

Making Connections
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Body Copy: Typography and the Human Scale

The typographic sequence of study at the Ontario College of Art & Design (OCAD) follows a historically accepted course of studio practice that closely outlines an understanding of typography - the means, logics and strategies for the combination and integration of alphabetical and numerical forms for visual communication. While format - page, space, environment - are given significance in this approach, an exposure to spatial realms far beyond the page are necessary to broaden the discourse of the role typography can play in our increasingly mediated cities. The confines of formal study in small, intensive typographic exercises should be supplemented by the inclusion of larger formats that serve as a preface to scales of engagement that address the body. This paper will argue that along with investigations that address the symbolic and systematic aspects of typography, significance must also be given to projects that engage the human body in scale and quality. The device driven dissemination of information now crosses and integrates previously distinct channels of media. Cell phones, mp3 players, net-books, and handheld video games all share a common typographic scale and experience. The pedagogical evolution from a typography of the eye and hand, to one that integrates the body as a whole may be considered timely as our collective attention is being pulled from civic environment to virtual device.

The involvement of the body, hand, and eye to a routine of typographic production has its roots in the teachings of Armin Hofmann and Emil Ruder; both studio masters at the Basel Allgemeine Gewerberschule. Hand drawn type and a series of exercises in the refinement of silhouettes, distinguished the approach to basic typography and formal study in Basel from those of other Swiss design schools in Zurich and Lausanne where

mechanically set type was exclusively the norm.¹ The many students of the Basel Allgemeine Gewerbeschule that are now teaching at OCAD, the practices of Hofmann and Ruder continue to be relevant in both curricular and pedagogical approach. While implicating Hofmann and Ruder in the curricular evolution of OCAD, it may be Wolfgang Weingart who has had the strongest affect on the current generation of Professors at OCAD. In 1968, Weingart initiated the Advanced Program for Graphic Design which intensified the global dissemination of the pedagogy and processes unique to Basel. Weingart's insistence to push basic principles of typography to process based ends, free of professional or market constraints remains a hallmark of beginning typography studios within the Graphic Design Program at OCAD.

'School' for me is an institution which, through a certain teaching program, attempts to clarify certain information. This information is essentially independent from the concrete demands made by existing professional standards. The teaching programs are open, not bound by fixed opinions. The content of the program is determined and constantly developed in the school. It is important that the 'school' maintain an experimental character. The students should not be given irrevocable knowledge or values, but instead, the opportunity to independently search for values and knowledge, to develop them, and learn to apply them.²

Weingart's experimentation at the outset of his typographic education was largely unsupervised, and constantly informed by investigations of individual letterforms. Using printed letters of various scales, Weingart pasted 6 prints to the sides of a cardboard cube, covering the surface of the solid with typographic form. Using a camera, and now able to change point of view through his camera and the cube, Weingart was able to

¹ Hollis, 215.

² Weingart, Looking Closer 3, 221.

achieve views on letter-forms that were previously impossible to generate through mechanical means alone. This experiment, Weingart dates at 1965 while he was working independently in Ruder's type studio in the Basel Allgemeine Gewerbeschule.³

It is significant to reach back to project forward in terms of typographic education at OCAD. The teaching methodology and basic parameters for project work at the Gewerbeschule were always process based, not product or outcome-based. The typography studio in Basel was a place to experiment and challenge convention. Convention however, meant students had gained basic control over typeset language forms, and thus, basic control over visual communication through typography. While OCAD manages to preserve the emphasis on process and formal development in typography, there remain issues of comfort and convenience to overcome in the current student population. Omnipresent digital devices only provide a limited experience of typography, and engender a relationship to type that is at best imprecise. Large, and Standard type display options on an mp3 player hardly make for compelling control over a type-based interface. This being the dominant form of typographic interaction when students arrive at OCAD, a significant push needs to be initiated in the typography studios to introduce experiences that flesh out the opposite end of the scale continuum. The context and case-study presented here provides the documentation of one such push - and its outcomes.

A History of Beginnings

The study of typography at OCAD often begins with the stroke - the basic constituent elements of typography. The derivation of thick and thin strokes from writing tools, whether natural or mechanical, introduces the beginning student in typography to line weights that are even and static, or variable and dynamic. Vertical, horizontal, diagonal and curvilinear strokes intersect in specific relation to form individual, legible Latin characters.⁴ The

³ Weingart, *My Way to Typography*, 233.

⁴ Kunz, *Formation*, 24.

relationship between hand, motion, direction and speed all correspond to specific formal qualities of stroke. These exercises are best repeated slowly, thus contributing to a physical understanding about the relationship between the specific action of the body and a specific production of form.

The scale of these exercises is frequently limited to common letter size sheets of calendared or hardened bristol paper, so chosen for surface smoothness conducive to consistent mark-making. The connection between hand, action and form is a crucial first step in craft-based understanding of the derivation of typographic form.⁵ This understanding is further developed through a series of exercises that challenge students to move past making strokes by attempting to resolve freehand tracings of historically significant typefaces. When given an actual typeface, the complexity of the edge becomes a new challenge. Typefaces such as Garamond, Baskerville and Bodoni prove to be incredibly complex forms of compound curves that demand great attention to changes in direction, radius and the sharpness of intersections (Figure 1.1).

Figure 1.1 *An exercise in freehand tracing of Baskerville Regular.*

Students in beginning typography at OCAD can face a month of these exercises, slowly building a familiarity with typographic form that is both haptic and optic. Both of these concerns, that of the body and the eye are preserved when the study of full type families are introduced to the studio. When asked to compose a simple word using unattached, individual letters, students must physically overcome the most basic issues of typographic composition; baseline and vertical plumb. The necessity of a triangle and T-square brings the assumptions and ease of the digital environment to the foreground as an issue to overcome. As certain letters - for instance 'o' and 'a' - have no clear reference to how they "sit" on a horizontal datum (baseline) students must begin to resolve this issue in the relationship between characters individually, letter by letter. The practice of arriving at an

⁵ Hollis, 215.

acceptable typographic structure is one of optical refinement. Once an optimal relationship to basic typographic structure is selected, students address the issue of letter spacing or kerning, an exercise of looking at, and adjusting the space between each letter while respecting the overall shape of the word, and the form of each letter in sequence. The pace of the exercise is slow, forcing students to constantly assess their manual spacing of letterforms at every greater distances. Even when the type is to be digitally or mechanically set, there is no one absolute solution, only degrees of refinement, the process still remarkably slow and similar across media. The activity of physically moving type in space, by hand, however, begins as understanding of type as object with physical properties (Figure 2.1).

Figure 2.1 *Kerning exercise with Helvetica Neue 55 Roman letters; students must establish typographic structure and a good relationship between counters and negative space within and between letterforms.*

It is at this point that students must assess their work from eye's length - rather than arm's length. Optical relationships of space between letters are dynamic, and change instant to instant. Adjustments are no longer objective, but depend on a growing realization of the quality of a given spatial arrangement in relation to previous attempts. While students are aiming at a temporary resolution of letter spacing, they are also gaining an attentiveness to their typographic environment. Road signs and everyday wayfinding becomes a constant source of student education as they discern ever finer issues of letterspacing in their city. Though the scale of these exercises remains small, it is the spatial engagement of kerning that forces the beginning student of typography to consider not just the task at hand on paper, but its evaluation from across architectural space. Ruder's pointed stance on the spatial aspects of positive and negative form, of solid and void, are made clear in this contribution to the 1960 catalogue *Typography as Communication and as Form*:

The formal quality of every piece of typography depends on the relationship between the printed and unprinted parts. To

see only what is printed, to overlook the decisive contribution of the unprinted parts, is a sign of professional immaturity. The business of typography is a continual weighing up of the white and the black, which requires a thorough knowledge of the laws governing optical values.⁶

Scaling Up

The practiced path of typographic education at this point gains complexity and scale, but within the parameters of previous experience. Students slowly graduate from letter to word, word to sentence, sentence to paragraph, paragraph to text, then into more complex relationships with image, page structure, and content communication. Within Graphic Design Program at OCAD, a great deal of repetition and focused study results in highly developed typographic sense at the level of the page and the screen, but very often omits an engagement with the architectural environment. At the stage of the kerning exercise, evaluation of form should happen from a distance of approximately 4 meters. The distance foregrounds inconsistencies that would remain otherwise hidden at arm's length.

Due to curricular imperatives to address type within limited and confined scales there exists a threshold in this approach that many students never cross. The progression forward from stroke to letter, then word, sentence, paragraph, text, image and onwards often entails a path of uniformity in digital tools, and their inherent limitations in the visual display of type: the laptop screen. In order to preserve, and in some ways extend the beginning students' engagement with type as a physical experience, we need to initiate and include other processes and typographic precedents.

Project

A project just completed at OCAD involved a scale of letterform previously reserved for the initial stages of typeface design itself. Taking advantage of basic output technologies in large format

⁶ Hollis, 218.

laser printers and laser cutters, students are asked to generate distinct letters at a scale that forces them to “handle” the letterforms. Some students remain cautious of truly human scale letters, but even a letter of 3-4ft in height proves to be a challenging object to control. The project begins with students staging their letter in an environment, then continues with the stage being lit using a variety of light sources. While the activity stretches nascent photographic skills, it introduces a relationship to type in which one has to bodily position type as spatial object in a constructed scene (Figure 3.1).

Figure 3.1 *Staging letters for spatial investigation.*

The resulting photographs can only indicate an index of the staged type which challenges students to both understand the form of their large typographic elements, but also understand how their scene is changed by spatial composition in three dimensions. In place of paper offering little resistance in the earlier kerning/letterspacing exercises, the letters are now formed from corrugated plastic, MDF, Sintra/Forex. The act of staging a scene requires students to act upon material qualities that resist certain placements, and accommodate others. The upward shift in scale and material change from the page also gives letterforms additional properties that must be managed through physical manipulation.

The shift from the earlier kerning exercise, and letters of 3-4 inches to letters of 3-4 feet begins a material education for Graphic Design students that is often circumvented by the introduction of digital tools. As each letter form embodies a unique path or bezier curve, students gain an understanding of their letterforms as digital and material constructions through the transition from screen to physical object. Though contemporary digital output devices render type with precision and rapidity, students still find themselves correcting for material imperfections and minute alterations of edge quality. Such imperfections would only be magnified through the casting of shadow, thus the output material type object must represent a

specific letter of a specific typeface in a specific weight. Edge quality that was once digital and smooth carries slight imperfections that might require sanding, or other physical adjustment. Inward from the edge, students must adjust for the light cast by high output light sources. Materials that were once seen as opaque gain slight translucency, objects that are white reflect, while those that are darker or black absorb projected light.

The dematerialization of type into index allows students to perceive typographic form free of the limitations of a 15” screen, or the typical letter and tabloid sheets of paper germane to common output devices on campus at OCAD. The scale is of a different order than previous exercises in beginning typography in which the format is usually a page of some orientation, or a smaller square for ease of iteration. The introduction of floor, wall, ceiling and room gives the students an exposure to typographic environments that are not bound by the screen, and that can envelop the body. Typographic space becomes not just the space between letters, but a space we can momentarily inhabit. The shift from paper or screen as surface to a different order of substance in the space of a room is difficult, as even the shadows cast are on a flat surface. The goal within the parameters of the project is to overcome, momentarily, the flatness of the plane, and produce a typographic environment of depth. The freedom to work without the need to communicate a specific message outside of a single principle makes students much more attuned to the formal experience of their staged constructions. The focus becomes the nature of the experience - and -does that experience begin to give one a sense of depth past the confines of the immediate walls (Figure 3.2).

Figure 3.2 *Outcome of project through light projection and cast shadow.*

The parameter of depth then becomes the operating reason for the construction. Students cannot simply overlap letterforms, or orient them in such a way as to indicate perspective. If atmospheric and spatial events that indicate depth are to be

generated through cast shadow, the construction of the stage becomes all important. In this sense, the project is an extension of the earlier kerning exercise, though free of the constraint of an English word, and free of the typographic structures of baseline, cap-line, and sequence. The shift from a horizontal, planar understanding of type to an environment in-the-round challenges students to look at type as both symbol with communicative potential, and as an object with specific formal and spatial properties. While the shift from linguistic symbol to material object may read as dichotomous, students are asked to think in a continuum - type is both of these extremes, and all the iterations in-between. As a continuation of kerning, the project is formally quite unrelated through outcome, but very much related in spatial experience. To address the counter forms between letters in a kerning exercise one must look between letters. To address the shadows possible through specific spatial arrangements of type in the depth project, one must walk between letters.

The project can continue through endless iterations, but it remains the initial experiences that are the most instructive. Larger letterforms, the transition into three dimensions, and a higher level of complexity in spatial thinking brings students of Graphic Design into a more rounded appreciation of form, symbol, and information in an architectural environment. These are threads that will be pulled later in the OCAD curriculum, yet information design, environmental graphic design, and interface design have their beginnings in this type of project work. The significance of the project does not lie in the fact that it involves and particular type of space, but that it stretches Ruder's *white and black parts* into solid and void, beyond the optic and into the haptic. Perhaps from here other avenues of exploration might include a return to supergraphics, or perhaps more appropriate to today, superinformatics, and how to communicate specifically, and clearly at the architectural scale through typographic intervention.

Conclusion

Typographic education at the level of basics - the anatomy, structure, composition and assembling of type must always be responsive to the needs of student context. At present, that context is spatially limited in scale, contained within the screen and devices germane to current digital communication and computation tools. A basic education in typography at OCAD now includes and exceeds such contextual constraints, to both acknowledge the import of knowing digital tools and environments as formats unto themselves, but also to reach for scales beyond the device-level and experience type as object, as solid, as mass and volume in-the-round. The project parameters and outcomes set forth here represent a beginning from which other forays into architecture might take place, to synthesize a typographic experience across dimensions and practices.

The leap from individual letters on paper carefully kerned by hand to a staged environment of typographic objects is a necessary extension in the traditional progression of graphic design education. The primary goal of the project in this study being the experience, translation and communication of depth, students gain a far greater understanding of page space, and are able to make connections forward to spatial and information navigation that will come later in the curriculum at OCAD. Aspects of data visualization, and exhibit design are also informed and engaged by this basic project well located in the second or third semester of study. As a spatial practice, Graphic Design very often begins and ends as a flat surface. Projects that pull us out of flatland for a more inclusive view of our surroundings need not leave behind forms that we know, and that we need in order to communicate symbolically - typography.

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