

SOME UTOPIAN CHARACTERISTICS OF SOFT TECHNOLOGY (Robin Clarke)

"Hard" technology society

1. ecologically unsound
2. large energy input
3. high pollution rate
4. non-reversible use of materials and energy sources
5. functional for limited time only
6. mass production
7. high specialization
8. nuclear family
9. city emphasis
10. alienation from nature
11. consensus politics
12. technical boundaries set by wealth
13. world-wide trade
14. destructive of local culture
15. technology liable to misuse
16. highly destructive to other species
17. innovation regulated by profit and war
18. growth-oriented economy
19. capital intensive
20. alienates young and old
21. centralist
22. general efficiency increases with size
23. operating modes too complicated for general comprehension
24. technological accidents frequent and serious
25. singular solutions to technical and social problems
26. agricultural emphasis on monoculture
27. quantity criteria highly valued
28. food production specialized industry
29. work undertaken primarily for income
30. small units totally dependent on others
31. science and technology alienated from culture
32. science and technology performed by specialist élites
33. strong work/leisure distinction
34. high unemployment
35. technical goals valid for only a small proportion of the globe for a finite time

"Soft" technology society

- ecologically sound
- small energy input
- low or no pollution rate
- reversible materials and energy sources only
- functional for all time
- craft industry
- low specialization
- communal units
- village emphasis
- integration with nature
- democratic politics
- technical boundaries set by nature
- local bartering
- compatible with local culture
- safeguards against misuse
- dependent on well-being of other species
- innovation regulated by need
- steady-state economy
- labour intensive
- integrates young and old
- decentralist
- general efficiency increases with smallness
- operating models understandable by all
- technological accidents few and unimportant
- diverse solutions to technical and social problems
- agricultural emphasis on diversity
- quality criteria highly valued
- food production shared by all
- work undertaken primarily for satisfaction
- small units self-sufficient
- science and technology integrated with culture
- science and technology performed by all
- weak or non-existent work/leisure distinction
- (concept not valid)
- technical goals valid 'for all men for all time'