PAGANINI

PARTICIPATORY GOVERNANCE AND
INSTITUTIONAL INNOVATION
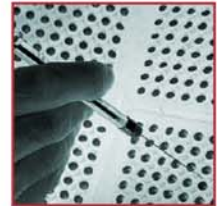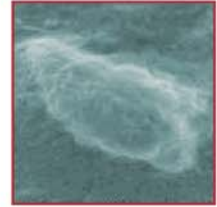
Deliverable 5:
Final Report –Theory and Method

Investigating new participatory practices of the 'politics of life'
in a European context

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The Paganini project

Focussing on selected key areas of the 6th EU Framework Programme for Research and Technology, PAGANINI investigates the ways in which participatory practices contribute to problem solving in a number of highly contentious fields of EU governance. PAGANINI looks at a particular dynamic cluster of policy areas concerned with what we call the "politics of life": medicine, health, food, energy and environment. The politics of life refer to dimensions of life that are only to a limited extent under human control - or where the public has good reasons to suspect that there are serious limitations to socio-political control and steering. At the same time, "politics of life" areas are strongly connected to normative, moral and value-based factors, such as a sense of responsibility towards the non-human nature, future generations and/or one's own body. In these areas, traditional mechanisms of governance can be seen to hamper policymaking and much institutional experimentation has been taking place.

Work package 1

The PAGANINI project is set up on the premise that there is a quality to the politics of life that links it to civic participation, and sets out to investigate empirically the ways in which participatory governance in the domain of the politics of life is becoming a component of the European polity. The objective of Work Package 1 is to provide the theoretical and methodical framework on the basis of which the project's empirical research can be conducted. To that end, in Work package 1, the central notions – participation and the 'politics of life' – have been elaborated theoretically against the background of an analysis of broader processes of societal change and the emergence of new 'governance' strategies. Furthermore, a methodical approach has been designed in order to enable an empirical investigation of the manifestations of participation in life-political domains. The resulting framework presented in this report builds on the key elements outlined in the project proposal which was granted funding within the 6th EU Framework Programme as well as on literature study, and has benefited to a large extent from intensive discussions among the researchers involved in the PAGANINI project, among them in particular Prof. dr. H. Gottweis, Prof. dr. Y. Haila and Dr. B. Szerszynski.

Report outline

This report consists of two parts. In Part I, the project's research objective and its research agenda are outlined on the basis of a conceptual and historical exploration of the transformations in the dominant conception of what constitutes politics, science and life. Part II presents a research approach to guide the project's empirical work that is contingent with the conceptual elaboration of its core themes (participatory governance and 'the politics of life'), and illuminates the project's case selection.

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Part I

Participation, governance and life: the intertwining of conceptual and institutional innovation

1. Introduction

Relations between society, technology and nature seem to be undergoing changes of a pace and profundity that set them apart from the dynamics of change which characterised the better part of the 20th century. Contemporary disturbances between scientific expertise, formal political institutions and citizenry have come to challenge the dominant perception of social and political ordering of the past century, the functional differentiation between the state, market and society that characterised the past epoch, and the distribution of roles and functions associated with it.

The image of the state as a unified political space seems to be giving way to an appreciation of networks of actors as the loci of political activity (Castells 1996). The nation-state's authority vis-à-vis various realms of societal development as well as to other governmental bodies seemingly looses its self-evidence. With states – and supra-state bodies like the EU – increasingly seeing their role as creating the conditions for technological innovation, networked relations between state and economic actors increasingly blur the boundary between innovation on the one hand, and regulation on the other (Jessop 2002:96). In this new context, knowledge production seems to be shifting to a pattern based on transdisciplinary networks across the public and private sectors, with the boundaries between knowledge production and other societal processes increasingly blurred (Gibbons et al 1994; Nowotny et al 2001). The assumption of a universal, certain body of knowledge grounded in the natural world to draw from for directions as to know 'what to do next' has been challenged by an understanding of knowledge as being contextually constructed, situational and always bound up with particular practices.

These dynamics are reflected in the changing ways in which communities try to create, stabilize and acknowledge new space for politics at the turn of the 21st century. The kind of state-initiated social engineering that dominated the better half of the last century, which was based on the assumed availability of synoptic, universally valid knowledge and of the ability of states to shape society and the market, no longer seems an option under late-modernist conditions. Practices of what James Scott (1998) calls "high modernist statecraft" too often have been seen to fail. In reaction to such experiences and in line with the described dynamics in general, there is growing evidence of an "opening up of the political" (cf. Beck 1997), a development which comes out in two ways. On the

one hand, new arrangements of <u>governance</u> – that is, of the act of governing[*] – are being designed, in which non-state actors (that is, anyone not employed as an elected representative or in the civil service) are actively invited to participate in processes of policy analysis or policy-making. Participatory governance in these new institutional designs is understood as "the practice of consulting and involving members of the public in the agenda-setting, decision-making, and policy-forming activities of organizations or institutions responsible for policy development" (Rowe & Frewer 2004). In many countries over the last decades, state initiatives have emerged to promote and support such forms of public participation (Akkerman et al 2004).

On the other hand, the realm of the political is being challenged and 'opened up' *conceptually*. The social sciences, in particular the political sciences and the study of science dynamics, increasingly acknowledge the political nature of any act that holds public consequences, including those which are enacted outside the formal institutions that are traditionally considered the exclusive centres of political power. Attention is drawn to any setting where social, economic and political reality is (re-)created and (re-)written (e.g. Beck 1992, 1999; Gomart & Hajer 2002; Mol 2002) – that is, to the *practices* in which politics is being enacted through the articulation of meaning and moral and their inscription in analyses, plans and material objects. In these sites, heterogeneous authorities and agencies struggle over meaning and seek to shape our conduct "by working through our desires, interest, aspirations and beliefs" (Dean 1999:11; Gottweis 2003:255). Among them are human subjects who, at some times intentionally, aspire to inform and adjust social and economic activities or, at other occasions, are simply implicated without prior consent in the process of the shaping of science and society. Among them, too, are the material objects, often constituted *as* objects in the same moment as they come under the administrative gaze, and which mobilize in their turn subjects, emotions, discourse, the direction of further research and so on.

These two interpretations of an 'opening up of the political' intersect. The conceptual transformation of politics leaves the question of what precisely counts as 'public participation', so straightforwardly defined in terms of the traditional conceptualisation, unsettled. What is it exactly that a public participates in? How is 'the public' constructed; in relation to what and by whom? When the ability to govern is attributed exclusively to a reified concept of the state-as-exclusive-domain of political power, these questions can be answered rather straightforwardly in terms of in- or exclusion in processes of formal political decision making and policy analysis of, indeed, non-state actors. Yet when politics is understood as a struggle over meaning and the allocation and prioritisation of values

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[*] Please note, the word 'governance' is used here as a mere descriptive term referring to an activity, namely as a description of the series of acts that people undertake to jointly rule and control the public consequences of natural events or human activity, and in so doing, to shape, guide or affect the acts of others (cf. Gordon 1991; Dean 1999).

that comes out *in* technologies, or in, say, scientific and medical practices, the notion of 'participation' is stretched beyond its limits and the above definition is rendered obsolete.

The need to acknowledge this intertwining between institutional and conceptual innovation in regard to 'public participation in politics' becomes acute when one wishes to empirically investigate new forms of participatory governance, as is the objective of the PAGANINI project. One might, for the sake of practicality, choose to ignore the conceptual quicksand that the latter understanding of politics brings along. However, in so doing, one runs the risk of analysing and assessing the 'new' in terms of the past, and even of overlooking the very manifestations of politics and participation in the issues under scrutiny. As Connick & Innes (2003:178) remark in regard to what they call "collaborative policy making": "[m]any evaluations … miss the mark because they come from the perspective of an older, modernist paradigm of policy making predicated on the assumption that policies can be designed to produce predictable outcomes, even in very complex settings. … Today's collaborative practices are more fluid and less predictable than traditional forms of policy making." The familiar conceptual apparatus and methodological techniques employed hitherto therefore are increasingly considered ill-suited to grasp today's political phenomena (Rosenau 1995; Beck 1999, 2004; Dryzek & Braithwaite 2000; Torgerson 2003).

To avoid the pitfall of conceptual determinism in assessing institutional innovation (or the lack of it), the PAGANINI project adopts an *empirical* approach to investigating how 'publics' and the objects and issues that trigger their coming into existence, are mutually constructed and transformed in concrete practices of participatory governance. Only thus can we consciously elaborate the adaptive terms to describe the shapes that politics and participation take today.

Obviously, one cannot start empirical research "intellectually empty-handed" (Geertz 1973:27). Nor would one want to, as the theoretical assumptions underlying the project provide a foothold and stepping stones for its empirical elaboration. To that end, below, the core themes on which the project is outlined[1] are elaborated theoretically. In section 2, the notion of participation is elaborated by positioning it historically as an expression of the vocabulary associated with a particular framing of governance. In so doing, the object of research in the PAGANINI project is identified as a broad range of contemporary forms of participation that span the traditionally defined formal participatory arrangements as well as institutionally less articulate new practices of governance. In section 3, this conceptual understanding of participation is discussed in relation to the project's thematic focus: the politics of life. It is argued that in the domain of life-political issues, the notions of participation and governance seem to have become intermingled to an unusual extent. The way in which that is the case in concrete instances of the politics of life, and which form such an intermingling takes practically is an empirical question, which sets the project's research agenda. Part II discusses the

implications of the conceptually 'innovative' understanding of politics and participation for the way in which manifestations of (participatory) governance can be investigated empirically. It is argued that for a full understanding of participatory governance, the inquiry process needs to adopt a 'double focus': on the one hand, the participatory practices of governance that form the object of research should be understood in relation to the broader societal – political, economic, technological – dynamics of which they are a specific expression; on the other hand, it is argued, the researcher should have an eye for the micro-politics of meaning that take shape in the practices under scrutiny.

2. Participation and the transforming conception of politics: identifying the object of research

As the orientations of academia are intertwined with the development of a particular set of institutions, the reification of those institutions that are themselves the product of a particular period, and indeed, of particular political conflicts (cf. Hobsbawn 1977; Joll 1978; Manin 1997) is often difficult to avoid or overcome. Just as modern sociology was tied to the development of industrial society and later to the development of the welfare state (cf. Lenzer 1975; Dahrendorf 1988; Beck 1992; Heilbron et al 1996), modern political science and policy analysis were deeply implicated in facilitating the stability of the political institutions of the Western nation state in the postwar era, whether in the domain of international relations, comparative politics or political institutions (Dryzek et al. 1995; Goodin & Klingemann 1996; Wagner 1996). However, at the turn of 21st century, a growing discrepancy is felt between the dynamics observable in the political and economic organisation of society, roughly sketched in the introductory sector, and the conceptual framework of the 20th century political sciences to described and analyse these. The changing topography of politics – through such processes as the 'globalisation' of production networks, the transnationalisation of policy-making (EU!) and a decoupling of identity and territory – impel a conceptual change. In turn, a conceptual reorientation – a *rethinking* of the core axioms in the 'science of politics' as developed under the conditions of the past epoch – implies an 'opening up', a broadening of the traditional empirical focus to include a wider range of sites where politics become manifest. Concretely, for the PAGANINI project, this means that the answer to the question what exactly is its object of research – participation in governance – is contingent to the way in which politics is conceptualised.

2.1. The 'orthodox' view on politics

Governance in the political sciences that crystallised in the 20th century has long been defined in terms of the formal centralised political institutions by which the intent to govern, that is to publicly handle a problem issue in a way that respects the interests of a community, becomes manifest. Of these institutions, the government of a nation-state as the apex of power and authority was conceived of as the centre of political will formation. Three assumptions underpinned this depiction of what now is known as the "orthodox understanding" of governance (cf. Fox & Miller 1996:14-19): *i)* the idea that there was – or at least should be – a clear caesura between norm-driven politics on the one hand, and a neutral public administration to 'technically' implement political decisions on the other, *ii)* the idea that the relation between the realms of the political and of administration was one of a hierarchical control, and *iii)* the assumption that science, when properly exercised, could inform political decision making with "judgements that are beyond question" (Collingridge & Reeve 1986).

The ideal image of a fact - value dichotomy incorporated in the organisation of politics (cf. Weber 1930), placing politicians and administrators in a chain-of-command hierarchy with science in a role of "speaking truth to power", to use Wildavsky's (1979) famous phrase, was in its heyday in the decades following World War II, in what is now depicted as the age of "high modernism" (Scott 1998). It is against the backdrop of this conceptualisation of government that David Easton formulated his well known and much cited definition of politics as "the authoritative allocation of values for society as a whole" (Easton 1953). Of course, values are also allocated by and within other systems or institutions, such as families or firms, but it was only the political *system*, Easton posited, that allocates values for society as a whole (cf. Van de Graaf & Grin 1999). The policy process by which that function was made operational was portrayed in Easton's (1953, 1965) system theory as a "conveyer belt" (Stone, 1998: x). Pressures from society are turned into inputs (demands and supports) for the political system, within which politicians authoritatively order and translate the societal pressures and requests into problems to be processed by policy-makers. It is the latter's task to thereupon transform them into policies that, after having been politically sanctioned, are to yield policy outputs that resolve the problems as experienced. Subsequently, governmental administrators implement these policies. In return, society may respond by a new round of demands being articulated and pressures building up (Grin & Loeber forthcoming).

The *substance* of politics thus being closely intertwined with its *site* – in the shape of formal political institutions – for 'orthodox' political science, the contours of its object of research were delineated by the organisation and operations of government. The traditional topography of politics – the institutions now designated as "classical-modernist" (Hajer 2000; Wagner 2000) such as elections and

centralized decision making on issues of collective interest via councils of elected representatives – became the prime focus of research, as were the dynamics at the boundaries of 'the political system' (the inputs 'into the political system', and its outputs).

Over the past decades, the orthodox perception of what counts as politics and political space has been met with two types of critique. Both types of critique reflected and provoked innovations, institutionally and/or conceptually, that feature the notion of 'participation'.

2.2. Participation in the light of empirical critique: refining 'state simplifications'

Over the past decades, the image of the state as a unified political space gradually has lost its convincing power. Varieties of political scientists provided serious amendments to the orthodox interpretation of government which, although these authors may not have questioned the image of a unified political system as such, made important comments on the interpretation's credibility.

The notion of rational decision making was questioned seriously because of the idea of synoptic rationality it presumed. Simon and March (1958) launched the concept of 'bounded rationality' to describe the inherent limits to an actor's ability to obtain and process knowledge, which applied, he argued *mutatis mutandis* to the state as well. Lindblom (1959, 1968; Lindblom & Woodhouse 1997) developed the notion of "disjointed incrementalism" to describe the process of policy making, portraying political decision as being at best *provisional* allocations of values, to be reviewed in processes of trial-and-error learning.

A different strand of empirical criticism concerned the assumed objectiveness of the findings from positivist technocratic approaches to policy analysis inherent in the orthodox model of government.[2] The idea that knowledge in itself is sufficiently authoritative to legitimise its use in decision-making was challenged by such "policy disasters" (Dryzek 1993:215) as the Vietnam War and the War on Poverty (DeLeon 1988); policy 'events' that stirred considerable public outrage. These events were looked upon by the public and political scientists that commented on them as consequences of the use of expert intelligence and sophisticated technologies of decision engineering, an assessment which led March and Olsen (1995:198-199) to remark that "[t]he history of efforts to act intelligently in democracies is a history of mistakes."

The image of a fact - value dichotomy in the hierarchical organisation of politics and bureaucracy, furthermore, was gradually shattered by empirical studies on the implementation of political

decisions. Such studies indicated that bureaucracies, and in particular the local and regional branches of the formal system of public administration, were not the machines depicted in the orthodox model, controlled hierarchically by the national political system. The findings of such empirical work inspired Majone and Wildavsky (1979) to describe implementation as "the continuation of politics with other means."

'Formal' (state-initiated) participatory arrangements

In response to this type of criticism, the practices of governance have gained in sophistication, in processes that have been far from uniform between nation-states. This has been the case to such an extent that Fox & Miller (1996:3) conclude that "(a)s an acceptable model of governance, … orthodoxy has died a thousand deaths." In that sense, Scott's (1998) critique of "state simplifications" is of course itself a simplification. Among the 'government technologies' developed to overcome the "capacity deficit" (Mayntz & Scharpf 1975; cf. Mayntz 1980) stemming from imperfect information flows between public policy actors and 'policy target groups', and the 'legitimation deficit' – the lack of public trust in traditional democratic institutions – are a wide range of state-initiated '<u>participatory</u> <u>arrangements</u>'. Such arrangements, designed under such labels as *Bürgerforen* (citizens' panels) in Germany, citizens' juries in the United Kingdom, and 'voting conferences' in Denmark, take shape in widely varying forms (see e.g. Mayer 1997).

The trend to experiment with new forms of 'interactive policy-making' or 'interactive policy analysis' has been widely covered in the literature (e.g. Chandler 2000; Joss & Bellucci 2002; Akkerman et al 2004). In addition, on a more conceptual level, in the course of time, a kind of taxonomy-style literature has surfaced which provides systems of classification to assess and analyse the participatory practices found (e.g. Fiorino 1990; Laid 1993; Collin & Evans 2002; cf. Rowe & Frewer 2000). Central criteria in the assessment of these practices are those concerning *access* (who is allowed to participate; by whom is that determined) and *autonomy and influence* of the participants vis-à-vis formal political institutions. The exemplar case for the political sciences is the so-called "Ladder of Citizen Participation" by Arnstein (1969), which distinguishes between eight levels of participation in political decision making, ranging from 'manipulation' to 'citizen control'. In the latter case, citizens fully control all stages of decision making, having been granted total sovereignty in reaching decisions. In the field of policy *analysis*, a landmark classification system is Durning's (1993), which distinguishes between four types of participatory policy analysis.[3]

Participatory arrangements developed and implemented in the domain of technological development stand out for the specific characteristics of their substance matter. In the context of technological innovation, the 'capacity deficit' for instance gains a specific meaning: When possible societal negative

side-effects are observed, there is often little room for adjustments or change of a new technological procedure or artefact, as by that time, it may already have been widely disseminated and embedded in a particular socio-economic and infrastructural setting (the so-called Collingridge dilemma; Collingridge 1980). From the wish to deal with this and other particular problems related to the 'governing' of technological developments, a literature and practice of 'Technology Assessment' has been developed from the 1970s onward (Smits & Leyten 1991; Loeber 2004). Initially, the idea was that TA studies could provide decision makers with objective information on those impacts, whereupon they would incorporate this information in their professional work that would thus result in 'better' or 'safer' technologies. This classical, "critical-synoptic" perspective on TA (Hoppe & Grin 1995) was abandoned when it became clear in practice that the impacts of technology can only be partly foreseen, and that TA-studies appeared to have disappointingly limited impact. It has been giving way to a broad range of participatory TA practices that sprung up as part of a democratically-oriented call for a "broadening of the societal basis for decision making" on science and technology[4], and as part of a practical orientation towards improving technological design. The resulting participatory TA-practices[5] are characterised, similar to the policy practices, by numerous attempts at classification. These classifications are based either on the functions that TA-studies are intended to serve, or on the methodology employed. [6]

These arrangements for formally organised public participation', which includes both state and non-state actors' initiatives (e.g. forums or analytic projects initiated by the corporate sector, NGOs or knowledge institutes), form an obvious focus in empirical research on participatory governance. But they are not the sole objects of investigation. Other – not necessary 'new' – types of participatory practices can be discerned when the orthodox notion of what counts as politics is reviewed.

2.3. Participation in the light of conceptual critique: rethinking political space

The kind of formal, often state-initiated participatory arrangements described above, and the pragmatist, policy-scientific critique on the organisation of government to which they were an (indirect) response, are often firmly based within the conceptual contours of mainstream political thought on the nature and workings of politics in society. The critics invoked above, from Lindblom to Scott, refrain from elaborating the consequences of their arguments to the conception of the very notion of politics, and of political space. That critique was voiced initially from a variety of perspectives mainly from outside mainstream political science.

The critique on the orthodox model voiced in the policy sciences in regard to policy implementation seemed to imply that the space where politics is being given shape stretches beyond the formal institutional organisation of government. Yet it was notably via the social studies of science and technology dynamics literature as well as from macro-sociological expositions that the idea of power being dispersed in polycentric networks gained a foothold in political science, changing the perception of what counts as political space.

The social studies of science literature, and in particular the literature that focuses on the social construction of technology (e.g. Latour & Woolgar 1979; Latour 1987; Callon *et al* 1992) has drawn attention to the political nature of scientific and technological development, thus calling into question the sovereignty of formal political institutions (see section 3). These studies portray a dispersion of power in a wider range of sites, including the sites of production of scientific knowledge, and indicate that the boundaries between a political 'system' and society as a whole are much more fluid than Easton's model suggested.

Of a similar vein are the claims of an entirely different body of literature, a literature on societal change from the perspective of macro-sociology. For all their differences, key authors like Castells (1996, 1997), Giddens (1990, 1991), Albrow (1996) and Beck (1994, 1997, 1998) all conclude with the erosion and transformation of the nation-state model into patterns of practices that thrive on flexible networks of actors. Beck argues that we look for politics in the wrong place, if only formal governmental institutes are the object of research. Loci of what he calls "subpolitics" are e.g. the board rooms of business and industry, or knowledge institutes. A similar yet more sophisticated argument of the "displacement of politics" is found in Castells' elaboration of the notion of the "network society". According to Castells, functions are organised in networks pertaining to a space of flows that links them up around the world, while fragmenting subordinate functions and people in the multiple "space of places", made of locales increasingly segregated and disconnected from each other. In the network society, power is no longer concentrated in modern institutions, such as the state, capitalist firms, corporate media alone, but is also diffused in global networks of wealth, information and images, which circulate and transmute in a political system best described as a "variable geometry" and dematerialised geography (Streeck & Schmitter 1986). These studies describe the nation-state in the later half of the 20th century as a collection of social and economic actors who are, as inhabitants, nominally based in a country but who participate in diverse dynamic social and economic networks that stretch across national boundaries.

The emergence of a European multi-level political game[7], furthermore, inspired a literature that focuses on the analysis of political arrangements that comprise actors on the local, regional and global level (Kickert et al 1997; Hanf & Jansen 1998; Van Tatenhove et al. 2000). Processes of "trans-

nationalisation" of economic, cultural and social relationships and the "horizontalisation" of the accepted authority of the nation-state between firms, NGO's and citizens are here seen as concurrent with the process of European unification. This literature too challenged, because of its theoretical perspective as well as via the institutional arrangements it chose as its object of research, the traditional understanding of politics and government described above (cf. Peters & Pierre 2001).

The increasing interdependencies between states and their inhabitants worldwide in the second half of the 20th century render the concept of the nation-state as the organising principle in politics obsolete. Phrases such as the "dispersion of politics" (cf. Hajer & Underhill 2003) that are coined to accommodate for the analysis of political arrangements spread across space and time are part of a new, emerging vocabulary in the policy sciences. As the substance of what counts as politics – the notion of the 'polity' – is being disconnected from its traditional sites, formal political institutions, and even from its territorial connotation (Hajer 2003), a new conceptual language is required that avoids a nationalist, centralist methodology to designate what exactly constitutes 'politics' and 'political actors' in practice (cf. Beck 2003, 2004). Concepts such as "nodal points" (Gottweis 2003:260) and "public energy fields" (Fox & Miller 1996:100-110) have been proposed to describe the sites of politics and notably the *changing topography of politics* without having to take recourse to an outdated conceptualisation.

In the PAGANINI project, the use of such new vocabulary is considered useful and befitting its 'unorthodox' approach to participatory governance (se Part II). By stepping away from earlier conceptualisations of what counts as politics, it is able to take into considerations as an object of research so-called "new political spaces" (Hajer 2000).

New political spaces

New political spaces are sites where processes of political judgment and decision making take place that exist *next to* or *across* the institutions that are traditionally considered the exclusive centres of political power. These 'new' loci of political activity may *a priori* be considered sites of 'participatory governance' as they by definition entail the involvement of 'non-state' actors. Thus, they form a second – potentially overlapping yet possibly distinct – type of empirical research objects in the PAGANINI project, in addition to formally arranged (state or non-state actor initiated) participatory practices.

New political spaces can be seen to come into being in relation to the formal codified arrangements that provide the official setting of policy making and politics in the post-war era in Western societies described above ("classical-modernist" political institutions, e.g. institutes for representative

democracy), when the latter are unable to cope adequately with unruly societal problems. New political spaces in those cases may emerge as a historical product of such an <u>institutional ambiguity,</u> that is, of a situation in which the 'rules of the game' – the way in which a problem issue can and should be legitimately framed and publicly handled – are themselves the subject of political deliberation and struggle. Empirically, institutional ambiguity comes out when on the one hand, the existing rules and norms that shape politics and policy-making with regard to a specific issue are considered problematic and/or unacceptable, while yet, on the other hand, there is evidence that clear rules are considered indispensable by the parties involved to determine who is responsible, who has authority over whom, what sort of accountability is to be expected and so on. When such a situation occurs, Jasanoff (1997) speaks of a "civic dislocation", which is expressed as "a mismatch between what governmental institutions were supposed to do for the public and what they did in reality", causing citizens, at least temporarily, to "disengage from the state".

Situations of institutional ambiguity or 'civic dislocation' and the possible subsequent manifestation of new political spaces may occur in reaction to either sudden disrupting events or, alternatively, as a result of more pervasive, lasting perceptions of skepticism and alienation (Jasanoff 2004a). The intertwining of these two dynamics becomes clear when a sudden disruption is understood in terms of Laclau's (1990) concept of "<u>dislocation</u>". A dislocatory moment refers to the "emergence of an event, or a set of events, that cannot be represented, symbolized, or in other ways domesticated by the [dominant] discursive structure – which therefore is disrupted" (Laclau 1990:41). Such a moment with Laclau, please note, is more than a mere "focusing event" (Baumgartner & Jones1993; Birkland 1997) or "window of opportunity" (Kingdon 1995) that is, "a sudden, unusual, and widely known event that focuses public and political attention on a policy issue … [raising] the prominence of that issue on governmental agendas … and provide the impetus for major policy reforms, as well as new institutional arrangements that can shape future decisions in a given policy domain" (Busenberg 2001). The dislocatory moment in Laclau's poststructuralist view has a far more radical impact and complex origins. It is a symptom of the "structural dislocation of capitalism", an instance in which the *dis*contingency of discursive structures is made visible and apparent transient consensus on meanings, roles and identities between actors ("political subjects") is fundamentally shattered. A dislocatory moment hence not only refers to a 'traumatic event' of chaos or crisis (Torfing 1999:149) that induces a break with dominant structure. This structure is never given, but merely temporarily constructed and consented to – a situation that comes to a end in the face of sudden disaster, lasting scepticism and uncertainty, 'conflicting state imperatives' (see below) and so on.

Without having to adopt Laclau's normative agenda[8], the notion of dislocatory event (or series of events) may serve to denote moments of obvious dynamics – 'turning points', 'ruptures' – in the discursive field in which political issues are constructed and ordered. On such occasions, it becomes obvious that actors in various constitutive fields (say, 'science and society') fail to find common ground and that there are no

clear rules and norms according to which that ground can be regained. Such events hence cause a sense, and a situation, of institutional ambiguity and impel a need for 're-ordering'. In so doing, they may be seen to trigger the emergence of new political spaces where framings of the problem as well as the rules of the game (and the roles of those involved) are being (re)articulated.

Obviously, a dislocation – expressed as a sudden rupture or as a slow change of events – may bring along unprecedented crises of legitimacy and credibility of formal political institutions and associated knowledge institutes. Among the things disrupted is the kind of 'passive' trust which is presupposed in the formal organisation of government, and which is derived from the classical means of political participation and representation such as elections, representation of political leadership and the enactment of scientific expertise. Essential for situations of institutional ambiguity where unity, stability, cohesion and cooperation among members of a collective are not self-evident – that is, the four component parts of trust, according to Weinstock (1989) – is that the one-way communication from 'classical-modernist' institutes to 'the citizen' no longer suffices. Such communication, which generally consists of information flows in which a particular framing of the problem in conveyed through various modes of representation, e.g. in quantified scientific terms, no longer serves to arouse feelings of trust. In those moments, trust – which can be understood as the situation in which "groups of individuals presume the goodwill of others with respect to shared interests as well as the divisions of knowledge necessary to make use of explicit rules for collective action" (Warren 1999:14-15) – will have to be actively re-created, in and through the actual interaction between real (situated) human beings.

Active trust is a quality of a relation between two or more situated actors that is produced (intentionally or unintentionally) through in situ mechanism such as perceived reciprocity in the involvement in the problem situation, rituals, mediation (by a person or object), verbal and non-verbal expressions and so on.[9] As a consequence, the 'public' becomes, in contrast to the notion's traditional connotation of a passive audience of citizens defined in relation to 'the state' as given entity, an active constituent of the 'science-politics interface' which may take shape in concrete practices of interaction between scientific experts, policy-makers and citizens (cf. Edwards 1999; for a further conceptual and operational elaboration of the notion of 'the public' see Part II).

In cases of institutional ambiguity, in other words, the 'silent contract' between citizens and formal political institutions, including those operating through the enactment of scientific expertise, is broken, and the state's licence-to-operate, so to speak, is withdrawn. Such a development can come out in widely varying ways. In the one extreme, unease may find an expression in public turmoil and visible protest, organised publicly and covered in the media. The wrecking of test plots with GMO crops by 'action groups' calling themselves the 'Raging Potatoes' in the 1980s in the Netherlands is a case in point. On the other extreme, the unease may only be expressed on the level of the individual, e.g. by a patient or pregnant women in the doctor's office faced with conflicting imperatives of self-determination and

responsibility on the one hand, and the impossibility of reducing uncertainty about health risks for oneself or one's offspring to a 'manageable' level on the other. The emotions of protest involved (Jasper 1998) may come out in sudden outbursts limited in space or time, or may fuel and sustain more or less persistently visible expressions of conflict, such as e.g. in 'social movements' ("the collective, concerted efforts to change some aspect of society" (Jaspers 1998:399). Furthermore, institutional ambiguity may be perceived of not (in the first instance) so much by non-state actors but by actors operating professionally in formal political institutions. Social, technological and political dynamics may be such, that regulatory practices to policy-makers and / or politicians present conflicting situations ('conflicting state imperatives' e.g. when crossing boundaries between the public and the private sphere) which bring about feelings of unease, conflicting loyalties or moral indignation.

New political spaces, in other words, provide the settings where social, economic and political 'reality' is re-created and re-written, as the outcome of *new* processes of discursive construction. These processes are both inherently political and inherently social. They are *social* in that, as an ensemble of ideas and concepts, they are being "produced, reproduced, and transformed in a particular set of practices" (Hajer 1995:44). They are *political* in that such discourses do not merely disclose some underlying reality, but "actually constitute it" (Gottweis 2003:251). The inextricability of discourse from social practice, and the political nature of discursive construction, makes all practices in which meaning is articulated the *loci* of politics. Hence, as is the case in Easton's projection of the realm of the political, politics is related to site. In contrast to the orthodox understanding of 'the political system', however, the notion of site (or 'space') is constructed without any territorial reference. Governance, hence, here refers to a regime of practices.

Understood in these terms, the notion of 'participatory governance' then denotes the emergent, iterative and fluid performance of governance in which varieties of actors, who can be identified not (solely) in relation to the state as pre-given entity but rather in relation to attempts to align problem framings, articulate roles and generate trust, deliberate their problem definitions and solutions, and *while doing so,* also negotiate the rules by which they can do so legitimately and effectively. The practices in which this kind of governance become manifest may include the 'participatory arrangements' described above, but may also take different shapes. What shapes these practices take is an empirical question in the PAGANINI project.

3. Life at issue: setting the research agenda

In the previous section, as the object of research in the PAGANINI project, practices of governance were identified which come about in situations of institutional ambiguity, that is, in situations where the dominant discursive structure is disrupted and a need for re-ordering is felt, not only in regard to the subject matter at issue, but also in regard to the way the issue can be dealt with legitimately and effectively. The project's *thematic* focus is on what is designated here as 'the politics of life': research in the PAGANINI project focuses on those practices of governance that concern phenomena of life.

The PAGANINI project is set up on the proposition that in regard to 'life' as a construct of political and scientific discourse, participation and governance have become intermingled to an unusual extent. Why is it that one may expect the 'silent contract' between citizens and formal political institutions, including those operating through the enactment of scientific expertise, to be broken frequently and fundamentally in this particular domain of politics? In this section, the central proposition in the project will be elaborated theoretically. In so doing, the thematic focus of the project is explored further so as to set an agenda for research.

3.1. Critical novelties and the co-production of science and politics

To some, our current times are fraught with danger. In the eyes of German sociologist Beck, for instance, the on-going process of modernisation has brought the world "on the brink of apocalypse", of deliberate or inadvertent collective suicide in a way unequalled by anything in the history of mankind. The risks involved in modern society are "in fact a historical innovation" (Beck 1997:31). Novel is their scale and size – the globalisation of dangers which result from the "creeping ecological disaster" – as well as their inclusiveness: they concern everyone (Beck 1999). A comparable argument is found in McNeill (2000) who speaks of environmental damage and ecological disturbance created by current civilization in terms of "novelties under the sun." These, and many other authors concern themselves with what they perceive as 'real crises', that is, with crises in the ontological real, as do their critics who dispute the criticality of the risks, their abundance or pervasiveness and so on. The technical and socio-political discourses through which these 'crises' are brought to the fore are cast in terms of the management of risk, and of the handling of uncertainty (e.g. Wynne 1992; Mol & Bulkeley 2002).

Other authors identify late-modern society's core problematique, which sets this area apart from previous times, in quite different terms. Rather than as 'ontological crises', contemporary disturbances

are analysed as crises in the production of scientific and political authority. Instead of taking crises of "invisible, elusive, fearful, yet wholly 'real' entities" at face value, Jasanoff in her work (1990, 2004b) directs the attention to the relation between the modern state's capacity to produce and maintain political order and its capacity to produce and use scientific knowledge. The dynamics in the various 'spheres of action' in society influence one another, the author argues, in such a way that developments in, say, environmental science and its outputs are supported and legitimated by other social practices such as policy-making processes, and vice versa. This perspective she refers to with the phrase 'co-production':[10]

> [C]o-production is shorthand for the proposition that the ways in which we know and represent the world (both nature and society) are inseparable from the ways in which we choose to live in it. Knowledge and its material embodiments are at once products of social work and constitutive of forms of social life; society cannot function without knowledge any more than knowledge can exist without appropriate social supports. Scientific knowledge, in particular, is not a transcendent mirror of reality. It both embeds and is embedded in social practices, identities, norms, conventions, discourses, instruments and institutions – in short, in all the building blocks of what we term *social*. The same can be said even more forcefully of technology (Jasanoff 2004b:3, italics in the original).

The passage is quoted at length, as in the PAGANINI project it is from this perspective that the object of research – practices of participatory governance on life-political issues – is approached. This perspective leaves unimpeded the possibility of seriously pondering phenomena of concern located in the world of nature and the potential crises involved, or the threats or benefits of newly developed technological artefacts and procedures. Stronger, it enables one to analyse the reasons why and the ways in which such normatively-laden epithets are used at all in debates on nature. Furthermore, it allows for an analysis of why and how nature as such (defined by Jasanoff as "things known and knowable only with the aid of science"; 2004a) 'causes' a range of social (scientific, political) practices to emerge, and how in turn nature is constructed there. Thirdly, it helps shed a light on the reasons why notably at this juncture, in the closing decades of the 20th century and at the brink of the 21st, the way society, politics and science were organised and conceived of in the course of the past century is time and again called into question, and situations of institutional ambiguity are bound to occur.

Below, these reasons are explored by placing the 20th century dominant mode of ordering society in historical perspective. It is argued that current dynamics involve (stir as well as result from) a dislodgement of the very fundaments of current institutions and thought in both realms of action – the dichotomy between science and politics, between nature and society itself. The PAGANINI project argues that the basic assumptions in regard to science, and those in regard to politics (e.g. as expressed in the (ideal) organisation of government; see section 2), are being reviewed implicitly or

explicitly, as a result of which the two spheres of action are increasingly perceived as *not* being separated at all.

3.2.   The dichotomy between science and politics in historical perspective

Any historical narrative of societal dynamics that are described to explain and analyse a present state of affairs itself is of course a product of its time and place, of the author's ideological and empirical repertoire cast in the vocabulary of his or her times. The selection of views presented here therefore is not exhaustive by far, nor is there an implicit claim to some 'final truth' in the accounts briefly touched upon here. Yet, a historical perspective on 'governmentality' (Foucault's phrasing of the issue of 'how to govern'; Gordon, 1991:7), 'bricolaged' on the basis of the work of a number of authors may sensitise readers and researchers to the (ideologically or empirically) hidden dynamics that underlie the social, economic, technological and political contexts and events that the PAGANINI project focuses on empirically.

Where to begin a historical narrative is itself a matter of ideology. Often, treatises on western political organisation take the work of Aristotle, and the ancient organisation of the city-state as a point of departure. Yet, such accounts (e.g. Witteveen 2002) usually strongly root in the (neo)republican tradition of political theory which factors out of the discussion assumptions about the 'the citizen' and 'the common good' that themselves can be seen as the constructs of the modern socio-political order (see below). An entirely different perspective is offered by Szerszynski (2005), who places the transforming idea of European political organisation in the context of Christianity as a historically developing social condition, arguing that secular rule became constituted within a particular ordering of the sacred. Basing his views on Gauchet (1997), he argues that the origins of the idea of rulership may be traced in an "archaic sacred" which constitutes explicit connections between specific empirical people, objects and places, and divine power – the paradigm case of this being African ideas of divine kingship. The separation of earthly and heavenly power in Western history which led to modern ideas of secular political rule can be understood as deriving from the political logic of the monotheistic sacred central to Christianity (Gauchet 1997:118-24).

In Gauchet's view, initially, the institution of the European monarchy reproduced the logic of archaic rule, constituting the monarch as filled with divine, transcendent radiance. However, in the course of time, the nature of monarchical power changed. Rather than the transcendent sacred touching the empirical world at one point – the body of the King – it was *folded into* the whole empirical world

(Gauchet 1997: 140-3). The social order forged in these days, in which the safety of the collective became the responsibility of the elite, fostered a new, mundane understanding of political rule.

Various authors have, from a variety of perspectives, described and analysed the way in which such an understanding of mundane, political rule subsequently developed over the last centuries in the light of, and in close intertwining with, transformations in (natural and social) scientific thought, production methods and other societal developments (e.g. Toulmin 1990; Foucault 1991; Kumar 1995; Wagner 1996; Hardt & Negri 2000). For all their diversity, these authors all view the "formation of Modernity" as a central theme and ordering principle in the processes unfolding since, and trace current day dynamics to the development of Enlightenment thinking, which, in various interpretations of the possibility and the right of human beings to self-determine their individual and social lives, is in turn granted explanatory power in understanding present-day societal constellations and institutions.

Toulmin (1990) for instance evaluates the "project of Modernity" which set out, in his interpretation, to unearth the basic building blocks and immovable stepping-stones with which and on which both the natural and the social world were built. This teleological orientation in mundane (later: 'scientific') thought was grounded in what Grin (2005) following Toulmin calls "the two dogma's of the Enlightenment project": the idea, firstly, that is possible to know Truth on the basis of universal knowledge, grounded in some Archimedean point, and that, secondly, it is possible to control reality on that basis. These beliefs got widespread in the course of the 16th and 17th century (Kumar 1995:78-80), as a response, Grin argues, to what Richard Bernstein (1983) called the Cartesian Anxiety: the quest for certain, universal, grounded knowledge to deal with the threat of chaos, freeing humans from fate. Although – or perhaps because – the implicit promise to 'discover' a permanent bottom-line (such as the laws of Newtonian mechanics, or the axioms of Euclidean geometry) on which to build certainty and rationality proved unattainable, the notion of progress through control became the core of new expressions of social ordering and political rule. The quest for universal certainty which initially primarily related to nature, evolved into a worldview that also included the idea of a controllable social reality: views on the cosmos and on the polity melted into a 'Cosmopolis', in the words of Toulmin (1990).

An interesting interpretation as to the reasons why the quest for rational and certain knowledge became so deeply embedded in the organisation of political rule – or rather: in political philosophical thought about the transformations of political rule – can be found in Wagner (1996), who underscores the importance of the American and the French Revolution in shaping modern political thinking. Had man hitherto been 'given' – both from his own perspective and from that of others in his community – his natural place in society ("his identity … which he once appeared to derive from

his station, from his social condition, or from the possibility of attaching himself to a legitimate authority", Wagner quotes Lefort 1988:180), with the emergence of "a culture of individual autonomy", forcefully made visible in both revolutions, he now had to search for new ways of organising identity and social embedding. According to Wagner, the revolutions set in motion in Europe "with its long-established statist institutions" a development in which "in the Enlightenment-combination of freedom and reason, the state was … reinterpreted as the incarnation of reason, once the expression of human freedom fed into its construction" (1996:246).

While the 'expression of human freedom' came to be organised in the steadily transforming institutions of representative democracy (such as the formation of political parties, elections, councils of elected representatives), the 'incarnation of reason' found an expression in the dialectic between state and science and, later, in the gradually increasing tendency of the first to make "full use of science" (Hawkesworth 1988:14) in public problem solving. From the early 18th century onwards, 'rational' knowledge became the basis on which nation-states relied to ensure the legitimacy of their actions and the success of their attempts to promote social progress for the people within their territories (Grin 2005).

It was this view that informed the functional differentiation between nation-states, societies and market that was characteristic for the 20th century (Kumar 1995: 81-82; Gill 2003: 115-148). And it was this view, too, that, reinforced by the perceived fact-value dichotomy, drew a demarcation line between arrangements for political judgement on the one hand and sites for the production of expert-centred 'universal' knowledge on the other, eventually culminating in the notion of "scientific management" (Taylor 1985) in the heyday of high modernism in the post-World War II era (see section 2). The networks of efficient and carefully interrelated institutions in policy domains like medicine, health, food, agriculture and energy were the concrete manifestations of the 'state incarnation of reason' as they were tailored to nurture knowledge-driven development to yield social-economic progress (cf. Grin 2005).

A comparable historical argument on the transformation of political rule is found in Hardt and Negri (2000), who, informed by Marxist political-economic thought, however do not consider the Enlightenment project the breading-ground of popular self-rule and a historical momentum in the liberation of the individual. On the contrary, these authors argue, European modernity entailed a loss of hegemony of the individual as he (she) was brought under (and 'disciplined in') progressing mechanisms of state power and control. The authors sketch how developments in the capitalist mode of production and the accompanying transformation of the labour process paralleled and mutually reinforce developments in social ordering which entailed an increasing repression of human beings. Social control is exercised by sovereign states onto the "subject" in whose name a state claims to

govern, the authors argue, and eventually even interiorised within subjects, exercised through schooling systems and welfare practices that challenge the possibility of free thought (2000:23-24).

3.3. Science at issue: the loss of 'Truth'

Whether 'coerced' into or 'liberated by' modernist thought on the separation of nature and society, and of technology and politics, in any case, people's willingness to take these fundamental conceptions for granted, Ezrahi writes (1994:30) tends to be "revoked toward the end of the twentieth century." Several interrelated developments in the 'realm of the scientific' itself seem to have contributed to that development.

The assumption central to Enlightenment thinking, that it is possible to know the ontological real through the employment of scientific methods, entailed the belief that the rational and certain knowledge yielded by scientific inquiry mirrors objective reality. This view had long been the object of discussion in academic circles, disputed by those who from a constructivist outlook on science hold that reality, even though it may exists 'out there' independently of human observers, can only be known through the eyes of the beholder (see e.g. Berger & Luckmann 1966; Guba & Lincoln 1989). Yet the dominance of the belief in the possibility of generating certain, universalistic knowledge that reflected the true state of affairs in the natural world never seriously faltered (take for instance the Wiener Kreis debates in the 1930s). A change was felt when in the 1970s and onward, the philosophical debate was added to by empirical work done by sociologists who set out to investigate how scientific knowledge is actually produced. Groundbreaking work in this respect was done by Latour & Woolgar (1979, and Latour 1987, 1988) who employed participant-observer methods in studying how knowledge was 'constructed' in actual practice in laboratories. Historical analyses of the processes by which technological artefacts had been 'socially constructed' (e.g. Pinch & Bijker 1987; Callon 1986) furthermore added to the insights in the 'construction of scientific facts' and led to a new understanding of how technologies and artefacts are produced in emerging and increasingly stabilising networks of actors and material elements – artefacts, texts, symbols, concepts, and so on (an understanding which Latour captured in an 'Actor-Network Theory' (2004), and which inspired Callon to coin the concept of techno-economic networks; Callon et al. 1992; see Annex 1).

The contextualism of these studies showed how various elements in the generation of social phenomena – agency, knowledges, institutions, power – are mutually constituted and transformed. They emphasised that the actions of scientist and technologists are based on and informed by notions regarding contextual aspects and human interactions by which their actions acquire meaning, as well

as by notions regarding the technical assets of the issues that they are dealing with (Latour 1994, 1997; cf. Achterhuis 1992). Analytically, therefore, Latour posited (1997:56), one cannot conceptualise knowledge production and technical innovation as separated from the social context in which and by which it is given shape. Reversely, scientific utterances are 'true' only to the extent that they are embedded in social practices which feature conventions and supportive problem frames that together define their meaning and 'truth'.

Insights from the body of work on the construction of knowledge, and of science and technology in society, fed two lines of argumentation that were increasingly seen to detract from the original scientific claims to universal knowledge and objective truth. Without the possibility of taking recourse to an objective truth 'out there', firstly, the social validation of a truth claim apparently hinges on the authority that a scientist or scientific community is able to generate. This view has implications for the roles granted to the actors involved in the production of knowledge. Rather than as impersonal, objective observers of the empirical truth, scientists came to be looked upon as strategically operating social actors – concerned, among other things, with constituting the boundaries of their peer group (for which Gieryn 1999) coined the term "boundary work": the activities scientists and others (e.g. policy-makers) engage in to determine who is 'part of the group' and who is not, who has access to resources; who can legitimately posit a truth claim an so on), and with non-scientific criteria employed in assessing a scientist's trustworthiness (Collins 1985).

Also the role ascribed to 'the public' was subject to change. Rather than as passive recipients of information provided by experts, the public itself (and policy-makers as a specific part of the sciences' public) came to be understood as an active partner, a constituent factor, in the production of knowledge: a responsive reception (including rejection or dispute) *co-produces* the truth claims made. This view folds into the second line of argumentation that detracts from the sciences' claim on uncovering universal knowledge and objective truth. It is increasingly acknowledged that the dynamics in science and technological development are not dictated by some hidden 'real' waiting to be 'uncovered', which would make these developments into 'autonomous processes' to which society has to respond. Rather, the configurations in which science and society at large (politics, economy and so on) take shape are both the resultant and the cause of the interaction between the two. No specific scientific, technical and or social dynamics can be designated as 'prime movers' (Jasanoff 2004b). They work simultaneously, mutually shaping one another in such a way that "solutions to the problem of knowledge are solutions to the problem of social order" (Shapin & Schaffer 1985:332), and vice versa.

The separation of nature and society and with it the distinction between technology and politics that, as a central tenet of the Enlightenment, came to be expressed in the design of 20th century

institutions, in the past decades has been called into question in various ways in various circles (both academic and non-academic). With the 'unmasking' of truth as a constructed and, therefore, negotiable quality of human agency rather than a derivative of 'the natural world', faith in the possibility of "escaping from politics" (Ezrahi 1994) that underlies policy-making practices was found increasingly untenable. The consequences of these dynamics are profound. Rather than merely fuelling the idea developed in the 1960s and onward that science provides ammunition in political disputes (as in the "policy analysis as advocacy" interpretation; Jennings 1987, and the ensuing calls for 'contra-expertise'; Sclove 1995), the emerging perception that "the natural and the human are inextricably intertwined and mutually defining" (Jamison & Wynne 1998:9) is seen to expose, time and again, extant institutions as reflecting a moral, political and scientific order that is no longer in place.

As a consequence, among other things, the nature of the expression of trust as an intrinsic component part in the construction of scientific authority is seen to be changing. To be sure, trust almost by definition plays a role in the production of scientific knowledge as, even apart from any implied views on the ontology - epistemology distinction, the expression of scientific observation is ultimately a *representation* of things found. Expert knowledge, after all, is "almost by definition possessed by only a view" (Porter 1995:7). Not many people, for instance, can 'look through the microscope themselves'; those who have no access to the instrument and via the magnifier and the Petri-dish, to the 'natural world' of microbes, will have to rely for their understanding of microbe life on those who have. Representation of things studied through science, of course, makes scientific observation essentially political. 'Public distrust' of expertise which led, as said, from the 1960s onward to the institutionalisation of contra-expertise (e.g. in the shape of "science shops"), to calls for a 'broadening of the decision making process on science and technology' (see section 2) and the ensuing design of 'participatory arrangements', generally centred on the question whether some representation is implicitly *biased*, e.g. in terms of gender, 'income bracket' group, race and so on. To that kind of trust / distrust dynamics the newly emerging insights in the inextricable interconnection of science and society, and therewith of society and nature, add a new dimension. Rather than trust or distrust in terms of mere confidence in the authority of experts as persons or institutes – in the generation of which the media (e.g. Brown & Michael 2001) or stipulations on process transparency (Jones & Salter 2003) may play a role – 'trust' now has come to relate to the very objects of expert discourse, both to the 'natural world' which is represented through science and to the social order in which that takes shape. The fundamentals of that social order which helped humanity navigate through political and scientific uncertainty in the past epoch are now themselves at issue, and an incentive in causing feelings of distrust, in the face of recent transformations of the conception of politics, and of new technological and scientific developments.

3.4.   Politics at issue: the loss of 'unity'

As discussed in section 2, the political institutions of the Western nation-state in the post-war era themselves embodied the modernist belief in the separation of science and politics. In the political science perspective prevailing in 20th century, moreover, the state as the manifestation of 'the political' was understood as an entity *per se*, as intrinsically manifesting a general will and reason. Central to this then-dominant depiction of what constitutes politics was the assumed contingency between governance, the nation-state and its people. This conception of politics rooted in the empirical observation that the three elements that co-determine the potential for 'governing' more or less fitted together at the level of the nation-state: *i)* the sovereignty of formal political institutions, *ii)* the patterns of social and economic organisation, and *iii)* the normative commitments in civil society, for example in the form of cultural adherence and shared political identity (cf. Hajer 2003).

With the emergence of a European 'multi-level' political setting (cf. Richardson 1996; Wallace & Wallace 2000; Hooghe & Marks 2001) and of economic activity organised in patterns of global outsourcing and intensive capital mobility across traditional boundaries, the nation-state however no longer serves as the self-evident *locus* of politics. In order to come to grips with their observably changing object of research, the political sciences therefore gave witness of considerable conceptual innovation. The notions of 'network governance' and 'network management' were coined (e.g. Mayntz 1993; March & Olsen 1995; Kickert *et al.* 1997; Rhodes 1995; Pierre & Peters 2000) to capture state – civil society interaction and the state's ability to govern in the face of complex and dynamic, trans-national social and economic networks.

In the light of the basic, Aristotelian question of what is required for a human political community to be possible at all, the conceptual 'decoupling' of the act of governing from territory is genuinely innovative. In Aristotle's times and perception, what bound men (*sic*) together into a 'community' was what they held in common: their territory, *in casu* the city-state: "The members of a state … must at any rate have a common place – one city will be in one place, and the citizens are those who share that one city" (Politics I; trans. B. Jowett, 1976: 282). Yet, while the 'polity' was now seen as disconnected from its territorial connotation, the assumptions regarding the mechanisms by which actors may form a political community, even when operating in erratic and unstable network configurations, largely remained intact in the 'governance' literature.

Central tenets in this literature are the Aristotelian notion of the 'good citizen' (that is, the citizen that has the knowledge and ability 'both to rule and to be ruled' (Aristotle, Politics III, trans. B. Jowett 1976) – and the basic concept of citizens administering themselves (the governing 'of free men by

free men'). Politics then is considered the product of interaction among independent citizens; political communities are perceived of as collectives of independent and free citizens who discuss problem issues with an eye for the 'common good', which stems from their reciprocal involvement "in situations held in common" (Gutman & Thompson 1996).

This neo-republican conceptualisation of politics, which resounds in recent theoretical literature on deliberation and democracy and in empirical studies that address practices of governance from the perspective of citizen participation (e.g. Dryzek 1990; Fung & Wright 2003; Fung 2004), features an unabated belief in the communality of actors, of men and women free to choose to engage in rational deliberations about shared concerns (cf. Cohen & Rogers 1995). Yet, in a world were not only the organisation of politics but also the construction of identity and a sense of 'belonging' are no longer self-evidently coupled to territory, the notion of a 'common good' and the concept of unity implied by that, has itself become problematic. In late-modern society, 'the citizen' him- or herself has become plural: s/he is characterised by a diffuse identity, or rather, can adopt multiple identities and roles depending on the concrete settings in which s/he operates (cf. Fox & Miller 1996). Furthermore, as identity and role in turn are constructed through the settings in which an individual is active and through the interaction with others in these settings, the sheer diversity of the sites where modern citizens dwell 'produces' a multi-faced citizen. In the eyes of Mouffe (1992), therefore, society under modern conditions is precisely characterised by the *absence* of a substantive common good (1992:229).[11] With Laclau, she explicitly departs from a vision of society as a unified sphere (Laclau & Mouffe 1985:96) and instead conceives of politics as taking place within varieties of social practices occurring in a society that is in a state of permanent 'dislocation'. In fact, rather than taking unity as a pre-existing entity enabling the manifestation of politics, according to these authors, politics *is* the actual attempt at achieving social unity: "If the social does not manage to fix itself in the intelligible and instituted forms of a *society*, the social only exists … as an attempt to construct that impossible object" (Laclau & Mouffe 1985:112).

In other words, the 'spacialisation' of politics both geographically and conceptually does not leave intact the basic assumptions in modern political thought, namely those regarding the nature of a political community. Political communities are collectives of individuals jointly posing the question of 'What should we do next?' in regard to some specific issue, in the light of the more general question of 'How are we to 'be' together, and what is to be the institutional setting for that being-together?' (Beiner 1983:138). The territorial bind but also the teleological orientation presupposed in modernist social order are lost when such a community is constituted by 'multiply defined' citizens under late-modern conditions. An urgent question left to be answered then is *what* it is that brings people

together in the 'production of politics', and why do they at all join in attempts to align their problem framings and definitions of solutions with one another?

Mouffe's work provides interesting possible answers. According to Mouffe (1992), political communities may well be defined in relation to a specific problem situation, rather than on the basis of some notions, beliefs or territory held in common. The author coins the notion of *societas* or *cives* (on the basis of Oakeshott 1975) to describe a collective of which the participants are linked "because of the recognition of the authority of the conditions specifying their common or 'public' concern." In contrast to the collective as *universitas*, which *pre*supposes an engagement in an enterprise to pursue a common substantive purpose or interest, the constituent parts of a community as '*societas*' are held together by a common bond, a public concern. This creates a "common political identity among persons otherwise engaged in many different enterprises" (1992:323).

Such a depiction of political communities which arguably fits currently observable dynamics in political organisation (e.g. the finding that people can, while being otherwise engaged and inclined in various ways, manifest themselves as political actors 'on the spur of the moment', when some incentive in that direction is felt; Verhoeven 2004), challenges the very conceptualisation of 'the state' as a pre-given entity and, in a comparable way with the above remarks on politics in relation to scientific developments, the concept of 'the public' as an entity of citizens, that is, of a given, pre-existing (though often 'dormant') conglomerate of political actors.

Thus, as is the case concerning the scientific 'sphere of action', also in the realm of the political, the dynamics of the past few decades are challenging the fundamental bearings of the social order which developed in line with the central notions of Enlightenment thinking. The associated reified notions of the public and the state that were dominant in mainstream 20th century political science and that are considered a *sine qua non* in almost all literature on 'the shift from government to governance' and 'network governance' as well as in literature on participation and participatory arrangements, now appear to loose their seemingly unassailable status of permanence and universal truths. In their place comes a relativist understanding of these notions reminiscent of John Dewey's 1930s conceptualisation of 'publics' as collectives emerging in relation to a specific issue perceived as problematic.

'The public' for Dewey referred to the development of actual scientific and economic activities at a given time: "The public consists of all those who are affected by the indirect consequences of transactions [i.e. of interactions between actors which transform both the actors and the objects of their action] to such an extent that it is deemed necessary to have those consequences systematically cared for" (Dewey 1927 [1991:15-16]). Such a contingent understanding (and arguably empirically

observable development) of the *public* as *emergent through scientific, technological and political practices* obviously holds implications for the state. In Dewey's political-philosophical exposé, the state too is conceived of as a contingent category of political practices that emerges from the actions necessary to defend and protect the harmed public (Dewey 1927 [1991:37-74]).

Yet, in the perception of real people in their every-day professional (and personal) lives, either identifiable as state (politicians, policy-makers and other civil servants) or 'non-state' actors, the state is very much a 'given' entity with indeed a logic, will and reason 'of its own'. It is precisely that reality that is called into question in the 'dislocatory moments' arguably occurring so significantly at this time juncture and arguably notably in regard to 'phenomena' of life, triggering institutional ambiguity and bringing forth new political spaces. Why is that the case?

3.5. 'Life' in politics[12]

In the social order that grew out of Enlightenment thinking, the idea of a potential unity in social life and the notion of an unambiguous truth to be found in the natural world presupposed and reinforced one another. Underneath all political strife lies an assumed potentiality of a 'unifiable' community with a universally valid teleological orientation: the mastery of nature. As Ezrahi (1994:29) writes: "It is on the basis of [the premise that nature and society are two separate and distinct domains] that the mastery of nature … could appear as a universal human goal, as something common to all members of human society, thus removing from the idea of technology the problem of harsh normative choice." In this perspective, all social action, including scientific and political, of 'the' community can be understood as a continual engaging in 'boundary work', to use Gieryn's phrase in a liberal reading, to set apart the social from the natural, 'us' from 'not-us', and to define both worlds in separate terms in hermetically closed structures of logic.

Within this constructed dichotomy, it was life itself that linked up the social and the natural. Life as a construct of political and scientific discourse 'strangely' and inevitably permeated the two domains. Even when defined in essentially anthropocentric terms, 'life' comprises both human and non-human life, namely the human body ('internal nature'; the material manifestation of the self) and its 'environment' (external nature; the material manifestation of 'not-us'). It is in the efforts of separation that the entanglement between these constructs of life becomes clear, in an continuously changing three-corner relationship, of body and mind (e.g. when knowledge of nature is seen as a means to separate the mind from its entanglement with the somatic), between body and external nature (e.g. when the latter – the body's 'environment' – is seen as a controllable threat or as a resource by which

to enhance human safety and freedom) and between mind and external nature (e.g. when the latter is constructed as a 'victim' of human agency that needs protection or preservation, or as any other personalised entity holding rights).

A specific reading of the relation between these is offered by Foucault (1977; 1979) who holds that modernity is characterised by the idea that not only non-human life can be constructed as a resource for enhancing human freedom and wellbeing, but that also the natural processes which determine human life itself, such as birth, fertility, illness and health, aging and death, can be implicated in that sense. Foucault identifies the latter interpretation as the emergence of a 'biological' understanding of human social order, which he traces to the beginnings of the 18th century.

In a historical narrative of the changing expressions and mechanisms of power and control in society, Foucault links the emergence of a 'biological' understanding of human social order to the newly emerging forms of state power that developed during those times.[13] Up to the 18th century, the author argues, the absolute monarch had the power to decide on life and death – whether indirectly by asking subjects to put their lives at risk by defending the state, or directly by putting to death those who transgressed his laws or rose up against him. Power, in this era, was "a right of seizure: of things, time, bodies and ultimately life itself" (Foucault 1979:136). From the 18th century onwards, by contrast, power became the right to *administer* life – not to impede or destroy the forces in society in the name of supernatural splendour, but to bend and optimize them, to make them grow in particular directions in its pursuit of freeing humanity from fate. The objective of this new *biopolitical* ordering of society was the perpetuation of biological existence, of life itself, which became the new location of the sacred.[14] Political rule thus came to be conceived in terms not of transcendence and difference, but of the maintenance of society's own immanent coherence. Even the resistance to state power became conceived in the very terms that that power was taking, in terms of life: of the right to life, health and happiness (Foucault 1979:154).

According to Szerszynski (2005), this view represented a shift away from the understanding of this world as 'pointing towards the next one' – as both symbolizing transcendent truths, and preparing the faithful for eternal life. Instead, there was a focus on the endless reproduction of life-processes within *this* world. The natural and biological take on a new immanence and self-sufficiency. In earlier epochs, creatures were never *solely* biological, merely natural; to be solely biological was to be stripped of sacral or social status, to be in a state of deprivation of legal status or religious communion with the divine, characteristic of the slave, apostate or those convicted of a heinous crime (Arendt 1958:84; Agamben 1998:71-74). In the modern period, by contrast, in Foucault's view,

the biological becomes seen as a self-sufficient mode of existence; what modern power administers are no longer 'legal subjects' but 'living beings' (Foucault 1979:142-143).

Foucault argues that it is at this time that life is first conceived as an object to be administered, and that this new power over life took two forms. The first, *anatomo-politics*, focused on the administration of the individual human body, regarded as a machine to be measured, disciplined and optimized. The second, *bio-politics*, emerged later and focused on populations and the management of life, that is, of what Karl Marx called the 'species being'. The term 'bio-politics' is often used to cover both of these sets of practices (cf. Rutherford 1999:38-39). Both of these, Foucault notes, were vital for the emergence and growth of capitalism, so that bodies and populations could be effectively inserted into productive and economic processes. Law, too became focused less and less on displays of 'murderous splendour' for those who transgress sovereign power. It became simply part of an array of technical apparatuses regulating and measuring life, trying to bring it to the norm. For Foucault, this was 'the entry of life into history'. Rather than the biological exerting pressure on society from outside in the form of epidemics and famines, it was increasingly an object of control *within* society. Life was at once placed *outside* history, by being conceived in biological, natural terms, and *inside* it, in that it was subjected to politics (Foucault 1979:139-143).

Foucault's reading of recent Western history and its changing forms of "bio-power" shows how the basic tenets in modernist thought not only permeated the emergence of institutions in the realm of politics and of science, but also became manifest in the relation between the individual and the collective. In so doing, it alerts us readers from the 21st century to the sheer extent of disruption and 'unsettlement' that a 'rummaging' of the dichotomies of modernism that underlie the present-day 'bio-political' ordering of society – the distinction between society and nature, between politics and technology – may involve. In turn, it explains the reasons why particularly in regard to 'life', such an unsettling and disruption of ordering structures may be expected.

3.6.   The new politics of life: disruption of dominant structures and the need for re-ordering

When life enters our human understanding and attempts at ordering, there is politics of life. New to the life-political issues of late-modernity is that they entail novel constellations in the constructed relation between mind, body and non-human nature. As a consequence, they challenge the very institutional arrangements that political and scientific communities produced in the course of the past

centuries to deal with nature as a resource or a threat to social order and human life, and to eradicate associated uncertainty.

The 'new politics of life' of the 21ˢᵗ century hence concern those issues regarding life (in both its somatic and environmental interpretations and their associated constructions of human identity, self-hood, and individual and collective responsibility), for the ordering of which modernist forms of governance are found no longer viable and legitimate. Life-political issues in late modernist times tend to expose the in-built tensions and implicit assumptions underlying modern governance in such a way that this mode of ordering is called into question in acute, concrete political and scientific practices. Inherent to new life-political issues hence is that there cannot be, at least not self-evidently, a 'binding, authoritative allocation of values for society as a whole' by the centre of formally institutionalised state power. The ensuing situations of institutional ambiguity imply the need to develop, *in situ* and *ad hoc*, new modes of governance by which actors can deal with the issues at stake effectively and legitimately, in a context where no *a priori* unity or an implicit notion of 'the common good' as a motive for political action may be assumed, nor a possibility of taking recourse to an 'objective truth' for knowing what to do as a community. With the basic tenets that provided the regular stepping-stones in modernist governance perceived as gone up in thin air, society is faced with the need to produce modes of re-ordering which can accommodate for feelings of distrust, uncertainty and for a diversity of values, in particularly concerning the teleological orientation of (joint) social, political, scientific) action. Therefore, it is likely that in the domain of the politics of life in late-modernity, participation and governance become intermingled to an unusual extent.

In the PAGANINI project, it is a question of empirical research to assess in exactly what configurations of (participatory) governance the new politics of life become manifest. Likewise, it is an empirical endeavour to establish the exact reasons why the politics of life in concrete situations are felt to entail *novel* constellations in the constructed relation between mind, body and non-human nature. Taking the proposition of a mutual simultaneous shaping of scientific (e.g. environmental, medical, agro-economic) knowledge and political will formation and institutionalisation seriously, such reasons may be identified in technological and scientific developments (such as the developments in stem cell research or recombinant DNA technologies), in 'newly framed' phenomena of life (such as novel framings of diseases, like BSE or Aids; or of 'hybrid' life forms that are produced through genetic modification), or in novel political ordering (such as the EU-unification process or the newly emerging geo-political constellation of the Baltic states in the post-soviet area).

Although cases of 'the new politics of life' may be empirically diverse, they all may shed a light on a number of themes which can be identified as being of particular research interest on the basis of the

conceptualisation of governance and life in modernity and late-modernity outlined above. Together these themes set an initial agenda for research in particular case studies:

- *The mismatch between a life-political issue and dominant modes of governance triggers situations of institutional ambiguity.* In cases of the new politics of life, the PAGANINI conceptual framework holds that the assumed 'unity' and 'access to truth' which are presupposed in modernist modes of regulation are perceived as untenable. The question is whether that is indeed the case and how that is expressed. Who is it (which actor group) that perceives such a mismatch between their definitions of an issue at stake and dominant modes of governance? Is it 'the state' (central government) that experiences that 'seeing from the centre' ('seeing like a state') is difficult and centralist, rationalistic attempts at ordering need to be changed to or supplemented with participatory modes of governance, and if so which? Or are there other actor groups, newly emerging contingent publics, multi-faced and transient, who in relation to their framing of the issues at stake express that a 'de-centring' of modes of ordering is required, and if so, how? Who observe and / or experience 'institutional ambiguity' and spark a discussion on the 'rules of the game'?

- *The co-production of science and politics comes out in contextually instantiated discursive space and regimes of justification.* The traditional (ideal) understanding of the separation of science from politics makes it possible to identify specific 'units' of political actors ("target groups", "users", "technologists", "implementers" and so on) which may be expected, in principle, to accept a specific representation of scientific findings. That principle was supposed to hold even when in particular cases no consensus or trust was experienced (in which cases participatory arrangements with representatives of those actor groups might be designed to negotiate or jointly construct a 'fitting' representation). The PAGANINI conceptual framework posits that no contingency between units of actor groups and representation can be assumed *a priori*, implying the need to empirically accommodate for the fluidity of processes of meaning construction that take place in actual practices. The focus in such empirical work is on the discursive space in which the coherence between science and politics comes out in contextually instantiated regimes of justification. Of interest is the question is who can say what on which grounds in a specific situation. What argument carries force, what can be said by whom legitimately? How do the boundaries of actor groups in specific cases become established, who and what is decisive in determining who is 'in' and who is 'out'?

- *The new politics of life entails interactions among people (situated actors) which involve exchanges in terms of logos and pathos.* The traditionally constructed dichotomy between science and politics intended to 'remove from technology the problem of normative choice' and to enable as much as possible effective and legitimate political judgement 'by reference to

facts' entailed a stripping of emotions. Discourse on uncertainty and risk was cast in terms of reason, of logos, while the emotions involved in the perception of risk and in the trust required for accepting specific representations of science were bracketed. The 'dismantling' of these ideal constructions in concrete practices of the new politics of life entails a re-appreciation of the notions of trust (see above) and risk (see below) – especially in such cases where science and technological development (*in casu*, their representations) are actually widely 'seen' and known not to mirror the natural world, e.g. in the case of genetic modification or pre-natal 'management' of life (in cases of screening, selection and provoked abortion), or expressed in disagreements among scientists – and impels a re-appreciation in empirical research of emotions (pathos) that play a role of in the attempts at re-ordering under scrutiny. How is expertise expressed and appreciated in practices where the issues at stake are perceived as highly complex both in technical and normative terms? Is expert knowledge employed to generate active trust between scientist, formal political institutions and citizens (lay-people), and if so, how?

- *The new politics of life addresses critical choices about the future of human kind and makes this manifest in ways that essentially challenge the dominant mode of social and political ordering in terms of risk.* The new politics of life escape the logic of risk rationality constituted in modernist governance practices as a mode for ordering society.[15] As a mode of ordering, risk is constructed as calculable (risk is assessed as a statistical probability), as collective (risk is understood solely in its relation to a population, not to the individual), and as capital (risk is expressed in terms of the loss of financial value involved; cf. Ewald 1991). In the new politics of life, the relation between mind, body and non-human nature is being reframed in ways that may elude these constructions: risk may involve uncertainty about the information necessary to assess nominator and denominator in statistical calculations, risk may be experienced predominantly on the level of the individual, and risk may involve non-economic assessments of damage and responsibility. The life-political issues under scrutiny may therefore deserve to be assessed in terms of a possible shift in the ways risk is being understood and dealt with. Is there a shift from 'risk' discourse to a discourse of uncertainty? How are the issues framed by government actors, and how by actors contesting their modernist modes of dealing with these?

- *The new politics of life entail new modes of 'mastering nature' that entail shifting perceptions on the aggregation level at which such mastering should be 'ordered'.* This issue comes out in two, possibly interrelated, ways. Firstly, in the mastering of *'external'* nature, that is, in the control of human's natural environment, which as a key feature of Modernity has been institutionalised as a collective responsibility through the design and implementation

of 'regulatory science', the level of the nation-state was long considered the most appropriate level of ordering. With processes of transnationalisation on the one hand ('globalisation' of economic activities; unification of the EU and so on) and of 'de-territorialisation' on the other (network society, individual's multiple identities which only partly may refer to the nation-state), a *mismatch* between the level of formal ordering and of problem perception may be experienced (e.g. between the 'universalistic' claim that some species need protecting and the locally perceived need not to bother). The question is whether such mismatches are frames as part of the institutional ambiguity experienced, and how they are being addressed in practice. Secondly, with the new and transforming possibilities of mastering *'internal'* nature, that is, the human body's condition and with it, the construction of 'life itself', new ground is broken in regard to conceptualising *responsibility*. What previously had been a matter of fate or luck now is brought, to certain extents, under human control. The question arises who is able and justified to take up responsibility for such control, and at what aggregation level that responsibility is to be organised and accounted for, e.g. at the level of the collective or the individual, the producer or the consumer and so on). Are the life-political issues at stake in the cases under scrutiny defined in terms of responsibility and control (and risk / uncertainty, see above), and if so, how?

In short, the politics of life may be understood as involving a broad range of issues that concern the relation between the mind and the body, and between these and external nature, that acutely challenge central assumptions in dominant modes of ordering, e.g. regarding trust, risk and responsibility. Due to the complex relations between science and politics regarding life-political issues, and with it, between their objects (artefacts) and subjects (the scientists, the policy-makers, and the issues' wider public), it is in this policy domain that the inadequacy of dominant, modernist modes of governance may be urgently felt, and may result in institutional ambiguity and a decentring of state vision. Attempts at re-ordering the unruly issues in the face of such ambiguity may therefore well entail the participation of varieties of (state and 'non-state') actors. Consequently, not only the subject matter of the issues at stake – such as new technological development, newly emerging framings of 'environmental concern', newly emerging geo-political constellations – but also the governance practices involved are critically 'novel.' The actors engaged in these practices can be identified as the 'publics' to the issues that call these practices into existence in the first place. The complexity and un-controllability of nature (both internal and external) is thus reflected in and paired to a multi-faced, elusive public that may no only demand but also require new modes of governance – forms of governance that build on and know how to deal with the 'unruly' publics involved. If only for their suggestion to be manifestations of a newly emerging social order, the politics of life of late-modernity and the practices of participatory governance through which they become manifest are

well worth investigating empirically. An approach to research by which that can be done, and which is contingent with the views on the co-production of science, politics and society explored above is presented in Part II.

Part II

An eye on practice: methodological guidelines for investigating the dynamics in and of participatory governance

1.   Introduction

The previous sections discussed how newly constructed phenomena of life in scientific and political discourse of recent tend to escape the modernist way of governing, as a result of which governance in this domain of politics may be expected to take shape in new, unprecedented ways. The PAGANINI project approaches the question in what shape and form precisely such new governing practices become manifest, from an explicitly empirical perspective. The project is based on the proposition that such new forms of governance are likely to be participatory in character; yet the question whether that is the case, and if so, in which form, remains to be answered. Below, the approach to research is outlined by which the case studies in the project may investigate practices of (participatory) governance in the domain of the politics of life.

2.   Research justification and questions

In view of the project's theoretical assumption that in the face of complex issues pertaining to the politics of life, situations of institutional ambiguity may occur (that is, situations lacking in state regulation that is perceived as legitimate and/or effective), in Part I, the object of research was identified as '*practices* of governance.' These practices were defined as the sites in which politics is being enacted through the articulation of meaning and morals and their inscription in analyses, plans and material objects.

The focus on practice as a site of joint action and learning constituted around life-political issues provides the starting point for the empirical study of participatory governance in the PAGANINI project. Such a focus is called for as it is in practices, that agency, knowledge, institutions and power in various spheres of action in society (science, economy, politics) are constituted in processes of simultaneous mutual shaping. Practice is "a way of acting and thinking at once" (Flyvbjerg 2001). Moreover, it is the site where the relation between agency and structure comes out in action, in doing. Doing, the central thread of practice, is never "just doing in and of itself" (Wenger 1998:47), but is always "doing in a historical and social context that gives structure and meaning to what we do." It is hence in actual practice that the "virtual order" of structure (Giddens 1984) gains momentum (is

"instantiated") and influences the acts of real, situated actors, whose action (practices) in turn contribute to the 'contextures' (Lynch 1991) in which politics and science are being 'co-produced'.

A focus on practice, furthermore, allows for an inclusion in the empirical research of 'attempts at governing' that take shape outside formal political institutions. State-initiated and other formal participatory arrangements form an obvious first focus of attention in empirical research on participation in governance. However, given the broad definition of politics endorsed in this project, a focus on practices enables the researcher to move on into taking the 'new political spaces' into consideration, defined in Part 1 as the sites where processes of political judgment and decision making take place that exist *next to* or *across* the institutions that are traditionally considered the exclusive centres of political power. Those possibly little articulated and probably not formally sanctioned practices may be argued to be relevant manifestations of participatory governance.

Thirdly, by taking actual practices as a prime point of entry in the study of politics science and governance, conceptual abstractions such as 'the citizenry', 'the public' or 'the state' can be framed as historical phenomena which may be objects of empirical observation and which require contextual explanation. By thus 'de-black-boxing' institutions and concepts into phenomena that can be assessed on the basis of questions as to who is doing what, where, on which account and why, political analysis takes power seriously and 're-politicizes' politics (Stavrakakis 2002:16; see below).

Lastly, a focus on practice may prevent the PAGANINI project from adopting a normative approach to participation that is but all too prevalent in studies on the topic. This prevalence may be understood by taking into consideration the ideological bearings from which 'participation' has been struggled for and promoted, as a project by which to share power between the state depicted as centre, and other actors in the periphery of that power. In line with its normatively-inspired origins, evaluations of participatory arrangements, in particular those that are informed by a perspective on deliberative democracy, typically first describes (e.g. Innes & Booher 2002) what is desirable – for instance "genuine" participation that under "ideal conditions" will result in "participation in a much deeper, more inclusive and more meaningful sense than the conventional methods" or "authentic" participation (Simrell King & Stivers 1998) in contrast to "symbolic" participation – and then heads on to assess actual cases of participation in these terms or to describe what keeps societies from organising such a type of participation.

Clearly, the idea here is not to 'promote' participation and participatory governance as an alternative approach to traditional state-centred government, nor to discuss concrete cases of participation on the basis of *a priori* formulated criteria as to what counts as 'good participation'.[16] An *a priori* positioning in the canon of literature on participation, and an implicit endorsement of the normative

positions implied in it, may obstruct from view the dynamics of constructing politics and meaning in the practices that the PAGANINI project focuses on. In this project, the initial focus is to capture 'what is going on' in the politics of life, to study the spheres of contestation and the sites in which these come out in practice. In so doing, the features of participatory governance in context-specific terms may come to the fore, as well as their effects (e.g. in terms of learning, the generation of trust and the provision of modes of governance that cope with the uncertainty, risk and value conflict, and the issues regarding individual and collective responsibility that are key to the politics of life in a way perceived as legitimate and effective). On the basis of these findings, subsequently, inferences may be drawn as to the potentials and limits of participatory practices in regard to the politics of life in the context of European multi-level governance.

The objective of the PAGANINI project then is to trace telling examples of participatory governance in the politics of life, and to thus develop an understanding of the dynamics in this domain of politics, and of the modes in which governance is given shape in the face of the institutional ambiguity that is likely to characterise it. The search is not for general laws regarding 'good' participation, nor for the 'essence' of the politics of life. Rather, the project sets out *i)* to generate empirical insight in the ways in which, and the extent to which, participatory governance in the politics of life domain is becoming a component of the European polity; and *ii)* to develop new theory on the basis of the empirical research in regard to participatory governance, and to the roles and relations of expertise, formal authority and citizenry in such practices in multi-level contexts.

In order to realise these objectives, the PAGANINI project focuses on the following research questions:

What forms and types of (participatory) governance can be discerned in the face of newly perceived politics of life issues? In which ways do these practices of governance provide an answer to situations of institutional ambiguity that arose in regard to new life-political issues?

i)   What are the status and the meaning of these practices?

ii)   Do they provide an increase in democratic legitimacy and/or effective problem solving?

- How do the newly developing governance practices deal with such themes as uncertainty, risk, value conflict, and individual and collective responsibility that are key to the politics of life?

- Are newly developing participatory practices conducive to learning and/or the generation of trust, and if so, to what extent and why?

On the basis of the findings, eventually an answer is sought to the question:

iii)   What are the potentials, problems, and limits of participatory practices in the context of European multi-level governance in regard to the politics of life?

The project adopts a case-study approach to provide an answer to these questions.

3.   Research set-up and case selection

An intricate question for an 'internationally comparative' research project is how to investigate governance practice arising in 'new political spaces' without imposing a priori assumptions about the nation-state as the logical unit of analysis. It might well be that governance practices (and participatory practices in particular) emerge predominantly within the confines of the nation-state. Yet, as the life-political issues central in this project can be perceived as essentially transnational (in various meanings of the word), a nationalist methodology to designate what exactly constitutes 'politics' and 'political actors' in practice (cf. Beck 2003, 2004) had best be avoided. Nevertheless, one should also be able to acknowledge that structures identified and defined on the level of the nation-state that are historically specific and rooted in conceptions of territory ("cultures and cultural imagination", Beck 2004:142; "national styles of governance"; Vogel & Kagan 2004), and may strongly influence the way the life-political issues at stake are addressed and expressed (e.g. Ansell et al. 2005).

Comparable to the way the project treats the notion of 'participation', the PAGANINI project seeks to avoid an a priori classification of 'the politics of life', beyond the open description and conceptual elaboration into research themes provided in Part I, section 3. It leaves open how the manifold dimensions of that complexity are made political and to what extent that is guided by the context within which politics is conducted. In that light, a conventional internationally comparative take in organising the empirical research is not in place. Instead, a case study approach is designed in such a way that each case covers a number of nation-states *and* the EU, which centres of formal politics are identified as 'regulatory nodes' in the "public energy fields" (Fox & Miller 1996; see below) under scrutiny.

Furthermore, the focus on practice and 'situated meaning' (Yanow 1999; *in casu*: on what is meaningful to the actors engaged in practices concerning the (some) politics of life) in the PAGANINI project, which roots in an interpretive (phenomenological-hermeneutic) research tradition (see below), renders the conventional case-study approach (Yin 1994) of the social sciences that model

themselves itself after the natural sciences inappropriate. The research set-up here is designed in concordance with the project's interpretivist epistemological presuppositions. The cases have been selected according to the logic of 'maximum variation' (a selection strategy "to obtain information about the significance of various circumstances for case process and outcome", Flyvbjerg 2001:78), so as to ensure that the cases together may provide a more profound insight in the issue under scrutiny (participatory governance on life-political issues) than the sum of the findings of the individual cases.

In order to enable the desired accumulation of insight on the basis of the cases which vary largely in terms of research topic and contextual setting, the case descriptions will present a considerable 'richness' in empirical detail ('thick description'), and ample information will be provided on the contexts, history and temporality of the practices (phenomena, actors, objects) studied (contextualism). Furthermore, the research themes identified in Part I, section 3 serve as 'sensitising concepts' (Blumer 1969) and will give direction to the process of data collection in each case, and provide a first, tentative framework for understanding the case material in the light of the research questions asked (cf. Wester 1995). The empirical case studies thus will result in a stock of material with a certain degree of uniformity, that can be looked at from different angles with different question regarding new modes of government in relation to novel life-political issues.

Accumulation of insights regarding these issues then is possible on the basis of the drawing of analogues that can be detected in the material amassed in the case studies (cf. Polya 1945). Accumulation of insights, the drawing of inference and possibly the development of new theory on the basis of the empirical findings in an 'analogue models' approach is based on the communalities that can be argued to exist in the different cases, here, in the different areas of the politics of life and the various geographical settings where they take shape. Analogue models cannot be directly 'fitted' from one situation to another. Instead, they suggest qualitatively important aspects and processes that deserve particular attention in studying the other situation (Haila & Dyke 2005).

The possibility of drawing analogues is facilitated in the actual selection of cases, in that they all *i)* addresses critical choices about the future of human kind which they approach in an essentially comprehensive way; and *ii)* relate to political issues that concern mastery over (internal / external) nature, defined in an essentially anthropocentric manner. As concerns the latter stipulation: the selected cases vary in concordance with the continuum implied in the internal - external distinction made, encompassing two cases concerning the human body (internal: 'red') and two concerning non-human nature (external: 'green'), and two cases of which the topics, more readily than is the case with the others, can be (and are) defined in terms of problem framings of both ends of the spectrum of nature.

At the 'red' end of the spectrum, life is framed in terms of a molecular phenomenon, with the life-political issues at stake holding as a key claim that life as producible. Core questions in this domain are: 'What is (human) life? What defines life if 'nature' or the natural life cycle no longer provides a foothold to distinguish life from death? At the 'green' end of the spectrum, life is framed in terms of a planetary phenomenon, with life-political issues holding as key claims that human activity fundamentally endangers non-human life, and in so doing is endangering humanity. Core question in this domain is: "What is a living planet?"
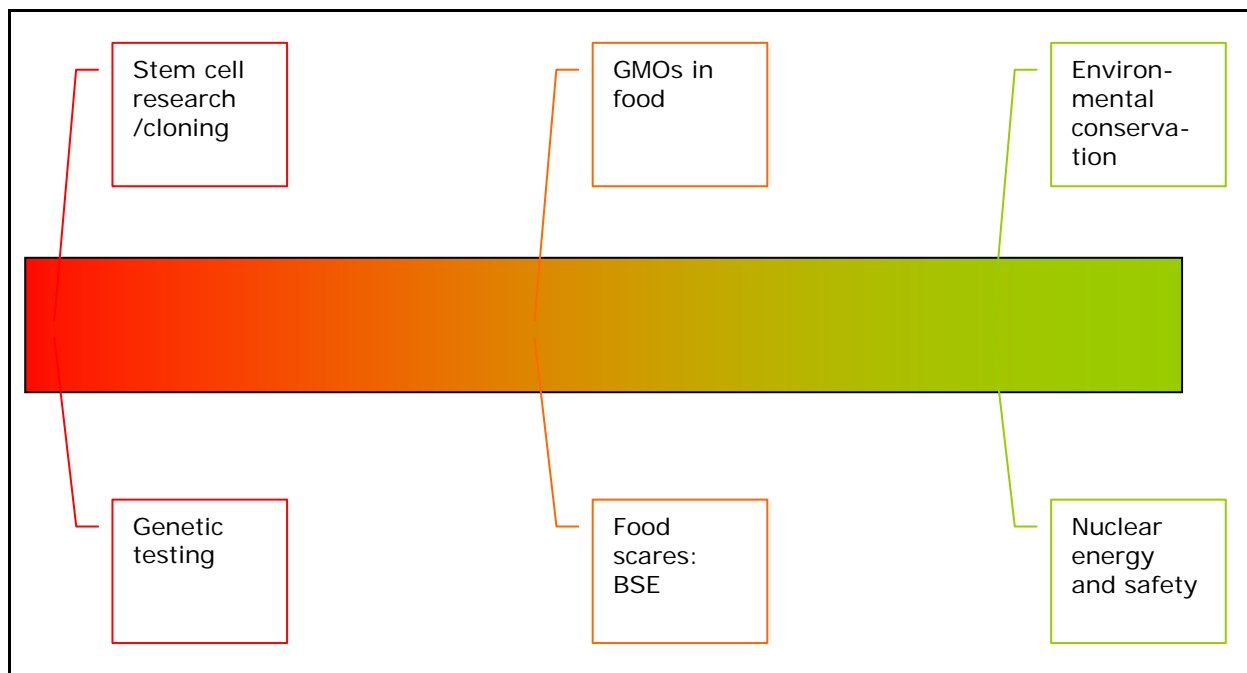

Figure 1. The 'life-line'

The cases concern human embryonic stem cell research and therapeutic cloning (with empirical work done on Germany, Great Britain, Italy, the EU and the US; Work package no. 2), genetic testing (with work done on Cyprus, Denmark, Germany, Great Britain and the EU; Work package no. 3), genetic modification in food (with work done on Great Britain, Greece and the EU; Work package no.5), food scares in particular BSE (with work done on Germany, The Netherlands, Great Britain and the EU; Work package no. 5), environmental conservation, in particular the implementation of the Habitat Directive (with work done on Finland, Greece and the EU; Work package no. 4), and nuclear energy and safety (with work done on Bulgaria, Czech, Lithuania, Slovenia and the EU; work package no. 6).

Data collection for the case studies will be based on a 'triangulation'[17] of research techniques and data sources, including document analysis and interviewing. Documents studied may include information from governments (incl. administrative documents, policy plans and white papers), knowledge institutes (incl. research reports, strategic plans), the corporate sector (incl. annual reports, publicity material), the media, and NGOs. In each case study about 30 interviews will be held, which will be transcribed and of which key passages crucial for an understanding of the case will be translated in English. Where possible and relevant, data will be collected through participatory observation of the practices studied.

4. The discursive construction of political reality: a research perspective

As was argued above, the phenomena of life of late-modernity that take shape in new, unprecedented ways not only present novel challenge to the institutional arrangements that political communities produced to order nature. They also entail, directly and via their challenging of institutional structures, an imperative to re-conceptualise politics (and with it: science). In turn, such a re-conceptualisation (see part I) challenges the neo-positivist epistemological assumptions underlying mainstream social and political science.

The core critique on customary political science approaches targets the prevailing idea that phenomena such as states, governments, citizens and so on are 'out there' to be found by scientists, whose descriptions of their findings then disclose some underlying reality. This approach conveys an understanding of politics in terms of (constitutional or non-constitutional) institutions as expressions of a "pre-discursive" ontological reality. Such an understanding conceals from view that the ways in which politics and government (or any other social or natural phenomenon) are understood depends upon their discursive articulation (cf. e.g. Stavrakakis 2002).

Alternative approaches which are based on an interpretivist epistemology in contrast take into account the powers at work in the 'discursive' construction of reality (as comes out, for instance, in the aforementioned 'de-black-boxing' of institutions and concepts). As Gottweis remarks, not only the politics of organisation, but also the organisation of politics requires attention:

> [T]he semantic struggles … which define who counts as an actor in a particular policy setting – and who does not; which institutions are legitimized and authorized to take part in the shaping or the implementation of policymaking – and which are not … are important [objects for] analytic considerations [to] address dimensions of power widely ignored in conventional policy analysis. Power is not only articulated in interactions between actors, in institutional biases or ideologies. In addition, discourses,

representations, scientific statements, or 'public philosophies' are critical articulations of power which construct subjectivity and position individual or institutional actors in the socio-political field (Gottweis 2003:254).

In the PAGANINI project, a research approach is endorsed that allows for a 're-politicization' of politics and which thus may shed light on the discursive construction of the institutions and actors at stake in life-political issues.[18] The project suggests that discourse-analytical and dramaturgical concepts can be helpful instruments to analyse how the ordering of life-political issues in practice takes shape, and with that, how the dynamics in science and politics in regard to these are being 'co-produced'.

Discourse analysis is an empirical approach to studying the ideas, concepts and categorizations through which actors allocate meaning to social and physical phenomena. A discourse methodology assumes that politics is 'played out': that it becomes manifest in words, acts and objects. The idea is that as a researcher, one cannot see what is going on in the heads of the actors studied; access is gained via a focus on the acts (including 'speech-acts'), their settings and artefacts that actors endow and embody with meaning (cf. Yanow 1999). In that way, discourse analysis allows for an essentially empirical approach to politics.

Language is taken to be a first point of entry to the empirical aspect of politics. Language is understood as a system of signification, that not only pictures the world but profoundly shapes an actor's view of it as well (Fischer and Forester 1993). By studying language-in-use in practices, that is, the discursive exchanges between situated actors, the mechanisms by means of which a group of actors finds ways to address public problems in a way that participants find meaningful may be traced. The 'discourses' found on the basis of the analysis of language, are the analytic constructions of the researcher, understood as an ensemble of ideas, concepts and categorisations through which meaning is allocated to social and physical phenomena, and which is produced and reproduced in an identifiable set of practices (Hajer 1995).

The focus on language-in-use raises the question of how the 'in-use' part is of relevance to understanding language. How does the 'where' and 'how' of what is being said influence the 'what' of utterances? Austin (1955), who laid the foundations of discourse analysis, already pointed at the 'performative dimension' of language: to say something is an act. Inclusion of the performative dimension in discourse-analytic approaches implies a focus on how people physically, 'performingly' engage in politics, in interactions with one another and with the material world that is their context. The idea is that discursive realities are being expressed not only by what people say, but also by how they say it.

A focus on the performative dimension[19] of the discursive construction of reality is of particular value to the study of life-political issues, which almost by definition imply a breach with the operational routines of modernist government. Given the institutional ambiguity that they bring along, prime empirical questions are how, in the absence of stable, routinised rules and norms actors may come to agree on policy actions, by which systems of signification participants may make sense of the issue at stake, how understanding across these systems is achieved and how mutual trust is generated so that actors present may expect that action in line with the things is to occur. Because of the likely transnational character of the issues at stake, and the wide varieties of publics that an issue may stir, participating actors will bring different cultural codes to the situation, which adds to the relevance of the question how they may order an issue.

Such ordering (governing) attempts of course will include processes of negotiation to develop a shared sense of a problem and come to an understanding of what the problem 'really' is. Because of the institutional ambiguity, the object of this negotiation comprises more than the problem definition and its solutions alone. Participants also have to work out the rules according to which (legitimate) decisions are to be made as well as secure the mutual trust needed to consolidate policy solutions that have operational power. They will have to work out a mode of operation that makes 'joint governance' possible in the first place (Shachar 2001). The essential instability, the absence of shared rules, the need to collaborate across systems of signification: these are the conditions that ensure that the very joint experience of collaboration becomes the key reference in securing such essential components of 'good' governance as shared knowledge, trust and a reciprocal understanding of conditions under which the various parties have to operate. Through developing a common understanding of the problem at hand as well as a mode of operation, participants even begin to develop shared and complementary identities (Innes & Booher 2000:21).

Hence performance is a concept that mediates between the individual and the context, between 'the setting and the act'. To include the 'performative dimension' in an analysis of the politics that become manifest in relation to some construct of 'life' would imply that not only the language being used is studied, but also the act of speaking, that is, the way the 'speaker' conveys his/her message, the way its 'audience' receives it, and the setting in which this interchange takes place. The underlying hypothesis is that the setting influences what is being said, what can be said and what can be said with influence: the setting defines the act to a certain extent. Performance then would be the way in which the contextualized interaction itself is seen as co-producing social realities like understandings of the problem at hand, knowledge and new power relations (Hajer & Versteeg 2005). A focus on the performative dimension of politics helps to understand how governing in cases of institutional ambiguity takes the form of *in situ* enactment, and thus is contributory to the studying of the "micro-

politics of meaning" (Gottweis 2003: 257) by which reality is discursively constructed. As said, in such cases of ambiguity, the participants will have to develop a shared discourse and ' set the stage', that is, work out a script for resolving conflict and develop its logic of appropriateness. Thus, politics may be argued to be a form of improvisation theatre, in which participants have to watch each other closely, because the rules of the game are made and can change on the spot.

5. From methodology to method: making 'a focus on practice' operational

How does the above perspective on the discursive construction of political reality translate into actual empirical research? In the introductory section of this report, it was argued that in order to be able to appreciate new types of participatory governance practices, there is a need to 'dare to let go' of the traditional conceptualisation of politics as confined to describing the doings of actors in formal political institutions. What makes such a step so 'daring' is not the theoretical freedom gained by which one can interpret social manifestations of powering and puzzling that hold public consequences in their proper political terms. The catch is in translating the conceptual width into concrete concepts by which to conduct research on the manifestations of politics *empirically*, concepts that at once allow the researcher to appreciate the full range of such potential manifestations yet that provide sufficient guidance to keep the research on track and within manageable proportions. The move away from previous conceptions of politics implies the need for a new vocabulary and conceptual apparatus with which to denote and describe the observed elements analytically.

The theoretical elaboration in Part I has made clear what conceptual and methodical innovation is required for empirically investigating participation in governance on life-political issues. Three concrete issues need to be dealt with methodically: *i)* the consequences of expanding the notion of politics to areas outside and across formal political institutions for the unit of analysis in empirical research; *ii)* the implications of identifying publics not in relation to the state as such, but as emerging categories of actors that come into existence in relation to a problem issue; and *iii)* the implications of adopting as a point of departure the proposition that the generation of social phenomena – agency, knowledge, institutions, power – in various spheres of action in society – science, economy, politics – are simultaneously constituted in processes of mutual shaping (the proposition of 'co-production') for the focus of empirical research.

5.1.   The 'public energy field' as a unit of analysis

When wishing to include in the empirical research 'new political spaces' where processes of political judgment and decision making take place *next to* or *across* the centres of formal politics, it makes little sense to take the latter as the basis for outlining the unit of analysis. Given, too, the (potentially) transnational character of the life-political issues at stake and the increasing 'evaporation' of the nation-state, there is a clear need to step away from the traditional policy science vocabulary (and discourse) that reifies 'state' and 'bureaucracy' as the centres of political power. This is exactly what Fox & Miller (1996) try to facilitate, when they posit the notion of "public energy fields": "We attempt for the field of public administration no less than a paradigm shift from 'bureaucracy' to 'public energy fields', as potentially eye opening (we hope) to our field as the very similar shift from 'particle' to 'wave' in the quantum mechanics has been for physics" (1996:101).

The authors propose to "subsume under public energy fields all those activities and recursive practices currently conceived as agencies and institutions in organizational chart boxes in the bureaucracy, along with any such closely related sectors of civil society as the non-profit social service sector, the forth estate, and citizen groups of all kinds: all those who are engaged in activities with public implications, who are projecting actions in accordance with the implicit question, what should *we* do next?" In this way, a public energy field can be understood as the unit of analysis for researching governance through practices without a priori taking recourse to the conceptual language of the classical-modernist understanding of politics in the first place. The latter type of institutions are explicitly included, yet are not seen as a first point of 'entry to the field' of politics (in the anthropological sense of the word). After all, please note, the shift in conceptualisation by no means implies the 'abolition', conceptually and actually, of standing political institutions. These (rule-directed) institutions are not replaced by new political arrangements. Rather, rule-directed and rule-altering types of arrangements co-exist, while the former mark the landscape, so to speak, in which the latter – the new political spaces – take shape (Van Tatenhove et al. 2000; Loeber 2004).

5.2.   In search for the public: delimiting the range of potentially relevant actor groups

The choice to define the publics involved in 'public' participation in relation to the various contested problem framings that are likely to characterise the life-political issues at stake in the case studies, rather than to the state as such (in a 'citizen to state'-relationship), implies that a straightforward demarcation line by which to identify relevant actor groups cannot be given. Furthermore, the

inclusive focus on participation, which entails that also 'non-conventional' modes of participatory governance may be included in the research 'breaks open' the notion of participant to potentially include any actor implicated by some political or scientific development in the domain of life.

The problem of underdetermination of the concept of participation is not new (see e.g. Oakley & Marsden 1985: 18-19), nor exclusively related to the PAGANINI project. In political theory approaches, definitions of 'participation' range from merely 'taking part in elections' (in 'elite democratic theory'; Dahl 1971) to 'communicating information about their interests, preferences and needs to public authorities and to generate pressure for them to respond' (theories on 'citizen activism'; Verba et al 1995). In addition to the specific theoretical perspective adopted, the contours as to what counts as 'participation' are also determined by the stance towards the participating actors taken. The question is who constructs 'the participant', and who determines what decisive motives are involved: the person taking part in something out of his or her own free will ("participation is self-motion"; Sartori 1987)[20], or the researcher who as a bystander determines 'the relationships of involuntary participation'.[21]

The PAGANINI project suggests a practical rather than an ideologically informed solution to the problem of underdetermination. Identification of 'publics' may be facilitated by empirically focusing on practices first, rather then on actor groups, and only then on the actors that can be observed to become manifest as part of that practice. Thus, the focus is on the people that identify themselves in relation to the issues at stake in concrete cases (either as voluntary or involuntary participants). In those situations, these actors may be understood as 'publics', as they are 'politically active' (Verhoeven 2004), while the same people in different settings and on different moments may not. 'Public' hence is an emergent category indeed, yet not a fixed category of permanent identity.

5.3. Delimiting the range of practice: description of 'key incidents' plus their contextures

By taking 'public policy fields' as units of analysis, and by focusing on the new political spaces within these to identify relevant actor groups and their problem framings, the PAGANINI researchers run the risk of drowning in data. This is specifically the case when the notion of co-production is taken seriously in the empirical work done, which then may comprehend in principal 'all' sites where life-political issues take shape. In order to delimit the description of the cases, the PAGANINI project suggests to focus on particular key-incidents. Key incidents are a limited number of the practices that

form the location of participatory governance, understood to relate to one another in a diachronic or synchronic manner.

For reasons of practicality, some of these encounters (and 'translations') can be chosen to allow for an in-depth analysis of the politics of meaning that took place during the particular incidents that were studied. Hence, the key incidents need to be chosen for the fact that they are particularly illuminating for answering our research questions in a particular case. The idea is that the case description then can dig in deep, including transcribing and translating the episodes to be able to analyse and compare the data and the findings in light of the research questions of PAGANINI.

Simultaneously, these concrete practices cannot be understood fully without detailed knowledge of the 'contextures' (Lynch 1991) in which they take place. Contextures are the systems of signification that influences what is said, what can be said and what can be said with influence (i.e. the regimes of justification). Part of these systems are what in the literature on technological innovation is referred to as *'regimes'* (Rip en Kemp 1998; Geels 2002): the sets of implicit and explicit rules and conventions, formal (e.g. the law, or axioms in science) and informal, that guide the actions of professional actors in practice, and which are in turn reshaped and reinforced by those actions (Scott 1995). In addition there are the structuring contextures which have a more visible, more permanent appearance: basic *economic dynamics*, the dynamics in *technological development* (e.g. the 'Kondratieff-waves' involving both the relatively minor changes in cyclic periods of about 10 years, as well as more drastic changes in longer waves of about 50 years, set in motion by technological breakthroughs (Freeman 1984), and the *'innovation system'* (Van Est 1999; see Annex 1 for ways to capture these in distinct conceptual building blocks that may give guidance to their description), and the (formal) *'political system'*, including national styles of government. Care must be taken that the historical, dynamical dimension of these contextures is not lost in the description (see figure 2, below).

6.   Case description: guidelines

The research approach outlined above suggests that the case descriptions should at least provide information on:

i)   the narrative (what is the story about; what are the main themes and why?);

ii)   the story's context (what case-specific discursive background is of relevance?);

iii)   the key incidents (which practices are (uniquely or typically) exemplary to the case; how do we understand these and *their* embedding (contextures),

iv)   themes (do the themes identified in Part I, sections 2 and 3 come up, and if so, how? How do they relate to one another in this specific case? Are their any other 'remarkable' themes coming up?)

Please note that these four elements merely indicate the types of information considered relevant, and do no necessarily provide the structure for the (eventual) case reports. Views on structure and on the type of case information that may be considered indispensable will be developed in conjunction with progressing empirical insight. The four elements are elaborated below into specific research questions that may give guidance to the description.

6.1   Narrative

Provide a detailed account on what the story is about, based on a time-line of events:

1. What are the main themes and why: How can this case be described in terms of the politics of life? How does 'life' appear in the case, in which terms is it framed by relevant actors; how are life issues re-presented?

2. How did the life-political issues become unruly: Are there manifestation of institutional ambiguity related to the issues? How was / is the issue administered up until then? How and by whom were the rules and structures that dominate that particular area of governance called into question?

3. How is a dislocation becoming manifest: Are there articulated types of resistance / unrest / protest? If not, how do actors engage in the issue at stake, and how can their engagement be identified as 'public'?

4. Are there new political spaces being called into existence: Are there newly emerging attempts at governance? Where and by whom were they initiated? Were they related to formal political institutions located in the energy field (regarding to which regulatory nodes; 'formal participatory arrangements)? In which way? Did other forms of participatory governance emerge? Who were involved (citizens, experts, state-officials, …)? Are there 'new' actors around (whom do not belong to the usual (state or non-state) suspects? Are there new sites where the public aspects of the issue at stake are being deliberated? How and by whom were the 'publics' being framed?

5. How were the issues at stake being framed by the public, in which terms (pertaining to the body; the individual; ethical conflict; legitimacy, lack of trust and so on)? How are the actors framed, by which lines of division?

6. What kinds (if any) of participatory governance practices are emerging in this specific case (circumstances; activities, projects? How does that affect the discourse / the usual ways the issues is governed /ordered? Does it affect existing (formal) institutions? If so, how?

7. In what ways are formal state (classical-modernist) institutions responding? How do (parts of) the new governance practices change into new forms of administering / ordering?

8. What other formal responses have there been – e.g. pressure groups working with industry?

6.2   Context to the story: description of discursive space

Provide a brief description* of the background against which the moments of contestation arose:

Questions to that end include:

1. What do you think is the relevant the supranational, transnational, national and local contexts? Which is most relevant to the case? What is the policy culture, institutions etc, against which background the issues have come to the fore? The description preferably makes clear whether the issues involved and the practices of participation are typical or atypical for the contexts in which they are taking place.

2. What case-specific discursive background and cosmos-making is shaping the perspectives of the actors involved (e.g. biodiversity as a threat to the planet, nuclear power and national sovereignty, GMOs and 'playing God')

3. How do the described phenomena relate to other, contemporary societal dynamics that actors consider of relevance for the way the problem is being handled and discussed? The description may include portrayals of social movement cycles and their implications for the local, national and trans-national contexts.

6.3   Selection and description of key incidents *in* context

Select and describe the practices that are key to the case, and motivate their selection: What are the key events in the case? Why? Illuminate what kind of dynamics the incident is an exemplar of. There are two types of key incidents: a) the type of incidents that represent the dynamics that are typical for the case / issue – Clifford Geertz' Balinese cockfight is the exemplar case: it functions as a *pars pro toto* to illuminate Balinese culture; b) the incidents that are explicitly a-typical events, in which however, crucial dynamics in the processes under investigation come to the fore: "something that was not around before is now present in the process." Ideally, the key incidents should shed a light on the

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* The description will be subject to continuous revision on the basis of future empirical research findings as context is not (all) 'given' but reflects and is produced in and through the actions of relevant actors in the course of time

networked phenomena at issue in the politics of life, and on regularities therein. The description of key incidents hence should always be accompanied with a description of context, both in place and in time.

1. What incident(s) do you (propose to) research? Are these 'unique' or exemplary of a wider set?
2. Why do you think they are useful for the research?

Detailed analysis of the key incidents will have to be case-specific. But teams might attend to performative issues such as: How are the interactions producing political meaning? How do speakers come across? What language is being used (grammar, metaphors)? How are the politics 'performed'? Is there emotion, pathos, passion? In turn, how are emotions etc. canalised and structured as a way of ordering the participatory practice?

For a proper understanding of what is described here, the practices, and the actors taking up roles therein must be placed in context (see figure 2).
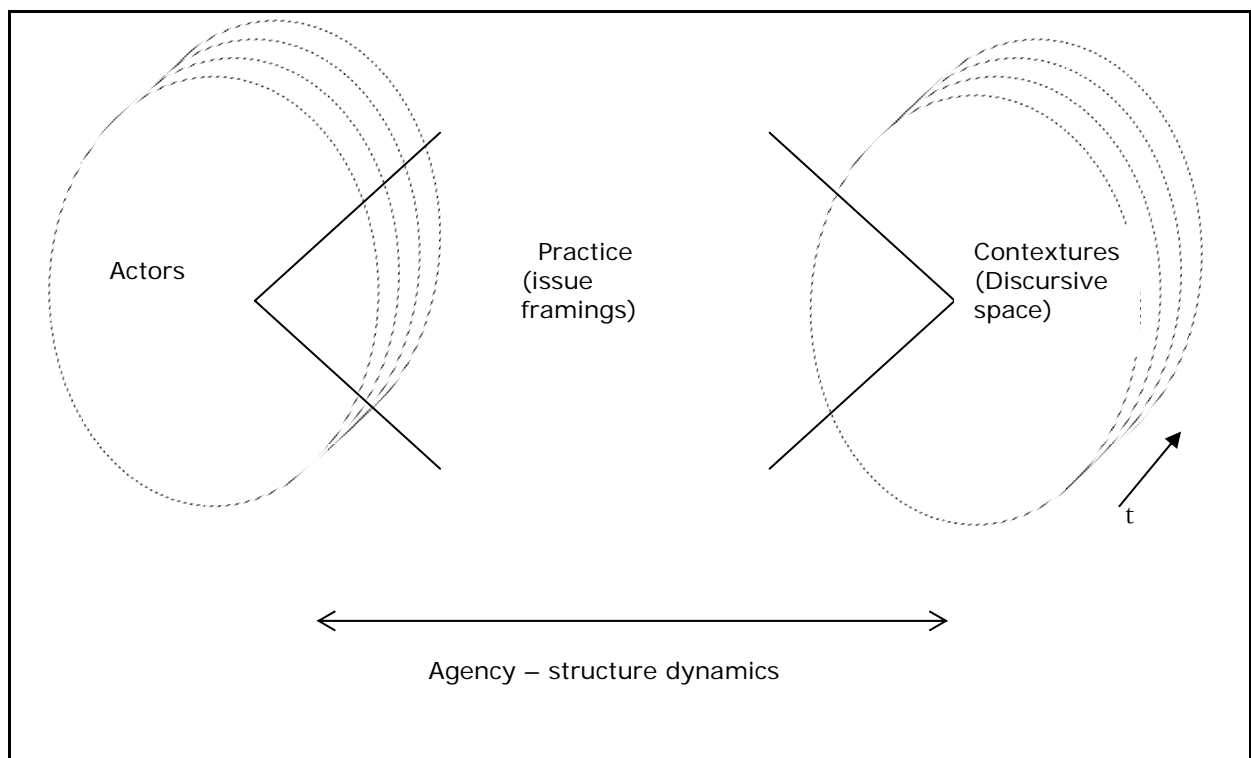

Figure 2. Practices as empirical 'middle ground' between agency and structure

6.4   Themes

Please comment on the themes identified in Part I, as well as on other perspectives and aspects of the politics of life that come up in the case. Where relevant also indicate the extent to which and the reasons why a theme "surprisingly" is not at issue in a specific case.

1. **Dislocation and institutional ambiguity**: How do new life-political issues disrupt ('dislocate') standing government practices and other ordering structures? Are there indications of institutional ambiguity? Are new political spaces being called into existence? How and where: what is their relation to classical-modernist political institutions?

2. **Participation and public**: How do(es) the publics involved come about? Are there moments / incidents of state-initiated public participation: were there 'official' participatory practices? Were there other forms of participatory governance (non-state initiated) located in the public energy field? Did actors participate in these that are not usually involved? How do the two types of arrangements relate to one another?

3. **Reason and emotion**: How do emotions play a role of in the attempts at re-ordering of the contested issue framings? How are emotions implied and played out in the expertise expressed in practices?

4. **Risk and uncertainty**: How is risk framed? And possibly reframed? Is there a risk discourse identifiable? In which way did that shape the issue framings at stake, in particular settings? Is there a lack of trust in the abilities of the state to calculate risk and act accordingly? How does uncertainty come to the fore? How is uncertainty perceived, on the level of the collective and/ or on the level of the individual?

5. **Expertise and trust**: Do science-based experts perform specific role(s) in the issues at stake? If so, which? And how: what techniques are being made use of? (E.g. what if calculable justice does not satisfy the felt need for personal justice / dignity)? How are feelings of unease, distrust and discontent (if any) becoming manifest and canalised? Are there attempts at actively creating trust? If so, how, by whom and why? Did these attempts at scripting succeed: Do new forms of participatory governance make the regeneration of trust possible? How (emotion / different representations)?

These themes, which were elaborated in Part I, form an initial conceptual lens that may be added onto in the course of the project, depending on progressive empirical insight in the particularities of the phenomena studied.

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Modes for analytically describing technological and innovation systems (Excerpts from the EUROpTA protocol)

Excerpts from the **EUROpTA- project research protocol**: European Participatory Technology Assessment. Participatory Methods in Technology Assessment and Technology Decision-Making. Cf. S. Joss & S. Bellucci (2002) *Participatory Technology Assessment. European perspectives.* Centre for the Study of Democracy.
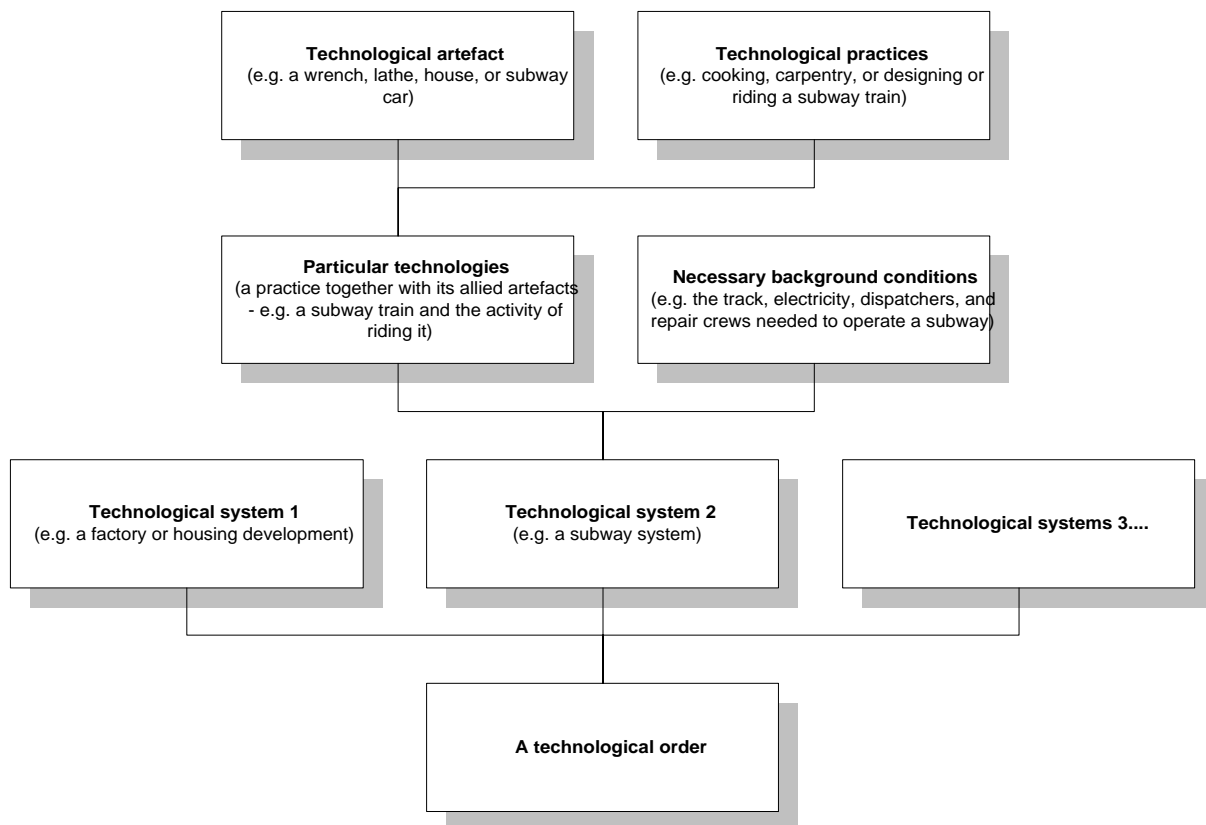
Technological order

Figure 1:   Hierarchic relationship among basic technological concepts (Source: R. Sclove, 1995, *Technology and Democracy*, New York: Guilford Publications)

Innovation system

Callon et al. (1992) introduced the concept of *techno-economic network*. A TEN is defined as "a co-ordinated set of heterogeneous actors – public laboratories, technical research centres, industrial companies, financial organisations, users, and public authorities – which participate collectively in the

development and diffusion of innovations, and which via many interactions organise the relationship between scientific and technical research and the marketplace." (1992:220).

Techno-economic networks are organised around five major poles, three of which are the supporting pillars: a scientific, a technical, and a market pole. Poles can be distinguished both by the actors constituting them as well as by the nature of their production. Within the *scientific pole* (S) certified scientific knowledge is produced by scientists and researchers, who work within universities and public or private research centres. The main actors within the *technical pole* (T) are engineers and technicians working in technical laboratories in companies, co-operative research centres, or pilot plants, where they conceive of, develop or transform artefacts destined to serve specific purposes.

In the terminology of Callon *et al.* [1992], the *market pole* corresponds solely to the universe of users. In our [i.e EUROpTA project, AL/MH/JvT] discussion "market" will be used in the classical sense as a place where supply meets demand. Thus, it seems elegant to rename the "demand-side-oriented" market pole that Callon *et al.* use. That pole will be called the consumption pole. In addition, the supply-side of the market will be named the business pole. The business and consumption poles jointly cover the market. Within the *business pole* (B), general managers either try to anticipate new consumer demands or translate demands expressed by users into products. Moreover, they organise the production, distribution and marketing of these novel products. The *consumption pole* (C) corresponds to the universe of the consumer, who ultimately buys, uses, and thus economically values the artefact.

Although by definition "public authorities" are assumed to play a role within techno-economic networks, their role is not properly integrated within this concept. To emphasise the role of politics, Van Est (1999) proposes to add a fifth *political pole*. The political pole is almost similar to a regulation pole. It is however a somewhat broader concept which refers to the whole policy subsystem (as part of the innovation network). A policy subsystem can be defined as the set of actors who are involved in dealing with a policy problem such as air pollution control, mental health, or energy." (Sabatier [& Jenkins-Smith] 1993:24) These actors may stem from a variety of private and public institutions at all levels of government. The political pole thus involves the whole political debate related to techno-economic innovation, including regulation. Because of the need for introducing a political pole and a broad conceptualisation of innovation, we, instead of employing the concept of techno-economic network, prefer to speak of an *innovation network*. As indicated, innovation networks will be described as organised around five poles: a scientific (S), a technical (T), a business (B), a consumption (C), and a political pole (P). Technologists play a dominant role within

the science and technical poles, firm managers are the main players within the business pole, users reside in the consumption pole, and policy makers occupy the political pole.

Pole	Science	Technicians	Business	Consumption	Politics
Actor	Scientist, Researcher	Engineer, Technician	Manager	Consumer	Policy maker
Role	Production of scientific knowledge	Design and development of an artefact	Production and marketing of a product	Consumption and economic valuing of the artefact	Stimulation and regulation of innovation

Figure 2:   The structure of the innovation network (Source Van Est 1999: Fig. 7.1).

Common analytic vocabulary

<u>Contextures</u> (Lynch 1991) in the P<small>AGANINI</small> project are understood as the structures that are instantiated in, and therefore of influence on, practices of science and <u>governance</u> (which in turn reproduce and co-constitutes these structures), and include **mutually supportive regimes of** implicit and explicit rules and conventions (including 'regimes of justification'), the dynamics in technological and scientific development and political organisation, and basic economic dynamics. To provide readers of P<small>AGANINI</small> case-studies with sufficient background information to understand the issues and practices investigated in their context, the case reports include descriptions of the observable precipitations of these structure in the shape of (reified) innovation systems ('technoscapes'), political systems (formal political institutions, national styles of government) as well as (where relevant) the concrete socio-material environments of scientific knowledge-making (physical sites, equipment) and political judgment and will formation (physical sites, documents and so on); (see p.34).

<u>Discourses</u> are analytic constructions of a researcher referring to ensembles of ideas, concepts and categorisations through which meaning is allocated to social and physical phenomena, which become manifest in words, acts and objects (and their settings), and which are produced and reproduced in an identifiable set of practices (see p.40; cf. Hajer 1995).

<u>Dislocation</u> refers to the emergence of series of events, "that cannot be represented, symbolized, or in other ways domesticated by the [dominant] discursive structure – which therefore is disrupted" (Laclau 1990:41). A dislocation may be the resultant of sudden dynamics or of "more pervasive, lasting perceptions of scepticism and alienation" (Jasanoff 2004a), and may give rise to situations of <u>institutional ambiguity</u> (see p.11).

<u>Governance</u> refers in the P<small>AGANINI</small> project to the act of governing, i.e., to the series of acts that people undertake to jointly rule and control the public consequences of natural events or human activity, and in so doing, to shape, guide or affect the acts of others (cf. Gordon 1991; Dean 1999); (see p.2).

<u>Institutional ambiguity</u> refers to a situation in which, on the one hand, the existing rules and norms that shape politics and policy-making with regard to a specific issue are considered problematic and/or unacceptable, while yet, on the other hand, there is evidence that clear rules are considered indispensable by the parties involved to determine who is responsible, who has authority over whom, what sort of accountability is to be expected and so on. As a result, in situations of institutional

ambiguity, the 'rules of the game' – the way in which a perceived problem can and should be legitimately framed and publicly handled – are themselves the subject of political deliberation and struggle (see p.11).

Key incidents in the PAGANINI project are selected events and/or practices that particularly illuminate the 'how' and possibly the 'why' of the dynamics under scrutiny in the specific cases of the politics of life investigated. They are either exemplary for the studied dynamics by which specific phenomena are related to and co-produced by broader societal, political and scientific developments, or they are crucial 'turning points' in those dynamics, analytically enlarged to understand the micro-politics of meaning at work (see p.44).

New political spaces are sites where processes of political judgment and decision making take place that exist next to or across the institutions that are traditionally considered the exclusive centres of political power ('classical-modernist' political institutions), and which by definition entail the involvement of 'non-state' actors. They form a second – potentially overlapping yet possibly distinct – type of empirical research objects in the PAGANINI project, in addition to formal participatory arrangements (including designs of Participatory TA); (see p. 10; cf. Hajer 2000)

Participatory arrangements are (often state-initiated) institutionally articulate forms of interactive policy-making or interactive policy analysis, by which non-state actors are actively invited to engage in the agenda-setting, decision-making, and other policy-forming activities of formal 'classical-modernist' political institutions (see p.7; cf. Rowe & Frewer 2004).

Participatory TA practices are a specific type of participatory arrangements, often initiated by research institutes, designed to make Technology Assessment (TA) – i.e. a specific form of analysis that focuses on the interrelation between technological and societal developments – instrumental in achieving the aspiration of a 'broadening of the societal basis for decision making' on science and technology, and/or in improving technological designs from the perspective of (varieties of) 'stakeholders' (see p.8; cf. Loeber 2004).

Performance in the context of a discourse-analytic approach to investigating processes of meaning allocation refers to the contextualized enactment of discourses, which are instantiated not only in and through the language being used but also by the act of speaking, that is, the way in which a 'speaker' conveys his/her messages, the ways its 'audiences' receive it, the objects involved in these acts, and the setting in which this interchange takes place (see p.40-41; cf. Hajer & Versteeg 2005)

Public in the PAGANINI project refers to categories of actors that come into existence (i.e. are framed from various perspectives) in relation to specific objects and issues that are subject to processes of

political judgement and decision-making, and which relate to these objects and issues in terms of mutual construction and simultaneous transformation. Consequently, publics are considered a constituent factor in the production of objects and issues, and of associated processes of knowledge production and political judgement (see p.12-13).

<u>Public energy field</u> (Fox & Miller 1996) is a descriptive phrase to denote the unit of analysis in researching <u>governance</u> practices that take shape in relation to some issue of contestation, in regard to which a need for joint rule and judgement is being expressed. Public energy fields encompass, yet explicitly 'stretch beyond' formal political institutions (including <u>regulatory nodes</u>) to include <u>new political spaces</u> (see p.36).

<u>Regulatory nodes</u> is a neologism to denote the 'classical-modernist' *centres* of formal politics, including national governments and the EU, coined in order to step away from the traditional political science vocabulary (and discourse) which takes the nation-state as a self-evident organising principle in empirical political-scientific research. Regulatory nodes may be identified as dominant sites for political judgement and will formation in <u>public energy fields</u> (see p.36).

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[1] Project proposal Participatory Governance and Institutional Innovation – PAGANINI; Proposal no.505791; Submitted 2/18/2004.

[2] The word is used loosely here to capture approaches to policy inquiry that regard policy ends as givens, and values as arbitrary and external to the analysis endeavour. As Dryzek points out, using the phrase in this way is strictly speaking inappropriate: "it is hard to locate any contemporary advocates of a true positivist approach to policy and its analysis" (1993:218).

[3] The respective perspectives in these categories differ in defining who is to participate in policy analysis, in what ways and for what purpose. The first type of participatory policy analysis (PPA) that Durning describes ("analysis for participatory democracy") is merely an attempt to take the position of 'the underdog' into consideration in the analytic process, so as to stimulate a pluralist debate. In the second type of PPA ("providing analytic inputs"), citizens (lay-persons, patients, clients et cetera) are merely involved as provider of information while the analyst solely exercises the power to transform the gathered information into policy advice. In the latter two types of PPA ("interpretive analysis" and "stakeholder policy analysis" respectively), stakeholders are able to both express and negotiate their definitions of reality, facilitated to do so by an analyst who operates as a process facilitator. These two types, which differ only in the extent to which the stakeholders or the analysts are responsible for the analytic output, depart from the traditional concept of policy analysis: instead of a top-down process of collecting and processing information in the light of preferred policy objectives, a bottom-up process is organized by which actors who (perceive themselves of) have(ing) a stake in the issue under scrutiny can come forward and express their claims and concerns in the light of their own preferences and objectives.

[4] In the Netherlands, for instance, this resulted in 1983 in a White Paper that sought to enhance the integration of science and technology in society. The paper propagated TA as a practical instrument to do so.

[5] Denmark and the Netherlands were among the first countries to conceptualise and organise public participation in TA-practices. In Denmark, this initially took the form of so-called 'consensus conferences', which was institutionalised by the Danish Board of Technology in 1987. In the 1990s, other European countries too staged processes of participatory TA. In the late 1990s, an international comparative evaluation of these practices was organised under the name of 'EUROpTA' (cf. Joss & Bellucci 2002). The studied not only showed the tremendous diversity in concepts, methods and techniques which have been developed under the umbrella-name of pTA in response to, and under the influence of, the needs and characteristics of specific

national contexts. It also revealed the importance of explicating the normative position of the evaluator when categorizing and interpreting methods used and impact found of different participatory methods.

[6] The large variety of initiatives that have transpired to replace the classic interpretation of TA as an instrument of 'early warning' can be roughly classified into two broad categories. On the one hand, there are the TA-studies that aim at a broadening of the design processes of technological development. These include forms of TA that focus explicitly on the societal aspects of a given technology in order to influence the development in tune with (future) users' preferences. Such TA procedures are being developed on the basis of insights from the field of science dynamics. A prominent example of such TA is Constructive TA (CTA), a concept developed in the Netherlands that is internationally adopted. CTA, according to its initiators, is a design practice in which impacts are anticipated through an early involvement in the process of R&D of users and other impacted communities (cf. Rip *et al.* 1995; Schot & Rip 1997; Smit and Van Oost 1999). On the other hand, there are examples of TA, which are undertaken with the intention to support processes of opinion forming and political judgement on technology in the public domain. This notion of so-called 'public technology assessment' has been institutionalised in many Western countries, such as in the now abolished Office of Technology Assessment (OTA) in the US and, still in office, the Rathenau Institute in the Netherlands.

[7] The concept of multi-level governance, which founds its origin in comparative public policy analysis and public administration, treats policy making in the European Union as a multi-level game in response to state-centered approaches (cf. Richardson 1996; Wallace & Wallace 2000; Hooghe & Marks 2001; Van Kersbergen & Van Waarden 2001).

[8] To Laclau, dislocation has a potential for 'radical democracy' to contest 'the limitations of traditional bourgeois forms' of political representation.

[9] In regard to "reciprocity in the involvement in a problem situation", see Fox & Miller 1996; on the function of rituals in creating trust, Forester 1999&, on mediation, e.g. Susskind & McKearnan 1999, and on trust as a resultant of verbal and non-verbal expressions, Szerszynski 1999.

[10] Please note that in the following, the word 'co-production' will refer to this interpretation of the concept and not to Whitaker's (1980) interpretation, common in public administration literature, that denotes the co-operation between target group and public officials in implementing policy objectives.

[11] Mouffe (1992) connects a normative position to that observation, positing that a modern democratic political community *cannot* be organized around a single substantive idea of the common good. This view dismisses for instance any attempt at copying at EU level a national institutional framework of formal representation as a basis for legitimacy of political decisions on an international scale (cf. Beetham & Lord 1998; Jachtenfuchs 1995).

[12] This section has benefited in particular from comments and input by dr. K. Braun and dr. B. Prainsack.

[13] His view is endorsed and elaborated on by numerous authors, such as Rutherford (1999), Hardt & Negri (2000), Rose & Novas (2005), and Szerszynski (2005). This paragraph is based on Szerszynski's (2005) reading of Foucault.

[14] Wars, for example, are according to Foucault (1979: 137-138), no longer the defence of "the juridical existence of sovereignty; at stake is the biological existence of a population". The death penalty too he understands as having less to do with the enormity of a crime, than with the incorrigibility of the criminal – his *biological* endangerment of others.

[15] The new politics of life and the dynamics in the political and scientific spheres of action that form the heart of these arguably challenge dominant modes of ordering in several ways. Through the developments in biomedicine and genetics testing for instance, human society developed new kinds of 'mastery of nature' which make into an 'act of will' what previously had been a 'fact of life'. Whereas the enhanced control of external nature (the world around us) had been a key feature of Modernity, the harnessing and transformation of 'internal nature', *i.e.* of human and non-human life forms (e.g. through stem cell research), presents a relatively new phenomenon (Gottweis 1998). The progress of biomedicine and the new genetics seems to indicate an increasing capability of medical-scientific technologies to transform "life itself" (Rose 2001), typically on the genetic, or more generally on the molecular level. Developments in molecular biology, genetics, and biotechnology led to the availability of a broad range of tools that have the potential to fundamentally change "life as we know it", through genetic modification, or through human intervention in the creation of life forms themselves, as it is the case in cloning. In the words of Giddens' (1994:14-15): "what used to be fixed either by nature or tradition is now subject to human decisions." Simultaneously, and arguably because of these very developments, society witnesses an *end of* mastery of nature, Szerszynski holds (2003:212), as the production of genetically engineered organisms results in the initiation of unpredictable, irreversible processes that generate "new kinds of uncertainty in the human relationship with the natural world." This disrupts, Szerszynski argues,

not only the durability of nature but also the human capacity to *know* nature: "nature comes to be known not as a fabricated object is known but as we know a participant in a dialogue" (2003:215). This, in turn, Szerszynski concludes, affects humanity's status as "a knower and master of nature."

[16] The normative stance in the academic analysis and assessment of participatory arrangements is echoed is a 'hidden' bias in the set-up of such participatory arrangements themselves. Young (2000:6-7, for instance, argues that participatory practices are often governed by the norms of deliberation that, in her words, "implicitly value certain styles of expression as dispassionate, orderly, or articulate," thus excluding those participants who do not confirm to this norm. Hartman (1998) even speaks of a "paradox of participation", suggesting that the more possibilities created for participation, the greater the gap between the citizens that use these opportunities and those that do not (cf. Hajer 2005).

[17] Originally, 'triangulation' is a technique for localising unknown spots on land surface by measuring the land from at least three points of view. In the social sciences, the word triangulation is used for indicating the employment of two or more types of data sources and research methods or strategies (Hakvoort 1995:131).

[18] This subsection is based on Hajer & Versteeg 2005.

[19] Please note that the notion of 'performative dimension' as it is used here does not refer to its colloquial connotation of intentional and strategic efforts to control an interaction or to push an interpretation in the direction of preferred outcomes. Nor does the concept as used here refer to Burke's (1969) structuralist interpretation that holds, simply put, that a setting determines what is being said there.

[20] "Properly and meaningfully understood, participation is taking part in person, and self-activated, willed taking part. That is, participation is not a mere 'being part of' (a mere being involved in some occurrence) and even less an involuntary 'made-to-be part of'. Participation is self-motion" (Sartori 1987).

[21] In a Foucauldian reading of the word, for instance, 'participation' may pessimistically be looked upon as a way of implicating people in risky collective societal decisions, as a particular operation of secular power in modern, post-fordist societies driven by innovation and competition that are no longer able to provide populations with the same guarantees of security and safety as once was thought to be the case in the area of risk-dominated discourse.