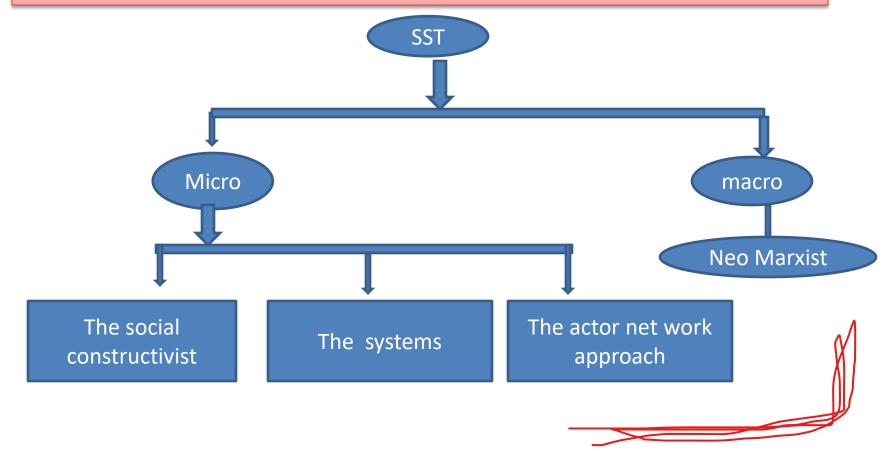
The social shaping of technology (SST) approach serve as a needed and corrective and an antidote to naive technological determinism. It does not deny that technologies have social effects rather it focuses on the social forces which give rise to particular technologies.

Social shaping of technology

In the early 1980s social shaping of technology approaches emerged as a major stream. Not denying that technologies have social effects, the focus is on the social forces which give rise to rise to particular technologies.

There are two broad approaches to the social shaping of technology.



The social constructive approach

The social construction of Technology (SCOT) was introduced in 1984 by Beijker and Pinch. The social construction of technology has grown out of the tenets of social constructivism and the sociology of scientific knowledge.

According to social constructivist approach:

- 1. Scientific facts are seen as social phenomena.
- 2.Technological artifacts are socially construct. Technologies emerge out of process of choice and negotiation between 'relevant social groups'.
- *The most basic relevant groups are the users and the producers of the technological artifacts.
- * Sometimes there are relevant groups who are neither users nor producers of technology like journalist, politicians and civil groups etc.
- 3. The focus is on design and development



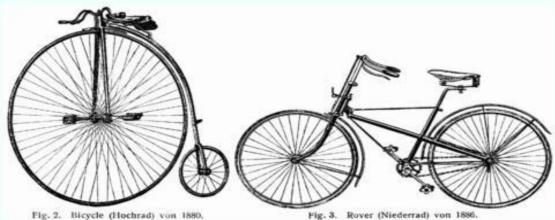
Bicycle's case..



Pinch and Bijker's study the case of the bicycles, they analyze the development of the bicycle.







In bicycle developmental process..

- Identify the relative social groups for certain arti-
 - Some parts of the bicycle's development can be explained by including a separate social group divided form a similar group.

For example:

Within a group of cycle users a separate social group of cyclists have different problems.

Because:

- -For the first time ladies couldn't ride bicycles they did -At first women were only allowed to ride tricycles the
- skirts getting caught in the spokes and of course to ensumodesty by keeping their legs covered up!



SCOT

In bicycle developmental process..

Identify the problems each group has with respect it that artifact





SCOT

In bicycle developmental process..

Around each problem, several variants of solution can be identified



• We can say that technology does not determine human action but that rather human action shapes technology.

The ways a technology is used cannot be understood without understanding how that technology is embedded in its social context. SCOT is a helpful approach for understanding the innovation of particular artifacts, we can use it as starting point for exploring longer term technological issues by identifying meta- categories of relevant social groups.

SCOT model is also a methodology. It formalizes the steps and principles to follow when one wants to analyze the causes of technological failure or success.

The system Approach

 Hughes networks or systems approach sees system builders- inventors, engineers, managers and financiers- creating and presiding over technological systems; heterogeneous people, organizations and disciplines become part of a "seamless web."

The actor network approach

 Actor-network theory proposes networks linking human beings and non-human entities ('actors', or, in some versions, 'actants'). In this respect, actornetwork theory resembles Hughes's technological systems perspective: a technological system such as an electric light and power network ties inextricably together both material artifacts and human beings ties together 'technology', on the one hand, and economics, organization, politics and culture on the other.

The actor network approach is opposed to the social constructivist agenda in that it collapses any distinction between the technical and the social. The development of a technology is seen in terms of the relationships formed between human and nonhuman elements of the 'actor networks'.

Macro- The neo-Marxist approach

The second broad approach is the neo-Marxist. It examines how wider 'macro' socio-economic forces affect the nature of technological problems and solutions. Technology is designed, consciously to secure particular social or political objectives. The labor process approach looks at how the social relations of workers and management affect the nature of technologies.