On Maps, Machines and Roaches

An introduction to cut-and-paste topology

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Based on an M.Sc. thesis by Dori Eldar

Abstract: We try to map the configuration space of a simple machine, a six-legged idealized roach, and find that good old cut-and-paste topology can be a lot of fun.
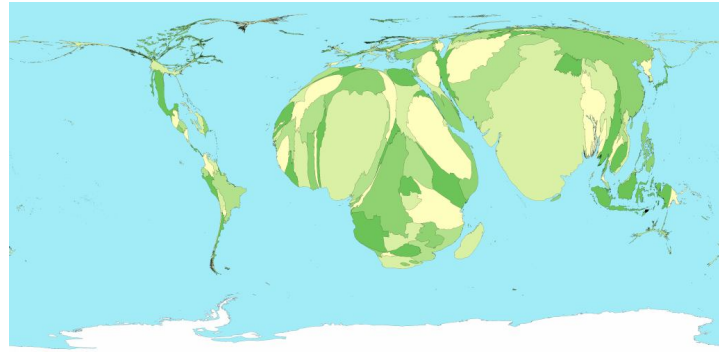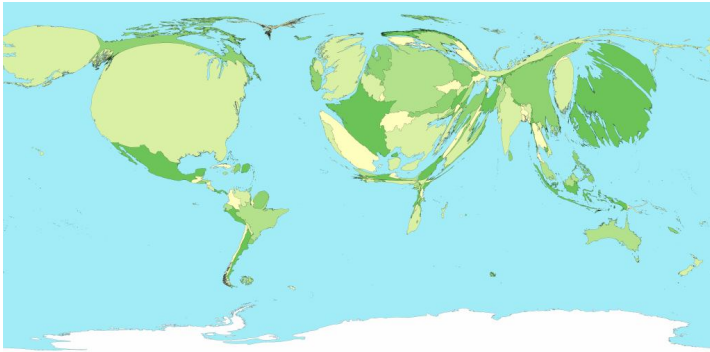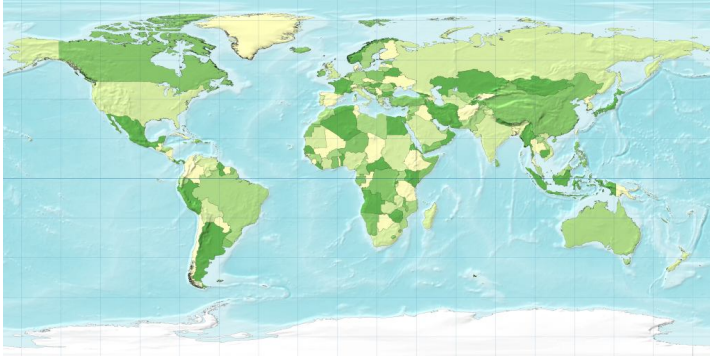
See http://www.math.toronto.edu/~drorbn/Talks/Machines
and http://www.math.toronto.edu/~drorbn/People/Eldar/thesis/

Also, Handout-1208.pdf

A TOP MAP: A one-to-one correspondence between places or states of reality and the points of an easily studied surface, so that very close points of the surface correspond to very close places or states, and vice versa.

Equally ~~good~~ bad:

Equally good: