READING OUTSIDE THE GRID: DESIGNERS AND SOCIETY

by

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Perfection of means and confusion of goals seem—
in my opinion—to characterize our age.
–Albert Einstein

Modern kitchen—where the pot calls the kettle chartreuse.
–Anonymous

We're now living 200 years per annum. When you're moving at that clip there's no place to stand. Its like putting a Model T on the highway at 100 miles per hour. It breaks down.
–Marshall McLuhan

All that is not eternal is eternally out of date.
–C. S. Lewis

Willi Kunz began questioning the operation of the grid system of page layout through typographic experiments in the early 1970s. (The grid, as we all know, but no one else does, provides columns with margins between them in both directions; it provides for multiple but similar starting points on a page.) Kunz pushed especially on the conflict, or at least difference, between text placement or punctuation, which implies stasis around points, and word sequence, which implies both physical and mental movement from word to word. Somewhat later Wolfgang Weingart also began to dismantle the Swiss grid system, using it as a three dimensional support for illusions of planar overlay generated by differences in grey value. Instead of horizontal linearity, his text layout involved depth perception, certainly a new direction for the ordering of thinking or reading. But, following the same procedure followed by architects who, in pursuit of a style of spatial articulation called Modernism, had turned from ornamenting construction to constructing geometric ornament, these early graphic experiments were soon replaced by stylists using the dismantled grid as an ornamental motif. Now dismantled Swiss layout is a fad in the United States, usually featuring the full range of Univers or Helvetica type strewn over the pages of avant-garde tabloids and school posters. Different designer intentions support this style of text layout, ranging from

historicism—reopening the Futurist's experiments with *Parole in Liberta*—to generating a new style of physical manipulation and visual acrobatics that could be called "sporty reading," or at least opening up possibilities for more reader control of narrative syntax.

But now that this mode of free writing, and/or freed reading, has been institutionalized (i.e., taught in design schools), it is time to ask whether these announced intentions coincide with their actual social operation, and if they do, how and why they work. We must understand what this evolving layout tactic means in order to know if, once more, graphic designers are making up a style that is interesting to them alone, or if this new layout system reflects changes in the nature of institutional thought. For in late twentieth-century democratic culture, institutions and their founding assumptions control all of our big decisions. We are a culture of committees, in business, government, and education, and although we make personal decisions, these are either marginal or irrelevant to the main operations of power. There is nothing more important to institutional culture than its organizational systems, big or small. And the systems we use to organize either thinking or living, be they modular sizes for the manufacture of building materials or the models governing text layout, are all based on the assumption that placement *is* information.

Beginning the questioning process about place on the page, we need to question the grid with more speculation about its origins. So far the origins given have been symptoms of its existence, not causes for its generation. For, as in the development of most new underlying social assumptions, or founding epistemologies as the anthropologists call them, practices precede theory. The origins of the grid structure do not lie in academic or aesthetic teaching or theorizing. Alan Hurlbut contends that the early twentieth-century books of Jay Hambidge were a contributing influence on the grid. Now it is true that Jay Hambidge, Claude Fayette Bragdon, Mathilde Ghyka, Darcy Wentworth Thompson, and others around the turn of the century discovered, or demanded, an underlying geometry in the world, finding the golden mean and the Fibonacci series to determine everything from the arrangement of plants to countless systems for generating ornament, ranging from that of Islam to that of dynamic symmetry. Lydia Dalrymple Henderson has gathered the writings of these neo-Platonist enthusiasts into two main groups; those that gave time, the "fourth dimension," a physical, geometric form, and those, who like the Theosophists, connected physical geometry to the service of a religious spiritualism. But the grid as a page organizing system predates these geometricizing spiritualists by about a century. It originated in the need for more precise indexing systems to make, market, account for, and transport the products of the Industrial Revolution. Newspapers, catalogs and railway schedules all provided the multiple vertical column. Order forms, bills of lading, sales receipts, and account books provided multiple horizontal locations.

The Swiss grid simply divided the page, or the double spread, into more possible points of significant separation. It was a logical conclusion in a culture that had been developing a profound conviction that place was an active component of abstract thought ever since the place system in counting and calculation was learned from the Arabs in or about the twelfth century. The two dimensional grid was very slowly assimilated into the accounting practices of the Italian and German bankers and merchants, but by the sixteenth century was in wide use. It was then supplemented by a three-dimensional version when Descartes proposed the grid as a locating system for the properties of the physical universe. The Cartesian grid was considered so useful, or so glamorous, that Thomas

Jefferson used it to structure the Land Ordinance of 1786 and determine the property boundaries of all new lands subsequently acquired and sold by the United States. And at the end of the eighteenth century J. H. Lambert (1728–1777) and William Playfair (1759–1853), began to develop time-based graphic charts based on a grid of two intersecting horizontal and vertical variables.

In this atmosphere of significance designated by place, the development of a grid layout system, doing for text what the multiple entry system had long done for numbers, cannot be explained by the existence of any one group of geometricizing enthusiasts at the turn of the century. And furthermore, the grid system of page layout simply expanded on the basic tactic for information access already used in the classic page layout of the codex. Guides to the information on a traditional page were usually found on the top and on the left margin of a page. At the top of the manuscript page the Diminuendo gave entry into the text. In printed texts the running head gave a continual summary of the contents of the chapter or that page. On the left margin indentations or marks announced changes of subject. Sometimes the folio numbers were on the top or side of the page, and extra material (elaborations, definitions, concordances) was printed in smaller type in the outside or central margins. But like the other elements of the traditional codex layout, these emendations sought to make the center of the text block more accessible through marks on its edges. The grid system dissolved that block, moving the top down, and the left margin over progressively so that the entire page was open to the devices of traditional indexing.

By the mid-nineteenth century, the multiple column format was used for the structure of some books, especially almanacs that had to incorporate many different kinds of information. By 1931 layout guides like Andrew Tuer's *Mise en page* were advocating a rudimentary grid of vertical and horizontal page divisions to accommodate different kinds of text and pictures. And in the 1950s, the grid was given final form in the work of Swiss designers like Max Bill, Armin Hoffmann, or Emil Ruder.

The next question that needs to be raised about the grid system relates to how texts presented in grid formats are read. The grid system not only organized textual material, it affected reading by changing the kind of language that was used within its confines. A grid system can exist with only two columns of text or images per page, but more typically it has three or more vertical columns, and three or more horizontal divisions. As the number of columns goes up, their line length goes down, and many newspaper columns are not more than 12 or 15 picas wide. The argument used to justify short line length ties together the small forward eye movements used to read, the saccadic movements, with reading by contending that the sentence length which most nearly corresponds to the amount of text seen at one time is most easily read and comprehended. Now this may be true, but it is also true that the kind of idea best presented in a short sentence is short, or uncomplicated; one without ambiguities or qualification. (Remember, the columnar grid originated in numbers, or in the one or two word categories found in accounts, graphs, train schedules, and catalogs.) Such short entries, and short thoughts, work like codes which are deciphered by reference to information given outside the sentence, outside the text, in general culture. This kind of idea can be called conventional wisdom, common sense, the cliché, or implicit knowledge; but whatever the name it is never a *new* idea. Ideas which are not "common sense" frequently need explicit development in longer sentences for anyone to comprehend them. First Ludwig Wittgenstein and then Marshall McLuhan, both

of whom presented not new ideas, but new arrangements of old ideas, found to their dismay that if an idea is not already so well known as to be implicit in the culture, there could be no substitution for precise language, carefully deployed around the dimensions of the idea. Both tried to present their ideas in aphoristic language, in the short sentence; and McLuhan, at least, finally reaped nothing but resentment and scorn. Now, a generation after his death, his ideas have been quietly assimilated and many academic writers have found his writings useful in thinking and are writing entire books to fill in the gaps left in his abbreviated dicta.

McLuhan's fate highlights the fact that other ideas, many of which are still useful for thinking, have fallen out of general circulation because we can no longer read their sentences. Many earlier English writers, and contemporary writers in other languages like Italian, use long sentences. It is not appropriate to put either Henry James or Italo Calvino into a 12 pica line. It is difficult to sustain reading of their long sentences when these are forced into narrow lines, and therefore extend half-way down the page. The combination of saccadic eye movement and frequent line returns sets up excess noise that interferes with the smooth remembrance needed to keep the multiple subtended clauses of such sentences in order.

But for the common-sense idea, the assumptions that implicitly govern culture, the grid system and the short, encoded sentences that the grid supports, provide a simple reading system that is open to every level of reader. The wide range of type weights and set widths in the sans-serif type families typical of the Swiss style grid layout, and the generous white spaces, help frame the information and make it memorable much as the shape of a chart serves as a mnemonic for its data. Ease in reading the grid layout supports equal access to information, which equals democratic opportunity for employment and economic survival. And democratic access to information is critical to our corporate business and bureaucratic structure, for, to flourish corporations require a large pool of potential employees characterized by intellectual skills like literacy, conceptual inventiveness, and organizational talent. Such skills do not necessarily occur in sufficient numbers in the privileged populations created by blood-based dynasties or caste hierarchies.

It cannot be said that our corporate culture does not support some blood-based social exclusion from information and social opportunity: we seem to be deeply and irremediably racist. But in so far as our institutional bureaucracies do need literate clerks, the grid system supports literacy. The dismantled grid does not. Reading the dismantled grid is only open to very determined and very sophisticated readers. The unskilled reader simply cannot regenerate enough text from the reader-syntaxed stew to find the implicit assumptions of institutional culture needed for their sustenance or interest. The style of the presentation, *dismemberment*, becomes the subject of the presentation.

It is possible to say that graphic designers are simply acting out the behavior of late practitioners of any art style outlined by historians of cultural shift like Henri Focillon, George Kubler, or Thomas Kuhn. These writers on the history and uses of style would perhaps have said that graphic designers long for variety and novelty but, not yet being able to generate a new style, exaggerate and ornament the old one. Or it might be possible to project from the writings of a number of late-nineteenth century art historians, the most important of whom was Alois Riegl, that this late style of fragmentary sentences, requiring active reader participation for the reconstruction of sentence sense, reflects a new preference in comprehension habits. Riegl wrote about late Roman sculpture, once considered

unskilled, degenerate, by art historians because instead of the skilled transitions from one plane to another differences were crudely drilled in; roughly defined. Riegl contended that although skill may have declined, viewing preferences had also changed. He felt that these sculptures demonstrated a change in responsibility for making the complete image from the sculptor to the viewer, who, with the activity of their own eye and mind made from the light and shadow generated by the rough surface of the sculpture a complete, and dramatic surface more interesting than the smooth one provided entirely by the sculptor.

Applying Riegl's idea that a change in style reflects a change in the habits of cognitive practice in the groups that use that style, it is perhaps possible that the designers using the dismantled grid may reflect profound cultural changes; changes in organizational preferences, that is to say, changes in the very mode of comprehending information.

Joshua Meyerowitz, one of the many writers mining the seams first opened by Marshall McLuhan, has written a book, *No Sense of Place*, about his finding that the place system of authority which has sustained our culture for such a long time is collapsing. He notes that television, which sells the illusion of capturing the live moment with such close-up realism that it shows the red blood vessels in the skin of a politician's nose, has so effectively demystified public figures that it is no longer possible for them to gain authority simply by speaking from a position or place of power; a place like a church pulpit, a political seat, or an academic lectern. He found that even in popular culture, no one cares about contemporary "stars" the way they did about Gary Cooper or Elvis Presley, because their lives are no longer separate or mysterious enough from the rest of us. And he cites the newspaper editorials which made it clear that a president, who was televised tripping on his untied shoelace, could not regain the charisma that traditionally supported his authority simply by sitting behind the desk in the oval office.

There is evidence that belief in the fixed place as a condition of authority, truth, and power is slipping away at other scales of human activity. Einstein and his theory of the relativity of physical phenomenon has been jokingly accepted in popular culture for two or three generations, and popularizing books like *Chaos Theory* and television science programs continue to develop the theme of the fluidity of physical reactions. Now, the scale of the points or *places* described by fractal geometry mathematics has become so fine, so miniaturized, that it is too fine for visible distinctions of direction at all.

At the literary level, deconstruction of the process of assigning qualities to something by naming it, begun in the late nineteenth century by Ludwig Wittgenstein, has by now reached the level of popular culture. Deconstruction of the connection between naming and belief in the reality of the named qualities is now central to popular entertainment; the slow trajectory from Laurence Sterne to Samuel Beckett, who merely broke down literary conventions by making them the subject of their stories, accelerated off the charts as David Bowie and Boy George dismantled gender by making it their subject. In short, it may be that the incomplete story, the particle, the fragment, is now the preferred unit of information for our culture, and lack of place is more useful for presenting these fragments than to fix them into sentences or grids.

Fashions are a mode of asking questions and an experimental range of answers. "Running it up the flagpole" may provide answers that last fifty years, or may provide answers that last for centuries. In the thirteenth century the zero and the place system used in counting and mathematic calculations was a fashion. It proved to be such a useful adjunct to the development of accounting that accompanied mercantilism that it has lasted for

centuries. The place system is but one example of our cultural reliance on grid systems for organization, evidence that the grid has been a fruitful tool for thinking. Now it may be that the fashion among graphic designers for the deconstruction of the grid, and of some kinds of traditional punctuation like the continuous sentence may auger a new kind of idea for thinking, a new textual organization system, of floating fragments, combined by the readers the way Riegl contended fourth century Romans combined vision of light and shadow to make up the images of their sculpted gods and generals. Perhaps this new spatial system will produce texts in which the connection of word to word will be, as it is in Japanese, very much more flexible. In Japanese the reader runs any two contiguous words through a wide and open range of connections at every stage in the deciphering of a sentence. In effect, reading Japanese, or reading the post-Swiss or fragmented sentence expands the possible connections beyond the scale of the grid that has served us so far, into a new grid, with so many connections that the intersections are no longer visible. We are now, with computers, truly gathering and using information on a new scale, through a grid that is sub-miniaturized.

Change of scale is not a simple additive or subtractive process; change of scale is absolute, with consequences which cannot be comprehended by projection from previous experience with the earlier scale of organization. For example, the change of scale of our business and governmental institutions into ever larger bureaucracies required the development of simple communication matrices, language and work practices, which could be understood by a large and varied work force. But this change of scale has unexpected consequences: these engrossed bureaucracies could not even deal with many of the very social problems they were established to handle, because society is not one large body but many individuals, with many specific, personal, idiosyncratic needs.

Scale change is absolute change. Converting the visible grid that we have known into a sub-miniature grid is a change of scale that has produced not additive but absolute changes. The sub-miniaturized grid is too small to be visible and punctuation can no longer be seen to fit into it. A new punctuation system may be devised by the same kind of experimental repetition that generated the earlier grid over time, but as yet the new grid is only a fashion, a question. As yet the fashion for the floating sentence is too abbreviated for many to make use of it. It is not unlike the aphorisms of Wittgenstein or McLuhan, without the necessary bulk of different interpretations and experiences swathed around their skeletons to make them comprehensible to the out-size groups which support the scale of our social institutions. Designers may provide enough variations on the freed sentence, inserting it into many different kinds of reading products, and ultimately make it familiar to different populations so that they can either use it or reject it. Academics will then analyze the ways in which the freed sentence works, write theories about it, and produce teaching texts to support it. If the freed sentence is to be a major reading and thinking tool, the time it takes to establish it is one of those unknowns that results when organizational scale is changed. A few years or a few hundred years from now the freed sentence may provide our major reading, and thinking, tool.

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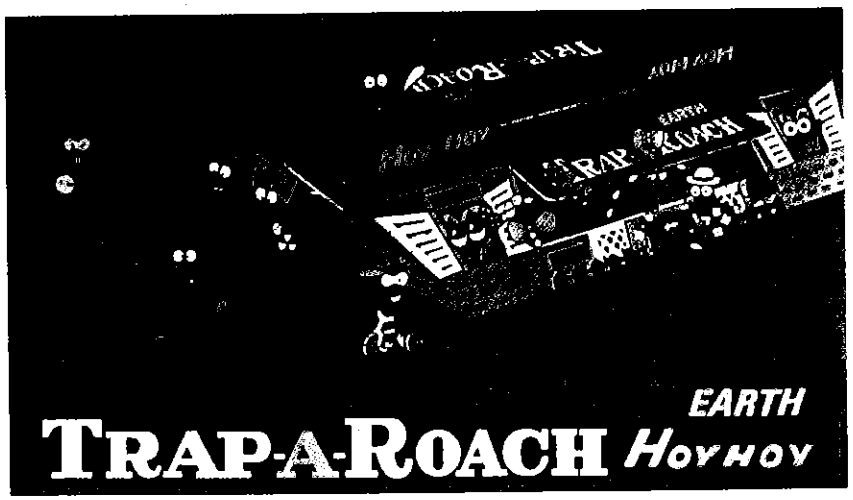
(Lupton/Miller)

We cannot simply draw a line between low and high, or between the inside and the outside of culture, or between public and private experiences of mass media



The categories of low and high are relative. Even at the level of the kitchen baseboard, one can find distinctions of low and high, formal and vernacular. The roach motels above recall Robert Venturi's and Denise Scott Brown's opposition between the modernist monolith and the decorated shed. The tasteful, International Style wood-grain model on top is designed to tastefully disappear, while the Trap-a-Roach below joyfully promotes the bugs' final vacation.