge of the Monotype Corporation’s publicity) went on to suggest that sans serifs are less legible than serif typefaces in extended passages of text, and rejected the idea that sans serifs have any necessary or special claim on the alleged Zeitgeist. This was the typical voice of the new traditionalism (as it has sometimes been termed) in British typography, at the moment when the voices of typographic modernism were just beginning to be heard. For the new traditionalists, typography needed to be modern—to use mechanized processes and to cater to the needs of the modern world—but needed to avoid “modernism.” The specter of *Das Modernismus* was kept at bay, in this case by the development of a sophisticated rival to the more rationally, geometrically conceived, new German sans serifs.

As exemplified by the timetables shown (figures 2, 3, 5), Gill Sans remained in use in Britain as the normal sans serif well into the 1960s. Its predominance was then disturbed by the arrival on the market of Univers, the typeface used in the Dutch timetable of figure 4. Univers was designed in Paris, beginning in 1954, by the Swiss Adrian Frutiger, and first became available as Monotype matrices in 1961. When it was new, Univers carried with it an aura: that of system. It was the first typeface whose total set of forms—the variants of weight and expansion or contraction—was conceived at the outset. The claim was made implicitly (in the name given to it) and to some extent explicitly (in publicity for it) that it was the typeface to meet all needs in any typesetting system in any language using Latin characters.

**The fate of modernism**

The changes of typeface in these timetables—the introduction of Gill Sans in the late 1920s and early 1930s, replacing nineteenth-century serif typefaces, and then the introduction of Univers
(from the early 1960s) to replace earlier sans serifs such as Gill or the grotesques — are instances of larger historical shifts that underlie this subject. To put it rather portentously, one is here discussing the fate of modernism in the twentieth century: the attempted social and esthetic revolution that took off, shakily, from the continent of Europe in the 1920s and began to suffer drastic, almost fatal reversals in the 1930s (in Germany above all) but which struggled on, dispersed and diluted and which reemerged in the post-war world of the West and somehow, rather mysteriously, became a common visual currency during the 1950s and 1960s.

What has this to do with the rhetoric of neutrality and information design? My suggestion is that the assumptions and beliefs of information design can be traced to the period of heroic modernism (between the two wars) and that they spring directly from certain post-World War II mutations of the modern movement. Thus, in order to understand the present situation of information designers, one needs to investigate modernism and its history.
For example, consider this quotation from a famous artifact of modernist typography, the letterheading of the Dessau Bauhaus (in one of its several variations, figure 6): “an attempt at a simplified mode of writing: 1. from all the innovations in writing, this mode is recommended as the form of the future . . . 2. text loses nothing when composed only of small letters, but becomes easier to read, easier to learn, essentially more scientific. 3. why for one sound – ‘a,’ for example – two signs, A and a; why two alphabets for one word, why twice the quantity of signs when just half of them would be enough?”

This example serves as a reminder of the faith of modernism: the belief in simple forms, in reduction of elements, apparently not for reasons of style but for the most compelling reason of need – the need to save labor, time, and money, and to improve communication. Text set in lowercase only is, it was suggested, “easier to read.” If we smile at this declaration now (how difficult to
imagine any such statement on a present-day letterheading!), these ideas do become understandable when seen in the context of their time and place: Germany soon after World War I, when standardization was an economic imperative and when there were possibilities of social and political revolution. However, by the middle 1920s (the time of the Bauhaus letterheading) the utopian, revolutionary moment had passed, and economic and social life were attaining some degree of stability.

It is from this time in the progress of between-the-wars modernism that the theme to which information design is an heir comes to the fore: the mood of Sachlichkeit and a governing belief in science and technology. Thus, writing with small letters is "essentially more scientific."

Another document from the period provides further evidence: a journal published in Zurich, which gathered writers from across the spectrum of interests — economics, science, education, technics, and art — under the banner of Information (figure 7). In both form and content it is a typical product of the modern movement. This is not to suggest that with this journal the modern movement laid any exact claim on the word and the idea that now helps to bring information designers together, but merely that this strand of modernism's typical concern with information — " instructive knowledge" — is something that present-day information designers share too.

In alluding above to the "reversal" of the 1930s in Germany, one is, of course, simplifying and, it could be argued, falsifying. Revisionist historians have effectively disposed of the myth of some absolute break (in January 1933) between modernist in "good form" and Nazi kitsch.9 It is clear that the modern movement in design, in Germany as elsewhere, was always a minority affair, just as it is obvious that German national socialism accepted and exploited elements of modernity: industrial production and technological advance. In the sphere of esthetics, however, national socialism arrived eventually at neoclassicism as its preferred style in architecture and also in typography. Thus, following a Nazi Party decree of 1941, gothic or blackletter ("the Jewish Schwabacher") was deposed as the standard letterform in Germany; the new standard was to be roman (Antiqua).10 The words of the thousand-year Reich, like its public architecture, were to be lent authority borrowed from classical Rome.

The ambiguities of beliefs and forms of those years in central Europe force one to define what it was in the modern movement that is still alive in design now. For information design, specifically, one might separate out a commitment to the rational, the sceptical, the democratic socialist, the internation as playing no part in nationalsocialist modernization. This collection of beliefs and attitudes — including also more specific beliefs in simple forms and economies of effort — is something that information design


10) The decree is reprinted in Karl Klingspor, Über Schönheit von Schrift und Druck (Frankfurt am Main: Schauer, 1949), 44.
inherited from heroic modernism, but in transmuted form, over a gap of years in which World War II figured as an enormous convulsion. The after effects of this convulsion are described below, without a pretense of understanding precise causes.

**Information design in the postwar world**

In the immediate postwar situation, the ideals of modernism seemed to find a role again. In Britain, one thinks particularly of the programs of the new Labour government in housing, health, and education and of the surrounding discussion and presentation. But with the economic recovery of the 1950s, ideals changed. The dream then envisioned an ideology-free or ideologically neutral world made possible by advances in technology, by an abundance of material goods, by the spread of representative democracy and the eclipse of rival political systems, and by mass education. It was this dreamworld of the 1950s and the 1960s in the United States and Western Europe that provided the context for the spread of modernism in design. To return to the timetables, this was the context in which Univers – the universal, sans serif, sans-ideology typeface – could be designed and be so widely adopted. This was the context of the flourishing of Swiss typography: the style of technical advance, precision, and neutrality.

If the word *information* can be used as a point of focus for some between-the-wars modernists, it also has specific connotations that date from after World War II in the United States. This is its use in the terms *information theory* and *information technology*. The science of information is then laid onto the pattern of modernism: partly fitting with and confirming it, partly modifying it. The notable feature of the post-World War II concern with information is the way in which concepts developed in electrical engineering and computing have been generalized and dispersed, so that notions such as “message,” “feedback,” “redundancy,” for example, could become part of anyone’s mental baggage – in particular any designer’s. This seepage from the laboratory into the wider world happened because such concepts could be of service. The idea was put forth that human transactions might have the same order and essential simplicity as an electrical circuit. One may suspect here a desire for the human world to be as amenable to understanding and control and as free from unpredictability as an electrical machine.

If information design can in many of its aspects be traced back to between-the-wars modernism, then the other large component in its formation would be this more recent matter of what has been called the information revolution. The clearest instance of the conjunction of these two strands – or overlaying of patterns – is in the work of the Hochschule für Gestaltung Ulm (HfG Ulm), the institution that fostered the work of Bonsiepe, which provided the starting point for this investigation.
The HfG Ulm was set up in the early 1950s to continue the Bauhaus tradition, though tempered and developed for the post-World War II world (and the special problems of reconstruction in West Germany). For example, there was at first a Department of Information to educate students in skills of writing and radio broadcasting. But the real point of contact of the HfG Ulm with...
The conflict-ridden history of this school lives on to obstruct attempts to document its work, but see a recent special journal issue on "The Legacy of the School of the Ulm," Rassegna 19 (September 1984).


It is informally estimated within the advertising industry that on any given day the average American city-dweller takes in roughly 2,000 advertising messages; thus Mark Crispin Miller, "Introduction: The Critical Pursuit of Advertising," Word & Image 1 (October-December 1985), 320.

This argument is in the interest taken by some of its members in communication or information theory, cybernetics, and related areas of inquiry. A good example of these concerns is an article in which Gui Bonsiepe, using the Shannon formula, tried to quantify the respective degrees of order in two pages of an industrial catalog: the irrational, ad hoc approach to design in a printer's existing version (figure 8) and an Ulm-designed version of the same information, concerned to reduce variations of type size, text measure, picture size (figure 9). In his conclusion, Bonsiepe ruminated on the possibility that the redesign was more beautiful, as well as more ordered than the original. Thus, this project combined the lessons of the new typography of Central Europe in the 1920s and 1930s with those of the Bell Telephone Laboratories in the 1940s.

The work of the HfG Ulm represents a marriage of modernism of form and appearance with highly developed theoretical interests. The marriage was a convenient one: Formal expression could diminish as the theoretical labor – the work of analysis – flourished. And this did seem to fit, at least for a time (the late 1950s and early 1960s), into the pattern of West Germany, in particular: the society of the "economic miracle." The analytical approach could find application in the complex tasks of coordinating the design of products of large concerns (a Lufthansa or a Braun). The style that issued out of the analysis worked too: to provide a sense of efficiency, sobriety, seriousness. These were the guiding values of the German post-World War II recovery. So one arrives again at the rhetoric of neutrality. If nothing can be free of rhetoric, what can be done to seem free of rhetoric? The style (for such it was) of the HfG Ulm was one response.

Coda

This historical excursion – proceeding via London North-Eastern Region railway in the 1920s, Central Europe in the 1930s, Ulm in the 1960s, and on up to the present – is intended to serve as a simple reminder that nothing is free of rhetoric, that visual manifestations emerge from particular historical circumstances, that ideological vacuums do not exist. In the context of the present rather intensely charged and volatile political atmospheres of even the "stable" Western nations, it may not be necessary to labor such truths. The rhetorical interlarding that these cultures effect in their material and visual production hardly needs decoding. That is certainly so if one thinks of the more blatant products of the Western cultures of consumption: advertisements, above all. But, among information designers, there has been a tendency to escape from the assaults of the wider world, to deny any idea of rhetorical persuasion, and to take refuge in immaculate black machine casings. Indeed, the whole revolution of information technology seems to encourage the view that ideology becomes increasingly reduced –
miniaturized – in step with the development of ever smaller and more powerful computing devices. Therefore, we need to keep awake, applying our critical intelligences outside, as well as inside, the black box: questioning and resisting.

Fig. 9) The catalog page redesigned (halftone pictures represented schematically), as reproduced in Ulm 21 (April 1968). Reproduced by permission of Gui Bonsiepe.