OBJECT NUMBER: 461.2006.1-2

ARTIST: John Maeda (American, b. 1966)

TITLE: Flying Letters

DATE: 1996

ACCESSION NUMBER: not on MoMA record

DEPARTMENT: Architecture & Design

MEDIUM (or COMPUTER TECHNOLOGY): Current version at MoMA is an interactive installation that uses an iMac (OS X platform), LCD monitor, and Cirque Glidepoint trackpad. Previous iterations of this installation have used a mouse in place of the trackpad; according to the artist’s wishes, the trackpad (or a comparable touch-sensitive pointing device) is now preferable.

The piece was programmed in C, using a basic C compiler.

DESCRIPTION:

Significance

John Maeda is a computer programmer and visual artist whose body of work synthesizes the two fields. In 1996 he joined the staff of the Massachusetts Institute of Technology as Associate Director of Research. In 2006, he published the book The Laws of Simplicity, a guide to simplifying one’s life in an increasingly complex digital landscape, which has since been translated into thirteen different languages. Since June 2008, Maeda has served as the president of the Rhode Island School of Design in Providence, RI, where he continues to unite the two worlds of graphic design and visual art.

Flying Letters is the second in a series of works Maeda released between 1995 and 1999 called Reactive Books. The five pieces also include The Reactive Square (1995), 12 O’clocks (1997), Tap, Type, Write (1998) and Mirror Mirror (1999). All of the pieces except Mirror Mirror were released and distributed commercially by Digitalogue, a CD-ROM publishing company; Digitalogue folded before Mirror Mirror could be released. All five pieces are interactive computer-based works that explore the various interactive processes between human agents and digital media. Flying Letters in particular was borne from Maeda’s fascination with typography and was conceived as a compilation of text-based pieces that can be manipulated through the use of a mouse. Flying Letters is the work with which Maeda is perhaps most closely associated; he abashedly has referred to himself as “that guy who makes the flying letters.”1 This suggests that the work is an important one in Maeda’s development as an internationally recognized visual artist and

graphic designer. The work has been featured in at least two prior exhibitions, one at MoMA in 2007 and one in “John Maeda: Post Digital” at Intercommunication Center in Tokyo, Japan.

Installation Environment, Technology, Interactivity

In its current incarnation at MoMA, which was installed in 2009, a user interacts with the piece by touching the trackpad situated underneath the computer monitor and selecting one of ten chapter options, numbered 0-9, located at the upper right hand side of the display screen by tapping. The ten chapters each correspond to a different screen where the user’s motions on the trackpad affect the visual display on the screen.

The ten chapters are described below with an accompanying photographic depiction. Each picture was taken on an Apple iPhone 3G. It should be noted that still photography, particularly from a cameraphone, is largely unsuitable as photo documentation of a piece such as Flying Letters, where motion is integral to the piece’s nature:
0: The cursor appears on the screen as the letters A to Z, cycling rapidly through the alphabet. As the user moves his finger on the trackpad, the letters move on the screen as well. A “trail” of letters becomes visible if the cursor is rapidly moved from one side of the screen to the opposite side. The letters are white and appear on a black background.

Fig 1. Flying Letters, option 0. From MoMA installation, March 2010.
I: The words “close to you.” appear on the screen. When the cursor moves over the letters, they begin to vibrate. The strength of the “vibration” increases or decreases depending on how close the cursor is to the letter. Up to three adjacent letters may also vibrate along with whichever letter the cursor is placed. The adjacent letters’ “vibrations” are less powerful than those of the selected letter. The font is black on a white background. (NB: The vertical white bars depicted in the photograph below are a result of the photographic apparatus’ insufficiencies. They are not present in the actual piece, nor should they be.)
Fig. 2: *Flying Letters*, option 1. From MoMA installation, March 2010.

2: The words HORIZONTAL and VERTICAL appear on the screen, forming a cross with each word corresponding to its referent axis (i.e. HORIZONTAL reads left to right, VERTICAL reads top to bottom). As the cursor moves, the letters of each word move with it. The cursor represents the center point where the two words cross. This center point changes as the cursor moves, so that depending on where the cursor is, the section where the two words meet changes as well.
3: When this option is pressed, a white screen is presented. Immediately, the word “black”, in black font, appears numerous times, filling up the screen rapidly until the entire screen eventually turns black. When the cursor is moved, the word “white”, in white font, appears wherever the cursor moves, thus “erasing” the effect of the black words filling up the screen.
4: The words “Flying Letters” appear on the screen in as white text on a black background. As the cursor moves, the letters of the words trail along with it, moving as rapidly as the cursor does in a chain-like formation.

Fig. 5: *Flying Letters*, option 4. From MoMA installation, March 2010.
5: The letters X, Y, and Z appear on the screen, in correspondence with their respective axes in a three-dimensional Cartesian coordinate system. As the cursor moves over the letter formation, the letters appear to rotate in three-dimensional space. The letters are white on a black background; the letters that are in the “foreground” of the three-dimensional plane appear to be brighter than the letters that are in the “distance”.

Fig. 6: *Flying Letters*, option 5. From MoMA installation, March 2010.
6: The word “water” appears as black font on a white background in fourteen columns on the bottom of the screen. As the cursor moves over the letters, the columns of “water” respond as though a disturbance is causing a body of water to ebb and flow. The columns change in height depending on how “violent” the disturbance of the cursor moving over the words is, thus simulating the appearance of rocking waves.

Fig. 7: Flying Letters, option 6. From MoMA installation, March 2010.
7: A series of twelve squares of different widths appears in the middle of the screen against a black background. As the cursor moves over each square, a different letter in the word “ILLUMINATION” appears as black text within a white background in each square. As soon as the cursor leaves the square, the inside of each square becomes black again.

Fig. 8: *Flying Letters*, option 7. From MoMA installation, March 2010.
8: Similar to Option 0, the cursor in Option 8 is represented by a rapidly shifting stream of letters. In this case, the stream of letters spells out the words “to the heavens”. As the cursor moves up and down, the screen appears to move as well.

Fig. 9: *Flying Letters*, option 8. From MoMA installation, March 2010.
9: Option 9 works on the same principle as Option 4, with the colors reversed. The words “Flying Letters” appear as black text on a white background. Otherwise, it functions exactly the same as 4. (cf. the note accompanying Option 1 regarding the presence of white bars in the photograph.)

Fig. 10: *Flying Letters*, option 9. From MoMA installation, March 2010.
COMPONENTS:

The current setup for Flying Letters at MoMA consists of an iMac computer with the Flying Letters program installed, a second flat-screen LCD monitor stationed below the iMAC, and below that the Clique Glidepoint trackpad mounted on the wall. A plastic bracket situated around the trackpad serves as both its mounting device and as a way to obscure the left- and right-click buttons located on the bottom of the trackpad, which do not serve a purpose in the piece.

ARTIST INTENTION:

During the artist interview, Maeda expressed few strong feelings either way on the ideal installation condition of Flying Letters or any of the other Reactive Books. Among other things, he claimed to not care whether or not the cables for the computers were visible in the installation or not. For Flying Letters, Maeda did intimate that he much prefers the trackpad technology over that of the mouse.

As regards future modifications, Maeda did not suggest that the code can or should be altered in any significant way for future installations. The rather simplistic presentation of Flying Letters – e.g. the use of only black and white colors to ensure that the piece functions quickly – serves Maeda’s original intent for the piece (as well as his general ethos of simplicity in technology) but overall the conceptual essence of the work is paramount to other, more practical considerations.

TECHNOLOGY (or COMPUTER ENVIRONMENT):

Flying Letters requires, in its current incarnation:

- Hardware: A PowerPC Macintosh
- Operating system: Mac OS 9
- Software: Flying Letters program application
- Dependencies: Mouse input, preferably a trackpad (the one currently used by MoMA is a Cirque Glidepoint)
- Programming language: C
- Compiler: unknown

CONDITION ASSESSMENT:

At present, the work is fully operational. Judging from the video demonstration on Maeda’s personal website, the operating speed of this incarnation of Flying Letters is comparable to that of its original presentation.

RISK ASSESSMENT:

Flying Letters, like all of the Reactive Books, is dependent upon the Mac operating system. While Maeda does not seem to be overly concerned with the specific type of
equipment used in the piece, trackpad technology may change significantly or no longer be available in the future, which could alter the work significantly.

**RECOMMENDATIONS:**

Maeda’s own recommendation for the preservation of the piece is that a video documentation should be sufficient. It is recommended that this action be undertaken, particularly because a mere written description of the ten different chapters in this work insufficiently conveys the particular effects of each piece (as the possibly foggy description of each chapter above suggests). Video documentation in and of itself, however, likewise insufficiently conveys the interactive experience of *Flying Letters*, providing merely a document of the piece’s existence.

For a longer-term preservation strategy, it is recommended that the compiled source code for *Flying Letters* be acquired from Maeda; when the OS 9 platform becomes obsolete, the code can be recompiled. MoMA should also hold onto both the original CD-ROM and book of *Flying Letters* as they represent the original incarnation of *Flying Letters*. As the work straddles the line between art object and design object, *Flying Letters*, like all the Reactive Books, is perched precariously between two potential fates. The Museum must decide if the piece can and should continue to be exhibited with the interactivity kept intact or if there will be a future scenario when a documentation of the piece will suffice in the absence of any playback method. However, as Maeda’s code should not be terribly difficult to recompile for programmers, preserving the original essence of *Flying Letters*, with interactivity intact, seems the best approach for keeping in line with Maeda’s intentions for the piece.

**BIBLIOGRAPHY/INTERNAL RESOURCES:**


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