Manymals v.02

by Antonio Daniele

Manymals is a genetic algorithm that explores the complexity of gender, identity, social behaviour and language. It is written in Java using Processing.

The algorithm creates a universe populated by 7 random creatures which are visually represented as polygons.
Each creature carries, within itself, both male and female attributes. It is eventually an algorithm that determines the sex of the creature. Similarly, another algorithm defines the gender identity, by calculating the ratio between heterosexual, homosexual, bisexual and transexual attributes, contained in the creature's genome.

The creature's sex is treated as a phenotype and it is visually represented: males are fully coloured whereas females feature only a coloured border. On the other hand, Although the gender phenotype is not visible, it defines the creature identity and determines its sexual preference during the mating. The creatures also have a language represented by a note (C, D, E, F, G, A, B) that evolves generation by generation.

During their lives, the creatures simulate a sort of social behaviour. They travel into the universe and they meet other creatures. If a creature finds another one that it is attracted to, they stick together for a while. If they stay together for long enough, they will procreate. The children will inherit some of the characteristics of their parents and the language will evolve accordingly. While evolving, the newborns language will generate a melody, rather than a single note.

Instructions:

Run the app and let the creatures do their work.

You can repopulate the universe by pressing the key ‘r’

You can save a screenshot by pressing the key ’s’

You can see the debug by pressing the key ‘d’

Enjoy!

www.letitbrain.it

@letitbrain