

Chapter 11

The Anthropology of Science, Technology and Medicine

“science” in practice often does not conform to the idealized images of science often presented to nonscientists

Science and Anthropology

Science studies - scholars reconsidering traditional assumptions about what science is and how it works

Thomas Kuhn in the 1960's developed the idea of paradigms (scientists working in specific fields like physics or biology) This was called normal science

Sometimes anomalies would develop and scientists would need to reconcile the anomaly. If science need to change because of the anomaly this is called revolutionary science which in turn might lead to a paradigm shift. The earth as the center of the planets

Anthropology, Science and Technology

Technology is considered to be any material objects shaped by humans in order to increase their ability to act on the world and reshape it for their own purposes.

It all started with the first stone tools from around 2.5 m.y.a.

Science and technology studies (STS) believes that technologies require support if they are to be effective

Anthropologists have begun to look at technologies as being part of cultural and social organization

Anthropologists study how technology reorganizes social ties across the globe (Skype, social networking, new art forms, World of Warcraft)

Technology and its use general is skewed to the “haves”

The Anthropology of Medicine

Medical anthropology attempts understand and find solutions to health challenges faced by people

Medical anthropologists have been deeply influenced by and sometimes critical of western medicine

The traditional scientific forms of knowledge and practice is called biomedicine

Anthropologists often deal with beliefs and practices outside biomedicine, as such they need to use terminology to fit the situation

Suffering is used to describe physical, emotional or mental states that may not fall under the ideas of biomedicine

Do we all suffer the same?

Culture-bound syndromes – a sickness only found in a particular area or culture

Koro

Anthropologist have found great interest in wide range of explanations people use explain why people get sick and how to cure illness

Evans-Pritchard's work with the Azande (D.R.C., South Sudan and C.A.R.) they understood the material causation of a cut but might use witchcraft to explain why the cut doesn't heal

As the world has become more globalized some anthropologists argue that cosmopolitan medicine more accurately describe medical practices today though ethnomedicine coexists with cosmopolitan medicine

Human Health in Evolutionary Context

Medical anthropology must consider

1. demographics – statistical study of human populations
2. epidemiology – looks at the distribution of diseases
3. epidemics – diseases that spread quickly
4. endemic – diseases that are always present

Paleoanthropology study sickness and health in past societies

Medical anthropologists seek to understand human sickness and health in an evolutionary context

M.A. will look at both biological and cultural adaptations

Human Health and Nutrition

Medical anthropologists look at nutrition (the content and quality of the diet regularly consumed by people in a community)

The human diet has changed through the development of a more sedentary lifestyle and technology

Health and Human Reproduction

Good nutrition is essential for healthy biological reproduction

The importance of breast-feeding

Sickness and Health in the Global Capitalist Economy

Critical medical anthropology looks at the ways in which many forms of physical, mental and emotional suffering correlate with forms of socioeconomic and political inequality

The issues are labeled the biology of poverty

Armed conflicts and war produce trauma

Rape as a weapon of war

Structural violence looks at how risk is structured within society

Critical medical anthropologists have begun to look at public policies that influence health practices

They also look at the spread of biomedical commodities such as pharmaceuticals