

Parallel session 4: Cultural identity implications in genomics research and communication

**SCIENCE COMMUNICATION THROUGH SOCIALLY
CONSTRUCTED MONOLOGUE**

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Abstract

By applying 'social constructivist' and related 'public understanding of science' (PUS) perspective paper empirically examines the social construction and communication of the Latvian Genome project through media discourse analysis with emphasis of its underlying pattern of expert-lay relations. Major part of media coverage on this issue is occupied by technologically deterministic expert discourse leaving little room for lay people's narrative. Public interests are somewhat externally constructed via medical, national, economic, political and other rhetoric with yet only limited attempts made by other relevant social groups to modify and oppose those.

Key words: genome project, science communication, media discourse analysis, expert-lay divide

Context

Following the lead of many countries in regard to national gene pool exploration Latvia has recently initiated the population genome project anticipating to create national gene database for medical research as well as development of preventive and treatment measures. However, despite voiced promises of gene technology it is increasingly being subjected to critical assessment as to its implications for social realm. With its potential positive and negative consequences extending to various aspects of human life there is a need for wider involvement of society in the discussion and appraisal of these issues.

Objective

Building on the ideas of social constructivist perspective (Bijker, 1995, 1999; Pinch, Bijker, 1999; Gergen, 2000) this study aims to perform a qualitative media discourse analysis regarding the ideological basis and attributed meanings of this gene technology in printed media. By utilising related concepts of the PUS research (Wynne, 1995; Gregory, Miller, 1998) this study also aims to detect the character of expert-lay relations within the framework of this science communication case.

Methodology

In line with constructivist perspective, through analysis of language used in a particular field of social practice, discourse analysis admits the existence of manifold realities and alternative perspectives with diverse underlying

assumptions and values (Fairlough, 1995; Van Dijk, 1997; Lehtonen, 2000; Wetherell *et al.*, 2001). Based on the notion that media are among prime agents involved in defining social reality and communicating science, media discourse analysis as one of general discourse categories and one form of public discourse was chosen as basis for studying social construction of this technology and interrelations of relevant social groups. Empirical data in the form of articles were obtained from a range of most widely distributed 11 national newspapers of Latvia covering period of time from January 1999 to February 2003.

Results

The media discourse analysis of the project points to a rather persistent dominance of the so-called public deficit model, which basically implies a monologue instead of a democratic dialogue with major part of contribution constituted of ideas voiced by project initiators and lack of strong alternative discourse by other relevant social groups. Lay people present a very low involvement with no special resources to influence the forming discourse while it is rather high to the genome project group involving various potentialities. By suppressing dominating latent interests of researchers these are being transformed into manifest universal values - advancement of national science, national self-respect and self-determination independent of foreign interests, contribution to economic prosperity of the country, future promises for healthcare, diverse control options over 'national property', nature, future, etc., thus redefining the problem and the meaning of technology in order to please groups that might not comply with its initial formulation. Project promoters acknowledge a need for discussion on the subject in a wider public while understanding it as a unidirectional – informative and educational – communication. The main stress is laid on the refutation of existing negative information instead of discussing the problematic aspects since the former is seen as created by unsubstantiated fears, lack of trust in novel developments, etc. It is not the new technology but the attitude that is considered problematic and alterable. Public is seen as a passive mass with no actual choice options given before launching a project with only some *post factum* options of discussion.

Conclusions

Media discourse analysis of the Latvian genome project let to categorize it as a complex discourse formed by a range of more specialised discourses – both dominating and subordinate ones. In this sense it is rather ample discussion of this technology with certain interpretative flexibility due to the range of meanings attributed to it beyond its strictly medical and biotechnological interpretation. Nevertheless, it is rather one-sided by the dominant relevant social groups represented by experts trying to highlight mainly the benefits but not that much the accompanying disadvantages, risks and threats. Since the latter is less likely to be done by those directly involved in the project widening of the discussion area is essential through the development of civil society, increased public participation and making ones own choices. Alternative argumentation and views are important especially under current conditions when the particular technology has not yet reached its closure.

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