33 QUESTIONS PER MINUTE
PROJECTION VERSION

BY RAFAEL LOZANO-HEMMER

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GENERAL IMPORTANT INFORMATION

This short section must be read for proper operation

33 QUESTIONS PER MINUTE (2001)
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This manual is referring to software versions 2.00 and over of the projection version of 33 Questions Per Minute. For earlier projection version or the display version, please refer to the other manual.

Technique

Computer, custom-software, projector.

Description

33 Questions Per Minute consists of a computer program which uses grammatical rules to combine words from a dictionary and generate 4.7 trillion unique, fortuitous questions. The automated questions are presented at a rate of 33 per minute - the threshold of legibility - onto any projected surface or monitor. The system will take over 270,000 years to ask all possible questions.

This piece is loosely based on the long tradition of automatic poetry. It is full of anti-content. It attempts to underline our incapability to respond, faced with an electronic landscape made up of demands for attention. The piece provides useless and slightly frustrating machine irony. Tireless grammatical algorithms perform a romantic and futile attempt to pose questions that have never been asked.

The effect of the installation is destabilizing due to its speed. The rhythm of questions excludes any rational answer. 33 questions a minute is the threshold of legibility : there is no time for reflection.

The majority of the automatic questions are absurd: Will you bleed in an orderly fashion? Is the creator always being born? Do I snip the marriage bed without rhyme or reason? But this surreal wordplay sometimes turns up questions that do have meaning within the context in which they are exhibited: Who bribes the artist? Why did computers become so self-congratulatory.

Operation

** Please refer to "Appendix I - Installation" on page 16 for detailed system information and wiring diagram. **

1. Connect the computer and the projector (or monitor) to electrical power. Use the supplied power cables. Connect the computer and the projector thru the supplied video data cable (HDMI, VGA, DVI, etc.).

2. To turn the piece ON, press the power button of the computer for a second then release it. *Important note: Please do not push the button again as this will shut down the piece. Wait at least 2 minutes before pressing it again as the computer might take that long to boot.* After 2 minutes (maybe faster), you should see the piece.

3. To turn the piece OFF, press the computer's power button all the way down for half a second. The computer should initiate a shut down process that could take up to 30 seconds.

4. If the piece doesn't start within 2 minutes, try to turn on the piece again. If it still doesn't turn on, then hold the power button all the way down for 10 seconds. Then, wait at least 3 seconds and press the power button all the way down for 1 second and you should be up and running again.

Maintenance

If presented within a monitor, please do not clean the monitor surface with Windex or soap. Use a lint-free cloth and LCD screen liquid cleaner, such as Kensington Screen Guardian found in computer stores.

We recommend cleaning the piece at least every 2 months.

Placement Instructions

In projection version, the projector can be set almost anywhere we want, as within the software we can select where we want the text to be displayed. However, we do recommend selecting a proper optic and projector setup and the right throwing distance between wall and projector in order to optimize the brightness of the artwork.

In the case where the piece is displayed within a monitor, we do recommend to have the monitor vertically centered at 150 centimeters (59 inches) away from the floor.

DETAILED TECHNICAL INFORMATION

Software

The software will automatically cycle thru randomly generated questions once started. The different settings will allow to modify the way the artwork reacts: speed, size, color, language, etc.

Accessing the piece's menu

When the piece is up and running, press on any key of the keyboard (except "Escape" or the "Windows key"): the menu will pop-up. The "Escape" key will quit the software.

If you modify settings, once you have something you like, hide the menu in order to save your new settings: if you quit software while changing settings in the menu without hiding menu first, the modifications will be lost.

Explanation of all different settings

Parameter	Description
Questions per minute	This setting will allow you to change the speed for generating new questions. This should obviously be set to 33.
Data_export	This allow to export generated questions into a text file. This feature is there for debug process.
Export speed	Number of questions to generate per second for the export process, the fastest is the best. Once exported, ensure to set back the "Questions per minute" setting back to 33.
Amount of exported questions	As name says, this will be the amount of questions generated in the export file.
Font	This allow to select any font available from the computer OS. **If you change to a new font, hiding the menu, quitting software and restarting software would be required to have proper display of the font. Software's icon should be in desktop.**
Font size	This allow to font size of the selected font. **If you change to a new font, hiding the menu, quitting software and restarting software would be required to have proper display of the font. Software's icon should be in desktop.**
Background color	This setting allow you to select the background color. You have 5 bars, 3 representing the RGB channels, one representing the Alpha channel, one displaying the actual color generated. As per RGB: 0 will give you black while 255 will give you the pure color (if all channels are set to 255, you will get white). As per Alpha channel, this sets the transparency of the color. We usually have the background color set to be black (0-0-0-255).
Font color	This setting allow you to select the color of the questions. Same functionality as explained previously in background color. We usually have the font color set to be white (255-255-255-255).
Language button (English, Spanish, French, German)	Each of these button will enable or disable the presence of these languages in the generated questions. Light blue is enabling the language, dark blue is disabling it.
Language Order (English, Spanish, French, German)	This setting only works if the cycling thru languages is sequential, see below. When language is enabled, it will allow you to pick an order number to determine a presenting order (from 1 to up to 4). If language is disabled, value is forced to 0.

Parameter	Description
Language apparition percentage (English, Spanish, French, German)	When language is enabled, it will allow you to pick an number from 0 to 100. If language is disabled, value is forced to 0. E.g.: if English percentage is set to 70, generated questions will be in English 70% of the time. **Pay attention here, the other languages percentages will adjust themselves when you play with this setting, it is normal: the total of all percentages will always be topped to 100%.**
How do we cycle thru different languages?	2 options here: sequential and random. The white rectangle is the selected one. Sequential will generate questions while cycling thru the languages according to the order number and the language recurrence (see next setting). Random will use the language percentages: language of new question will be randomly picked based of odds percentage.
When sequentially cycling thru languages: language recurrence before switching to next one.	When we cycling thru languages sequentially, how often do we want the same language to appear prior to go to next language, for the same amount of times.
Horizontal align	Will allow you to select if you want to align text on the left edge of, right edge of or centered in bounding box (see below).
Horizontal bounding box	Horizontal percentage of screen / projection area we want to cover with projection. The light blue rectangle visible when menu is shown is representing the bounding box. The text will never be displayed outside of that box.
Horizontal offset	Allows you to displace the bounding box from the left to the right. -100 will move the box outside of screen on the left side, +100 will move it outside of the screen on the right side.
Vertical align	Will allow you to select if you want to align text on the top edge of, bottom edge of or centered in bounding box (see below).
Vertical bounding box	Vertical percentage of screen / projection area we want to cover with projection. The light blue rectangle visible when menu is shown is representing the bounding box. The text will never be displayed outside of that box.
Vertical offset	Allows you to displace the bounding box from the top to the bottom. -100 will move the box outside of screen at the top, +100 will move it outside of the screen at the bottom.

Remote access to artwork's computer

The computer running this artwork has a software installed that allows the studio to remote connect to the artwork. This feature is helpful when you require assistance from the studio as we can remote connect to it and do a quick inspection and debug session onto your components. In order to enable this feature, the computer has to be connected to the Internet at all times. Depending on the computer's operating system (Windows 7/8/10, OSX), the procedure to set the computer online will be different. Please look online for tutorials if needs be.

Preliminary troubleshooting steps

After pressing the button, nothing seems to happen.

Do you hear any sound coming from the computer? If so, the computer is running and the monitor should display the piece shortly. If not, check if the monitor is well powered and try to turn it on with its remote control, also, check that the monitor's source is set to the same port where the cable is plugged in.

The software doesn't seem to take all of screen space.

In the software displays questions with a background not taking place in the whole display), first of all, ensure that the computer resolution is matching the monitor's resolution.

- To access Windows Screen resolution: right-click a blank part of your desktop and choose Screen Resolution.
   - To change the screen resolution, click the Resolution drop-down list and select the proper one.
   - Once you have the right resolution set, click on Apply then click on Keep Changes.

If the monitor is installed in landscape (horizontally) on the wall, ensure the following:

- The Screen resolution in Windows should be set to horizontal or horizontal (flipped) mode;
   1. Right-click a blank part of your desktop and choose Screen Resolution.
   2. Click the Orientation drop-down list and select one of the above options.

If the monitor is installed in portrait (vertically) on the wall, ensure the following:

- The Screen resolution in Windows should be set to portrait or portrait (flipped) mode;
   1. Right-click a blank part of your desktop and choose Screen Resolution.
   2. Click the Orientation drop-down list and select one of the above options.

The background is there but no questions appear.

Display the menu. If menu is displayed, the questions are generated, just not displayed. Check the horizontal and vertical offset values. Set them to a value closer to 0. If the questions suddenly appear, it means that one of the settings was set in order to display the question outside of visible area. Fine tune both settings to bring questions where you want it.

If previous test hasn't display the question, check the horizontal and vertical bounding box values. Set them to a value closer to 100. If the questions suddenly appear, it means that one of the settings was set in order that question was too big for the bounding box or that the bounding is too small for the question. Fine tune both settings to bring questions where you want it.

If previous test hasn't display the question, check the font size value. Set that value to 10, hide the

menu, quit the software and start the software. If the questions suddenly appear, it means that the font size was either too big for the bounding box or too small to be noticeable. Fine tune that setting to display the question the size you want it.

Rhythm of questions displayed.

If the questions are displayed too fast or too slow, adjust the Question per minute setting to 33.

Troubleshooting assistance

Prior to contact Antimodular studio for a problem with your artwork, ensure you went thru the preliminary troubleshooting steps from the previous section.

The troubleshooting process will vary depending on the problem. In order to ease the process, it is recommended that you collect and transfer these information to the studio:

- Date and time when the problem first happened;
- Description of the problem;
- Actions taken so far and conclusions;
- Detailed photographs (or videos) displaying the problem;
- Detailed photographs (or videos) of the suspected faulty component;
- Detailed photographs (or videos) of the whole artwork and its surroundings;
- Personnel involved;
- Other relevant details, such as any changes in the surroundings, etc.

Support (contact us)

If you would like support for the piece please feel free to call Lozano-Hemmer's studio in Canada:

Antimodular Research
4060 St-Laurent, studio 107
Montréal Québec H2W 1Y9 Canada
Tel 1-514-597-0917 Fax 1-514-597-2092
info@antimodular.com
www.antimodular.com

APPENDIX I - INSTALLATION

Components description

This artwork requires the following components:

Component	Description
Computer	Computer running on at least Windows 7.
Video signal cable	Connects the computer to the display. Usually it is an HDMI cable. Adapters may be required in between computer and display / projector.
Display / projector	Any display or projector, based on discussion held with Antimodular's studio team member. Ideally a monitor would be as matte (non-reflective) as possible, as slim as possible with bevels as small as possible. Ideally a projector would be a small as possible, as silent as possible, as much hidden as possible.
Keyboard	While not required for normal use of the artwork, it allows you to calibrate the system based on your actual location.

Wiring diagram and connections

In order to have the piece running properly, the computer should be connected as per following diagram.

Video signal cable

OR