

# A CRITICAL REVIEW ON THE CONCEPT OF SOCIAL TECHNOLOGY

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## Abstract

**Purpose**—A critical analysis of the term social technology from a social science point of view.

**Design/Methodology/Approach**—Review of the term “social technology” from a social science point of perspective in connection to the study of governmentality and power in a Foucauldian way.

**Findings**—The article covers the perspective that social technology provides social science knowledge for a purpose. Such a notion allows an in depth debate about the meaning of social order in modern societies. Establishing distinctive techniques now forms the basis of the modern state and governance. Social technology forms the basis of governmental decisions; it allows for a use of social theories and methods for a purpose in politics and introduces a specific conception of power between the individual and public powers. Therefore, it alters government in three ways: It provides expert power to define solutions for social problems based on social science knowledge. It transforms government. Social technology exemplifies a support system for an ordered method of the way of government, it allows for the conduct of others and self based on scientific expertise. It can define new areas of problems in need of a change of government.

**Research limitations/implications**—Consequently, social technology requests a critical analysis using a governmental approach. Such an approach focuses on problems

on the governed subject and how governing works and why it has evolved in that way towards the subject and what kind of ideas and thinking lies within the discourse.

**Keywords**—Social technology, government, governmentality, power, social science.

**Research type**—general review.

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## Introduction

When one searches the term “social ”technology” in Wikipedia, it is defined as the usage of technology for social purposes: to ease social procedures via social software and social hardware, which might include the use of computers for governmental procedures, etc. Colloquially, the term refers to any technological invention for social purposes like Facebook ([http://en.wikipedia.org/wiki/Social\\_technology](http://en.wikipedia.org/wiki/Social_technology), accessed 04-04-2011, Vannoy and Palvia 2010, Bernoff, 2008).

However, one has to take into account a social sciences view that deviates distinctly from the technical use and covers more than the use of social technology in the public or private sphere. This article first covers the different aspects of the term social technology from social sciences perspective, as applied usage of social sciences theories and methods for specific purposes. The focus lies on the social, which constitutes a problem that needs to be acted on; social technology provides the expert knowledge to define solutions for social issues.

The article summarises the ongoing discussion about social technology from a social sciences perspective in the first part. It then goes on to connect those ideas with the governmental analysis on power and governance in a Foucauldian way. Power in all its distinctive forms, in which it exists, allows us to scrutinize social technology: sovereign power, bio-power, disciplinary power or pastoral power. Social technology itself constitutes a specific part of bio-power, disciplinary power and pastoral power, as it at least develops empirical facts and provides information for a purpose, i.e. to govern the individual and the population via ““powers of expertise”” within those forms of authority. Governmentality, which is discussed in the third part, provides the connection to the government and mode of thought. Social technology allows for an introduction of a new form of thought, as earlier forms of governing others and self displayed problems. The expertise for decision-making does not lie within bureaucrats or politicians; experts and their technologies, which are used to obtain the information for a specific purpose constituting social technology, form it. A specific form is governing at distance working with self-determination restricted by administrative procedures and expert’s opinion. Another example is the term empowerment leading to a new form of behaviour of the poor. The final part of the article describes an ordered approach for a critical analysis of social technologies in respect to an analysis based on governmentality.

## 1. Social Technology in Social Science”s Perspective

In general, social technology covers many other terms in social science (Etzemüller, 2009, Knobloch, 2006, Müller, n.d). Some authors use “social technique,” “social pedagogy,” “administrative technique,” “technocracy,” socio-technique, political science engineering, planned society, efficiency engineer, social (economic) planning, (Müller, n.d.). Common in all the terms is the focus on the social, which should be dealt with and be acted upon. Social technique describes the usage of sociological knowledge (theories, methods or expertise) in solving practical problems. In other words, the knowledge of sociology is used to provide applied expertise for specific decisions or actions, for purposes. Social technology applies methods and theories to obtain a scientific based analysis for a purpose, which is, then, used for political decisions. Technique refers to the application of specific evidence in everyday life, in contrast to technology described as a system of evidence (Büschges, 2002).

In general, the social can refer to the micro or macro level, it can focus on the behaviour and actions of individuals and groups, on the content knowledge or motives, on institutions, social structures and society. The methods and approaches may rely on two distinct ideas: On one hand, one can emphasise social sciences methods as a base for rational solutions. On the other hand, one can regard natural-technical science and its methods and approaches as a basis for solutions (Knobloch, 2006).<sup>1</sup> Nevertheless, a distinct set of methods is established and adapted such as statistics, demography, pedagogy, scientific management, learning processes, risk management, evaluation involving an applied side: social work, urban management, social planning, evidence based policy and policy advising. The common approach in all concepts about methods is the role of expertise defining the problem, establishing an empirical basis, focusing on the processes and system and developing a rational-based solution for institutions and the state (Etzemüller, 2009).

Zygmunt Bauman (1987) applies the metaphor of gamekeepers, who become gardeners. The pre-modern ruling class was not so much concerned with cultivating “nature”, its main aim was to obtain sufficient resources and take care that nobody interfered with their land. In contrast, the gardener does not accept “nature” as it is; he/she constitutes a new role defined by new skills and new tasks. A garden cannot sustain itself, it cannot maintain itself, it always needs control and supervision, and it demands design and constant surveillance. Therefore, the gardener imposes an order on the land, a social order, and requiring constant gardening to maintain that order.

An idea long prevalent in sociological thought: Auguste Comte (1973) already noted that the relevance of scientific methods to reach the third stage in society, to go beyond the theological and metaphysical stage and to enter the positivistic stage in 1822. Such a stage relies on the dominance of scientific explanations based on scientific methods. Scientists should use their expertise to plan for scientific based politics. Such scientific expertise should enable them to smooth out the turmoil in societal transformation

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1 Knobloch (2006) discusses the conflict between Jürgen Habermas and Niklas Luhmann about rationality in depth.

processes like the change from one stage to another. Thus, Auguste Comte discusses the then emerging development of a society towards an positivistic one and articulates a distinct approach towards social transformation and modernity via social sciences as a technology to smoothen the process and limit the negative social effects of such a transition period (Lahusen 2002).

The idea of social planning and social technology is long prevailing in sociological writing. Charles Richmond Henderson (1901, 1912) refers to applied or practical sociology as social technology in the beginning of the 20<sup>th</sup> century, asking for specific social reforms and experiments for rational reforms. C.J Bushnell (1936) develops social planning, a constitutional form of social administration and planning, to apply social technology to solve social disorder. Other contemporary authors make use of similar ideas. Olaf Helmer (1966, 3) reestablishes such ideas and proposes the introduction of simulation models and expert knowledge in order to make the society governable. Social technology serves the purpose of controlling society for a better world.

“It has been remarked that many of the difficulties that beset our world today can be explained by the fact that progress in the social science domain has lagged far behind that in the physical sciences. Moreover, if we contemplate the continuing explosion of knowledge of our physical surroundings—a knowledge that will soon open up to us vast new techniques ranging from molecular to planetary engineering, with eerie implications for human society—we may well take a dire view of the future, unless we assume that the gap between the social and the physical sciences will not persist.”

Those ideas prevail and repeat themselves, social technology should help “the improvements of an existing system” and allow serious reforms in a welfare system, when one applies eleven steps, starting with identifying a failing system and moving on to correcting the system in due time, as Theodore Caplow (1994) states. Beyond establishing social order, such ideas aim to foster the take up of the technological advancement in sciences and use that for social purposes. When one thinks about technological advancement in the sense that they allow routines to evolve and work efficiently, one needs to add a social component, as those particular efficient routines have to be co-ordinated accordingly. Thus, one draws a distinction between physical technology, i.e. division of labour, and social technology, i.e. connection between the divided parts. Institutions and social settings constitute such social technology; they can promote physical advancement and restrict innovation in an economy. Growth and innovation can only occur when social technology allows the creation and further development of new technologies in that sense (Nelson and Nelson, 2002, Nelson 2005). Thus, social technology should take into account and use technologies to foster social advancement, similar to or in accordance with technological transformation.

## 2. Social Technology and Expert Power

Social technology/social engineering rests on the idea of social advancement. Karl R. Popper (1966a, 158) rejects the idea of an ideal state or ultimate aim. Utopian engineering draws a plan towards such a “blueprint of the society” and gives the means and ways to achieve that rationally. Such a total remodelling of society might

not be feasible, as a utopian engineer cannot rely on any experiences and, therefore, is not able to foresee the outcome and consequences. Utopian engineering targets the whole structure of society. Such an approach follows a dogmatic and large-scale ideal, with huge sacrifices to be made. In contrast, Popper establishes the idea of piecemeal engineering or social engineering. Such a step-by-step approach targets the small scale, “which we learn most is the alteration of one social institution at a time. For only in this way we can learn how to fit institutions into the framework of other institutions, and how to adjust them so that they work according to our intentions” (Popper 1966a, 163). Specific to this method is that it is based on the idea of emplacing scientific methods into politics. The piecemeal adjustments allow social engineering to learn and adapt from mistakes, only then, can theories be advanced and improved. Karl R. Popper (1966b, 222) requests that “[a] social technology is needed whose results can be tested by piecemeal social engineering.” Thus, in that sense, social technology constitutes the technical means of government. It establishes a means to constitute authority—a *techné* of government (Dean, 1999) or “intellectual machinery” (Rose and Miller 1992) for government, as social technology provides sociological expertise to manage societal problems. It also subsumes that it can help to give guidance to political authorities via social theories. Those theories provide knowledge for the government; those theories provide the “analysis of thought” for programmes developed to govern and solve the beforehand identified problems.

“Programmes presuppose that the real is programmable, that it is a domain subject to certain determinants, rules, norms and processes that can be acted upon and improved by authority. They make the objects of government thinkable in such a way that their ills appear susceptible to diagnosis, prescription and cure by calculating and normalizing intervention” (Rose and Miller, 1992, 183)

Social technology requires projections and describes the necessary measures, which have to be taken, to obtain a certain result. Nevertheless, one has to be especially aware of unintended consequences—a critical analysis has to be part of the package (Popper 1944).<sup>2</sup> Scrutinising the (un)intended consequences of social technology can be one theme of a Journal on Social Technology. Social technology allows for a focus on specific ways and methods to transform society. Thus, it investigates; it studies and deploys specific ways of analysis to provide theory and statistics for evaluation, for planning, for engineering. As such, it describes a programme connecting theoretical knowledge and purposes and constituting applied objectives. Such a programme, first, defines power and a specific form of government: “Theories and explanations thus play an essential part in reversing the relations of power between the aspiring ruler and that over which rule is to be exercised.” (Rose and Miller, 1992, 182)

As stated above, social technology also defines a specific relationship of expert powers and politics; social technology serves as a connection between expertise and politics, it transfers expertise towards political actions and can lead to a situation of expert powers over politics. Such an approach also defines a specific political rationality, as it influences the way governmental organizations exert their power; its objective is to implicate ideas about the conduct of others and ourselves (Dean, 1999). Thus, one

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2 Discussion about Popper’s definition of social technology and its limits see Knobloch (2006).

has to discuss the idea of authority and power. When Zygmunt Bauman (1987) uses the role of the gardener, he also refers to the pastoral power of the state, a metaphor used by Michel Foucault for a new form of state and power in modernity. Firstly, Michel Foucault (2005) acknowledges the necessity of philosophy to scrutinise the abuse of power in regard of political rationales. One can take into account specific areas of culture and society as Foucault does regarding sexuality and punishment, defining the power issue and the involved political rationales. One can criticise and analyse the term rationality itself; however, Michel Foucault suggests that one has to first scrutinise the specific composition of pastoral power and state. Pastoral power focuses on the ancient metaphor of a shepherd wielding power over his/her flock. The shepherd's tasks are to collect and lead the flock and to bring in dispersed sheep. Another aspect of the pastoral power regards the wellbeing of each individual and the flock at the same time. Finally, a shepherd sacrifices him/herself for the flock, taking care of them while they are asleep and he/she supervises the flock as a whole and individually, taking into account the material need of each individual and in total—"omnes et singulatim" Thus, the duty of being a shepherd leads to sacrifice and to pay attention to each member. The antique form of pastoral power was further developed and adapted in Christianity. The shepherd has to know the need of each, the actions of each member, and focuses on the individual soul too. The shepherd guides the individual with new techniques, reflects and analyses his/her behaviour and consciousness leading to a complexity of self-examination and guidance of each individual soul. The aspect of pastoral power is the notion of an ancient form of power; nevertheless, the notion of modern states also takes over and combines the legal and normative idea of citizenship and the idea of pastoral power. It involves the total and the individual; it involves the subjectification of power—"each and all" as Mitchel Dean (1999) states. It allows for a paternalist involvement for the "good" of the individual (Henman, 2010). Zygmunt Bauman (2000, 108) argues that "(p)olicing, controlling and supervising the conduct of the excluded is perceived as an act of charity, an ethical duty." Therefore, paternalist involvement might entail another form of power too.

It is termed as disciplinary power: distinct form of regulation and normalisation should lead to a specific adaption of the individual's behaviour towards government objectives, a kind of self-regulation. Surveillance, discipline and punishment in institutions like prisons, schools, poorhouses and factories exemplify such techniques via timetables, drills, work cycles, etc. The subject should internalise such practices and the disciplinary power aims at putting the capacities of the subjects to use, describing a power over and through individuals and aggregated groups (Foucault 1994, Dean, 1999, Henman, 2010). The disciplinary society defines groups and persons subjugated to a regime producing useful subjects in certain "enclosing" institutions. Gilles Deleuze (1993) notes that the era of "such "enclosing" institutions have ended and the age of "control societies" has begun. The enterprise has replaced the factory, further education and the school. Whereas the factory controlled the masses of workers, who could resist the control collectively, the enterprise aims to divide the individuals, enforcing competition and rivalry. The control in school is replaced by immanent evaluation in further education. In the disciplinary society, one changed from one "inclusive" institution to the next, the

society of control emphasises the never ending forming. Such moulding continuously occurs for participants in all different spheres: one has to constantly improve and monitor oneself in training, health, etc. Control society does not imply the continual control from “above”: an individual has its signature and an administrative numeration positioning the individual within the masses in disciplinary society. The individual is transformed to a “dividual” marked out as a code holding all information about personal profiles, qualifications, experiences, and ratings. A code can deny or allow access to data and information depending on the position of the “dividual.”

Robert Castel (1991) points out a further transformation from disciplinary society to a “new mode of surveillance.” The physical nearness of surveillant and controlled marks old modes of surveillance, in other words reciprocity between them enables the surveillance and intervention based on an individual contact. Prediction and prevention are part of the risk management and exemplify new forms of surveillance; the subject pales into insignificance beside the risk factor and other statistical information.

“The relation which directly connected the fact of possessing a knowledge of a subject and the possibility of intervening upon him or her (for better or for worse) is shattered. Practitioners are made completely subordinate to the objectives of management policy. They no longer control the usage of the data they produce.” (Castel, 1991, 293)

Prevention and prediction reduces the subject to a mere figure. Risk factors are calculated and determine the probability. Not genuine “dangerousness” or “abnormality” lead to intervention, but an occurrence of risk characteristics constitutes the intervention practices. Therefore, the new mode of surveillance focuses on the construction of objective conditions of risks and deduces the mode of intervention from those constructions. The “autonomised management” automatically and impersonally regulates administrative proceedings: Individuals are checked, assessed and managed according their profile established by specialists; other specialists do the concrete intervention. Deleuze and Castel describe other aspects of disciplinary power.

Conversely, sovereign power is not exercised through and over individuals; it is based on the idea of a subject and a monarch, whereas the latter has the right of death over the former. Nowadays, constitution, laws and parliament define democratic sovereignty based on the executive and judicative function of a modern state (Foucault, 1994, Dean, 1999).

Bio-power refers, in an extreme form, to distinguishing between life, which is worth living and which is not—in short the “right to death and power of life”. As “power is situated and exercised at the level of life, the species, the races, and the large-scale phenomena of population” (Foucault, 1978, 137). Michel Foucault names the mass killing in wars, the genocides and the right to die as contrasting with the old notion of the sovereign and his right to kill and let live. In general, bio-politics defines all types of rationalising problems arising for the administration concerned with life’s condition of a population since the 18th century: health, hygiene, birth rates, longevity etc. (Foucault, 2005). Nowadays, discourses about genomics and risks form the basis for strategies and interventions and modes of subjectification exemplify contemporary bio-power, as the “knowledge of vital life processes, power relations that take humans as living beings as their object, and the modes of subjectification through which subjects work on themselves qua living beings” transform steadily (Rabinow and Rose, 2006, 215).

Such a notion of power and politics can help to characterise social engineering and social technology in depth. Taking account, once again, of the role of the gardener (Etzemüller, 2009), that describes one essential task: weeding, the weeding of “sick” parts of population. Depending on the country and the political situation, targeted policies might enforce a specific behaviour towards such defined parts. An extreme type can lead to genocide like the Holocaust.<sup>3</sup> A combination of specific technologies and bio-power can form, especially in a political context with an absolutist dictatorship like the Nazi regime, a social order throughout society, killing not only outsiders but also insiders.

All four forms of power are specific ideal types, they might be overlapping, they might depend on each other and might enforce distinct opposite strategies; however, they can concur (Henman, 2010). In a Foucauldian sense power is not something negative; in its capillary like form, it also constitutes something positive (Foucault, 1979, 1994, 1999). Power in all its distinctive forms, in which it exists, allows us to scrutinize the term social technology: sovereign power, bio-power, disciplinary power or pastoral power. On one hand, social technology can transform sociological knowledge to provide an empirical base for governmental decisions for a specific form of intervention, for a specific form of power. On the other hand, social technology itself constitutes a specific part of bio-power, disciplinary power, pastoral and sovereign power. Social technology transfers knowledge and assists to develop empirical facts at least and to provide information for a purpose, i.e. to govern the individual and the population providing “powers of expertise” (Rose and Miller, 1992): the panopticon of Bentham (Foucault 1994), risk and the administration, calculation and insurance of risks (Castel, 1991), political economy, family, poverty and demography (Donzelot, 1980, 1991, Procacci, 1991, Foucault, 2005).

Social technology transforms social expertise for a purpose, develops ideas for the solutions for social problems. Thus, it also establishes itself as a part of modern government, it can impact governmental decisions, it allows for a “technisation”, introduction of new techniques and new procedures, new administrative ways of politics and for specific conception of power between authority and subject. Here, one specific idea is that of governing at distance, as described by Rose and Miller in 1992. Karl Popper’s idea of piecemeal social engineering means a direct, institutional way of governing society and reducing social disorder by interventions such as social insurances, taxes, education, etc. based on rational social planning and using methods from social science. The administration is somehow related to a state or near-state institution. However, the switch to contemporary social technology takes a step towards an indirect mechanism for shaping society: The private sector and the market allow governing via networks and also for self-determination of the individual, who has to act as an active responsible citizen. Liberal governance introduces other social technologies and other means to govern through different levels of society. One form of new social technologies is procedures. Such procedures are not put into place in order to find a

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3 For Rabinow and Rose (2006), bio-power of the NS regime is an extreme form; nevertheless, it exemplifies, how it campaigned for life (healthy food, tobacco, etc.) and for death at the same time. However, bio-politics and bio-power cannot be reduced to that extreme form.

good solution or good decision making method, rather to manage the situation and to deal with a matter, even when one does not know how to make a decision in a specific way. Specific for such a matter is a decision tree, which enforces a distinct form of operation on administrative and social issues in businesses. During such procedures, people get an opportunity to talk; nevertheless, they cannot change the final outcome. In most cases, the procedure predetermines the result; however, it allows the society to be kept manageable, whilst implementing procedures that involve the individual, but to a lesser degree changes the outcome and enforces self-determination (Braun 2011). The use of statistics and probabilities, expert's counselling, etc. restricts self-determination within bureaucratic procedures.

### 3. Social Technology and Government

Consequently, a critical analysis of social technology has to focus on governing as well, which goes back to the regime that defines the "population" as its governing object in society like the metaphor of gardener expresses. In that period, the governing of a state "mean(s) to apply economy, to set up an economy at the level of the entire state, which means exercising towards its inhabitants, and the wealth and behaviour of each and all, a form of surveillance and control as attentive as that of the head of family over his household and his goods" (Foucault, 1991, 92).

Government, population and economy transform the old notion of sovereignty and introduce the population as a field, which has to be formed by governing. In addition, the economy develops as a sector of its own and political economy defines the field of intervention in that sector. Government as a term describes those set of new techniques, institutions, knowledge and analysis established to exercise this new form of power concentrating on the population with the political economy supported by administrative systems of security, so called "apparatuses of security" (Foucault, 1991, 102). Foucault defines government as the "conduct of conduct" (Gordon, 1991, 2, Cruikshank, 1994, 32). Mitchell Dean (1999, 11) notes the following general explanation of government in Foucault's sense: "Government is any more less calculated and rational activity, undertaken by a multiplicity of authorities and agencies, employing a variety of techniques and forms of knowledge, that seeks to shape conduct by working through our desires, aspirations, interests and beliefs; for definite but shifting ends and with a diverse set of relatively unpredictable consequences, effects and outcomes."

Governmentality describes the link between governing and a mode of thought. It combines the "apparatuses of security" and specific knowledge that forms disciplinary or bio-power and results in an administrative and/or governmentalised state establishing a governable society. In the analysis of governmentality various aspects are important: the administrative system and their techniques, the knowledge established to collect information such as statistics, in order to evaluate, analyse and propose certain solutions to problems, which were identified beforehand (Miller and Rose, 1992). Diverse authorities and agencies set in play an activity via different means and technologies of government that aims towards a certain governed entity to form the conduct looking for a certain end, which has to be tested for the consequences and outcome. The aim is to regulate human

conduct, fitting to a certain rational of how to govern and how things ought to be. Such a definition circumscribes the governmentalisation of the state, whereas the individual and the population are regulated via influencing the constituting processes in different fields of expertise like psychology, sociology and economics constituting an administrative state. Thus, “government is intrinsically linked to the activities of expertise, whose role is not one of weaving an all-pervasive web of social control, but of enacting assorted attempts at the calculated administration of diverse aspects of through countless, often competing, local tactics of education, persuasion, inducement, management, incitement, motivation and encouragement.” (Rose and Miller, 1992, 175)

Social technology can serve as an example of a new method, which the contemporary regimes of government relies on; such regimes refer to the “way of doing things” in a structured manner to guide the conduct of others and oneself (Dean, 1999). The “conduct of conduct” emphasises a specific form of government, as it “presupposes the primary freedom of those who are governed entailed in the capacities of acting and thinking. It also, furthermore, presupposes this freedom and these capacities on the part of those who govern” (Dean, 1999, 15). The capacity of acting and thinking means that someone can govern him-/herself and can govern others by thought. Thought does not concern so much the ideas on the historical and societal level developed by major thinkers, it is about the way people think about governmentality, their knowledge and their beliefs about the “conduct of conduct” and how they act. A critical analysis about governmentality has to scrutinise the practices and regimes of government and searches such thought at the level of new techniques, new practices and transformed institutions. In such a way, the reflexivity is part of governmentality that “we govern others and ourselves according to what we take to be true about who we are, what aspects of our existence should be worked upon, how, with what means and to what ends. We thus govern others and ourselves according to various truths about our existence and nature as human beings” (Dean, 1999, 18). Thus, governmentality scrutinises the various forms of truth existing in the practices of governments. Through the process of conduct, different forms of truth are produced. Mitchell Dean uses the term economy as an example; nowadays, one could not govern nation states without an economy. Nevertheless, only the governing of a nation state leads to the development of an economy and nations states would not be governable without the production of economy as truth. On an individual level, one can suggest the responsibility for savings and economic planning over one’s lifetime as an example.

In general, social technology can be interpreted as part of governmentality. It can transform sociological knowledge about new ideas towards the applicable expertise needed for governmental decisions. It can also assist to refine governmentality, it can help to adapt, improve and advance that via providing necessary methods and theories applicable for such a purpose.

Specific to the analysis of the techniques of governmentality is the focus on the aspect of self-governance—self-conduct.<sup>4</sup> Self-determination, empowerment and casework<sup>5</sup> serve as examples for such techniques of government. Empowerment focuses on the distinct form of self-governing and the power establishes on one-self, as one political rationality formed by liberal governmental technologies. “This mode of government links the subjectivity of individuals to their subjection, by transforming political subjectivity into an instrument of government. Technologies of citizenship are the means by which government works through rather than simply against the subjectivities of the poor. The poor are governed, so to speak, but not strictly by the government or the state.” (Cruikshank, 1994, 32-33)

Diverse kinds of strategies enable the implementation of this “technology of citizenship”: one has to establish the consciousness of powerlessness for specific groups. A specific expertise forms the core ideas and the rationality of the government. In case of empowerment, one has to define the knowledge of the poor’s powerlessness and of the disempowering. Within that process, one has to form a group of “marginalised” and “powerless” out of lone parents, homeless, unemployment, etc. dichotomising against “powerful.” Empowerment needs a structural change. Within this discussion, governmental institutions create the structure necessary for the poor’s participation on the local level and create the concept of “community.” Finally, a range of actions is required to change the “powerlessness.” This process forms the “subjectivity” of individuals. Governmental interventions build the conditions under which the “poor” can become “active citizens.” The governmental regulation requires that the poor become subjected in order to obtain subjectivity and agency: “They involve both a voluntary and coercive exercise of power upon the subjectivity of the empowered” (Cruikshank, 1994, 35). Such subjectivity is essential for the formerly marginalised to obtain the capacity to exercise kinds of freedom. Barbara Cruikshank’s analysis of empowerment in the American “War against Poverty” in the 1960s exemplifies the interwoven power relations termed by Foucault as governmentality, how governmental institutions work upon the poor. Within this process, the category of the “poor” is established and the “conduct of conduct” is implemented in the context of self-rule.

#### 4. Critique and Social Technology

A governmental approach to analysis allows for re-examination of the normative principles, which might lead to questions about the inevitability of certain policies or regimes; such a focus enables us to challenge the narrative of policy’s advancement (Marston and McDonald, 2009). Such a process uncovers distinct aspects of “the powers of expertise”, which can be described as a specific form of regime of government for different regimes of practices like education, punishment or redistribution. In a regime

4 Specialists have to activate and lead persons/groups not capable of self-government (Rose 1999).

5 See Marston et al (2005) and Dean (1998) for unemployed and case managers as a new form of governmentality on the micro level.

of government, social technology exemplifies a support system for an ordered method of the way of government, it allows for the conduct of others and self in a more “scientific” way.

Social technology transforms governing; it uses new techniques to make society governable. It introduces a new mode of thought and allows for a specific support system for an ordered method of government. This leads to what is termed problematisation. In general, problematisation does not occur that often – it is the way to ask how we govern others and oneself in a specific context, when governing imposes a problem. Taking the example of empowerment, one can define a new way of governing that introduces empowerment. This can be contrasted with the idea of an administration taking all responsibility away from the recipient of a benefit. Nevertheless, the process of problematisation can indicate that the way of governing is regarded as insufficient and has to change (Dean, 1999). Another shift is the introduction of customer and new public management in social institutions (Clarke and Newman, 1997). Problematisation also concerns social technology as it alters the “conduct of conduct”. The expertise for decisions does not lie with bureaucrats or politicians alone; it is formed by experts and their technologies, which are used to obtain the information for a specific purpose. Expertise and social technology might, first, define new areas of problematisation and, secondly, change the way of governing and, thirdly, provide solutions for areas of problematisation.

*Table 1.* Summary of Social Technology and Governmentality

Social Technology	Social Technology in Social Sciences	Social Technology and Governmentality
Social sciences perspective applied usage of social science theories and methods for specific purposes	Rests on the idea of advancement, rational analysis of social problems and provision of solutions	Use of new techniques to make society governable, new mode of thought, support system for ordered method of government, self-conduct
Technological/organisational perspective usage of technology for social purposes: to ease social procedures via social software and social hardware	Introduction of new techniques and new procedures, new administrative ways of politics and for specific conception of power between authority/expert and subject (from gamekeeper to gardener)	Administrative procedures, calculability and rationality taking into account effects, consequences and outcomes
Colloquial perspective any technological invention for social purposes like Facebook		Expertise for decision not within bureaucrats or politicians but within social sciences (reciprocity)

Such power of expertise changes the way in which governing occurs, one looks for theories and explanations first, one searches for technologies making society manage-

able and calculable. Social sciences provide theories and explanations about society. It serves as a science introducing society as governable object, as it establishes the necessary theory about society. Social technology deploys the notion of purpose and expertise: expertise to solve a problem based on social sciences.

“Relations of reciprocity obtain between the social sciences and government. As government depends upon these sciences for its languages and calculations, so the social science thrive on the problems of government, the demand for solutions and the attraction of theories which have the plausibility of science and the promise of the rational disciplining and technologising of the social field.” (Rose and Miller, 1992, 182-183)

In a governmental analysis, one has to pose a set of questions to cover all aspects of regimes of government and practices (Dean, 1998, 1999). First of all, one has to scrutinise the visibility of field of government. When one poses such a question, one has to look at the things that are hidden and the things that are open to the field of government; what and how is something perceived? What/who is to be governed and what/who is not subject to such an interest? One looks at the agencies and institutions that are involved, and what forms of power are used in that field. How are those constituted and connected to solve a problem? One can pose the question, who is treated as a specific object - what is to be governed by this programme and what is not to part of the governed – what is the governed substance, for which social technology has to transfer social science expertise towards a purpose? In case of empowerment, one can ask how and why was the governed subject “poor” constituted. The role of experts and social technologies in that field are of interest too – who governs and how? How are those connected and what specific forms of power are evolved? Why and how did a shift occur from economic redistribution, income, jobs and education towards empowerment solving all societal problems?

Secondly, one has to ask what means, instruments and technologies are established to define authority and rule in a specific regime of practice. Social technology itself constitutes a specific technical mean of government (see above). Through the means of social technology, one could evolve specific measures and technologies to govern the population and the individual. Thus, one has to discuss the specific means and technologies, which are used, whilst scrutinising how governing works. In case of empowerment, one has to look upon the notion of the poor’s self-governing. Specific of participation is the involvement and expertise of the poor on the local level. Expertise, thus, serves as prerequisite to constitute such a technology; nevertheless, the technology itself constitutes the poor as turning from powerless to local activists, from non-expert to expert.

Thirdly, the connection of government and thought are called into question. Thus, the regimes and practices of government establish “forms of knowledge that arise from and inform the activity of governing” (Dean 1999, 31). Social technology imposes a distinct new regime of government; the thought is that social theories assist in forming rational based solutions for a specific purpose, a specific problem. That is the rationality of government or of the governmentality of government constituting an ordered way of thinking about government. What kind of strategies, expertise, know-how occur and impose a rationality in a field? How are these influencing the way of doing things, governing, and changing the involved technologies? Social technology provides

theoretical knowledge for specific problems and objectives; thus, it also introduces other forms of truth towards programmes and delivers expertise for a change of regimes of government and practices to obtain a specific aim or goal. Empowerment entails more than one notion of knowledge: the subject of poor is connected with powerlessness and low participation in local communities and presented as group to be acted on. Specific theories are transformed to define a solution – empowerment refining governing activity.

The final question of a governmental analysis about a regime of government defines the question of agency and identity. When one takes as an example empowerment, one has to ask the question what form of poor people are presupposed by governmental practices, as to the persons, their identities and self and what do governmental practices want to transform? Thus, the term empowerment sees dependent, powerless poor persons as incapable of self-government. The powerlessness of the poor should be altered via communal participatory structures and the poor should be uplifted through participation in the local communal organisations. Thus, it transforms both: the groups forming authority like politicians, administrators and experts and the poor. For both groups, one has to ask what conduct is expected. In addition, one can scrutinise the rights and responsibilities, which those groups have and how they are ensured. When does a certain form of conduct lead to an intervention? Specifically of interest for the analysis are the statuses, capacities, attributes and orientations for both groups. Governmental analysis does not focus on the “real subjects” and their identities (Dean, 1999), but on how to promote specific capacities, like the ability to participate in the decision making process at the local level, attributes, from powerless to powerful, and the status of “empowered” citizen. The poor has to find identification with an empowered citizen and has to prove his/her agency. Social technology connecting social sciences and purposes provides specific forms of identifications – the “active”, “cosmopolitan”, “consumer”, “learning”, “active ageing”, “risk managing” consumer; consequently, one has to ask the question, why does the governing work regarding the subject, why is one governed in such a way concerning rules and norm?

Empowerment can serve as an example leading to a new form of practice in governing poor and new forms of truth. Knowledge and expertise of administration, social sciences and poor activists are transformed, and the poor themselves are involved in such a process transforming the regime of government towards the poor and providing a new way of governing through participation and self-governing of the poor.

The final question also touches on an early idea in social technology – the utopia: Social technology can be both, piecemeal engineering and utopian engineering, both have an aim, as they want to transform society and the human beings. At least, they want to improve and obtain desired outcomes. It is not solely about power, it is “conduct of conduct” towards an end: what is the “telos” of government (Dean, 1998, 1999)?

## Conclusions

The article takes into account the notion of social technology in a social science perspective and summarises the on-going discussion about social technology from a social science perspective in the first part, as social technology provides social science knowledge for a purpose. Such a notion allows for an in depth debate about the meaning of social order in modern societies. Establishing distinctive techniques now forms the basis of the modern state and governance.

When one connects those ideas with the governmental analysis on power and governmentality in a Foucauldian way. Power in all its distinctive forms, in which it exists, allows us to scrutinize social technology: sovereign power, bio-power, disciplinary power or pastoral power. Social technology itself constitutes a specific part of bio-power, disciplinary power and pastoral power, as it at least develops empirical facts and provides information for a purpose, i.e. to govern the individual and the population via “powers of expertise” within those forms of authority. Governmentality provides the connection of government and mode of thought. Social technology allows for an introduction of a new form of thought, as earlier forms of governing others and self displayed problems. The expertise for decision-making does not lie within bureaucrats or politicians; it is formed by experts and their technologies, which are used to obtain the information for a specific purpose constituting social technology. Social technology forms the basis of governmental decisions, it allows for a “technisation” of politics and for specific conception of power between the individual and public powers. Therefore, it alters government in three ways: It provides expert power to define solutions for social problems based on social science knowledge. It transforms government. Social technology exemplifies a support system for an ordered method of the way of government, it allows for the conduct of others and self based on scientific expertise. It can define new areas of problematisation in need of a change of government. A specific form is governing at distance works with self-determination restricted by administrative procedures and expert]s opinion. Another example is the term empowerment leading to a new form of behaviour of the poor.

Social technology has to be aware of such a concept and take into account that the notion of advancement, improvement and administrating towards a better existence might entail negative aspects. Social technology can entail the “fine tuning”, the “perfection” of governing. It can lead to a tightening and stressing of power relations. It might involve more liberty; it might cause more domination. Like the notion of empowerment demonstrates, it can impose a regime of self-governing without an emancipatory implementation of equal and consensual power relations. A critical study on social technology has to be aware of such implications. Thus, one can only ask to scrutinise intended and unintended consequences and to critically analyse all aspects of social technology in this journal.

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## SOCIALINĖ TECHNOLOGIJA Konceptijos „Socialinė technologija“ kritinė apžvalga

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**Santrauka.** Straipsnyje pirmiausia apibendrinama socialiniuose moksluose besitęsianti diskusija apie socialinę technologiją, kadangi socialinė technologija socialiniams mokslams suteikia žinių. Tai skatina dar aktyvesnius ginčus dėl socialinės tvarkos modernioje visuomenėje. Dominuojančių technikų numatymas dabar tampa modernią valstybę ir valdžią formuojančiu elementu.

Šios idėjos toliau straipsnyje plėtojamos analizuojant valstybinį valdymą galios ir vyriausybės aspektu. Egzistuoja daug galios formų: suvereno galia, biogalia, drausminė galia ir pastoralinė galia. Pati socialinė technologija yra specifinė biogalios, drausminės galios ir pastoralinės galios išraiška, nes ji mažiausiai plėtoja empirinių faktų ir suteikia informacijos siekiant, pavyzdžiui, valdyti individą ir populiaciją naudojant „ekspertų galią“ pagal šių formų valdžios kompetenciją. Vyriausybės kumas, aptariamą trečioje dalyje, atskleidžia valdžios ir mąstymo tipo sąsają. Socialinė technologija leidžia pristatyti naują mąstymo tipą, kai ima ryškėti vis daugiau ankstesnių valdymo formų problemų. Ekspertinė sprendimų priėmimo kompetencija nepriklauso biurokratams ar politikams – tai atlieka ekspertai, pasitelkę technologijas, kurios naudojamos specifiniams tikslams, reikalingai informacijai gauti. Socialinė technologija formuoja valdžios sprendimų priėmimo bazę, ji leidžia „technologizuoti“ politiką ir specifinę individų ir viešosios valdžios galios sampratą. Dėl šių priežasčių socialinė technologija keičia valdžią trimis būdais: suteikia galią ekspertams pateikti socialinių mokslų žiniomis paremtus socialinių problemų sprendimo būdus; transformuoja valdžią (socialinė technologija susitiprina tvarkingo valdžios modelio paramos sistemas); gali apibrėžti naujas problemines viešosios valdžios sritis (viena tokių sričių yra nuotolinis darbas numatant savireguliacinius apribojimus, nustatytus administracinėmis procedūromis, parengtomis remiantis ekspertų nuomone, kitas pavyzdys būtų įgalinimas, vedantis prie naujo neturtingųjų elgesio modelio).

Paskutinėje straipsnio dalyje reiškiamas kritinis požiūris į socialines technologijas vyriausybės aspektu, nes socialinė technologija gali sukelti ir griežtus bei įtemptus galios santykius. Ji gali suteikti ir daugiau laisvių, ir daugiau dominavimo. Kritinėje socialinių technologijų studijoje pateikiamos šios išvados ir žvelgiama į nuotolinio valdymo įgyvendinimą. Taigi galima tik stebėti planuotus ir neplanuotus padarinius ir kritiškai analizuoti visus socialinių technologijų aspektus. Žvelgiant į ateitį dėmesys sutelkiamas į valdomų subjektų, valdžios veikimo bei priežasčių problematiką, idėjų ir mąstymo tipų diskursą.

**Raktažodžiai:** socialinė technologija, valdžia, vyriausybės kumas, galia, socialiniai mokslai.