Kinetic Typography Generator

Aim: Main goal of this project is to create an interactive environment that you can build up your own typographic video. User will be given a canvas that is seperated into boxes, typeface choices and ornaments that suits that typeface.

Research:

Kinetic typography: The technical name for "moving text" is an animation technique mixing motion and text to express ideas using video animation. This text is presented over time in a manner intended to convey or evoke a particular idea or emotion. With the advent of film and graphic animation, the possibility of matching text and motion emerged. Examples of animated letterforms appeared as early as 1899 in the advertising work of George Melies. Early feature films contained temporal typography, but this was largely static text, presented sequentially and subjected to cinematic transitions. It was not until the 1960s when opening titles began to feature typography that was truly kinetic. Scholars recognize the first feature film to extensively use kinetic typography as Alfred Hitchcock's North by Northwest (1959). This film's opening title sequencecreated by Saul Basscontained animated text, featuring credits that "flew" in from off-screen, and finally faded out into the film itself. A similar technique was also employed by Bass in Psycho (1960).

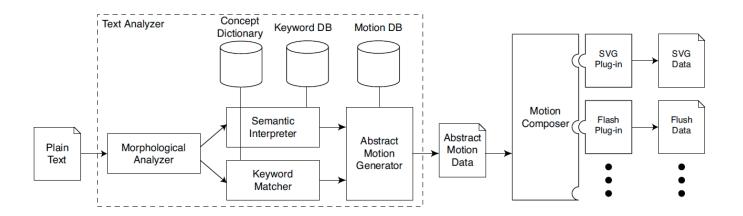
Since then, the use of kinetic typography has become commonplace in film introductory titles and television advertisements. More recently, it has been a central feature of numerous television idents, notably Martin Lambie Nairn's first ident for the British Channel 4 television network in use from 1982.

Y.Y. Wong has proposed that it is important to distinguish between the properties of form (e.g. colour and font) and of behaviour (e.g. qualities of movement) in temporal typography. It is necessary to make this distinction in order to classify kinetic typography in ways that acknolwedge their difference to static type (which may share proerties of form, but not kinetic behaviours). Kinetic typography is therefore categorised according to behaviours or action, rather than appearance. In classification, kinetic typography is a form of temporal typography (typography that is presented over time). It is distinct from other forms of temporal typography including 'serial presentation', which involves the sequential presentation of still typographic compositions. Barbara Brownie's model of temporal typography divides kinetic typography into 'motion typography' (subdivided into 'scrolling typography', 'dynamic layout') and 'fluid typography'. In dynamic layout, text elements move in relation to one another. Letters and words may move away from one another on a 2D plane, or in three-dimensional space. Likewise, scrolling typography can scroll across the flat screen, or can appear to recede or advance. In fluid typography, letterforms change and evolve without necessarily changing location.

Authoring kinetic typography: Animated text, commonly called kinetic typography, is any attractive visual expression used in films, TV programs, video games, etc. Previous studies have developed tools that support the authoring and rendering of kinetic typography. However, authoring kinetic typography is not easy because its methodology is still at an early stage. Hence, if we systematize expression elements in kinetic typography and propose an automatic composer that converts raw text into kinetic typography data.

Automatic generation of kinetic typography is a solution to this problem. Fully automatic generation tools, which convert inputted raw text into kinetic typography without interaction with the user, have benefits. One benefit is that the user only needs to write text. Just seeing written text in motion is an enjoyable experience, even if the motion is not superb. Another benefit is that the automatic generation tools are useful for visualizing information in attractive forms. As Ishizaki illustrated information visualization using dynamic designs of animated text showing that automatic generation of kinetic typography can be the basis of entertaining information presentation.

Architecture (how Mitsuru Minakuchi did it): We have designed a customizable architecture of the automatic composer that is composed of three major divisions: a text analyzer, an abstract motion generator, and a motion composer. The text analyzer analyzes plain text written in natural language and extracts its meaning and structure. It can use many techniques, such as keyword matching, semantic analyses like concept finding and ontology, structure analysis by heuristic rules, etc. The abstract motion generator receives the results of the text analyzer and generates abstract motion data, which is intermediate data of the engine, by marking up input data with abstract motions. The motion composer makes final output data in graphical format from the abstract motion data. We have adopted plug-in architecture to make use of many formats that are available to represent kinetic typography: Macromedia Flash, SVG, movie formats like MPEG, and so on.



Visual Research:





