Teaching Type in Motion to Amplify Meaning, Communication, and Emotion

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Abstract: The instruction of typography, which is universally incorporated into visual communication and graphic design curriculum, has largely been constrained to static or anchored communicative results. However, typographic representations using time-based composition, sound, and motion have the remarkable ability to broaden the emotional stimulus in audiences beyond what is attained in static delivery systems [6]. The application of kinetic media now enables the typographic designer to add multiple dimensions to typographic communication that enhance meaning and elicit emotional response. Through my results of teaching over the past 8 years, and by way of a series of qualitative and quantitative analysis, I have concluded that kinetic typography or “type in motion” within an appropriate context has the ability to evoke emotion, while enhancing visual form, meaning and communication.

By bringing “type in motion” studies into our design curriculum at The Ohio State University we investigate varying type size, weight, spatial relationships, form–counter form, and movement within a word, words, or narrative, that produce a variety of rhythmic and expressive uses of kinetic typography. This paper will outline our process of teaching and pedagogical concerns when teaching “type in motion.” It outlines a strategy of instruction, with associated results that should aid colleagues in incorporating course-work in their respective programs.

Key words: type, motion, kinetics, emotion, semantic and denotative representation.

1. Introduction

There is an undeniable burgeoning of knowledge and skill required of buddy designers. Professional practice expects entry-level designers to have a solid design vocabulary and be well versed in the tools of new media required of today’s wide range of applications.

Typography, or the arrangement of type to communicate messages, has been a core area of study for the graphic design or visual communication student. Designers create and compose letterforms into words in order to convey a message. This endeavor includes the function of the alphabet, which are merely abstractions until arranged. Thus, certain arrangements of the alphabet into words will convey different meanings [2]. It is in this progression from abstract to concrete that creates, for the designer, intrigue, possibility, and communication.
Typographic applications have primarily resided in static form such as print material, signage, and posters. With the emergence of electronic media, typography must now exist in the kinetic realm [1]. Television, film titles, multimedia applications, and the web have all given rise to the existence of type that moves. In some cases, the kinetic typographic messages are very purposeful. This was evident in the work of Saul Bass, who produced exemplary film titles from the 1950s–1990s.

Design education in many circles perceives letterforms and typography as something not inherently kinetic. Letterforms are generally meant to be static, flat, frontal, upright, and high resolution (figure 1). But letterforms can exist and communicate in the kinetic realm. When these elements become dynamic, typography expresses another degree of intonation, voice, personification, and emotional character (figures 2-4).

Teaching “type in motion” establishes a foundation for more meaningful applications in professional practice. Ultimately, the concepts imparted may be realized in film and television titles, commercials, information kiosks, multimedia programs, web sites, presentations, and other time based communication channels.

2. Course proposal

As a faculty, we identified time and motion as an important and emergent issue to which our students needed exposure. We proposed to develop a course in Type in Motion in 2001 that would not only satisfy these concerns, but also function as a segue to more immersive interactive experiences, e.g. teaching multimedia design. This course was aimed at expanding the student’s typographic vocabulary through the use of time-based composition, sound, and animation. We surmised that application of kinetic media would enable the visual communication designer to incorporate motion, scale change, sequence, metamorphosis, and context (mood) to typographic communication. The goal was to structure a learning experience for students that would allow them
to develop time and movement-related projects using semantic typography with the objective of enhancing visual form, meaning, and communication. Students investigated rhythmic and expressive uses as well as exploration in varying type size, weight, spatial relationships, form/counter form, and movement within a word(s), while preserving sound typographic principles.

Through consultation with other faculty colleagues, it was determined that the 3rd year would be the most appropriate level for this course. The student already had a solid foundation in type and letterforms, composition, and communication. We found that without this experience, moving directly into Interactive Multimedia at the 4th year was too large a leap for our students (conceptually and technically). Therefore, this Type in Motion course at this level gave students the introductions to the timeline metaphor, motion along the x, y, and z-axis, and type limitations on screen at the time we believe was most useful and best integrated into our curriculum.

3. Current challenges
Teaching Type in Motion is not without challenges. Collaboration and knowledge sharing has been an important component in improving our course delivery. A continuing dialogue has occurred with Frank Armstrong, Senior Lecturer at California State University, Chico (USA), Assistant Professor Gretchen Rinnert, Kent State University (Ohio, USA) School of Visual Communication Design, and Visiting Professor Andre Chris Murnieks at the University of Cincinnati (USA). Collectively, we have attempted to work through the difficulties inherent to teaching emergent topics such as type in motion.

One issue that is present is the lack of scholarly literature on the subject. Books either focus purely on software development or on the entertainment aspects of type in motion or motion graphics. “Teaching Motion Design: Course Offerings and Class Projects from the Leading Undergraduate and Graduate Programs” [3] is a compilation of syllabi. It is one of the few books that deal with the topic in an academic context. However, more comprehensive set of literature must be produced that outlines concepts, theory, and pragmatic results that would substantiate this area within a research university setting.

Another concern is the requirement of a degree of proficiency with an electronic authoring application. Students may tend to focus on the technological aspects of type in motion, in other words, what they can do or not do with Flash or After Effects. They confuse software expertise with design mastery creating a great sense of anxiety amongst them. I have found that separating the instruction into two concurrent modules to be most effective. One hour of the course, which meets once per week is spent focused on developing software skills with no discussion of design activity. It is the responsibility of the student to determine which application is most appropriate for his communication strategies, and continue a degree of self directed learning. We follow a series of tutorials, most recently relying on “Flash CS4: The Missing Manual” by Chris Grover. The remaining 3 hours is focused on design and communication. The students are encouraged to use analogue tools such as flipbooks. Tools that are flexible, loose, and forgiving that tend to yield the best ideas. The distinction between the two course modules has worked, but the over-arcing theme of manipulating time to communicate a message must be constantly reinforced.
Perhaps the biggest challenge for instructors to overcome is how students perceive and approach the subject. As they begin designing type in motion solutions, they tend to discard many of the foundational principles of type. Rather than composing their typographic elements on a ‘page’ as a frame, they tend to set type and objects on a ‘window sill’ violating good typographic and compositional principles. Sketching and mapping out key-frame storyboards easily deter such poor practices. At this point in the students’ education, they are familiar with using a grid to establish hierarchy. It is important to transition this ideal to now use time as a temporal grid to structure a message. Planning and sequencing a message is a daunting task for some students, and it is a challenge to convince them that good planning will yield better results than starting at frame one of an animation with no plan at all.

4. Course structure

The 10-week course, which meets once per week, begins with an overview of the principles of typography. This review was found to be important, as students seem to believe that the traditional guidelines are not applicable to electronic media. A discussion of letterforms is delivered that focuses on the deconstruction of letter form components, such as the beak, bowl, crotch, ear, and leg [4]. Regaining this familiarity is important as these metaphorical references are often used in the student’s project results.

There is also a discussion centered on basic principles of animation, and the number of ways in which it can be created. Our students begin making very rudimentary flipbooks that show a ball bouncing. This helps them understand that the rapid display of a sequence of images creates the illusion of movement. They quickly ascertain through this exercise how time, speed, space, direction, and dimension are important elements to be planned if the animation is to communicate effectively.

The distinction between ‘flying type’ or type that indiscriminately moves on a screen and ‘type in motion’ which intends to use motion to enhance meaning is reinforced through a series of kinetic principles. Principles are introduced in the first week, and continue to be presented in each of the subsequent weeks. Principles of motion are very difficult to communicate through static means. We have found that the use of film titles is more effective in illuminating specific principles. They are concrete examples that resonate with the students. Many of the film titles used are readily available and their duration often exposes conceptual meaning, systems, and structures as opposed to commercials, etc.

Some of the examples used are Alien (2004) that illustrates the idea of the abstract to concrete representation of letterforms synthesized with time to reveal a message of anxiety; Psycho (1960), designed by Saul Bass, shows through its agitated motion of the title coupled with the musical score sets an emotional tone of unsettlement and suspense; Barbarella (1968) uses the integration of type and image, as letterforms appear to interact with the leading character, which is floating in space; Along Came a Spider (2001) that uses typographical metaphors, direction, and anthropomorphism; Dr. Strangelove (1964) that applies a raw, erratic, linear, type treatment that does not sit as overlay to the film, but integral to it; Panic Room (2004) shows the integration and interaction of letterforms with the physical elements (architecture) of the film; Dark City (1998) which uses occlusion, masks,
and lighting effects and exploits the abstraction of letterforms. *The Music Animation Machine* [5] is also utilized which provides a diagrammatic visualization of the multiple dimensions and layering of music.

4.1 Project One

The first formal project is introduced in week 2 and spans 3 weeks. We refer to it as “Visual Equations from Verbal Language.” The goal is to enable words through animation to mimic verbal meaning, visually and kinetically. Students are instructed to examine a single word with different connotations or multiple meanings. For instance the word mercury could mean an element, a planet, or an automobile brand. Students develop a list of possibilities and narrow to a final choice with consultation from the instructor. Then, through motion, the student is charged with defining a specific meaning of the word.

The project is constrained to the use of a sans serif type, black on white background, 10 seconds in duration and with no audio. This set of constraints is important so the student is not overwhelmed by this new application space. They begin with a series of storyboard sketches, which are intended to deal with ideation of composition and form. Students are encouraged to annotate how letterforms will enter and exit the compositional frame. Students then move to the development of flipbooks, bound by butterfly clamps. This tool enables them to plan the compositional activities that will happen on screen and is independent of any software limitations (figure 5). Depending on the comfort level of the student, flipbooks are developed in low (pencil sketches) or high fidelity (computer generated letters). They are able to adjust time and sequence by how slowly or quickly they flip the pages. If an inferior node to their proposed animation exists, it is merely pulled out of the sequence of pages and replaced with another solution.

After the 10-second animation is planned, the student moves to an authoring phase using Adobe Flash. At this point technical or authoring issues may confound the students. At this phase, instruction becomes the most difficult. Students expect help resolving any technical barriers and while this is facilitated through my teaching, it is always secondary to maintaining the course focus on communication.

Through the entire process of this first project, it is vital that students make observations on the specifics of how things move, and then translate this aesthetic into their work. Motion can be overused or just as easily underutilized. When used affectively, motion directs attention. When used too much or when it is not specific in nature, it creates more confusion than clarification. The proper motion aesthetics must be depicted if a project is to achieve a successful result (figures 6-8 and 9-11).
4.2 Project Two

Moving into project 2, the students are more comfortable with the objectives of type in motion. They see the concrete application of it and no longer view it as purely experimental. The second project is introduced as the ‘Dialogue of Antonyms’ with the goal of creating a visual interaction while kinetically expressing the opposite meaning of words. Students are instructed to examine a pair of words with opposing meanings or antithesis. For example; slow-fast, curious-indifferent, smooth-rough. Through motion, the student is charged with defining the meanings of each word. The ideation process is similar to project one, but particular emphasis is now placed on creating an interaction or visual dialogue between words (figures 12-14). The project constraints are the same as project one, with the addition of 10 more seconds. The project is completed over a 3-week period.

Students are encouraged to utilize the dimension of time, in this case 20 seconds, to create a narrative that is not immediately revealed. This is important in maintaining audience interest. If they know how the ‘story ends’ prematurely, interest is lost. They are forced to become more strategic in their conceptualization. The projects are
planned using a framework such as metaphor, personification, interpretation, dialogue, and duality. This framework aids in the storytelling aspect of the student’s time-based compositions (figures 15-17).

4.3 Project Three

The final project is more analogous to creating a film title sequence. Referenced to as ‘Mixing Multiple Dimensions’ it announces a series of lectures on typography through time-based communication. Students reference a project completed in the previous quarter of study. The draw their content and visual language from a series of three typographic posters designed under the direction of Professor Paul Nini. We found it to be important that content and visual language be familiar to the student due to the complexity of planning and authoring of this project. When students had to generate content, the projects fell well short of expectations.

The students are charged with building a kinetic narrative that introduces the content and hierarchy of these posters (speakers, date, time, location) in 4 weeks. The incorporation of sound and color are now a project requirement. The students must deliver a message using the integration of typography and image, with sound, moving in time and space. The final animation should be seen as an extension of the typographic language created in the 3 previous anchored solutions. Audio is constrained to a 60 second instrumental track and must be semantically appropriate. Past projects were authored at 600x600 pixels at 30fps, but recently we have gone to a 16x9 aspect ratio. The project is authored using Adobe Flash or After Effects.

Because there is no need to engage in secondary research, the students quickly go about selecting a music track. As a class, we discuss how the audio evokes mood, pacing, and rhythm. Once an audio selection has been made, the students are asked to create a visual mapping of the audio. This is done by creating a time line that deconstructs the sound elements in separate rows, in other words, bass tones on one line, drums on another, horns on another, etcetera (figure 18). Climax and anti-climax are drawn and the result looks similar to a line-graph, with each second of audio visually represented on a horizontal axis. This visualization of the audio functions as a planning resource so the acoustical field is unified with the visual elements in their animations.
Once this mapping is complete, the students build a ten second prototype. There is an intermediate critique after 2 weeks to ensure that the communication is clear, audio is appropriate, and technical issues are addressed. At this point the students realize that the integration of multiple dimensions, sound, movement, and form, is a very powerful, but time dependant form of communication (figures 19-22). In other words, the viewer must be an active participant in the communication experience, thus the designer must be considerate of this. Type that moves too fast is unreadable and messages that are not holistically presented are incomprehensible. Therefore, the communication strategy must be purposeful, well planned, and masterfully executed.

The solutions delivered thus far are dynamic and captivating. The use of movement and sound create intonations with type that are difficult to achieve with static media. The use of space, depth, rotation, and viewing angles are maximized (figures 22-25).

Figure 18. An example of a visualization of music over time used as a planning resource in project 3.

Figure 19. The final project leverages a previously created visual language.

Figure 20. The sequence is scored to music over a 60 second time frame.

Figure 21. Multiple dimensions of motion and time are explored.

Figure 22. This time dependent sequence gives adequate time for reading.
Conclusion

The course provides our students their first formal exposure to time-based communication and is now a required part of our Visual Communication curriculum. It opens a new verbal and visual vocabulary to their armamentarium. Students discover that ‘Type in Motion’ can enhance in certain respects, visual form, meaning, and communication, beyond static anchored messages. Their project research reveals that this meaning is greatly influenced by our cultural influences, associative bonds, spoken language, and semiotic references. Additionally, it is discovered by many that kinetic typography that is specifically designed with the intent of enhancing meaning can evoke emotional responses. These reactions, whether they are excitement, delight, humor, agitation, or tension, make typographic communication a richer, more memorable experience, even if these reactions are momentary.

Each project builds in its complexity and communication. Project 1 gives the students their first opportunity to develop storyboards, apply various principles discussed, understand the temporal dimension of communication, and familiarize themselves with the potential of specific time based applications. Project 2 allows the students to react to constructive criticism received from Project 1. Confidence and authoring proficiency increase, while the intellectual delivery of communication is enhanced. Students also begin to articulate how their projects intend to work (or not) in the kinetic space. Project 3 affords a new range of creativity and communication. The integration of several dimensions (time, movement, sound, color, texture, etc.) although challenging, allows the student to expand their typographic vocabulary. They are able to take a more holistic view of their communication plans (static and kinetic) and are fully proficient in their chosen authoring application.

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5. Bibliography


