Evolutionary artwork using human fitness function derived from web-based social networks

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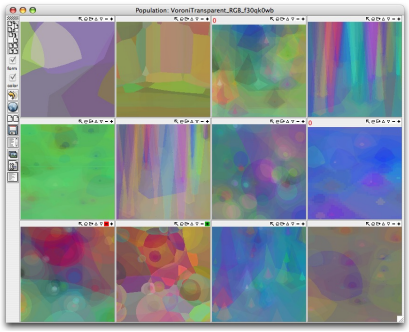
Genetic artwork usually requires *one human* operator to serve as the fitness function to rank the images.

Erwin Driessens and Maria Verstappen, "E-Volver". A human operator indicates individuals of poor fitness via touchscreen.

Karl Sims, "Genetic Images". A museum installation in which human operators stand on sensors to select pleasing images from an arc of computer monitors.

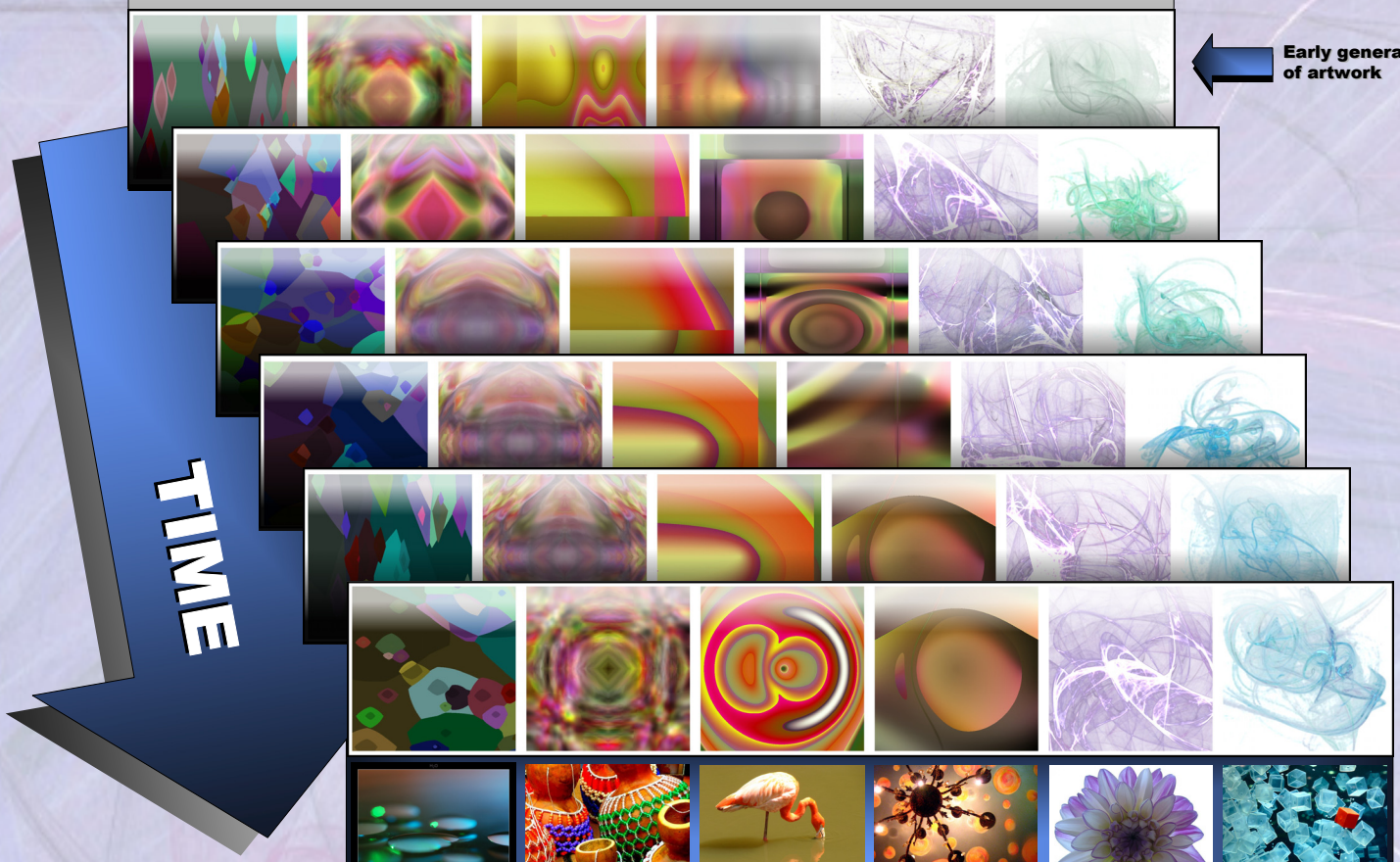


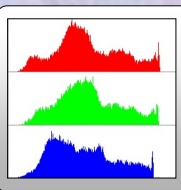
Thomas Jourdan, "Kandid, A Genetic Art Project". A human operator indicates individuals of high fitness, and a single individual of best fitness.

Flickr.com already has *hundreds of thousands of humans* ranking the "fitness" of photos shared on the site.

Samples of Flickr.com photos with the highest "interestingness" ranking. Interestingness of a photo is determined by the number of users who have viewed it, where the users who view it are coming from, number of favorites lists the photo belongs to, number of comments on the photo, when the photo comments have been made, and other factors.

Can we replace *one human* with *hundreds of thousands of humans*? Can we generate interesting art without waiting for any human input? Let's try a new fitness function: Rank generated art based on how closely its colors match Flickr images:





The fitness function analyzes the RGB color space of Flickr reference images and generated images. High fitness is given to generated images that have minimum distance to RGB profile of Flickr reference images.