What could a

Nanofactory

make?

Some Observations with Respect to the Projected Synthetic Capabilities of Certain Classes of **Molecular-Manipulation Atomically-Precise Fabrication** Mechanisms, with Particular **Emphasis on Certain Categories** of Domestic Consumables, **Notably Comestables, Apparel,** Communications Technology, Transportation, and Pastime Facilitation Equipment.

Timeline -- Computers

1960's – centralized \$M machines 1970's - \$100K, at small companies hobbyist machines 1980's - \$5k - the PC spreadsheets 1990's - "a meg and a MIPS" desktop publishing 2000's - "a gig and a GIPS" moviemaking

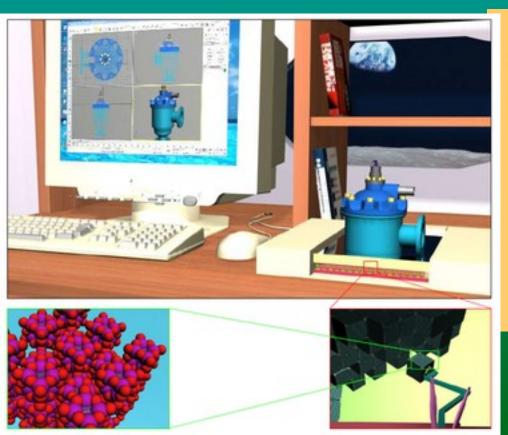
Timeline -- Fabricators

1990's - centralized \$M CNC shops 2000's - \$100K rapid prototyping hobbyist machines 2010's – \$5k – home fabbers plastic/electronic gadgets 2020's - nanoblock factories most manufactured items 2030's – full molecular synthesis food, flying cars





Nanoblocks





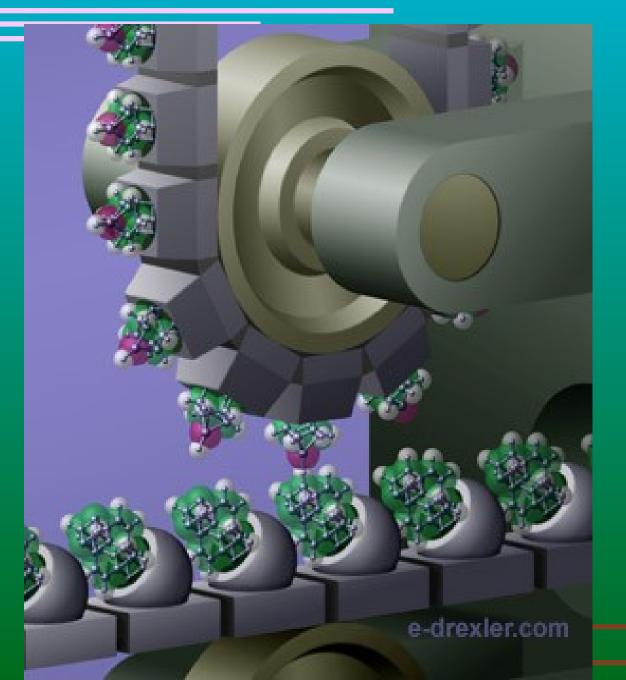
CHON(+)

The human body is 96% CHON

Carbon 18%, Hydrogen 10%, Oxygen 65%, Nitrogen 3%

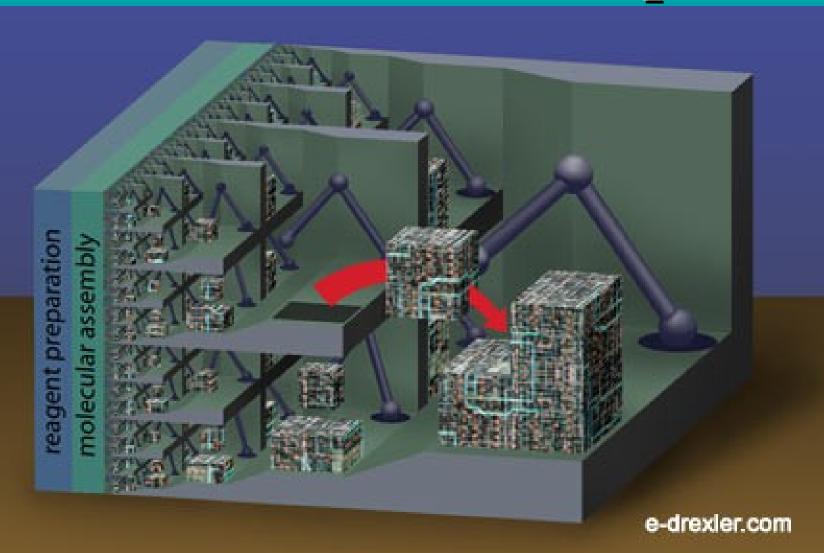
Wood 99%
Plastics typically 100%
Food: fats 100%, protein ~98%, carbohydrates 100%

Other useful elements: sulfur, silicon, boron, copper, etc for food, calcium, phosphorus, sodium, magnesium ...

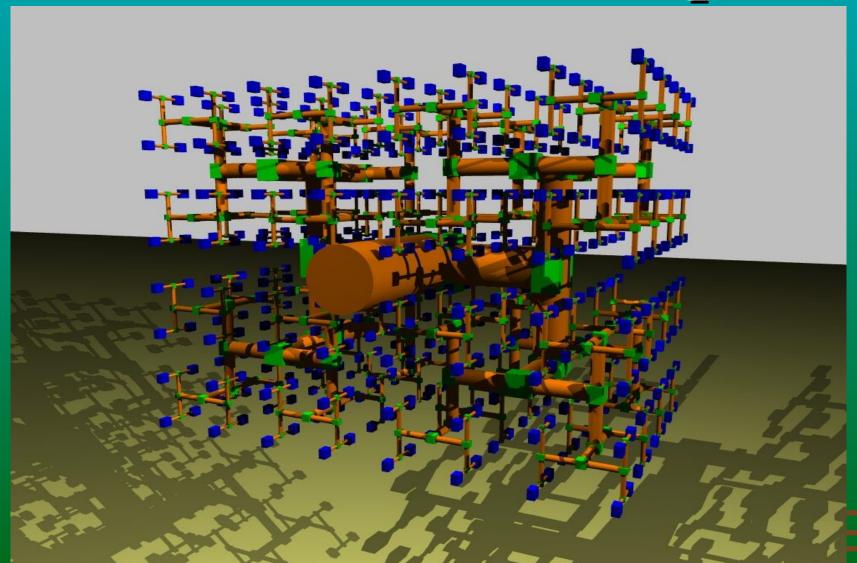


Speed

Speed



Speed



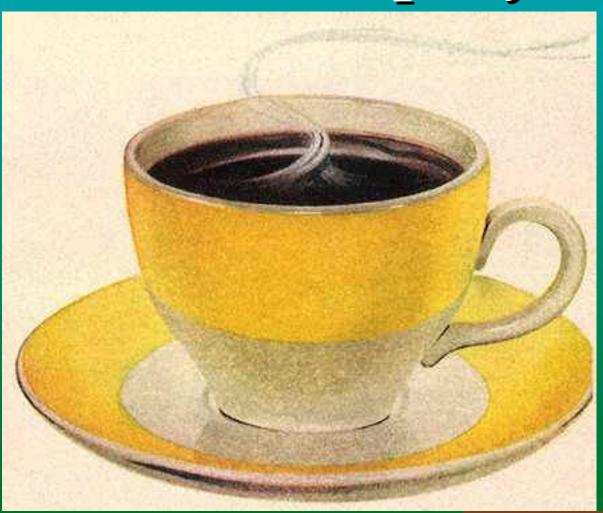
Apples



Bicycles



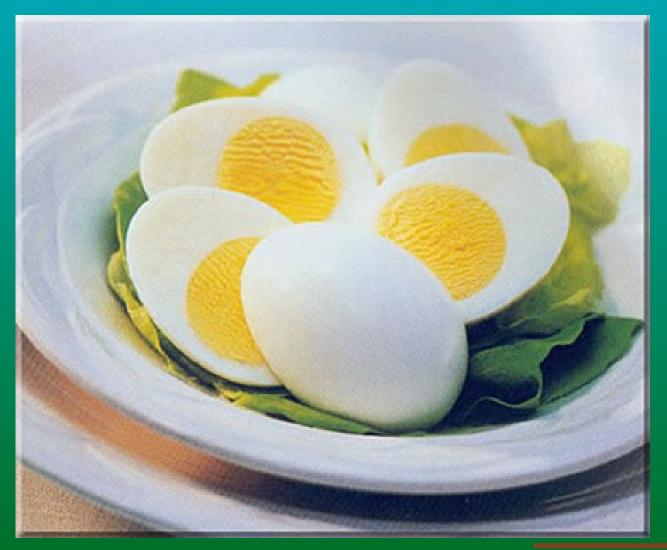
Cups of Coffee



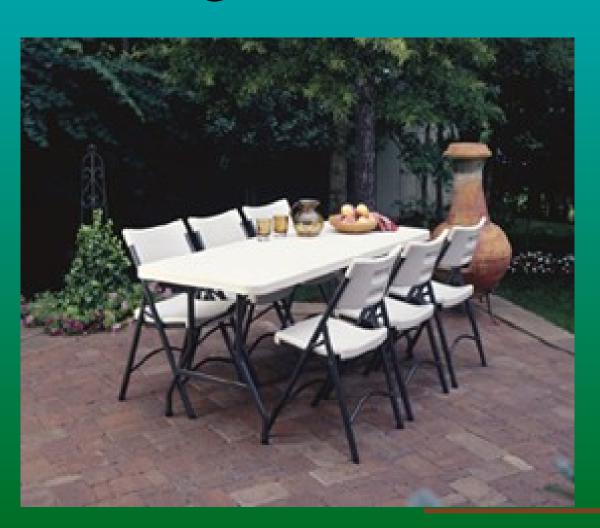
Diamonds



Eggs



Folding Furniture



Gadgets & Gizmos Galore





Headphones



Ice Cream





Jackets





Knives





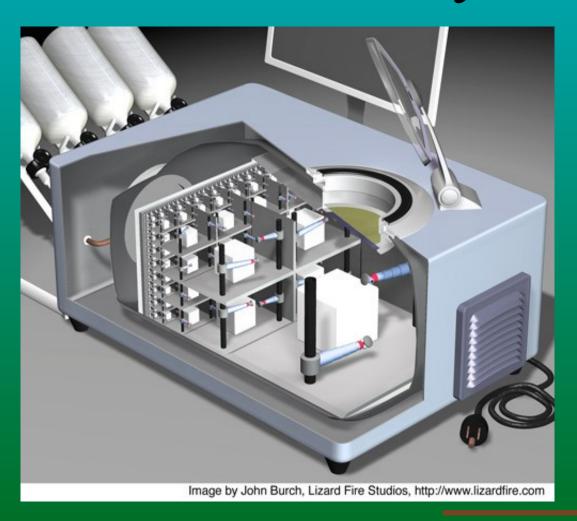
Lights



Money



Nanofactories









Perambulators





Queens





Robots



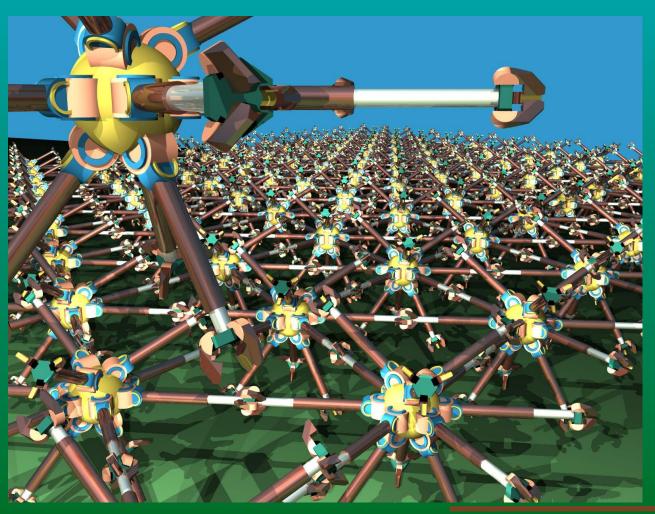
Sex Toys



Tennis Racquets



Utility Fog





Watches





Xylophones





but not Zircons!

