

TECH3002 – Questioning Technology

TECHNOLOGICAL DETERMINISM

A CASE STUDY OF THE INTERNET AS A PRODUCT OF CULTURAL PROCESSES

QUESTION:

Andrew Feenburg argues that *“technology is the medium of daily life in modern societies,”* and that *“every major technological change reverberates at many levels, economic, political, religious, cultural.”*

Using a single example of your choice, explain how one form of everyday technology might be understood as a product of an ‘economic, political or cultural’ process.

TABLE OF CONTENTS

Introduction.....	3
Development of the Internet.....	3
Technological Determinism.....	4
Cultural Processes.....	5
Conclusion.....	6
References.....	7
Bibliography.....	8

Introduction

The effect of information and communication technologies on societal change has long been a key area of discussion and study for sociologists, philosophers and media academics, but only more recently has research been directed onto the cultural preconditions of technological change and development. In this report, I shall be investigating popular media theories pertaining to such developments of Internet technology; in particular, the use of Hypertext, and its adaptation for various cultural purposes.

In order to understand the Internet and the way it has come to be, one must recognise that it is a hugely complex technology, and one that is hard to define due to its ever changing nature and multitude of uses. As a result, there is and has been no one factor affecting its development. The way we experience the Internet today is the product of myriad intertwining political, economic and cultural processes. Although to truly understand such developments, one must take into account all aspects of change, this is beyond the scope of this report. Here I will be discussing various theories regarding the development of technology and its effect on society, and focussing on the cultural uses that have shaped the Internet and the use of Hypertext in everyday life.

Development of the Internet

Today, the web permeates the daily lives of millions around the globe. The effect is profound and often direct, changing the way we communicate and consume on a global scale. After its initial development as a method of transferring and sharing information for use in academic research, and later adaptation for military use, the World Wide Web entered the public domain. The flexibility of Hypertext, and

increasing bandwidth capacities introduced new ways of interacting, communicating and sharing data.

The Online Publishers Association produce monthly statistics based on the percentage of online time spent in four generalised areas of activity, showing clear trends in current Internet usage.

Share of Time Spent Online (%)						
	Sep05	Oct05	Nov05	Jul06	Aug06	Sep06
Commerce	16.9	17.9	18.7	16.6	16.1	16.0
Communications	41.9	41.1	41.5	38.5	39.3	39.1
Content	36.7	36.2	35.0	39.6	39.6	39.8
Search	4.6	4.8	4.8	5.2	5.0	5.1

Online Publishers Association. *Internet Activity Index*. <http://www.online-publishers.org/?pg=activity>

The recent rise in the popularity of public media sites such as *Youtube.com* and *Newgrounds* suggest that the Internet is being used more than ever for the sharing and creation of media content, often intertwined with social networks. Another huge boom has been seen in networking and personal profile sites such as *Myspace* and *Faceparty*; very cultural uses of a seemingly neutral technology. Blogging websites, Instant Messaging and Internet Relay Chat can all be seen as extensions of Internet technology fulfilling various cultural roles.

Technological Determinism

While it is arguable that such technologies are adapted and developed according to their social and cultural uses, Marshal McLuhan's influential theories of determinism focussed on the inevitability of cultural change as a result of technological advancement.

The medium is the message. This is merely to say that the personal and social consequences of any medium - that is, of any extension of ourselves - result from the new scale that is introduced into our affairs by each extension of ourselves, or by any new technology. (1964)

The argument that available media shape human activity is often contested by other influential writers. Steven Hill argues that there are other important factors of technological change overlooked in technological deterministic theories, commenting that: *"the direction of change is a product of the particular alignment between the technological possibilities and the society and culture that exists."* (1989: 33)

Andrew Feenberg's attacks on determinism warn that: *"although constructivist sociology has placed particular technologies on the agenda in new ways, the basic questions of modernity posed by an earlier generation of theorists are rarely addressed today in terms of the general problematic of technology"* (11-12). Feenberg sees technology as a highly contested field, with social groups and individuals shaping its design, uses and meanings, and emphasises the importance of linking philosophy and social theory to create balanced approaches to technological analysis.

Cultural Processes

So if technological determinism is arguably flawed, does this mean that technology is entirely a product of cultural, economic and political processes? This 'social deterministic theory' is rejected by Langdon Winner in his book *The Whale and the Reactor* as 'single minded,' summarising the viewpoint as *'What matters is not the technology itself, but the social or economic system in which it is embedded'* (1986: 20). Winner views this premise as a disregard of the characteristics of said

technologies. On technological determinism, Winner suggests that there is not simply one way that culture could have adapted to new technologies, but that alternatives to these socio-political patterns may have been less effective than the ones pursued.

Pierre Levy takes a similarly cautious stance, commenting that: '*Technologies don't determine, they lay the groundwork*' (1998: 128). This cautious middle ground approach provides a balanced viewpoint which can be applied to the way we use the Internet today. Web technologies have important characteristics in and of themselves, but undertake something of a cultural metamorphosis after paving the way for social use.

Conclusion

The multitude of popular uses of the Internet and Hypertext, from social networks and 'blogospheres' to mass-e-commerce affiliations are testament to the technology's cultural influences, but it can be argued that neither technological or social determinism provide adequate ground for analysing the use and effect of such technologies. Although social and cultural uses of the Internet have had a profound effect on its development, it is important to bear in mind the many other factors present.

The way the technology is used will inevitably be shaped by its users, while said users are provided with new abilities and capacities, which in turn creates increased need for technological development. In order to understand the Internet as a new media technology, it helps to think of it as a foundation for cultural values to be built around, reinforcing its use in and upon society. The Internet is indeed a product of cultural processes, but one that has shaped said culture equally, and will continue to do so in an indefinite synergy.

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