

Abstracts

Jürgen Gerhards and Mike S. Schäfer

Hegemony of Supporters. Comparing Mass Media Debates on Human Genome Research in Germany and the US

The public sphere and the mass media have become increasingly important for the legitimation of science. In recent years, particularly biosciences have been subject to intensive media debates. Accordingly, we compared mass media coverage on human genome research in Germany and the US, expecting controversial debates as well as significant country differences. In contrast to our expectations, however, neither the German nor the US debate proved to be strongly controversial. Furthermore, both countries' debates showed clear similarities. They were dominated by a »hegemony of supporters« of human genome research, consisting mainly of (bio)scientific actors, affirmative evaluations and scientific and medical interpretations. Further analyses show that this seems to be caused mainly by the agenda building of actors outside the media rather than by the selection routines of journalists.

Roger Berger and Rupert Hammer

The Double Contingency of Penalty Kicks in Football. An Empirical Analysis

In football penalty kicks goalkeeper and kicker simultaneously and mutually form expectations of the jumping and kicking direction and act correspondingly. Penalty kicks, then, are a perfect example for double contingency. Due to their standardised process they are well suited for an empirical comparison of the respective approaches of Parsons, Luhmann and game theory. The comparison shows that only a game theoretical approach allows for empirical predictions about action patterns of the players. They follow from the »Minimax solution« and state that the players will randomise their decisions with predictable probabilities. In contrast, Parsons' approach is not applicable on penalty kicks. Because the interest of the players is completely contrary to each other, no stable and shared pattern can arise, where players could base their decisions on. If there was such a pattern it would immediately be exploited by the opponent. Luhmann's approach states that players in penalty kicks are not capable of any action. They are unable to solve the infinite regress of expectations because of the simultaneity of actions and without the missing possibility of communicative bargaining. For the empirical analysis we use a data set containing information on all 1043 penalty kicks that occurred during eleven seasons of the German »Bundesliga«. Overall our game theoretic predictions are confirmed. The observed professional football players resolve the double contingency of penalty kicks as expected. That applies particularly to goalkeepers who act close to optimum in a game theoretical sense.

Michael Guggenheim

Observing Between Functional Systems. Environmental Consultancies as Intersystemic Organisations

What is the relationship between organisations and functional systems? The answers given by social systems theory are vague and little can be said about organisations that do not rela-

te to one specific functional system. In contrast, praxeological approaches provide thick descriptions of organisations that are theoretically thin. This article tries to compensate the specific deficits of social systems theory and the praxeological approaches with a typology of intersystemic organisations to accomplish a better description of organisations. Environmental consultancies serve as a test case. Their organisational structure, their publication behaviour and their concept of research allow to describe them as intermediary and ambiguous organisations. The article is also an ethnographic study of the practices of these organisations.

Roland Walkow

Beavis & Butt-Head – observed by systems theory

The following text deals with the recursive interrelation between binary social structures described as codes and the communication processes which are enabled by these binary structures. For this purpose the text will be divided in a theoretical and an empirical part. In the theoretical part I will reflect and combine the theory of social systems by N. Luhmann and the interactional approach of E. Goffman in order to pay adequate attention to the recursive interrelation between the binary structure and the enabled processes. In the empirical part I will further clarify the concept elaborated in the theoretical part by discussing an example considering confusing the values of a code: "Beavis & Butt-Head". This MTV-cartoon is a simple object that serves to demonstrate how the dynamics of communication processes can affect the binary structure of a social system on the micro level.

Christiane Gross and Monika Jungbauer-Gans

Performance matters? A general survey of findings about scientific careers

This paper reviews the state-of-the-art on the determinants of successful scientific careers. Whether non-meritocratic criteria play a beneficial role in careers in science and which mechanisms account for these effects is of particular concern. At first, the scientific ethos of Robert K. Merton is discussed to draw several conclusions for the meritocratic understanding of science which is acknowledged on a broad basis. In a second step, this discussion is contrasted with empirical evidence from other research studies. Subsequently, our review refers to the enormous importance of social networks which are not pure non-meritocratic mechanisms, but in many respects are confounded with scientific productivity (i.e. regarding the reputation of institutions and universities). Furthermore, the direct effect of ascriptive characteristics such as gender and ethnic affiliation on scientific success seems to have diminished, even though indirect mechanisms continue to affect scientific careers.