Art Of Life: GUI User Manual

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1 Introduction

Art of Life is distributed with a GUI application that operates by default on Mondrian-lookalike images. The GUI can be configured to work with other images provided by a new genotype/phenotype. It offers a rich means of interacting with an image space and integrates with external applications by export as PNG or SVG files.

The GUI can also be extended to tailor it to special uses although it is hoped that this project will continue to enrich the default GUI to suit most common uses. I am personally using the Art of Life platform with my own genotype/phenotype as a basis for mixed-media artworks and will therefore continue to add new features and refine existing functionality as I continue with my personal work.

This manual covers use of the GUI including configuration to use custom genotype/phenotype definitions. Implementing custom genotypes is covered in the Developer Manual.

2 Overview

The Art of Life GUI launches for the first time to show the Generator and Inspector windows. Thereafter, it launches in the same state that it was last closed (not yet implemented).

3 Generator

The **Generator** is the heart of the application. It presents a population of images competing for your favour! The "best" images can be dragged up towards the top of the window while the "worst" images fall to the bottom. Images at the bottom of the window are culled and new offspring are bred to take their place. New offspring initially take their place somewhere in the middle of the window allowing you time to decide their fate as they fall downwards.

The Generator's population is divided in two. A proportion of images at the top of the window are immune from gravity and do not fall to the bottom. These are the images that

you want to remain in the population at present. Below this area, all images fall towards the bottom of the window and therefore will become eligible for culling if you don't intervene by dragging them up. Images that you decide are not worth keeping can be right-clicked to shift them immediately to the bottom (not yet implemented).

Images can be dragged off the generator and onto a file explorer (for example the Windows desktop): the dropped file is a PNG thumbnail.

Images in the generator can be selected by clicking on them with the mouse. The currently selected image appears with a yellow border around it, and is then the subject to the actions in the Image menu.

3.1 File menu

Load loads a new workspace into Art Of Life from a file saved by **Save**. This file contains the current state of the population in the generator as well any images in the Inspector, Mutator or other windows.

Exit closes the whole Art Of Life GUI, saving its window positions so that it continues from the same place when next launched (not yet implemented).

3.2 Window menu

Open Inspector opens the Inspector window.

Open Nursery opens the Nursery window.

Open Mutator opens the Mutator window.

4 Image menu

This menu is common across the Generator, Mutator, Inspector and Nursery although some options do not apply in all windows. The actions described below are applied to the currently selected image in the window.

5 Inspector

6 Mutator

7 Nursery