

Soft Architecture Machines

CART210

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Nicholas Negroponte

- Architect and computer scientist
- Founded MIT Architecture machine group in 1968
- Discusses the relationship between humans and machines to create architecture.



Connection between humans and computers

- Important to understand someone's intentions or needs without misinterpreting them.
- Understanding each other to the point where you both have the same view on each other
- Connects the idea to the Architecture Machine
- Computers learn more about humans, form connection with humans
- Prevents communication issues that disregard one's needs

Architect vs Resident

- What the architect designs might not always be what the resident needs
- Clash between technical and design aspects
- Architect thinks he knows better than the resident
- Push for “user participation”

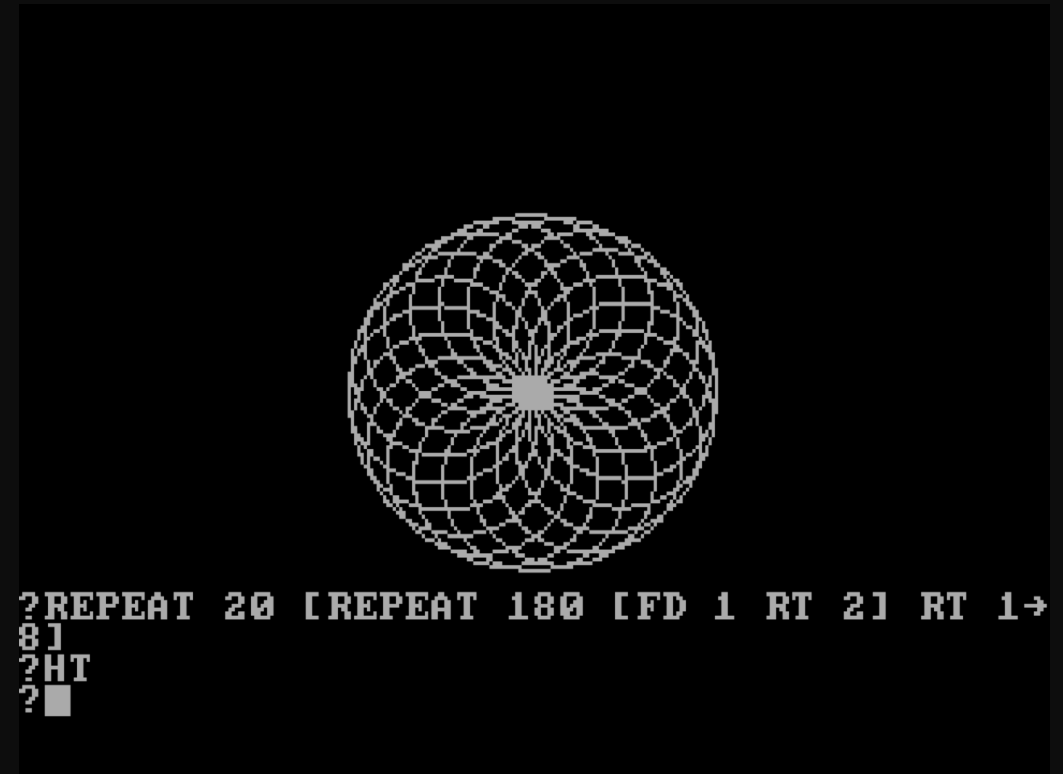
User participation

3 different perceptions

- Collect information on what residents need, architect gets final word
- “Advocacy planning”: one person advocates for the rest of the neighborhood
- “Yona Friedman paradigm”: remove architects, everyone is their own architect.

Design amplifiers

- Computer will help with technical aspects while still considering user's needs.
- Learning period between computer and user
- More communication = less assumptions
- User learns about architecture through computer, similar to LOGO (turtle graphics).



Plan recognition

- Allowing computer to analyze plan sketches by user
- Input/output
- May not identify objects properly
- Reinforces connection to computer
- Assumes user is an architect

Effect today

- Basis for human-computer interface
 - Input made easier
 - More user friendly
- Modern day “desktop”
- Turtle Graphics



Sources

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