

The Social Shaping of Technology

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A Taxonomy of Theories about ICTs and Society

Wolfgang Hofkirchner

Key Message: There are many ways to view the relationship between technology and society.

Key concepts:

Determinants		Values		
		Eutopianism	Dystopianism	Proactive approach
Technology (technodeterminism: reduction)		"Information society"	"Virtual society"	-
Societal (social constructivism: projection)	Nature as environment	"Managing-earth society"	"Plundering-the-planet society"	
	Economy	"Knowledge-for-all society"	"Knowledge-monopolies society"	
	Polity	"Participatory society"	"Surveillance society"	
	Culture	"Fun-", "Leisure society"	"Disinfotainment society"	
None (postmodernism: disjunction)		"Baroque society"		Global sustainable information society
Both (mutual-shaping approach: integration)		-		

Table 2: Classification of Sample Theories according to Determinants and Values

The social shaping of technology

Williams and Edge

Key message

SST came about mainly from four diverse traditions which can create conflict

Key concepts

SST originated from:

- Sociology of scientific knowledge
- Sociology of industrial organisations
- Critical studies of technology policy
- The economics of technological change

Some conflicts:

- macro vs. meso vs. micro studies
- "how do we know about technologies"
- what is technical

Of Bicycles, Bakelites & Bulbs

Wiebe E. Bijker

Key message: Technology innovation is shaped by social relations and political ideas/mobilizations

- Technological artifacts are stabilized in a recognizable forms by consensus building between relevant involved groups which shuts down other possible forms temporarily or permanently
 - i.e. "solidifies" artifacts' forms through iterative political processes of negotiation and eventual closure
 - Closes the scientific controversies and oppositions

Key concepts: Relevant social groups; Closure; Stabilization; Controversy, Modalities

Examples:

- Bicycles and sociopolitical gender relations;
- Fluorescent lights and industry monopolies;
- Bakelite plastic & social positioning of inventors and their work-



http://upload.wikimedia.org/wikipedia/commons/1/09/McCormon_Safety_Bicycle.jpg

Discussion:

Current day examples

- Closure of cellphone forms - the brick wins!
- Decay of cable television: The case of Netflix & Hulu
- The end of news