Modular Systems

In the sixteenth century, European type founders began supplying printers with the ornaments then known as 'flowers'. These were decorative, modular units founded in metal, which could be combined to construct ornamental title-page borders. Prior to printers' flowers, title-page borders were single wood or copperplate engravings, costly to produce and requiring the expertise of the engraver. For the printers of small editions in sometimes obscure locations, for which engraved title-page borders had been out of reach, the combinational border became popular.

The use of flowers turned out to be transitory, however, falling out of favor at the onset of the 19th century, which brought vast changes in industrial production techniques through new methods of automation and building materials. Their use was disliked for attempting to imitate the work of the engraver to closely. When eventually reintroduced by the likes of William Pickering, ornamental title-page borders had become extinct from large volume printing, replaced by either pure typography or simple, modern-style rules. Unlike the ornamental border, however, flowers have proven more versatile, remaining in use to this day as typographic ornaments.

import/export

05/30/10

1
Morison, Stanley, Day, Kenneth. The Typographic Book. University of Chicago Press, 1963.
In their introduction, the authors begin by stating the discrepancy between utilitarian, anti-historical design, advocated by modernist groups such as the Bauhaus, and beauty. They point out the direct relationship between architecture and book typography, and the fact that half a century of modernism has effectively destroyed decoration and the capacity to decorate through the suppression of craftsmanship. An interesting debate is the role of modular units, called 'printers's flowers', in title page decoration, which brought typographic mechanization into a process of ornamentation, previously the singular work of a skilled engraver.

Cover, 5" × 9"
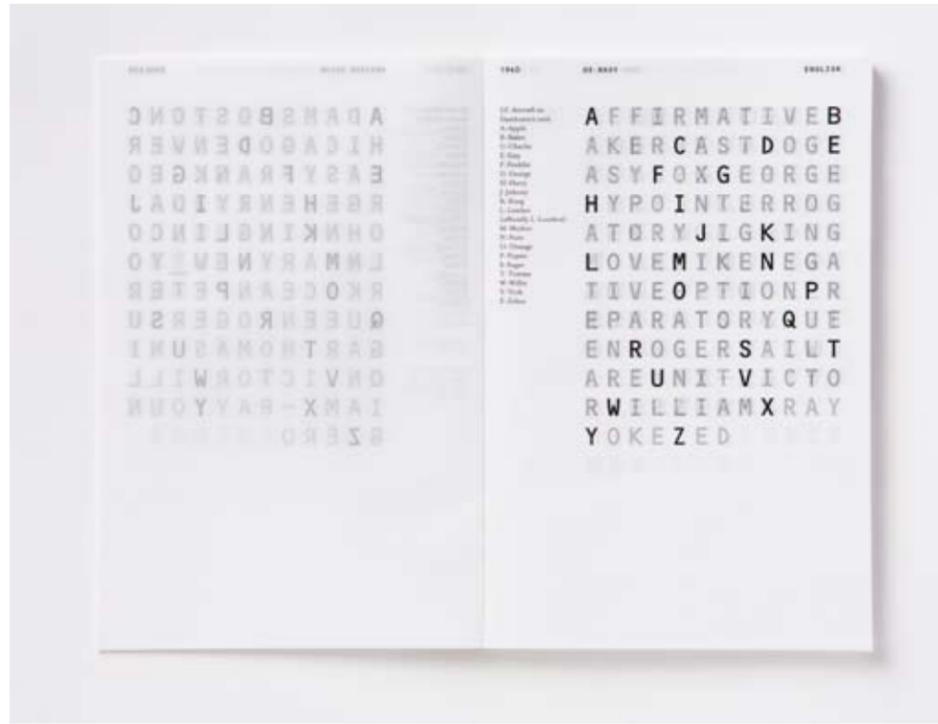
Spread, 10" × 9"

Phonetic Alphabets

The use of phonetic alphabets resulted from the necessity to clearly communicate verbally over channels induced with a certain amount of distortion or noise. Frequently used by themilitary or police, phonetic alphabets vary by language, country and function.

My design of a book of phonetic alphabets attempts to expose patterns inherent within the multitudes of these alphabets, the vellum stock heightening their comparitive characteristics.

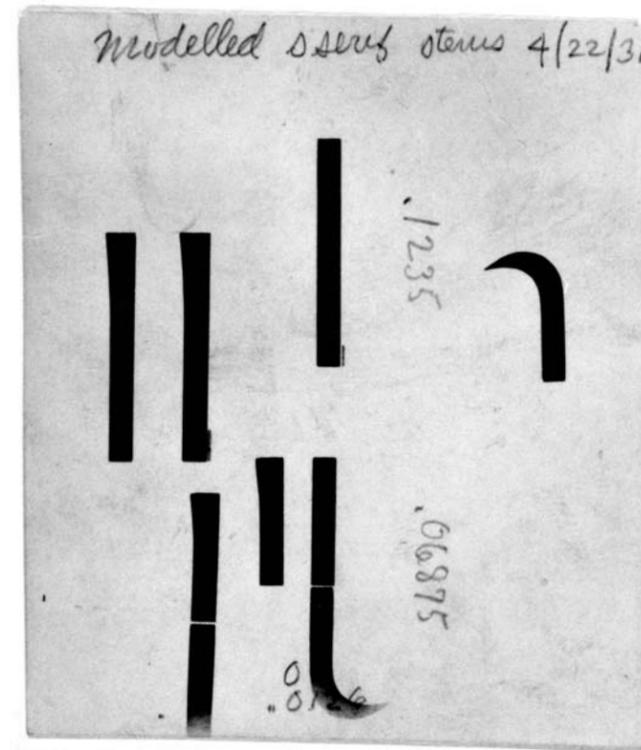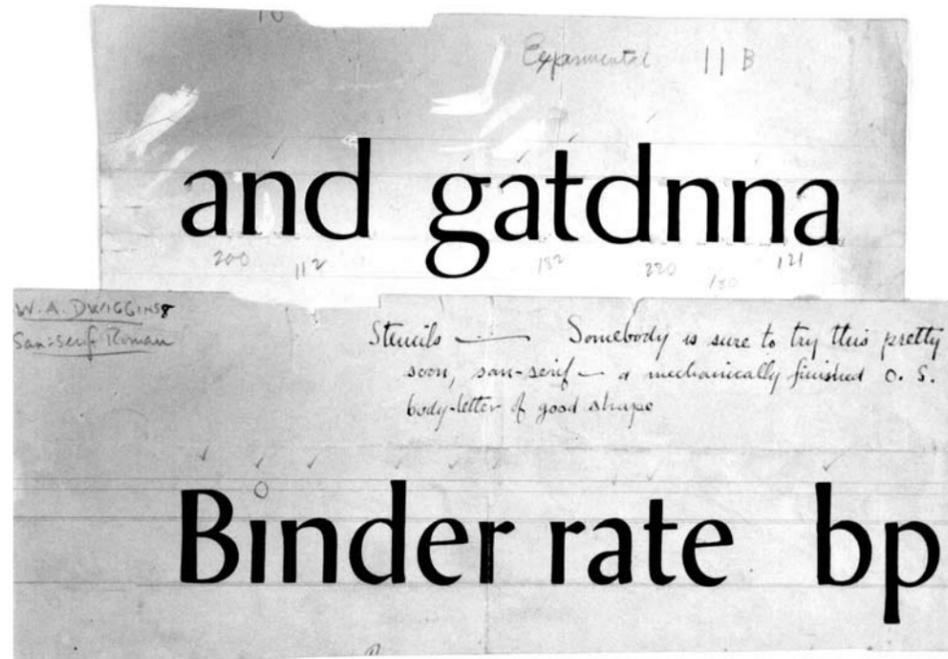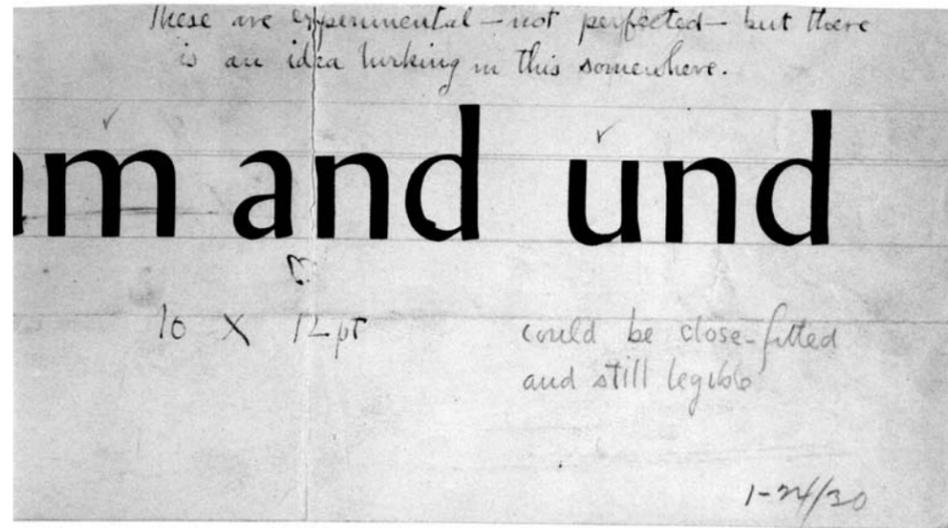**Spread, 10" × 9"**

Spread, 10" × 9"

In the early 1930s, American type designer William Addison Dwiggins began working on a 'roman' sans-serif, a type designed for high legibility in body text. Preceding Hermann Zapf's Optima **by three decades, Dwiggins' early designs exhibited modular letter forms, in alignment with the designs of many of his European and American contemporaries. Paul Renner's** Futura **was one of the first types to be based on a modular system, and Dwiggins' design, given the working title** Experimental 63, **was a response its immense popularity.**

During his 27-year exchange with Chauncey H. Griffith, vice president of the Mergenthaler Linotype foundry and in charge of typographic development, Dwiggins was finally dissuaded— after several years of development—of the commercial viability of a humanistic sans-serif and discontinued work on Experimental 63. **His drawings are now kept in the archives at the University of Kentucky in Lexington.**

Modular Systems

import/export

Pen drawings of Experimental 63. William Addison Dwiggins, 1930

Modular segments of Experimental 63. William Addison Dwiggins, 1931

ABCDEFGHIJKLMNOP
QRSTUVWXYZ
"'abcdefghijklmnopqrst
uvwxyz'"-fiflfffﬃﬄ
1234567890+-=$%
.,:;_([/|\])—!?–

Lexington, full character set. 60 pt / 72 pt

Modular Systems

import/export

My revival of Experimental 63 was primarily based on the notion of modularity in Dwiggins' original drawings. I attempted to maintain the calligraphic quality of the typeface, while regularizing its excentricities. In order to create those letter-forms missing from the original drawings, I studied the charac-teristics of his other designs, such as Electra and Metro, as well as newer typefaces with similar characteristics, in Hans Eduard Meier's Syntax and, of course, Zapf's Optima.

Lexington is an interpretation based on what I found to be the most significant characteristics of William Addison Dwiggins' Experimental 63—high legibility and a distinctly calligraphic quality. It is an attempt to bring new attention to a lesser known typeface, which was progressive for its time and embodies the uniquely American sentiments of its designer.
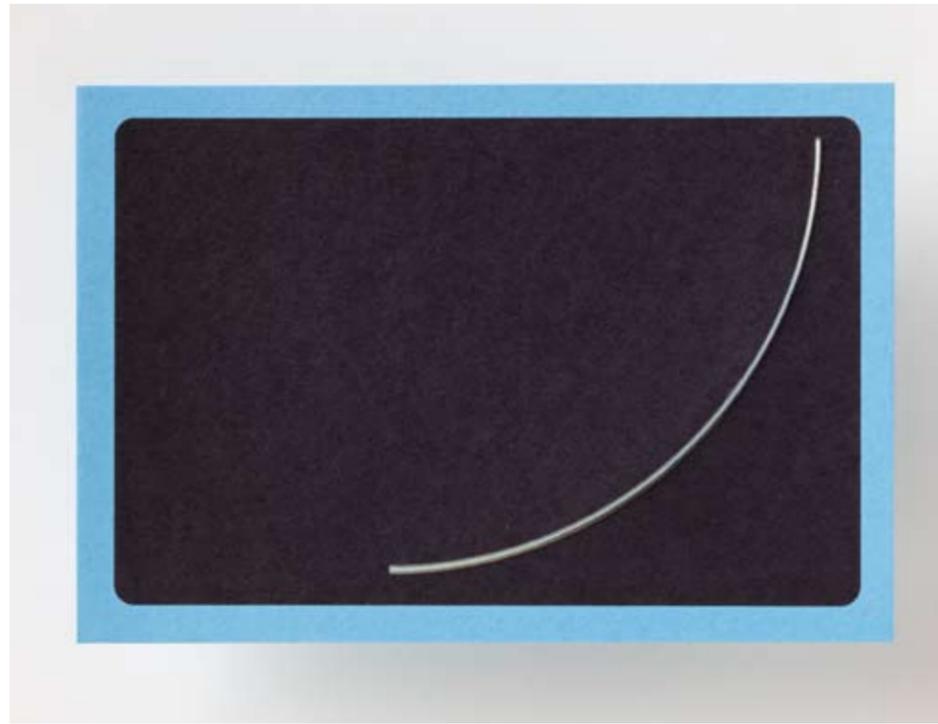
Griffith was vice president in charge of typographic development at Mergenthaler Linotype Company; Dwiggins was one of America's most vividly imaginative and individualistic graphic artists. Their collaboration is recognized as a milestone in the history of type design. During the 1930's Linotype issued three of Dwiggins' typefaces commercially: Metro, Electra, and Caledonia. The latter two were acknowledged as classics from the time of their introduction and, now in digital format, are still in common use. They are the basis of the judgment of Walter Tracy, among other printing historians, that Dwiggins was one of the 20th-century's most distinguished type designers.

Dwiggins' experimental typefaces are, not surprisingly, less well known than his commercial types. The first, and still the most important account of them is Paul A. Bennett's chapter "WAD and Linotype" in Volume 2 of "Postscripts on Dwiggins," published by the Typophiles in 1960. Walter Tracy's "Letters of Credit" includes a perceptive if sometimes waspish critique of Dwiggins' typefaces, both commercial and experimental. Bennett and Tracy also speak of the 27-year correspondence between "Bill" and "Griff." These letters contain far more than data about specific typefaces; they are an education in the fundamental problems and issues of type design. Though brief, colorful passages from the correspondence have been quoted by Bennet and occasionally others, no adequate study has yet been published. The archives are preserved at the University of Kentucky, Lexington, where Griffith deposited his papers, and the Boston Public Library, which houses the Dwiggins Collection.
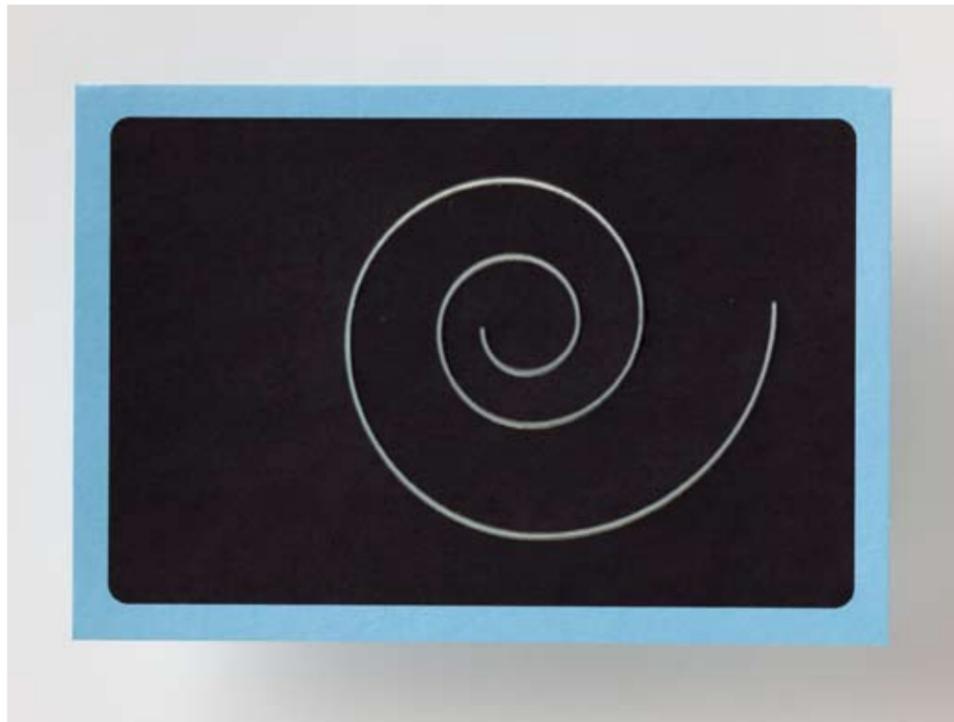
Lexington, 11pt / 16pt

Sometime during 1942 William Addison Dwiggins wrote to C. H. Griffith that: 'With the onset of war started the "clean out the attic" project. Me aged 62. With many good ideas still in me, but not too well. Says we: let us at least get some of these ideas on paper to save them, and lay them away for future reference if, when the Earth recovers its sanity. You elected to try a few of them in metal in a small way, looking toward something new in hand laid away to spring in post war days, if enough literate folk remained to need them.'
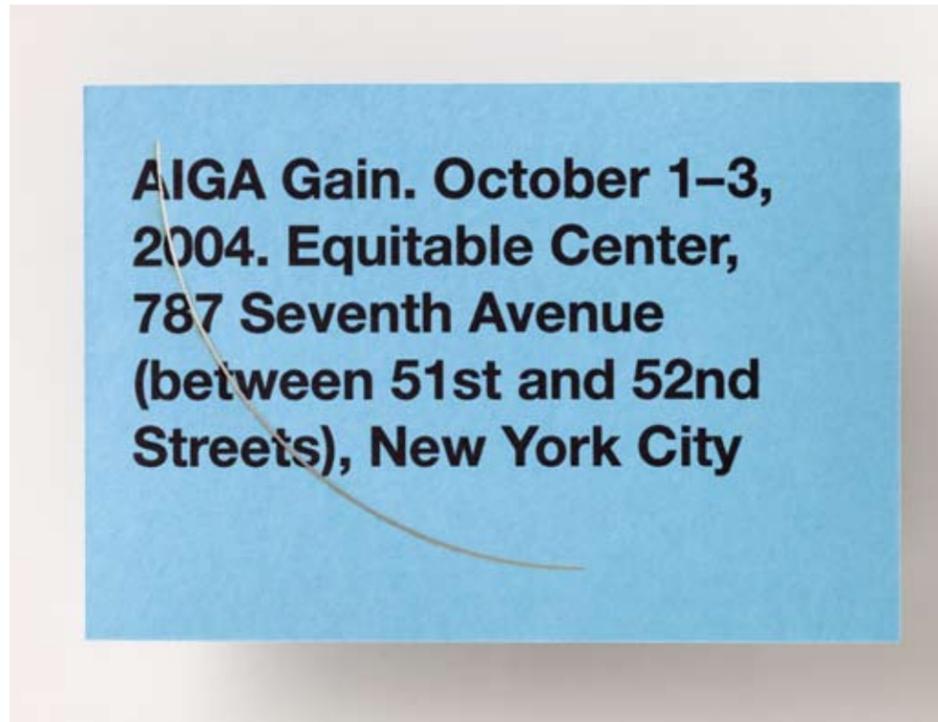
import/export

Lexington, 21pt / 27pt

Invitation, front. 4"×6"

Invitation, front. 4"×6"

Invitation, back. 4"×6"

AIGA Gain. October 1–3, 2004. Equitable Center, 787 Seventh Avenue (between 51st and 52nd Streets), New York City

Invitation, back. 4"×6"

AIGA Gain Conference Invitations
In 2004, the topic of Gain—the yearly business conference of the American Institute of Graphic Arts— was economic and personal growth in an increasingly commodified business environment. These keywords spawned the idea of creating a set of templates, sent out as invitations, using common visual metaphors associated with growth. Being templates, the invitations carry an inherent anticipation of use.

Modular Systems

import/export

Prefabrication & Templating

As designers, we are accustomed to using templates, in the sense that the various media we work in have clearly defined parameters and boundaries that we either accept or attempt to overcome. Standardization is central to our profession—when we are not using predetermined standards, we are establishing our own.

As a case in point, programming is initially non-proprietary. It is inherently conceptual, inherently abstract. Any programme, however, requires an appropriate expression, and through its visualization, it too becomes subject to standardization. In a sense, while programming may appear to free us from the constraints of the proprietary, by constructing programmes, or systems, we are, in fact, creating new templates.

As literary theory has pointed out, true originality does not exist—unconsciously or consciously, as creators we are always continuing ideas put forth by others. The more we absorb, therefore, the less we may 'invent'—the drive towards innovation and differentiation, while truly futile, is paradoxically unavoidable.

Conclusively, the template is of vital significance to the notion of adaptability. Any designed object is in a sense a template or a container when it constitutes a system which refrains from being specific to any particular content, only to a particular type of content. Here, design acts as a flexible framework with the ability to accommodate a variety of inputs.

Standardization

Before the onset of industrialization, ornament was a highly valued practice saturated with the accumulation of cultural knowledge, knowledge which was evocative, rather than intellectual. Over the decades since Gutenberg, through increasing automation and the decrease in manual labor, ornamentation gradually began to disappear, as did the value associated with craftsmanship. In bookmaking, ornament reached its peak in the illuminated manuscripts of the middle ages; in architecture, it may have peaked with the rococo movement. In both bookmaking and architecture, automation in form of the printing press for moveable type and steel fabrication in the building industry led to a decline of ornament which has continued until this day.

It appears that what happened was essentially a paradigm shift from one form of standardization—the inherited knowledge and skill of the craftsman—to another— the standards imposed in the name of increased efficiency through automation. The fundamental difference, however, is that the former was locally situated, while the latter tended towards ever broader standards, standards which have become global in our age. As we have seen, standards on a local scale are better suited to represent the varieties of cultures existing in the world today. These are local customs and rituals, beliefs and linguistics. Standards on a global scale are more efficient and practicable to the point of necessity in the interest of business—the inherent conflict in globalization.

At the onset of the 20th century and the proliferation of mass production, efforts were underway to impose international standards in every sector of industry. A coordinated production was essential for the high volume in the nation-wide exchange of goods. Furthermore, standardization was encouraged not only in production, but also conception. As Le Corbusier attempts to demonstrate in his 'Modulor', compositional standards lead to innovation within set limitations.[2] As an example, he cites musical notation, which limited composition to a fixed number of tones. This tempered scale was supposedly instrumental in bringing forth the great composers of our age, by focusing their creative output within a fixed, harmonious set of combinational boundaries. In another sense, standards evolved over time, as an accumulation of evidence gained through trial and error, in combination with the selective activity of market forces. Through study, we attempt to incessantly understand, re-contextualize and improve upon past works. These standards include certain types, such as the practice of a certain craft, building types, or the textbook, types which are constantly under scrutiny and gradually evolve alongside changing cultural values. As designers searching for tension and conflict in the work we produce, we are aware that standardization is a force to either embrace or counter.

2
Le Corbusier, The Modulor, Harvard University Press, 1954. The Modular is a development of the Fibonacci series, applied to the human figure—it allows harmonious composition in accordance to human proportions. Of interest is Le Corbusier's writing on systems of measurement, of interval, as well as standardization and prefabrication. His belief is that restrictions of interval, such as the tonal scale in music, advance human creativity and achievement. This has interesting parallels to the more recent debate surrounding analog and digital systems.

Modular Systems

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