Life as it *Could* Be: The Living Machines

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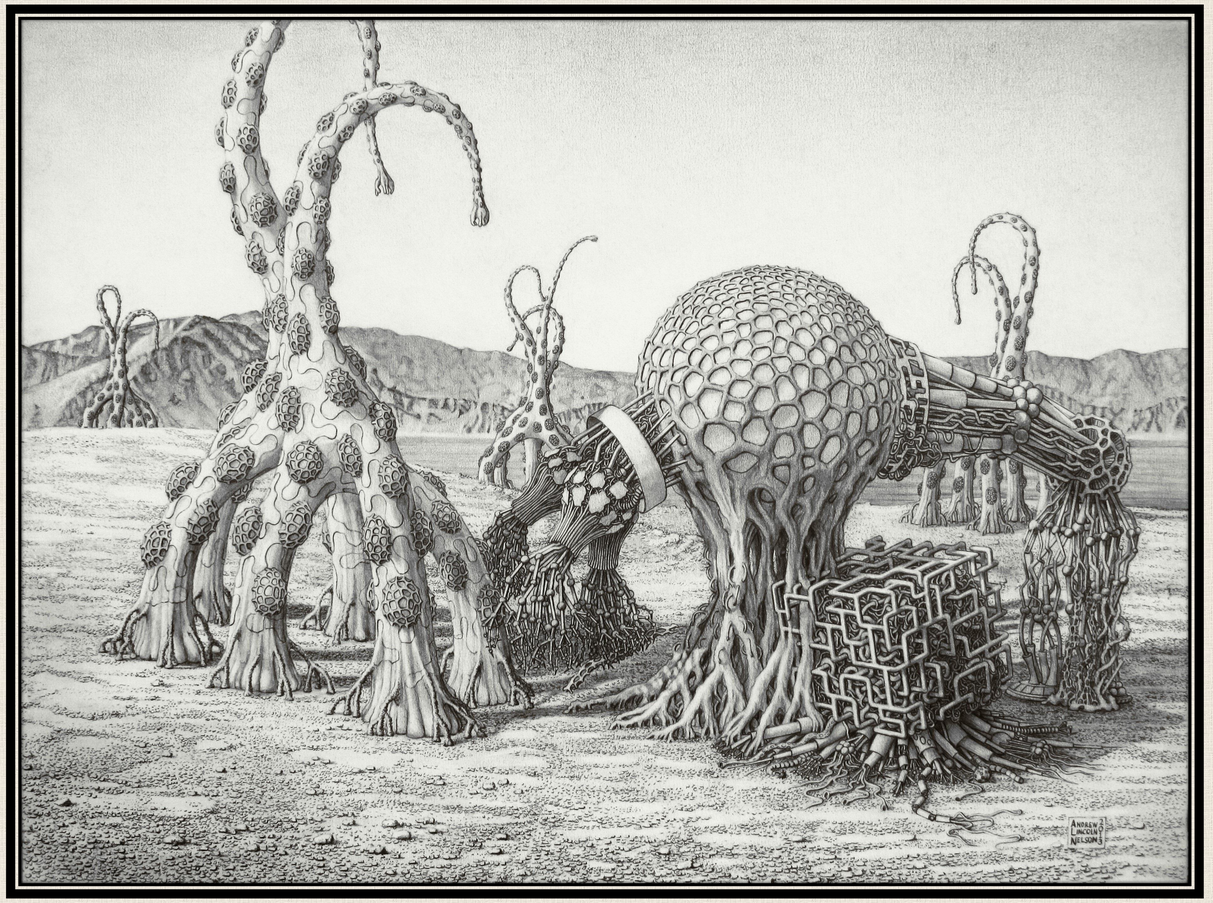
THESE GRAPHITE ILLUSTRATIONS depict semi-organic machine creatures situated in post-human or perhaps alien landscapes, and are part of a larger series entitled “The Living Machines”. The drawings explore the concepts of open-ended evolution and autonomous machine-environment interaction by presenting somewhat fanciful imaginings of what artificial self-evolving creatures might look like at some point in the very distant future. The illustrations might be characterized by the phrase “Life as it *could* be,” the catch phrase from early ALife conferences shepherded by Christopher Langton.

The machine creatures appear as though they were not designed or built by humans, but rather grown or self-assembled in some manner. Perhaps distant ancestors of these machines were constructed by humans or other organic beings, but now they are self-propagating, building and rebuilding themselves, and building their own offspring.

The illustration *Robot 21* depicts several concepts from the field of Artificial Life, but indirectly and perhaps in a visceral way, rather than an analytical way. The picture is intended to give the viewer a glimpse of what it might feel like to look upon a fully autonomous self-motivated evolving machine. The machine creature in the drawing might be considered *non-anthropomorphic*, having no familiar human



Living Machine Series: *Robot 21*

Living Machine Series: *Robot 25*

or animal visage. It is made up of various components that have similarities, but which are not exact copies, hence giving the sense that the creature, although embodying some level of modularity, was not designed or made in a factory. Its purpose for existence – beyond existence itself – is not exactly clear to the outside observer. It is not a machine designed for any obvious explicit human-imposed purpose.

Evolving and adapting machines might blur the lines between biological categories and concepts. In *Robot 25*, machine and biological entities are blended so that it is not clear if the agents are sessile plant-like creatures, or, rather, are more autonomous animal-like machines.

These works are intended to present concepts from the field of Artificial Life in a graphic format that does not rely on any particular expertise in the viewer, not even an awareness that there is such a field of research. In this sense, they are meant for a very broad audience. Illustrations from this series have been used in popular and technical presentations, including Keith Downing’s TED talk on Evolutionary Computation, Gray Scott’s recent keynote presentation at the 2014 World Future Society Conference, as well as other academic and popular presentations on Evolutionary Robotics and Artificial Life. *Robot 25* received a first place award at a recent National Arts Program exhibition at the University of Arizona and has also been shown at the Tucson Museum of Art. Also, a recent drawing from this series appeared in the July/August 2014 issue of the Futurist Magazine.

THE FOURTEENTH INTERNATIONAL CONFERENCE ON THE SYNTHESIS AND SIMULATION OF LIVING SYSTEMS
July 30th – August 2nd, 2014, Javits Center, New York, NY, USA