

Fluid Characters in Temporal Typography

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Abstract

As a hybrid of typography and digital animation, kinetic typography has arisen from two distinct histories. Studies of typography take for granted the fixed identity of the printed sign, whereas digital animation frequently features kineticism leading to transformation. It is perhaps for this reason that studies of kinetic typography do not offer adequate exploration of typographic forms that transform and change identity. Though texts on temporal typography offer thorough analysis of temporal typography that moves or is serially presented over time, these studies do not allow for examples such as MPC's Channel 4 logos, in which pictorial objects transform into a numerical character, or the typographic animation of Komninos Zervos and Dan Waber, in which forms morph between alternative typographic poles. This article will propose that, in order to address the current lack of understanding of transforming type, it is necessary to look beyond the fields of digital animation and typography, to the holographic poetry of Eduardo Kac. Kac identifies, in his holopoetry, forms that escape "constancy of meaning" as they appear to transform between linguistic and pictorial poles. Kac's terminology may be applied in the examination of "fluid" forms in temporal typography, leading to an understanding of the ways in which transformative behaviours differ from simple motion or elasticity.

Keywords

Temporal typography, Kinetic typography, Fluid, Eduardo Kac, Typographic Animation, Legibility, Asemiosis

Introduction

In screen-based media, letters and other characters are displayed over time. The field of temporal typography incorporates artefacts across temporal media, and includes artefacts such as film credit sequences, television idents and typographic animation. Temporal typography is steadily becoming ubiquitous. As an expanding field, there is an ever-increasing variety of temporal typographic artefacts, exhibiting wide varieties of styles and behaviours. Simple temporal typography may present scrolling text, as in numerous credit sequences, or typographic arrangements with more complex movement, in which typographic layout is treated as dynamic. Increasingly, however, onscreen typography is exhibiting more complex behaviours. As digital animation software evolves, new actions and behaviours are introduced to this field of practice. Surveys of temporal typography identify categories of behaviour, ranging from "serial presentation", in which static typographic works appear in sequence (often separated by transitions, or overlaid on a live-action backdrop) to "kinetic" or "dynamic" typography, in which letterforms appear active (animated, moving and changing typography).

Within the field of temporal typography, there are artefacts which defy definition according to established terminology. Such artefacts exhibit forms that are only temporality typographic, and transform over time to adopt new identities, thereby escaping the fixity that we have come to expect

of most print or screen-based signs. In Dan Waber’s typographic animations, *Strings* (2005), words appear as single strings which unravel and reform into different words; in MPC’s Channel 4 idents (2004-2012) architectural objects align to present the figure ‘4’ (see Fig. 1); in BB/Saunders’ series of idents for Five, words are formed from groups of independently moving objects, including the word ‘free’ from balloons and ‘fear’ from ethereal floating dots; and in Harm van der Dorpel’s *Type Engine* (2005), abstract polygons rearrange to form a sequence of different letters. These and other examples are available online at www.fluidtype.org/typology.html. In all of these artefacts, the identity of forms appears to change over time. At one moment they may appear typographic, but at another they may appear pictorial or abstract. Each form adopts multiple identities over time. This kind of behaviour is distinct from “motion” (a change in location that does not affect the identity or shape of a sign), and from other forms of “kineticism” as identified by numerous theorists in the field of temporal typography. In existing studies of onscreen temporal typography, there is no adequate terminology to describe typography that transforms to the extent that it adopts new identities. These forms, which are a hybrid of typography and other paradigms, cannot be considered purely as descendants of static typography.



Figure 1. MPC, Tokyo, Channel 4 ident, 2006. Source: MPC, ‘Channel 4 Idents,’ *The Moving Picture Company*, 2006, July 17, 2011 <http://www.moving-picture.com/index.php?option=com_content&view=article&id=341&catid=38&Itemid=926>

Existing Assumptions about the Constancy of the Letterform

Numerous studies of temporal typography do not allow for the full extent of transformation that is exhibited in some temporal media. Perhaps the most extensive surveys of temporal typography are the collections of Woolman and Bellantoni, which are misleadingly entitled *Type in Motion* and *Moving Type*. Woolman and Bellantoni propose that “moving type” is an all-inclusive term which can be used to describe “typography that moves, transforms, mutates, duplicates, blurs [and] interacts” (*Moving Type* 7). Examples are classified according to the medium in which they are contained rather than the behaviour which they exhibit, and as a consequence, these collections do not sufficiently acknowledge the variety of behaviours that exist in temporal typography, nor provide a “concise explanation” of “moving type” (Hillner, *Text in (e)motion* 166). Woolman and Bellantoni’s terminology is particularly problematic because it equates temporality with motion. Their collections feature several examples of

typography which is not strictly “in motion” (rather, static and serially presented over time). The terms “motion” and “moving” suggest changes in location, and much of the typography that exists in temporal media either does not include any motion, or operates much more complex forms of kineticism.

Other theorists in the field have yet to agree on the definition and appropriate uses for key terminology. Often, different theorists apply the same terms to describe very different artefacts, with contradictory implications. The terms “temporal typography”, “kinetic typography” and “dynamic typography” have all been broadly used to describe onscreen verbal forms that move, alter or are replaced over time (Jun 13). Wong suggests that the term “temporal typography” refers to any text, whether it is “passive” or interactive, that changes “dynamically” over time. The term “dynamic” is also used by other theorists. Specht and Hillner both describe “dynamic typography”, but while Specht suggests that it is an all inclusive term which describes any moving type, Hillner proposes its use specifically in reference to interactive artefacts. Lee, Forlizzi and Hudson describe typography that has both “spatial and temporal” dimensions, defining such artefacts as “kinetic typography”. Hillner uses the term “kinetic” to describe type that moves or has moving parts, but his definition is too strict to allow for the “other temporal change” that is included in the Lee et al.’s definition. Hillner further offers the term “virtual typography” for use in defining “text elements” which “change their position in relation to one another” or that may be navigated through “virtually” (*Virtual Typography 2*). Although this definition is relatively clear and concise, there is considerable overlap between it and other authors’ definitions of “kinetic typography” (including Hostetler, and Lee, Forlizzi and Hudson). All of these inconsistencies further reinforce the need for agreed and precise definitions of temporal typography in its varying forms.

These inadequacies may exist because studies of temporal typography learn primarily from the history of static typography. Temporal typography is often presented as a direct descendent of static typography, just as the computer screen is often presented as the next step in progression from the printed page. In print, the letterform has a fixed identity, and texts which present temporal typography solely as an advancement in the field of typography, retain the outdated assumption that the letter has a fixed alphabetic identity. Wong and Hillner assert that temporal typography needs to be considered as significant in its own right, not simply as the offspring of static typography. They agree that ways of describing and addressing temporal typography should be distinct from those in the field of static typography. Jessica Helfand tells us that “our static definitions of typography appear increasingly imperilled” (49-50). Her text acts as a call for new methods of analysis, and new language with which to describe these “dynamic” artefacts. Mattias Hillner suggests that the terminology currently applied to “screen based” typography is outdated and inadequate. Wong acknowledges that typographic theory, despite having developed thorough methods of analysis and description for static type, has yet to develop models for the “characterization” of temporal typography. She recognizes that temporal typography introduces new “issues” (such as those arising as a consequence of navigation around three-dimensional characters) which did not exist in print, and which therefore require new methods of analysis and description. In static typography, “the development of theories and language for discussing spatial qualities of type have helped designers create, articulate and reflect on design solutions”. Yin Yin Wong proposes, however, that there is currently “a lack of conceptual devices and terminology” for the description and analysis of all forms of temporal typography (8). She suggests that a framework for description and analysis, equivalent to those used for static type, may prove equally as useful for designers and critics who operate within this emerging field as such a framework has done for typographers dealing with print media.

If the field of typography cannot provide an adequate foundation for understanding certain kinds of temporal typography, we must consider ideas from fields that have also, to a greater or lesser degree, informed the development of temporal typography. As proposed in this article, the primary problem arising from the history of typography is the assumption that the identity of a letterform remains constant. This assumption does not allow for the transformation of an object. It is also an assumption that does not exist in other screen-based practices. In film, subjects are frequently seen transforming from one thing to another. Indeed, texts collected in Vivian Sobchack's *Meta-Morphing: Visual Culture and the Culture of Quick Change* are devoted entirely to exploring the many different ways in which screen-based temporal media depict transformation, with examples ranging from digital morphs to cinematic transitions. There is an abundance of time-lapse sequences in natural history film and television that accelerate the natural metamorphoses found in nature. Also in film, computer morphing allows "an object... to reshape and transform itself gradually into another object in full view of the audience" (Wolf 83). Likewise, in animation, transformation is common practice. Animated forms are capable of a kind of fluidity referred to by Sergei Einstein as "plasmaticness", that allows freedom from a fixed form, and distortion to the point of acquiring new identities (Solomon 16). Since most temporal typography is screen-based, it is reasonable to suggest that these practices (and their related histories) have been as influential on temporal typography as the history and practice of static typography. Arguably, it is these recently-developed fields of practice that have the most direct impact on temporal typography, because they employ the same technology. There is evidence to suggest that typographic transformations are more technologically motivated than they are inspired by notions established in the development of static typography. Many recent examples of fluid typography are motivated by the presence of tools unique to digital media, or even created with the explicit aim of demonstrating new technologies (including Tomas Markevičius's *Liquefaction* (2010), an example of typographic metamorphosis, prompted by the introduction of *Realflow*, a software package for the simulation of flowing liquids). However, the use of typography in digital animation, film and television is often viewed as incidental. Discussion of typography seems to fall beyond the remit of theorists of screen-based temporal media, despite the frequent presence of typography or lettering alongside other kinds of footage. Even analyses of credit sequences, when presented in the field of television or film studies, avoid direct exploration of typographic elements (see, for example, Seiter, Laudisio, or Klein). It seems that temporal typography has been located squarely in the domain of typography commentators and historians, to the exclusion of ideas from other disciplines.

If histories of static typography are unable to offer adequate foundations for our understanding of transforming typography, and theories and commentators of screen-based media are reluctant to take responsibility for typographic forms, it is necessary to look outside of these two fields in an effort to develop an understanding of emerging forms of temporal typography. One field of practice that may contribute to this discourse is holography, in particular, the work of Eduardo Kac.

Eduardo Kac and the "Fluid" Sign

Two texts offer discussions which acknowledge that letterforms may change to the extent that they undergo a change in identity. Peter Cho, in discussing "malleable typography", acknowledges that type may be deformed to the extent that it loses legibility, and "becomes no longer recognisable as a letter". He observes that, in some cases, forms may even "change shape and become a different letter" (10). Similarly, Ikonen identifies "non-rigid objects" and "a 'dynamic grammar' in which...signs change their form." Ikonen further acknowledges the work of Eduardo Kac as being particularly relevant to the potential for signs to change over time, and identifies a distinct similarity between

Kac's holographic poems and the events seen in some onscreen, kinetic typography, such as the digital artefacts by Waber and Van Der Dorpel.

Although Kac's works are holographic - neither presented on screen nor paper - they bear a much closer resemblance to some onscreen transforming typography than the print or even screen-based typography that is more commonly cited as its precursor. Kac produced "holopoems" from 1983 onwards. These holopoems provide temporal experiences as viewers navigate around them in a gallery space. As they move, viewers experience what appear to be changes in the letterforms in the poem. Kac describes his works as containing "fluid signs", or signs that alter over time, "therefore escaping the constancy of meaning a printed sign would have". They are capable of "metamorphoses between a word and an abstract shape, or between a word and a scene or object". Fluid signs can present multiple meanings. A fluid form evolves over time to the extent that its meaning also changes. A fluid sign is "not either one thing or another"; its form is constantly in flux, as is its identity (Ikonen). A single form may be observed in one moment as having a verbal identity, and in another moment, once it has transformed, as presenting another identity. Though in typography we would normally expect form and identity to be inextricably linked, and fixed, here, an additional identity is introduced without the introduction of an additional form.

Fluidity is exemplified in Kac's *Souvenir D'Andromeda* (see Fig. 2). In this holopoem, as the viewer navigates around the hologram, a number of abstract polygonal objects appear to align to present the word 'LIMBO'. The relative position of the viewer causes those objects to appear to be arranged in different ways, and therefore by changing the relative locations of the viewer and objects (as when the viewer navigates around a holopoem) the objects can appear to align to construct a meaningful configuration. The word "limbo" aptly describes the state of uncertainty in which the letterforms exist, and the way in which their identities cannot be taken for granted. The depicted objects appear, at times, to be abstract, and at other times to be linguistic. Hence, their identity changes over time. It is this behaviour that Kac later describes as "fluid".



Figure 2. Eduardo Kac, *Souvenir D'Andromeda* 30x40cm, digital transmission hologram, 1990, Collection Acqaviva-Faustino, Paris. Kac's holographic forms appear to float within the real space between the viewer and the surface of the hologram. The letters of the word 'LIMBO' are composed of apparently three-dimensional objects which align to form letters when seen from the "viewing zone". Image courtesy: Julia Friedman and Eduardo Kac.

Remarkably similar behaviours are observable in onscreen artefacts. In BB/Saunder's *Fear* ident (Fig. 3), ethereal dots slowly drift through an empty corridor. The experience of holopoetry is replicated, or at least imitated, on screen, with the tracked motion of a camera as a substitute for viewer navigation through gallery space. As the camera tracks through the corridor, the arrangement of dots can be seen at an angle from which it momentarily appears to present the word 'fear'. The ethereal appearance of the dots is suggestive of a ghostly apparition, while the temporary and ephemeral nature of the text identity connotes an uncertainty and insecurity that is a feature of many horror films/programmes. These dots are not only unfamiliar, but unexpected in the corridor setting, making it simpler to perceive them as part of familiar linguistic forms, understood as a graphic overlay of a kind that is common to television idents.



Figure 3. BB/Saunders, *Fear*, ident for Five, 2006. Source: 'Five Fear Ident,' *YouTube*, 2007, July 18, 2011
 <<http://www.youtube.com/watch?v=s05nmKGT7yk>>

Issues of Legibility

There has been extensive discourse in the field of typography concentrating on legibility, punctuated in the 1920s by the prioritisation of legibility in *The New Typography* and Beatrice Warde's *Crystal Goblet*. The issue of legibility again became a popular topic of debate in the 1990s, following David Carson's questioning of the communicative value of legibility when compared to the other expressive possibilities of typography (Pipes 168). One may expect, therefore, discussions of any new typographic medium to inevitably turn to the question of legibility. Many texts that address the subject of temporal typography focus on themes that are the mainstays of studies of static typography, particularly legibility. Legibility in temporal typography has been explored by Engel, Ditterline and Yeung, and Heidi Specht. Engel, Ditterline and Yeung explore the effects on comprehension of a text when it is animated. Heidi Specht focuses on the legibility of dynamic typography, insisting that "dynamic" letters which undergo temporal change are "useless as word information if they cannot actually be read" (19). These studies appear to contradict the implications of other theorists (notably, Helfand, and Lee et al.), that one of the key benefits of temporal characteristics is that type may become more expressive, and that the concerns of a static typographer (such as legibility) should not necessarily be the main concerns of a temporal typographer.

When letterforms transform as they do in fluid typography, they necessarily cease to be legible. In becoming something other than a single letter, they must abandon any representation of that alphabetic sign. Indeed, the issue of specific letter recognition becomes less important than the wider issue of paradigm recognition; when a form has not simply been selected from a collection of 26 letters, but could be one of a number of signs from any number of paradigms.

It is noteworthy that Eduardo Kac's discussion of legibility is limited. On the few occasions when Kac references legibility directly, he does so to draw attention to the relationship between verbal and non-verbal poles of transformation. Transforming verbal signs undergo what Hillner describes as "phases

of legibility” (*Virtual Typography* 4). As fluid signs change, even though they do so between poles, there is not one single moment when an identity is recognisable, but a phase in which legibility varies. At the pole, the identity is at its clearest and most legible, but the identity may still be recognisable before and after this point, with varying legibility. Kac’s discussion focuses on the process of “becoming illegible”, rather than the state of legibility (*Holopoetry, Hypertext, Hyperpoetry* 60).

Through transformation, Kac’s holographic forms become what he describes as “nonsemantic in-between shapes”. These are intermediate glyphs that emerge as a letterform transforms into a pictorial form, or vice versa. These glyphs bear some resemblance to written or typographic signs, but cannot “be substituted by a verbal description” (*Key Concepts*). Kac argues for the significance of these glyphs. He suggests that, in fluid typography, we must also consider the intermediate stages of transformation as significant, proposing that they are “a new kind of verbal unit” that lies part-way “between a word and an abstract shape, or between a word and a scene or object”. His suggestion that they are a “new” kind of sign may be challenged by the identification elsewhere of signs which also bear resemblance to writing or type, yet that have no prescribed meaning. Such signs have been identified in static artefacts, and are described elsewhere, by Tim Gaze, as “asemic”. “Asemic writing” is defined by Gaze as a form or collection of forms “which appears to be writing”, while “having no worded meaning” (*Asemic Movement* 2 31). Asemic forms may bear the hallmarks of writing, either through their shape or organization, but have no specific verbal signification.

Gaze identifies a continuum that exists “between abstract image and legible writing”, or “between text and image” (*Semiosis* 13). This continuum illustrates the behaviours observable in holopoetry, and the process of becoming illegible that is also discussed by Matthias Hillner, who observes that, in his own works of “virtual typography”, there are “variable levels of legibility”. At one end of Gaze’s continuum lies “legible writing”, which sits beyond “asemic writing”, then “abstract images”, and finally “recognisable images” (*Semiosis* 13). If we apply this continuum to Kac’s *Souvenir D’Andromeda*, we can identify, at various stages in the transformation, “legible writing” (the word ‘LIMBO’), “asemic writing” (as the forms begin to break apart, but still appear to have some kind of significant formation), then “abstract” shapes. In onscreen fluidity, the full spectrum is present. MPC’s Channel 4 ident, for example, initially presents the component parts of the “legible” figure 4’ as “recognisable images” of architectural objects. Legibility is a concern in only a part of this continuum. So, as fluid forms transform from image to text, the question of whether text is legible becomes superseded by the question of whether forms are “text” at all. Hillner (*Virtual(ly) Typography*) suggests, therefore, that the issue of legibility is less important than the question of whether forms may be recognised as having any verbal signification, and in so doing implies, like Kac, that to discuss issues of legibility would be to oversimplify the events that occur in transforming verbal signs. Issues of legibility therefore become overshadowed by issues of temporality, and entwined with the relationship between word and image.

The moment at which the verbal identity of a fluid sign becomes legible may vary depending on a number of variables, including the viewer’s expectation, or his/her familiarity with the alphabet. It is reasonable to expect that a verbal identity may be more easily and quickly identified if previous experience has told a viewer to expect a linguistic sign to appear. Artefacts such as Waber’s *Strings*, prepare the viewer to expect linguistic signs because they present several in sequence. From the introduction of the first word, Waber’s animations establish the fact that the morphing forms are linguistic (despite varying in specific meaning and form), thereby preparing the viewer to seek out the next word in the sequence.

Asemisis itself performs a function in these “phases of legibility”, contributing to preparing the viewer to seek out language. In fluid forms which resemble verbal signs, even when their identity cannot be precisely identified, the audience may make use of visual signifiers of paradigm. The suggestion that these forms are some sort of language, though unidentifiable, helps to encourage the viewer to approach the artefact with the expectation of reading. Once they have prepared themselves to take the role of reader rather than viewer, they may more quickly identify the linguistic identity when it begins to emerge, in effect, increasing legibility. The appearance of, for example, ascenders and descenders during a metamorphosis can prepare the viewer to accept the forthcoming identity as verbal rather than pictorial. In Harm van der Dorpel’s *Type Engine*, and *I Wouldn’t Normally Do This Kind of Thing* (2005) the regular spacing and consistent baseline of abstract forms helps to suggest to the viewer that these forms will have linguistic meaning once fully formed (Fig. 4).



Figure 4. This still from Harm van der Dorpel’s *I Wouldn’t Normally Do This Kind of Thing* (2005), captures a moment when the component parts that are used to construct letterforms are in the process of realignment. These forms exhibit many of the telltale features of letters, hinting at their potential for verbal signification. However, this particular moment, they have no precise verbal meaning. Source: Harm van der Dorpel, ‘I Wouldn’t Normally Do This Kind of Thing,’ *Harmlog*, 2005, January 15, 2007
<http://www.harmlog.nl/harm/harmlog/main.asp?id=77&action=prev&sort=1>

Gaze’s continuum, and examples of asemic writing, seem to assert difference from image without moving entirely into verbal paradigms. By being, according to Gaze’s continuum, neither figurative nor abstract, and yet having no identifiable linguistic/verbal meaning, this writing asserts its otherness. As a result of its resemblance to writing, the audience may seek connections to language, but will find none. This appears to be at odds with the aim of fluidity, which asserts similarity between paradigms. It seeks to make connections, not to break them. By transforming into many identifiable signs (often from several paradigms), fluid forms make overt the process of making meaning.

Moving Beyond Holopoetry and the Term “Fluidity”

Kac’s use of the term “fluid” grants access to an appreciation of transforming typography as distinctly different from letterforms that simply move. His holopoetry provides examples of how fluidity can occur, and parallels can be clearly drawn in onscreen temporal typography. However, examples of fluidity in onscreen temporal typography vary so significantly that it would be remiss to classify them all in the same, sweeping terms. The forms in examples explored here differ in the ways that they adopt new identities.

Transformation “between a word and an abstract shape, or between a word and a scene or object” (Kac, *Recent Experiments* 45), can be the product of different kinds of behaviours. In Kac’s *Souvenir D’Andromeda* it occurs as forms break into component parts and re-align. Polygonal shapes appear to align to form the word ‘LIMBO’ when the viewer moves into a privileged position, or “viewing zone” (*Key Concepts*). Another of Kac’s poems, *Astray in Deimos*, presents behaviour that Kac himself

describes as “typographic metamorphosis”. In this holopoem, a collection of wireframe letters spell the words ‘EERIE’ and ‘MIST’ at the two poles of a transformation. At privileged locations (Kac’s “viewing zones”) the viewer may be presented with either word, and then, moving towards another vantage point, will observe the letters of that word undergo a “topological transformation”. Four of the letters in the word ‘EERIE’ each metamorphose so that they become the letters of ‘MIST’, while the additional letter vanishes. A third kind of transformation can be observed in *Multiple* (1989). In this holopoem, three-dimensional numbers can be observed from one viewing zone. As the viewer moves, she initially expects to be able to experience the illusion of walking around these numbers to view them in reverse. However, as the numbers pivot in response to the viewer’s movement, the reverse view of these numbers is revealed to be a series of letters, spelling the word ‘POEM’. It appears, therefore, that the numbers have transformed into a word as the viewer navigates around them. It is revealed that the front face of the first figure reads ‘9’, while its back face reads ‘P’, and so on. This exploits the similarity of the letters in POEM to the reversed shape of the numbers ‘9’, ‘0’, and ‘3’. ‘3’, for example, when reversed, closely resembles as ‘E’. The final digit, another ‘3’, is presented at an angle so that it may easily be read as ‘m’, when anchored by the presence of other alphabetic, rather than numeric, characters.

These three alternative behaviours can all be identified in onscreen temporal typography. In MPC’s Channel 4 idents, the figure ‘4’ is constructed from parts, just as the word ‘LIMBO’ is constructed in Kac’s *Souvenir D’Andromeda*. The figure ‘4’ is modular, constructed from component polygons which re-align to form alternative configurations. Before they align into the ‘4’ configuration, these polygons are recognisable non-typographic objects, most commonly architectural objects which appear to be part of the live-action backdrop. In Dan Waber’s *Stings* and Kominos Zervos’ *Beer*, forms with flexible contours distort so that they are reshaped, much like the “metamorphosis” that Kac identifies in *Astray in Deimos (Key Concepts)*. The third main category of fluidity does not allow the audience to directly observe the creation of identities. Instead, it involves the revelation that those identities already exist but have been initially hidden from view. Vincent Viriot’s *Evil/Love/Hate* (2008, Fig. 5) presents a three-dimensional virtual model which contains three different verbal identities. As the film progresses, the camera navigates around the model to sequentially reveal the words ‘hate’, ‘evil’, and ‘love’. Each object, being three-dimensional, has several surfaces. Some of these surfaces are illuminated with an apparently blue light, others with a pink light, and others are left unlit. As the camera swings in a loop around the arrangement of objects, each of the four structures presents, in turn, one of the four letters of each word. In this example, the viewer’s initial assumptions are challenged as additional information is revealed in the same way as it is in Kac’s *Multiple*. These three categories of fluidity, which can be termed construction, metamorphosis and revelation respectively, all exhibit the defining characteristics of fluidity.

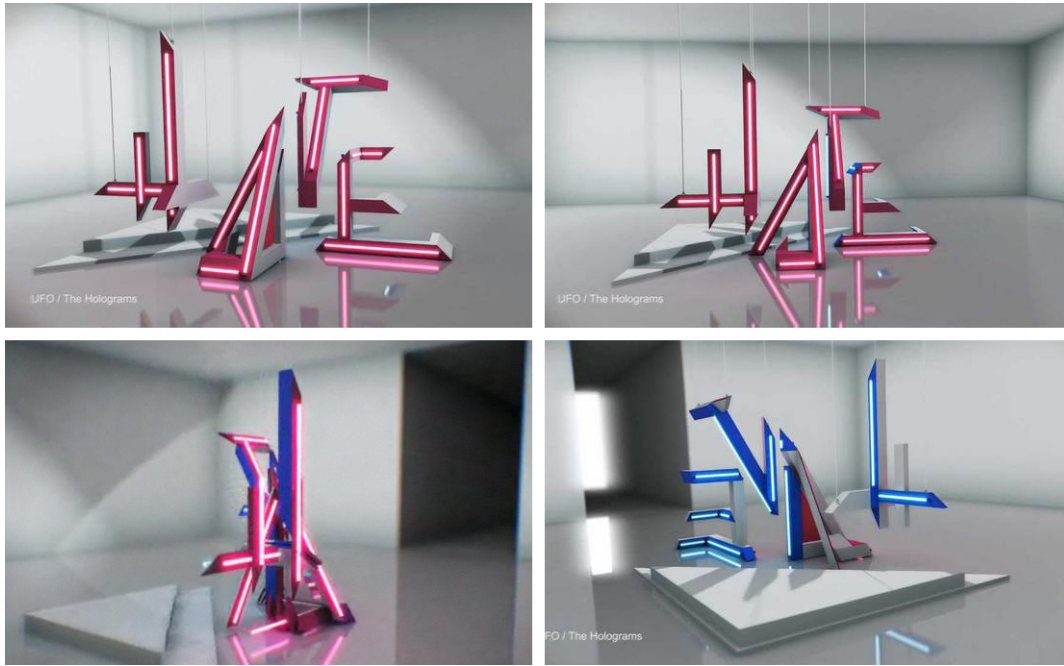


Figure 5. Vincent Viriot, *Evil/Love/Hate*, 2008. Source: Vincent Viriot, ‘Evil/Love/Hate,’ *Behance*, 2008, August 4, 2012 <http://www.behance.net/fmk_7/Frame/145974>

In identifying these specific categories of fluidity, it is possible to also identify specific influences from other fields, as well as specific convergences of different fields of practice. In two of these categories, construction and metamorphosis, it is possible to reinforce connections to static typography that have not previously been acknowledged in studies of temporal typography as they do not appear to emulate or anticipate motion. Processes of construction, in which a letterform is built from component parts, are made possible by the notion that a letter may be “modular” (Rosenberger and MacNiel 252-23). In Gestalt terms, each letter is not a single form, but a “complex” made from several separate parts (described by Rosenberger and MacNiel as “primitives”). Modular lettering was established in the static environment of print, and became particularly prominent in modernist typographic practice, including Josef Albers’ typeface *Stencil* (1925), Theo van Doesburg’s typeface for *De Stijl* magazine (1917), and Bart van der Leek’s lettering for works including *Het Vlas* (1941). Likewise, the notion of a letterform as elastic, and capable of distortion, as required for fluid metamorphosis, has foundations in the development of typefaces for print. The use of a grid in the creation of *Romain du Roi* in 1695 introduced the concept of a typeface that may be manipulated to produce alternative states of the same form. The fact that these historical influences are unacknowledged in histories of temporal typography suggests that the problem of definition may not be due to over-reliance on the history of static typography, but over-selectiveness on the part of typographic historians. Once we look more closely at the behaviours exhibited in temporal typography, particularly fluid typography, it is possible to appreciate the value of historical developments have not previously been acknowledged in this context.

Conclusions: Expanding Our Understanding of Temporal Typography

Temporal typography is too readily assumed to be limited to text that moves, is serially presented, or undergoes limited change. Most studies of temporal typography do not allow for forms that are only

temporarily typographic, adopting new identities as they transform over time. This omission is likely a result of the assumption that a letter has a single, fixed identity: an outdated remnant of studies of typography in print. In order to appreciate the potential for forms to present multiple identities over time – some alphabetic, and some abstract or pictorial – we may look beyond studies of static or screen-based typography to the holography of Eduardo Kac, and his proposed term “fluid”. We may further expand upon Kac’s terminology by identifying specific categories of fluidity: *construction*, *metamorphosis* and *revelation*. Moving beyond traditions and studies of static typography, common themes become less relevant or more complex. The issue of legibility, in particular, may not be addressed according to traditional means, as the issue of character recognition becomes less important than paradigm recognition. It is therefore vital to reconsider established practices in the definition and analysis of typography when faced with new, temporal media. Most importantly, we must abandon our expectations about the “constancy” of the letterform.

References

- Cho, Peter. “Pliant Type: Development and temporal manipulation of expressive, malleable typography.” BSc diss., MIT, 1997. July 13, 2011 <<http://hdl.handle.net/1721.1/10553>>
- Engel, Blake, Ditterline, Patrick, and Yeung, Brian. “The Effects of Kinetic Typography on Readability.” diss., Carnegie Mellon University, 2000. July 19, 2011 <<http://a.parsons.edu/~garyj320/05f/kinetictypography.pdf>>
- Gaze, Tim. *Asemic Movement 1* (January 2008). July 13, 2011. <<http://vugg.wippiespace.com/vugg/gaze/aseMICmovement1.pdf>>
- Gaze, Tim. “The Word “Asemic”.” *Asemic Movement 2* (February 2008): 31. July 19, 2011 <<http://vugg.wippiespace.com/vugg/gaze/aseMICmovement2.pdf>>
- Gaze, Tim. “Semiosis, by John Keane and Christopher Stackhouse.” Review of *Semiosis*, by Keane, John, and Stackhouse, Christopher. *Asemic Movement 1* (January 2008): 12-13. July 13, 2011 <<http://vugg.wippiespace.com/vugg/gaze/aseMICmovement1.pdf>>
- Helfand, Jessica. “Electronic Typography: The New Visual Language.” *Looking Closer 2: Critical Writings on Graphic Design*. Ed. Michael Beirut, et al. New York: Allworth Press, 1997. 49-53. Originally published in *Print*, May/June 1994.
- Hillner, Matthias, “Text in (e)motion”, *Visual Communication* 4.2 (2005): 165-171. July 13, 2011 <<http://vcj.sagepub.com/content/4/2/165>>
- Hillner, Matthias.”Virtual Typography: Time Perception in Relation to Digital Communication.” *Leonardo Electronic Almanac* 14.5-6 (2006). July 13, 2011 <http://leoalmanac.org/journal/vol_14/lea_v14_n05-06/mhillner.html>
- Hillner, Matthias. “Virtual(ly) Typography – Towards a Notion of Poetics.” *Icograda*. 2009. July 13, 2011 < <http://www.icograda.org/feature/current/articles291.htm>> Originally published in *Leonardo Electronic Almanac* 19. 5 (2009).
- Hostetler, Soo C. “Integrating Typography and Motion in Visual Communication.” Paper presented at the 2006 iDMAa and IMS conference, Miami, USA, April 6-8, 2006. July 13, 2011 <<http://www.units.muohio.edu/codeconference/papers/papers/Soo%20Hostetler-2006%20iDMAa%20Full%20Paper.pdf>>

Ikonen, Teemu. "Moving Text in Avant-Garde Poetry: Towards a Poetics of Textual Motion." *Dichtung-digital.de* 4.30 (2003). July 16, 2011 <<http://www.brown.edu/Research/dichtung-digital/2003/issue/4/ikonen/index.htm> >

Jun, Soojin. "The New Typography Today: Issues in Kinetic Typography from the Perspective of Jan Tschichold." MA diss., Carnegie Mellon University, 2000. July 13, 2011 <http://www.contrib.andrew.cmu.edu/~soojin/documents/Jun_2000_new_typography_today.pdf>

Kac, Eduardo. "Holopoetry, Hypertext, Hyperpoetry." *Holopoetry: Essays, manifestos, critical and theoretical writings*. Lexington: New Media Editions, 1995. 54-67. July 19, 2011 <<http://www.ekac.org/holopoetrybook.pdf>> Originally published *Holographic Imaging and Materials. Proc. SPIE* 2043 (1993): 72-81

Kac, Eduardo. "Key Concepts of Holopoetry." *Electronic Book Review* (January 3, 1997). July 16, 2011 <<http://www.electronicbookreview.com/thread/electropoetics/uncontrollable>> Originally published in *Experimental-Visual-Concrete: Avant-Garde Poetry Since the 1960s*. Ed. David Jackson, Eric Vos, and Johanna Drucker. Amsterdam—Atlanta: Rodopi, 1996. 247-257.

Klein, Amanda Ann. 'The Horse Doesn't Get a Credit: The Foregrounding of Generic Syntax in Deadwood's Opening Credits.' *Reading Deadwood*. Ed. David Lavery. London: I.B. Taurus, 2006. 93-100.

Laudisio, John. 'Media Analysis: The Sopranos' Title Sequence.' A Collection of Essay, Papers, and Ideas, 2010. April 25, 2012 <<http://johnlaudisio.wordpress.com/2012/06/22/medi-analysis-the-sopranos/>>

Lee, Johnny C., Jodi Forlizzi, and Scott E. Hudson. "The Kinetic Typography Engine: An Extensible System for Animating Expressive Text." *Proceedings of the 15th annual ACM Symposium on User Interface Software and Technology* (2002): 81-90. July 19, 2011. <http://johnnylee.net/kt/dist/files/Kinetic_Typography.pdf>

Pipes, Alan. *Production for Graphic Designers*. 4th edition. London: Laurence King, 2005.

Rosenberger, Tara, and Ronald L MacNiel. "Prosodic Font: Translating Speech into Graphics" *CHI 99 Conference Proceedings* (1999). July 13, 2011 <<http://alumni.media.mit.edu/~tara/CHI1999.pdf> >

Seiter, Ellen. 'Semiotics and Television.' *Channels of Discourse: Television and Contemporary Criticism*. Ed. Robert Clyde Allen. London: Methuen, 1987. 17-41.

Sobchack, Vivian, ed. *Meta-Morphing: Visual Culture and the Culture of Quick Change*. Minneapolis: University of Minnesota Press, 2000

Solomon, Matthew, "Twenty-Five Heads under One Hat: Quick Change in the 1890s." *Meta-Morphing: Visual Culture and the Culture of Quick Change*. Ed. Vivian Sobchack. Minneapolis: University of Minnesota Press, 2000. 3-20.

Specht, Heidi. "Legibility: How Precedents Established in Print Impact On-Screen and Dynamic Typography." MFA diss., West Virginia University, 2000. July 13, 2011 <<https://eidr.wvu.edu/eidr/documentdata.eIDR?documentid=1426>>

Tschichold, Jan. *The New Typography*. Translated by Ruari McLean. LA: University of California Press, 1998. Originally published as *Die Neue Typographie: Ein Handbuch für Zeitgemäss Schaffende*, Berlin: Brinkmann & Bose, 1928.

Warde, Beatrice. "The Crystal Goblet or Printing Should Be Invisible." An address before the British Typographers' Guild at St. Bride's Institute, London, 1930. July 13, 2011.

<http://glia.ca/conu/digitalPoetics/prehistoric-blog/wp-content/uploads/ward.pdf>> Reproduced from *The Crystal Goblet: Sixteen Essays on Typography*. Cleveland, 1956, 11-17.

Wolf, Mark J. P. ‘A Brief History of Morphing.’ *Meta-Morphing: Visual Culture and the Culture of Quick Change*. Ed. Vivian Sobchack. Minneapolis: University of Minnesota Press, 2000. 83-101.

Wong, Yin Yin. “Temporal typography: characterization of time-varying typographic form.” MS Thesis, MIT, 1995. July 19, 2011 <<http://hdl.handle.net/1721.1/29102>>

Woolman, Matt, and Jeff Bellantoni. *Type in Motion: Innovations in Digital Graphics*. London: Thames & Hudson, 1999.

Woolman, Matt and Jeff Bellantoni. *Moving Type*. Hove: Rotovision, 2000.

Woolman, Matt. *Type in Motion 2*. London: Thames & Hudson, 2005.

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