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Governance, Complexity, and Democratic Participation

How Citizens and Public Officials Harness the Complexities of Neighborhood Decline

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This article applies complexity theory to urban governance. It is argued that expert-based, hierarchical-instrumental policy making encounters insurmountable obstacles in modern liberal democracies. One of the root causes of this erosion of output legitimacy is the complexity of social systems. Complexity is defined as the density and dynamism of the interactions between the elements of a system. Complexity makes system outcomes unpredictable and hard to control and, for this reason, defies such well-known policy strategies as coordination from the center, model building, and reduction of the problem to a limited number of controllable variables. It is argued that participatory and deliberative models of governance are more effective in harnessing complexity because they increase interaction within systems and thereby system diversity and creativity. Using empirical data from research on citizen participation in disadvantaged neighborhoods in the Netherlands, the author shows (a) that neighborhoods can fruitfully be seen as complex social systems and (b) the different ways in which citizen participation is effective in harnessing this complexity.

Keywords: *participatory democracy; complexity theory; urban governance; policy theory*

Democratic Governance: Citizen-Government Collaboration in Disadvantaged Neighborhoods

This article is about four seemingly diverse, but actually closely related, topics: (a) public policy making, in particular the limits of traditional, hierarchical policy making—the approach that in policy texts usually has the qualification "rational" ascribed to it; (b) complexity as one of the root causes of the limits of traditional government; (c) an epistemology of public policy that suggests that policy is—and should be—driven by objective, empiricist knowledge of the world; and (d) participatory democracy as a possible answer to the challenge of complexity.

One of the main thrusts of the argument will be to describe and explain the intricate, and not well understood, relations among these four topics. For example, in advanced liberal soci-

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eties, hierarchical policy making cannot be seen apart from the institutional organization of representative democracy, where citizens vote once in every 4 years to provide the elected official (and an array of administrators and experts) with a mandate to manage a societal sector (Manin, 1997). Or complexity refers to a number of characteristics of social and physical systems that have profound effects not only on the functioning and outcomes of these systems but also on our ability to subject them to the kind of administrative management mentioned above. Or proposals to involve citizens in the development of public policy often falter on the privileged position and knowledge claims of experts in the administrative apparatus, knowledge claims that are themselves deeply rooted in a particular conception of society and how it should be understood and managed (Fay, 1975; Hajer & Wagenaar, 2003). The upshot of these examples is that statements about one of these topics will inevitably resonate with the other three. At the very least, as I will argue, proposals for administrative or democratic reform will have to show an awareness of these resonances.

The conceptual and practical interrelatedness of policy making, complexity, policy epistemology, and participatory democracy pose problems for both analysis and reform. For example, a study of the limitations of hierarchical policy making in dispersed policy networks inevitably touches on the institutional, systemic, epistemological, and democratic dimensions of governance in contemporary liberal democracies. Similarly, proposals to give citizens a larger role in public administration force the reformist to consider the knowledge claims of lay people, the position of citizens in the governing institutions of liberal democracies, and the added value of citizen participation over aggregative democracy in harnessing complexity. Let me, for purposes of discussion, summarize the interlocking relationships among these four topics in one comprehensive argument that will function as a roadmap for this article. In its most dressed-down form, this argument reads as follows: The epistemic argument for participatory, deliberative democracy in governance is that it is superior to representative arrangements in dealing with system complexity because it increases system diversity and system interaction. Both have the effect of contributing to the flow of experiential knowledge through the system so that they enable the actors in the system to produce, appreciate, and select productive intervention strategies and arrive at the coordination of problem solving and decision making.

Given the limited space of this article, the emphasis will be on the relationship between complexity and democratic participation. Traditional policy making and the epistemology of public policy will be referred to as a necessary backdrop to the main discussion. But before I set out, in any systematic manner, to describe the key concepts and conceptual relations that make up the above argument, let us edge into the many subtle relationships among public policy, complexity, knowledge, and democratic participation by looking at two concrete examples of the latter. Although these examples concern two particular neighborhoods in one Western European country, they are illustrative of a much wider complex

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of issues around the limits and possibilities of the democratic governance of advanced liberal democracies.

The Night Prevention Project (*Het Nachtpreventieprojekt*)

The Night Prevention Project (*Nachtpreventieprojekt*) in the Schilderswijk in The Hague came into being in the early 1990s when two separate streams of smoldering discontent with the deterioration of the neighborhood came together. At the time, the Schilderswijk was a typical low-income neighborhood, where generations of blue-collar workers lived in small, decaying apartments built in the early part of the 20th century.[1] Under the influence of the negative effects of urban renewal and a sudden influx of ethnic minorities, the neighborhood moved into a downward spiral of physical decay, crime, and loss of social cohesion. Drug dealing, burglaries, street robberies, violence, and public nuisance were more and more common. Old-time residents began to move away in ever larger numbers; ethnic minorities moved into the cheap housing they left behind. The neighborhood cop did his best to keep some order on the streets, but he helplessly witnessed how the drug dealers and street robbers he arrested were back on the street within a few hours. Residents filed complaint after complaint but were told by the police that they should perhaps consider moving out of the neighborhood. Administrators at city hall denied the problems in the Schilderswijk. Not surprisingly, residents felt abandoned by the authorities and angry that the world in which they had grown up had been taken from them. After running into one blank wall after another with the city authorities, out of sheer frustration, Janny, one of the “original residents,” and her neighbors put together a “black book,” in which the full extent of the physical and social decay of the neighborhood was documented. Demand was overwhelming. She had to print more than 1,000 copies. The initiative gave them a taste of citizen activism.

In 1999 the neighborhood cop and Janny met at a community meeting. Janny criticized the police officer in no mean terms for “being invisible.” The police officer suggested in reply that the residents join him one night to get a better idea of what was going on in the streets and what police patrolling entailed. Out of this spontaneous initiative grew the Night Prevention Project. Groups of citizens, mostly housewives, began to patrol the street at night. Whenever they noticed a crime they warned the neighborhood police officer. They were “the eyes and ears” of the police. Janny and her crew turned out to be particularly adept at establishing links with the city administration. The alderman “adopted” the project; he assigned an administrator whose task it was to provide administrative and legal support. Nevertheless, Janny and the other residents were careful to retain their independence. “The city is allowed to pay up,” she says with a broad smile, “but we remain in charge of the project.” In 2001 the project received a national prize for the most successful and innovative crime prevention project in the nation. The jury report mentioned a reduction in street crime and increased social cohesion as the main results of the project.

The Deventer Neighborhood Councils (The Deventer *Wijkaanpak*)

The Deventer *Wijkaanpak* differs from the Night Prevention Project in structure and origin. It is an institutionalized system of neighborhood councils, initiated by local officials (in the Dutch tradition of interactive policy making), where administrators, professionals,

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and residents, in a rather formalized procedure, signal problems and work out solutions. Most problems concern public safety, traffic nuisance, street crime, garbage in the streets, and quality of life. The goals of the project are formulated as: stimulating residents to take responsibility for the quality of their own neighborhood, signaling problems and translating these to the various offices in city hall, and improving quality of life, social integration, and "connectedness" in the neighborhoods. Deventer, a midsized town in the middle of the country with a beautiful historical center, has six neighborhoods. Each neighborhood has a neighborhood team made up of residents. Members are selected by other members and the neighborhood administrator (see below) on the basis of their ability to "think beyond their private interest" and to "think constructively." In dialogue with the neighborhood, each team formulates an annual plan with a budget attached to it (roughly € 30,000 per year). This team is a partner for elected officials, administrators, and private actors such as housing corporations. The teams are supported by a community worker who helps the residents to articulate their interests and goals and assists them in formulating an informed opinion about reports from the city administration. The city administration has assigned a so-called neighborhood administrator to each neighborhood who acts as a conduit between residents and city hall. Each alderman in the council of mayor and aldermen is responsible for one of the neighborhood.

Although few residents believe that improvements in their neighborhood are the direct result of the Wijkaanpak, they also believe that the neighborhood would be worse off if the councils would be abolished. They particularly like the councils as a social meeting place. Many residents say that they have become more interested in neighborhood issues since attending council meetings.

These are two examples where citizens and public officials have successfully cooperated over an extended period to deal with problems of public safety, crime, and the physical and social decline of inner-city neighborhoods. Despite considerable differences in design, both projects qualify as examples of participatory, discursive democracy.[2] Although the literature is ambiguous when it comes to concrete—as opposed to theoretical—examples of discursive democracy, these projects share such participatory features as "direct participation of citizens in the regulation of key institutions of society" (in this case, the town or neighborhood), whereby new channels of communication emerge through which ordinary citizens can apply their knowledge, experience, and interests to the formulation of solutions, the joint development of governance structures that are aimed at concrete everyday problems, and a deliberative style of problem solution (Fung & Wright, 2003, pp. 16-17; Held, 1996, p. 271). Also, in both cases, state officials work with citizens in different roles, thereby transforming traditional institutions of government and common patterns of policy making (Fung & Wright, 2003, p. 22). These projects have succeeded, in the words of Held (1996), to create a local "participatory society": "a society which fosters a sense of political efficacy, nurtures a concern for collective problems and contributes to the formation of a knowledgeable citizenry capable of taking a sustained interest in the governing process" (p. 271).[3]

However, on second thought, these participatory initiatives raise as many questions as they answer. Although these projects limit themselves to neighborhoods, they resonate, as I argued before, with the larger themes of limits to traditional policy making, complexity, and participatory democracy. How did traditional policy making affect these neighborhoods?

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Can this impact validly be described as resulting from alleged limits of government? How is all this related to the institutional organization of representative democracy? Can city neighborhoods be considered as complex systems? And, if so, how, precisely, are the activities of these citizens an answer to complexity? In what sense are the interactions of citizens and local officials deliberative? And, what kind of knowledge do ordinary people contribute to policy making in disadvantaged neighborhoods? In the remainder of this article, I will discuss these topics and their mutual relations. I will operationalize the concept of participatory, deliberative democracy, as it figures in the main argument, as the participation of ordinary citizens in the governance of disadvantaged city neighborhoods. This is considerably more restricted than the "participatory society" or "democratic autonomy" that usually figure in the literature on democratic theory as ideal types of participatory, deliberative democracy (Held, 1996, pp. 271, 324). A sustained focus on citizen participation in neighborhoods has the dual advantage, however, of zooming in on the core of democratic participation, that of "direct participation of citizens in the regulation of the key institutions of society" (Held, 1996, p. 271) and of giving empirical footing to this otherwise exceedingly abstract subject. My purpose in this article is therefore to show how ordinary citizens are able to establish long-term, collaborative relationships with local administrators and thereby point the way to a new democratic form of governance that carries the promise of harnessing complexity and overcoming the limits of hierarchical policy making.

The Limits of Government

Citizen participation in Dutch neighborhoods touches on the problem of the declining legitimacy of contemporary liberal democracies. Liberal democracies suffer not only from well-documented problems of representational or input legitimacy but increasingly from the much less well documented, or even sufficiently acknowledged, policy or output legitimacy (Akkerman, 2004; Hajer, 2003; Heijden, 2006; Klausen & Sweeting, 2003). As we saw in the preceding section, these citizen initiatives often came into being after (local) governments dramatically failed in solving everyday problems and/or in communicating with citizens about their policies. Policy failure has different faces (Bovens & Hart, 1998), but to ordinary citizens it usually presents itself as a glaring discrepancy between the official rhetoric on an issue and the reality on the ground, as being de facto abandoned by public officials or as being excluded from the central institutions of society (Wagenaar, 2005). More often than not, these failures are failures of policy implementation. In the division of labor that characterizes contemporary liberal democracies, elected officials make decisions about collective goals (usually with more or less detailed suggestions about how to attain these goals), leaving implementation to administrators or to decentralized or privatized actors. In many cases implementation quickly runs aground as it becomes mired in bureaucratic inertia, fierce opposition of citizen groups and interest associations, the unintended, strategic use of the program by the target groups, or a fatal combination of all three (Wagenaar, 1995).

The issue of policy failure raises a set of questions that are pertinent to the relationship between policy, policy analysis, and democracy.[4] The relationship between democracy on one hand and policy making and analysis on the other is far from obvious in the respective literatures that deal with these topics. Although the (necessary) association of policy and

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democratic interaction has always run as an undercurrent in the policy literature (Dewey, 1927; Dryzek, 1990; Lasswell, 1951; Lindblom, 1977; Torgerson, 2003; Wildavsky, 1979), the idea that public policy and the democratic organization of the state are intricately related has somehow been lost in the dominant, institutionalized form of policy analysis that is taught in schools of public policy and practiced by countless consultants and researchers, both inside and outside universities, who make a career out of advising the powers that be (deLeon, 1997). There are several reasons for this. Pragmatically speaking, the increasing technical complexity of societal sectors (Beck, 1999; Dryzek, 1990, chap. 3), in combination with a complex cross-current of administrative ideologies that favor expertness, managerial efficacy, and allocative efficiency (deLeon, 1997; Self, 1993), has resulted in rather a high-handed, technocratic style of policy making in which administrators and external experts claim the right to manage entire societal sectors and in which the citizens who are at the receiving end of these policies are consequently disenfranchised from the governance of their own environment.[5] Politics enters the concrete life sphere of ordinary people nowadays largely through (the effects of) public policy (Hajer, 2003). The obvious and sometimes spectacular failure of this style of techno-administrative management in such areas as health care, food safety, crime, education, urban renewal, spatial planning, large infrastructure projects, and education has focused attention onto its dubious assumptions (Hajer & Wagenaar, 2003; Latour, 2003).

But there is a more subtle conceptual reason for the purging of notions of democracy from the dominant professional and academic discourse on policy making and public administration. Policy failure has many causes (Hajer & Wagenaar, 2003; Rittel & Webber, 1973), but key to understanding the limitations of hierarchical-instrumental policy making is the notion of complexity. Complexity is hardly a new challenge for policy makers and policy analysts. Lasswell already exhorted policy analysts to spruce up their knowledge and to "contextualize" problems to grapple with the many aspects of complex policy issues. Wildavsky (1979) convincingly argued for the barrenness of "cogitation" in the analysis of public policy in the absence of democratic exchange "to guide intelligence."[6] And Latour (2003) argues that there never was a time that modernity's self-understanding (the generally shared idea that society can be effectively managed through the application of scientific knowledge and rational organization) "described its deeds adequately" (p. 38). However, the recognition and acknowledgement of complexity has fallen prey to the powerful hold that the ideal of rationality has over the discourse and practice of policy making. As Dryzek (1990) rightly points out: "All political institutions and practices have roots in theories of knowledge and rationality" (p. 29). And he continues:

> Now, theories of knowledge rarely (if ever) determine institutional structure. More usually, they legitimate and justify or (conversely) criticize and undermine particular practices. Nevertheless, theories of knowledge and rationality can inform political development to the extent they permeate the understanding of political actors. (p. 29; see also Hajer & Wagenaar, 2003)

Under the influence of a doctrine of instrumental rationality, complexity was denied from the very start by bringing to bear on policy problems various well-known strategies of systematic problem analysis. But before we go into the topic of effective and less effective responses to complexity, we first need to understand what complexity in public policy is. This is the subject of the next section.

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Complexity and Public Policy

A Theory of Complexity

What is complexity? Let us, for purposes of clarity, first get rid of what it is not. When I use the term *complexity* in this article, I do not use it as a rather obvious and noninformative qualification of social reality. I also do not think of complexity as something to be reduced or eliminated before we can act on the world—if that would be a realistic option at all (Axelrod & Cohen, 1999, p. xi). Instead, the concept of complexity refers to an emerging theoretical perspective on the morphology and functioning of our physical and social world. Although complexity cannot be controlled, it can be understood and harnessed, in the sense that some ways of dealing with complexity are more fruitful and more productive than others. Instead of a risk or an obstacle, complexity can be an asset, or at the very least a source of productive inquiry and understanding.

A useful definition of complexity is this: "[A] system is complex when there are strong interactions among its elements, so that current events heavily influence the probabilities of many kinds of later events" (Axelrod & Cohen, 1999, p. 7). From this definition, it follows that the core aspect of complexity is the density of the interactions in a system—more so than the number of its parts (see also Dryzek, 1990). As Axelrod and Cohen (1999, p. 15) point out: Systems with relatively few parts can be complex because of the intensity of interaction between those parts.[7] Interaction is also dynamic in the sense that its strength changes over time (Cilliers, 2005). The density and dynamic character of interactions in turn make for unpredictability. Because of the large number of connections in a complex system, small effects may reverberate through the system in unforeseen ways, adding up to unpredictable and, in the case of policy systems, unintended outcomes. Small effects may, under certain conditions, magnify into large effects. Equal initial states may, through self-propelling mechanisms of positive and negative feedback, turn into multiple possible outcomes. Indeterminacy or novelty is pervasive in dynamic complex systems (Waldrop, 1992). For our understanding of social systems, and the relevance of the concept of complexity for policy making and participatory governance, I will draw out some important implications from the above definition while I also define some basic auxiliary concepts.

First, complex systems should be understood in a holistic manner. Key to understanding complexity is that it is antireductionist. The complex whole exhibits properties that are not readily explained by an understanding of its parts (Kauffman, 1995, p. vii; Waldrop, 1992). Complexity theorists talk in this respect of emergent properties, properties of the system that the separate parts do not have and that are produced by the interaction between the parts (Axelrod & Cohen, 1999, p. 15; Cilliers, 2005; Waldrop, 1992, p. 82). Liquidity is a property of water, not of single H_2O atoms. Single neurons do not exhibit consciousness, but the human brain as an incredibly complex neural network has consciousness as an emergent property (Axelrod & Cohen, 1999, p. 14; Holland, 1998, p. 109; Waldrop, 1992, p. 82). However, for purposes of this article, a well-known example from the social world will be more convincing. Local preferences of individual citizens, such as the desire to have ethnically similar neighbors or to be friends with someone from one's own socioeconomic stratum, can lead to a society that is massively segregated along lines of income and ethnic background (Urry, 2003).[8] Neighborhoods and societies thus exhibit the properties of

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complex systems. If we translate this insight about complex systems to public policy, it has momentous implications. It basically means that the usual strategy of bringing expert knowledge to bear on policy situations is flawed, or at the very least of limited value. Because expert knowledge is primarily aimed at the understanding (and alleged control) of the separate parts of the system (e.g., members of ethnic minorities, food suppliers, school dropouts, employers, etc.), it threatens to miss the emergent properties of the system entirely.[9] Policy outcomes are an emergent property of complex social networks.

Second, the transitions of a system from one state to another are not necessarily continuous but can, in fact, be quite abrupt. That is, certain, sometimes even small, changes in the knowledge and information that flows through the connections in some part of the system can suddenly "flip" the system into a state of order or chaos (Kauffman, 1995, p. 78). Again, in policy terms, this is not a far-fetched idea. For example, it has long been documented that the steady inflow of low-income immigrants into an inner-city neighborhood, may, when a certain threshold level is reached, flip the once orderly neighborhood into a self-sustaining negative spiral of crime and urban decay (Wilson, 1978). Abrupt phase transitions point toward the dynamics of system complexity. Interactions in a system tend to be nonlinear, meaning that changes in the separate elements of a system because of information that flows through the system do not add up in a simple additive manner. Instead, as Axelrod and Cohen (1999, p. 43) and Kauffman (1995, p. 82) point out, complex systems can demonstrate "founder-effects" (small variations in an initial population can make large differences in later outcomes) or punctuated equilibria (periods of rapid change alternate with periods of little or no change), they can be "frozen" in a semipermanent state of dynamic equilibrium or they can descend into a state of "permanent boiling," where the level of mutation or noise is so high that the system remains in permanent disorder (Axelrod & Cohen, 1999, p. 43; Kauffman, 1995, p. 82).

Abrupt phase transitions do not mean that complex systems are by definition unstable. (The decayed neighborhood can be quite stable in its anomic state, unable to get out of it by itself. Or, conversely, many neighborhoods exhibit a typical "character," despite rapid turnover among its residents.) In fact, complexity theorists are particularly interested in explaining how equilibrium and homeostasis are reached and maintained in dynamic systems, how complex systems "self-organize" into an ordered state.[10] It has been demonstrated, for example, that when certain initial conditions have been met, complex systems, both physical and social, tend toward a state of dynamic equilibrium and might even display a certain robustness.[11] That means that once such a system has settled itself into a dynamic equilibrium, it is not plunged into chaos on the first perturbation of the system. This insight is important when applied to public policy. Policy interventions are the example par excellence of the kind of perturbation to a complex system that may lead to phase transitions. For example, if we conceive of inner-city neighborhoods as complex systems and the policy of urban renewal as an external perturbation of this system, than we could model the effects of this intervention as a phase transition. Again, this is not so improbable as it may seem at first blush. Time and again citizens have told us that after a while the negative side effects of urban renewal build up to point when the neighborhood "flips" to a state of anomie. For the citizens living in such a neighborhood, urban renewal proves to be a fatal remedy.[12]

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Complex systems have indeterminate outcomes. This is not merely an obvious statement about unpredictability and the concomitant inability to control the everyday world, but a key property of the morphology of complex systems, a property, moreover, that has decisive implications for public policy. The principle of indeterminacy is in fact the negation of reductionism. Where reductionism is backward looking and dictates you to reduce everything in the world to a few simple variables and laws, complexity theory, conversely, is forward looking and shows how a few simple principles can produce the infinitely rich variety and dynamism of the natural and social world (Waldrop, 1992, p. 153). For example, the basic elements of chess are few and simple (a limited number of board pieces, a few rules), but the number of possible moves and outcomes is almost unlimited.[13] Not only do such systems present themselves to the actors who move about in them, as an "immense space of possibilities," but, to bring this insight back to policy terminology, also no realistic hope exists that complex systems will have an optimal or "one best solution." The best that actors can hope for is to find fruitful ways to explore this space of possibilities and look for improvements (Waldrop, 1992, p. 167).

Finally, complex systems have both a past and a future. In fact, complex systems are always "on the move," mutating from one phase into another. Again the term *dynamism* belies a deep and subtle principle about complexity. First, from the perspective of the actors in a complex system, the world is always in flux. As John Holland says:

> Each agent finds itself in an environment produced by its interactions with the other agents in the system. It is constantly acting and reacting to what the other agents are doing. And because of that essentially nothing in its environment is fixed. (cited in Waldrop, 1992, p. 145)

"Nothing is fixed" is perhaps too strong when translated to the world of policy making and policy networks (after all, there are laws, regulations, and institutional inertia), but the essentially interactive nature of policy environments suggests that the possibilities of managing and controlling such environments—as opposed to harnessing them—are at best limited.

However, complex systems rarely mutate randomly. Through revisions and rearrangements of their building blocks, systems as a whole travel on trajectories from one phase to another.[14] In this process, actors' images of the future—ideals, perspectives, metaphors, storylines—are essential. It is a condition for the system's ability to adapt. All actors, and, by extension, all complex systems, build models to anticipate the future (Holland, cited in Waldrop, 1992, p. 177). In the case of human actors, these models of the future are often based on past experiences that have been transformed into expectations about what so-and-so will say or do. By constantly checking their past and current experience with their image of the future, the actors in a system gain from experience. This process of learning from feedback results in a modifying and rearranging of the system as a whole (Holland, cited in Waldrop, 1992, p. 146). This does not automatically mean that the system as a whole will improve. In fact, just the opposite might happen, as when residents in a deteriorating neighborhood decide to move out, thereby contributing to the further deterioration of the neighborhood. On a higher level of organization, however (e.g., that of a housing corporation or a city council), because the deterioration of the neighborhood refutes the projected effects of urban renewal, it leads to adaptation of the renewal strategy.[15] In any case, it is these models of the future, feedback, and learning that turn complex systems into adaptive complex systems.

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Complexity in Neighborhoods

How does complexity present itself to the residents and other actors who live and work in disadvantaged neighborhoods? Listen, by way of example, to the police officer who was instrumental in organizing the Night Prevention project, as he describes what it takes to work with citizens in fighting crime:

> And that simply means that we would set something up now, to tackle crime together, that we would be able to do that effectively. But that is not so simple, because you can say, yeah crime, but there are maybe a hundred items on which you could do a project. So, then I asked myself: what are the most important links in this circle with which you could do something. So then you look at the social control that wasn't there. You look at the resiliency of the residents. You look at random violence. The integration and participation of residents in the neighborhood that didn't happen. You look at people's subjective sense of safety that was minimal. And then you say. . . . I think there was yet another one . . . and then you say collectively we tackle crime. If you put together all those links, then you say, because we cooperate in dealing with crime, you will affect the other items too in such a project. So, I suggest that we are going to do a surveillance on crime at night with some residents, in which you only observe and listen, and also learn to observe.

Or listen to how two residents of Deventer describe the deterioration of their neighborhood as a result of changing demographics:

> R1: The neighborhood really went down fast from 1982-1983 to more or less the 90s, early 1990s, with crime, the environment, with quality of life, in fact with a real decline of norms and values. [Q: Can you make that more concrete?] Crime, dealing, yeah, drugs in particular. And we also got AMAs [*alleenstaande minderjarige asielzoekers*, or underaged asylum seekers without families], problems with the AMAs, we got the lawless youth from our former colonies if I may call it that way. . . . All these issues we attempted to address together, in cooperation with the city, and the police. . . . And then we had the immigrants of course. That meant . . . not so much crime, but that there were few mutual contacts. We couldn't negotiate with them. We couldn't say; come on, we're in this together. . . . And that is slowly getting better. We're certainly not there yet, but as pessimistic as . . . what's his name . . . last Sunday on television . . . that Eurocommisioner . . . from the liberal party.
>
> R2: Oh, Bolkesteijn.
>
> R1: He said that the integration had failed. That really isn't true. Failed in parts perhaps, but not as a whole. And that problem we also had here.

These statements reveal several important issues with regard to citizens' experience of complexity. First, and most obvious, these street-level experts do have a ready understanding of the complexity of the issues that affect them, although they do not use the analytical lingua franca of the academic experts or policy consultants to describe what is wrong with the neighborhood (although the police officer comes close). Both the police officer and the residents express their understanding of the neighborhood narratively; they tell detailed stories in which problems and causes are integrated into one meaningful whole. Detail is crucial here because the concrete details of the situation at hand open windows on the worries, interests, values, and aspirations of the actor.[16] But although the stories are full of concrete minutiae, they do not fully articulate how the various problems are causally related (the exact relationship among quality of life, the rise in crime figures, and norms and values remains unspecified); yet by listing them in one narrative framework, they strongly suggest that such a relationship exists. The lack of precise specification must not be seen as a weakness for the

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simple reason that the precise relationship among these elements of neighborhood life is unclear. Nobody, not even policy experts or city planners, is able to specify the relationship among these variables (although the latter claim they do, at least on a doctrinal level). Neighborhoods, as complex systems, do not escape the laws of indeterminacy. In fact, the residents have a different take on the problem of neighborhood decline. What becomes clear in their story is that they view the decline of the neighborhood not as a series of distinct problems but as a related whole of actions, mutual relationships, rules of etiquette, social trends, and policy measures. They also suggest that the problem of neighborhood decline should be dealt with accordingly; that is, not as a series of separate problems, with distinct variables that can be managed or controlled, but in terms of a coherent social entity with intensively interacting parts. And finally, the citizens see their neighborhood in developmental terms. Under the influence of external social developments, their neighborhood traveled a trajectory toward a negative stable state.

Citizens, administrators, and experts experience the dynamic character of complexity in various ways. One of the most common faces of complexity is an inability to understand what is going on in the situation at hand, partly because of a pervasive uncertainty of how to interpret the information that is available, but partly also because of an unequal distribution of knowledge among the actors in the system. But in human systems, not knowing or understanding is not a neutral event; it has immediate consequences for someone's standing in the system and for the possibilities of communication and cooperation between actors. Listen, for example, to the following exchange between two residents who visited a meeting about garbage disposal that was organized by the city council:

R1: And we discussed this with the municipal administration, in two or three evenings.
R2: Three evenings.
R1: Yeah, three evenings. And that resulted in a new garbage disposal policy.
R2: Yeah, and the first evening all the council members were also invited.
R1: Yeah.
R2: And they were also allowed to say what their ideas were about garbage disposal. And, I tell you, you couldn't believe what you saw.
R1: No really, I rarely saw politics embarrass itself so much. Of course, it isn't fun but it was necessary at that moment. I saw an alderman—the good soul is now mayor of *X*—but he stood there totally at a loss for words. And he looked at his administrators, and nobody knew a thing. The meeting had failed before it even began.

This example illustrates two further aspects of neighborhood complexity and some common reactions to it. First, lack of knowledge among public officials is both ubiquitous and inevitable. In this case, it might be that town administrators came to the meeting ill prepared, but in countless cases politicians, administrators, and experts simply do not know what is going on or, even worse, have no way of knowing it. This is not an exotic phenomenon or an exception to the rule of being well informed. Time and again we find that the general rule is that elected officials and professional administrators are not well informed about the slice of social reality that they deal with or about the effects that their policy measures have on the ground. Apart from the incentives inherent in every large bureaucracy not to get involved with street-level events, there are more fundamental reasons for this lack of knowledge. One reason is the sheer number of internal relationships in

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social systems such as neighborhoods (everything is related to everything). A second reason is the reactivity of social systems.[17] A particular intervention in the system (e.g., a policy measure) leads to a change in the behavior of one or more actors, which changes the immediate environment of some other actors, which triggers a change in their behavior, leading to a further change in the system, and so on. "Each agent finds itself in an environment that is produced by his interactions with other agents," as Holland (cited in Waldrop, 1992, p. 145) succinctly expressed the fundamental dynamic nature of complex systems. Complex systems create their own environment. Or to put it more precisely, complex systems do not develop against the background of a stable environment, but they evolve together with their environments.[18]

The second thing the garbage case illustrates is the fragility of communication. As we saw above, lack of knowledge is not a neutral event in the relations between citizens and their administration. Both enter communications loaded with hopes and expectations based on a history of earlier experiences, understandings, and assumptions about the other and certain self-images, strengths, and vulnerabilities. Lack of knowledge inevitably results in an ascription of motives—almost always negative motives, such as stupidity, obstinacy, duplicity, or carelessness.[19] In this particular case, citizens brought to the meeting their experiences and understanding of the policy as it had been implemented in their neighborhood and their willingness to share these with the city administration. Instead, they were met by an administration that not only lacked knowledge but also did not take them seriously. As a result, communication between the two groups broke down dramatically ("It was over right away.").

In the next two sections, I will argue that residents, contrary to the tradition of skepticism, if not hostility, toward the capacity of ordinary citizens to be productively involved in governance, not only have a keen sense of the complexity of neighborhoods, but, under certain conditions, they are very well able to deal with this complexity. I will show that citizen involvement gives room to the local knowledge that is embedded in the experiences and practices of ordinary people, in this way collapsing the demarcation between the process of political decision making and the social system on which these decisions operate. Democratic deliberation is a nonreductionist way of solving complex problems. It contributes to the generation of creative solutions and the coordination of divergent interests by establishing open channels of communication between the major actors. Finally, it preempts subversion of agreed-on solutions by narrow self-interests (Dryzek, 1990, pp. 71-72; Fischer, 2000; Innes & Booher, 2003). But first, we need to address the fourth element in the fourfold subject of this article. Or, more precisely, we need to address the difficult question of what extent democratic deliberation is more than an abstract ideal, particularly when it concerns the communication between citizens and state officials.

Is Deliberative, Participatory Democracy Possible at All?

Suggesting that it makes both a process and an epistemic contribution to public decision making usually legitimates the active involvement of citizens with government in democratic theory (Bohman, 1996; Fischer, 2000). First of all, citizen participation is seen as a way to overcome the limitations of representative democracy. The argument is that active

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participation of citizens in public decision making creates opportunities for personal development and self-transformation. By participating in public debate, by struggling with the complexity of policy issues, and by opening up to the divergent interests and opinions of other parties that inevitably weigh on an issue, citizens will increase their autonomy. Autonomy is defined here not as a trait but as the capacity for independent and critical judgment (Warren, 1992). Citizen participation in public decision making thus has intrinsic value. The active involvement in the democratic process strengthens the democratic process because citizens learn to distinguish between their personal needs and desires and the common interest. In addition they practice various important democratic skills such as conflict management, the careful articulation of their own position, listening, arriving at productive compromise, patience in dealing with thorny public issues, and the appreciation of difference. Participation in democratic process strengthens citizenship.

The process argument for participatory democratic governance is vulnerable to two often-heard objections. The first is that citizens are neither interested nor qualified to make a useful contribution to the complex and wicked problems that characterize government. Ordinary citizens are simply too ignorant or disengaged to be bothered by public policy. Moreover, even if they could muster sufficient interest and dedication, understanding and solving public issues in areas such as the environment, crime, transportation, or spatial planning requires so much specialized knowledge and governing experience that they are outside the reach of ordinary citizens. Government is the domain of experts and professional administrators (Held, 1996; Sanders, 1997). The second argument against involvement in government is that it takes a lot of time and energy, and the added value over traditional representative democracy is unclear and unproven. Differently put, citizen participation may have a democratic contribution, but its instrumental value is unclear.

It is precisely these two objections that the epistemic argument for participatory government addresses. It is also here that complexity theory has a contribution to make. Both are key for understanding, and legitimizing, citizen participation. The epistemic argument for citizen participation in governance, to return to the summary argument in the introduction, is that it is superior to representative arrangements in dealing with system complexity because it increases system diversity and system interaction. Both have the effect of contributing to the flow of knowledge through the system so that it enables the actors in the system to produce, appreciate, and select productive intervention strategies and arrive at coordination of problem solving and decision making.

However, the fact that citizens and local officials collaborate does not automatically imply that they do this in an open, reciprocal, discursively democratic way. Although many theorists subscribe to the ideal of a participatory, deliberative mode of governance (Benhabib, 1996; Cohen, 1996; Forester, 1999; Gutmann & Thompson, 1996; Healy, 1997; Innes & Booher, 2003), it has also met with considerable skepticism as to its practical feasibility. In particular, it has been questioned to what extent, given its emphasis of reaching agreements, deliberative democracy is able to deal with the kind of deep, structural conflict and power differentials that characterize our pluralistic society (Bickford, 1996; Bohman, 1996; Forester, 1999; Mouffe, 2000). Also, the representational claims of deliberative, participatory schemes have been questioned, as they seem to ignore deep-seated, structural inequalities that make it difficult for some groups to get their arguments heard (Sanders, 1997, p. 349) and to privilege male, White, well-educated participants

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who are able to articulate their interests in a public setting (Hartman, 2000; Stokkom, 2003). In addition, some authors question the possibility of deliberative schemes to survive contact with state institutions. Dryzek (2000), who is downright skeptical about the prospects of successful deliberation between citizens and state officials, seems to consider any sustained contact between these two groups as the kiss of death for genuine deliberation. In a typical statement, he argues:

> To the extent hierarchy, inequality in the ability to make and challenge arguments, political strategizing, deception, the exercise of power, manipulation, entrenched ideas, and self-deception persist in the policy-making process, that process resists revealing itself to any would-be communicatively rational community of policy analysts or ordinary political actors seeking to understand how a polity is or could be making decisions. (p. 125)

In the final analysis, state institutions will inevitably follow their own imperatives and thereby preempt the collaborative dialogue with citizens. Successful discursive citizen participation in an environment of state-society collaboration is thus far from self-evident and, if we follow Dryzek (2000), only possible outside the sphere of the state, in "separate public spaces" (p. 129).

Yet if participatory, discursive democracy is an answer to complexity, then this a priori separation of state institutions and the civil sphere to safeguard the purity of democratic deliberation seems inconsistent. In contemporary societies, dynamically complex systems involve actors from civil society and the state. In fact, it is precisely the key insight of governance theory that in almost all situations where social-technical problems arise, both realms interpenetrate in ever more complex networks and chains of state and civil society actors (Pierre & Peters, 2000; Rhodes, 1996). In an ironic sense, this is Ronald Reagan's famous phrase with a twist: In modern liberal democracies, government is inevitably part of the problem and the solution. Participatory, discursive schemes are an answer to complexity precisely because they shift the cognitive burden of the policy process from the center to those loci in the policy network that have more direct and immediate experience with the problem a hand (Dryzek, 1990, p. 70). The reciprocity and openness of the communication then guarantees that information and knowledge from the periphery of the network is able to reach other actors, thereby resulting in an open, informal kind of coordination. To exclude state actors from this process would be tantamount to erecting communicative firewalls in the complex system that will ultimately hinder coordination. From the perspective of state actors, it pays off to be involved in state-civil society networks because policies fail precisely at the interface of state and society, at the point where society talks back to policy makers (Wagenaar, 1995). Although there are certainly dangers to civil society actors to be involved with state actors in deliberative schemes, there is really little choice if deliberation aims to deal with real-world complexity. The question this then raises is if the participatory initiatives in which citizens cooperate with local officials meet the criterion of deliberative solution generation at all (Fung & Wright, 2003, p. 17), and if so, how they manage to do it.

In light of the foregoing analysis, the purpose of the remainder of this article is twofold. First, I will describe what it is in citizen participation that enables communities to ameliorate urban problems. In particular, I will argue that the democratic involvement of citizens in the governance of their neighborhoods is a potentially effective response to the problem

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of complexity. Complexity thoroughly frustrates the traditional instrumental policy-making approach of public officials; democratic, discursive modes of governance are, for reasons to be explained in more detail later, a potentially effective way of harnessing complexity. Second, I will delineate the conditions—both communicative and institutional—for such initiatives of participative, deliberative democracy to succeed in concrete, everyday, urban settings. Several authors have tried to deal with these objections in a theoretical way (Bickford, 1996; Bohman, 1996; Mouffe, 2000), arguing that discursive arrangements should (Mouffe, 2000) and can (Bohman, 1996) be organized such that they accommodate structural inequalities or that conflict does not necessarily preclude open dialogue (Bickford, 1996; Forester, 1999; Innes & Booher, 2003). However, empirical studies that demonstrate the viability of discursive arrangements are much scarcer (Bohman, 1998). I will show that in situations where government falls short in addressing pressing public problems in their neighborhood, ordinary people are both willing and able to establish constructive collaborative relationships with local officials to address these problems. Not only are citizens willing and able to establish partnerships with local officials, but they also, by doing so, have something essential to contribute to the process of local governance. Citizens and government officials develop certain practices that enable them to work together in an open, reciprocal way, to deal with situations of conflict and complexity. On the other hand, as I will show, the process is fragile. There are several risks that beset such participatory schemes that may ultimately lead to their undoing.

How Citizen Participation Contributes to Harnessing Complexity

In this section, I report my findings on the functioning of citizen participation. A lot has been written on the formal structure of citizen participation and its place in the institutional framework of local representative democracy. In metaphorical terms, this could be called the *hardware* of local democratic governance. In my research, I take a different tack. I wanted to get a better understanding of the *software* of citizen involvement, of the *practices* that council members, local politicians, administrators, and citizens develop to give substance to the involvement of the latter in local governance. By practices, I mean the various informal routines, joint understandings, patterns of communication, and practical judgments that have emerged among the different participants in local democracy to recognize problems, bring issues to the agenda, negotiate solutions, deal with conflict, and handle issues of accountability. In this sense, my research interest is close to what critical planners such John Forester, Patsy Healy, Judy Innes, and John Friedman describe as the collaborative, transactive practices that emerge between the participants of joint planning projects (Forester, 1999; Friedman, 1973; Healy, 1997; Innes & Booher, 2003). By focusing on participatory practices, I want to avoid the reductionist fallacy, common to much political theory, of depicting participatory, deliberative democracy as a particular kind of speaking and listening, a special form of dialogue, that, when governed by the well-known rules of communicative rationality, will result in cooperation where before there was conflict and antagonism.[20] Instead, I conceive of democratic deliberation as practical problem solving in public settings, involving a range of activities (exhorting, demonstrating, acquiring funding, drawing up a budget, composing a map or constructing a model, arguing, mediating, hanging out together, in addition to discussing and listening) and actors (citizens,

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administrators, experts, elected officials, professionals) that are governed by principles of openness, mutuality, persuasion by good arguments (but an argument can be a model of a building or an impassioned presentation by an expert), equal access, and lack of deceit.[21]

Following the purpose of this article, I will see these practices as contributing to harnessing complexity. That is, I will describe the process of citizen involvement in local governance as consisting of various strategies for dealing with the challenges of the neighborhood as a complex system. In particular, I hope to show that these participatory, deliberative practices are well suited to deal with two core aspects of complexity: novelty and dispersed control. Novelty refers, as we saw, to the intrinsic indeterminacy, the "endlessly unfolding surprise" and the concomitant absence of a one best solution, which is so central in complexity theory (Waldrop, 1992, p. 165). Dispersed control follows from the density of interactions and the resultant indeterminacy of effect. One or more actors in the system may claim central control (as usually happens in policy networks), but that does not necessarily mean that they are able to actually assert it. In fact, in the case of wicked problems, the rule is stalemate, controversy, suprise, strategic behavior, and unintended consequences, as opposed to the exception of arriving at the stated policy goals in more or less the indicated time frame. Democratic deliberation from this perspective is a joint exploration into the "space of infinite possibilities" to discover improvements of the current situation instead of the stated goal or the optimal solution; a collective activity in which, when it goes well, the journey is as important as the result.

So what democratic practices did I identify in the participatory arrangements I studied? What does the process of local democratic governance look like "on the ground"? Based on my interviews with citizens, politicians, administrators, and professionals such as social workers or officials of housing corporations, I found three distinct practices that I have called "pragmatism," "an integrated approach to problem solving," and "creating and maintaining a democratic communicative space."[22]

Pragmatism

Citizen initiatives in neighborhoods generally originate in the confrontation of residents with unresolved concrete problems. As one of the citizens said with some irony: "Uncollected garbage is the force that binds us." It comes as no surprise then that citizens approach these problems with considerable pragmatism. What counts is that the problem is solved effectively and without delay. What is perhaps more surprising is that, despite this practical orientation, citizens usually do not lose sight of the many ways that the problem interacts with other problems or with elements of the larger context.[23] In fact, I consider this nonreductionist way of dealing with practical problems as one of the most important findings of the study. Over and over again, citizens demonstrated that a focus on practical problem solving went hand in hand with an awareness of the permanence of the problems in their neighborhood. On-the-ground problems are not solved merely by formulating a policy. With the term *pragmatism*, I denote therefore a way of dealing with issues in which concreteness and a continuous awareness of complexity go hand in hand. Differently put, although citizens are at all times focused on solving the problems of their neighborhood as they present themselves to them in their concrete, experiential guise, at the same time they

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were not willing to simplify the issues or reduce it to only one, easy to control, dimension. With pragmatism, I also denote a way of dealing with problems in which complexity is not seen as a problem but as an opportunity. The following example of a "black school," which was brought forward by one of the residents, is an illustration of this approach:[24]

> We have a black school in the neighborhood. And if you accept that, it is a given, than you have to make sure that you make it work, you mustn't resist the presence of such a school in the neighborhood, you should explore the possibilities. For that reason Mr. X [a well-known education scholar] was here and did we have a conference here with BAZ [Buurt Aan Zet, a national program for stimulating inner-city neighborhoods]. We asked for money for this, not with the neighborhood council this time but with BAZ. We said: "What does it cost and can we use it for that purpose?". . . So we held a meeting, and we got the school inspection to participate, and teachers and school directors who struggled with the same problem, we had the alderman. . . . He is a well-known alderman from the town of Y who had been an alderman in our town. So we talked with him a lot. And then what is really great, the whole neighborhood supports such an initiative. To try to turn this black school into a quality school. To get it out of that negative spiral. (Resident)

For a proper interpretation of this example, it should be noted that black schools have become a focal point of the current discourse in the Netherlands on integration—or more precisely, the alleged failure of 20 years of policies aimed at the integration of Islamic minorities in Dutch society. In the context of this discourse, some politicians speak about black schools in stark language, suggesting that they are obstacles to successful integration and proposing draconic measures to control and curtail them. The story of the citizens has a completely different flavor. First, as we saw in an earlier quote of this resident in the preceding section, the issue of integration is not framed in terms of crime (although these citizens gave many examples of how crime, a lot of it perpetrated by ethnic minorities, had invaded their neighborhood in the wake of urban renewal and the immigration movements of the 1980s) but in terms of a breakdown of communication among groups in the neighborhood. As these citizens see it, differences in language and cultural habits have made it increasingly difficult to establish and maintain mutual relations in the neighborhood. The problem of the black school must therefore be seen in this framework of concreteness and inclusiveness, and, as the final statements in this example make clear, the success or failure of the initiative is measured in these wider terms.

The mix of concreteness and complexity also shows in the way citizens manage to mobilize various resources in handling the black school issue, resources such as knowledge (experts, professionals), political support, and financial means (a good example of the variety of practices that together constitute democratic deliberation). The focus throughout the story is always on resolving the problem. Contrary to the national debate (and interestingly enough, the citizens explicitly take issue with the conclusions of national opinion leaders, as these do not fit their own experiences), a black school is not a confirmation of a previously held pessimistic view on the integration but an opportunity to get a better understanding of the neighborhood of which the school is an integral part, thereby contributing to the improvement of the quality of life in the neighborhood. A problem is transformed into an opportunity.

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An Integrated Approach to Problem Solving

As the preceding section makes clear, citizens do not perceive of problems as distinct entities. In fact, a ready consciousness of the connectedness of issues, and of the wider implications of neighborhood issues for the city as a whole (or even the nation, as the example of the black school makes clear), is a recurrent theme in the interviews. Many of the citizens who participate in these participative arrangements displayed a keen sense of the contextual nature of the problems with which they are grappling.[25] The following conversation between two citizens makes this clear:

> R2: That's why I like it that I'm in the neighborhood council, and I really take a . . . I mean, you run into people who don't, but once you're in a neighborhood council, and there are several neighborhoods, because we are only one of them, you have to take a broad view, a really broad view. You shouldn't represent only your own little neighborhood. Really, no. You all present a problem from your own little neighborhood, but I think you should take all neighborhoods into account. That's really important.
> R1: You know, for a particular neighborhood the problems from that neighborhood are the most important. But then you get . . . how shall I say it . . . you erect a kind of wall around that neighborhood. But what we're doing these last years . . . is to look over that wall.
> R2: Yeah, to break that wall down.
> R1: Yeah for if you're not careful . . . we have six neighborhoods, then we are inventing the wheel six times. That has to stop. The money can be invested only once.

These and other remarks of citizens and street-level officials about the contextuality and integratedness of neighborhood issues has led me to a number of observations on the nature of integrated problem solving. First, integration is not only lateral but also sequential. Citizens have a ready grasp of the developmental trajectory of the problems in their neighborhoods. They realize that problems extend in time, both backward (problems have a history) and forward (a problem is not solved by a one-time initiative but requires an ongoing effort). The following quote by a resident makes this clear:

> Neighborhood work is an initiative of residents. So, at some point the question arose; how do you go about doing it? For, we made plans, we made beautiful plans, but the only thing we did was give them to X [the community worker] and say: "Now it's your turn." That's not how it should go. If you want something then you have to keep following up on those plans. The whole trajectory, until it has been realized. That's the task of the residents. And not to let go of your plans.

Second, this example has led me to reformulate the key notion of general interest in terms of complexity theory. One of the central aspects in deliberative democratic theory (sometimes presented as an outcome, sometimes as an enabling condition) is the ability of citizens to transcend their own narrow interest and to argue from the common good (Bohman, 1998; Dryzek, 2000; Innes & Booher, 2003). As becomes clear from the stories of these citizens, an understanding of complexity entails insight into the many interconnections in the neighborhood system. But what does it mean to grasp the interconnections of neighborhoods as systems, for the "system" of the neighborhood is a *social* system and not a collection of amoebas or atoms. Social systems are constituted of facts and artifacts, but also, and specifically, of meanings, interpretations, and value positions. To see the interconnections in such a system is almost by definition to be able to understand different points of view, different sides of an issue.[26]

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Perhaps a better term than *seeing*, and more in accordance with the next practice as we will see, is *listening*. Some analysts have suggested that the activity of listening is one of the prime means of establishing open, cooperative forms of communication in situations of conflict. We create not only a relationship in the act of listening (Forester, 1989, p. 110) but also a particular kind of relationship. By listening, we create a sense of mutuality and imply that the other and we belong to a common world. As Forester (1989) states: "By offering reciprocity . . . listening can work to create a sense of mutuality in place of the suspicions of vociferous collections of individuals" (p. 111). Listening is both active and imaginative. In listening, the actor asks questions that allow the other to express his or her perspective, his or her world as he or she experiences it. But asking good questions requires that we make a genuine attempt to understand the world of the other, to imagine how it might look for him or her. Interpreting the answers of the other requires an empathic form of imagination, of grasping his or her beliefs, meanings, ambitions, and strategies. Understanding the other requires that we reconstruct the particular context that informs the actions of the other. But, and this is the crux of the act of listening, as Bickford makes clear, we cannot do this by ourselves. For listening always takes place in a world of difference and conflict. Horizons cannot be bridged by simply imagining them to be bridged. In that case, we could easily deceive ourselves that we have grasped the other's understanding of the world. Empathy is a joint undertaking. It consists of "creating a path," as Bickford (1996, p. 148) calls it with a telling metaphor. And by jointly traveling this path, we have a chance to explore the inevitable misunderstandings, ambiguities, and uncertainties when facing the choice of how to act. We believe that core elements of deliberative democracy, such as reciprocity, change of preferences, or the development of shared meanings (Bohman, 1998; Dryzek, 2000; Innes & Booher, 2003), hinge on actors' ability to engage in this form of democratic listening, their ability to grasp the interconnections in social systems as relationships of meaning.

Third, this dual approach to problem solving (simultaneously practical and integrated) is not a given. As local administrators made clear, when citizens were recruited for neighborhood councils, for example, an ability to see beyond the narrow concerns of their own neighborhood and a willingness to focus on solutions instead of on problems were important selection criteria. But more importantly, the pragmatic, integrated approach is also the result of a learning process, both collective and individual. As I argued above, learning based on agents who act on the situation at hand and receive feedback from their environment is a key aspect of complexity theory. We have as of yet little understanding of how this learning process takes place in complex human systems such as neighborhoods. For example, on an individual level, it was striking to see how some citizens, who until then never had any involvement with politics or administration and who had never set eyes on a municipal report or policy proposal, were quickly able to play the political game or negotiate the local bureaucracy. Also, it struck me how much pleasure and personal satisfaction some of these citizens experienced in acquiring new skills such as organizing and managing a neighborhood watch group, negotiating with the local alderman, setting up a social restaurant, or addressing an audience about the results of participatory government. For these citizens, participating in neighborhood councils was a truly transformative experience (Warren, 1992).

Collectively, neighborhood teams were seen as following a learning curve. Although at the outset they focused on distinct "physical things," such as "potholes in the sidewalk," as

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they went along the teams began to address broader issues such as, "How do the Dutch and ethnic minorities live together?" (interviewed alderman). This collective learning seems to be stimulated by a number of factors such as increasing familiarity (so that citizens feel more comfortable addressing each other about their behavior), an increasing engagement with and sense of responsibility for the well-being of the neighborhood (described by some in terms of ownership of issues), more and deeper knowledge of what goes on in the neighborhood (people literally see more, a process described by one of the citizens as the development of a professional view), and more trust in one's personal ability to confront collective problems and mobilize the necessary resources (e.g., the creation of new networks). Similarly, politicians and administrators learn too by engaging in participatory arrangements. A striking example is the alderman who, urged by angry citizens, visits a problem neighborhood and discovers that a wide gap exists between the reality in the streets and the paper world of the reports produced by city hall. But more mundane forms of learning take place all the time. Politicians learn to trust certain citizens: to trust their judgment or their ability to get something done. Local officials learn to work with residents in different roles: more facilitating (providing services or subsidies) than steering. The upshot is that in well-functioning participative arrangements, at all levels and among all participants, positive learning seems to take place, turning the complex system of a neighborhood into an adaptive complex system.[27]

It is a truism of democratic theory that citizens are not born but made (Hajer, 2004, p. 19). I like to frame this process of individual and collective learning that is at the heart of the development of citizenship in terms of system adaptation. Interaction is critical to system adaptation. As Axelrod and Cohen (1999) state: "Interaction patterns shape the events in which we are directly interested, . . . and they provide the opportunity for the spreading and recombining of types that are so important in creating (and destroying) variety" (p. 63). I will discuss changes in interaction patterns more extensively shortly; at this point, I want to draw attention to what happens as a result of these interaction patterns. In formal terms, we see that processes of individual and collective learning change both the nodes in the neighborhood system (the agents who make up the system) and, as a result, the state into which the system mutates. Hands-on, local knowledge from citizens starts to flow through the system, combining and recombining with the professional knowledge of politicians, administrators, professionals, and other social actors. The increased skills of the agents, in addition to their ability to see both sides of the issue, enable them to contribute to new and creative solutions to the problems that plagued the neighborhood, often forcing public officials to rethink long-held assumptions about the way things are done in the city. As the effects are not just instrumental but generally include a higher level of trust in the neighborhood and the emergence of a network of familiarity and friendships among agents (e.g., different ethnic groups, or citizens and public officials) who previously lived in separate spheres, I believe that all this amounts to a genuine phase transition of the neighborhood system. The system is better adapted to the changing circumstances that, as I described in the introduction, created a sense of crisis and that formed the impetus for citizens to become involved.

Democratic Communicative Space

The third democratic practice that characterized these participatory arrangements was the emergence and maintenance of a *democratic communicative space*. With this concept,

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I want to capture the structure and the quality of the interactions in these systems of local democratic governance. A democratic communicative space consists of a dense network of communication lines, both formal and informal. These communication channels are short, unimpeded, reactive, and reciprocal. In experiential terms, the actors in a neighborhood know how to contact each other when needed, and an action is quickly and predictably followed by a reaction. Or, to be more precise, a communicative space is democratic when all those who compose it trust that a communicative action of the one who addresses will reliably result in a quick and acceptable reaction of the one who is addressed. Seen this way, a democratic communicative space does not function differently from a community of friends, colleagues, or business partners.

In a representative democracy, local officials are used to functioning at a considerable distance from the citizenry. Elected officials operate on the premise that they have been given a 4-year mandate to take care of the business of governing under conditions of accountability and the citizens' right of hearing and appeal (Manin, 1997). Administrators do their work as experts in their particular administrative field, situated within a legal and bureaucratic chain of accountability that ends with an elected official. In practice, that implies that communication between citizens and politicians or administrators is regulated by procedures, such as office hours, the rules that regulate what can or cannot be said in hearings, or the legally prescribed time frames for appeals and reply to an appeal. These rules and regulations define the formal position and responsibilities of the various participants in the local governance system. In doing so, they also define the system as a system of governance (instead of, for example, a debating club or a group of friends). But as every citizen and bureaucrat knows, formal rules are a two-edged sword. The way they regulate interactions between citizens and public officials is highly partial (it is no accident that responsiveness is such a central theme in theories of regulatory justice; Kagan, 1978), and, in situations of conflict, formal rules are prone to be used by administrators to frustrate communication with clients. Particularly in situations of antagonism and conflict, public officials tend to hide behind the rules, using them as a defensive shield to avoid further contact with citizens (Lipsky, 1980). After-the-fact accountability and the right to be heard or to appeal is in such situations often "too little, too late" and leaves relations between public officials and citizens seriously compromised. In such situations, short, informal routes of communication tend to be more effective, both instrumentally and by creating a climate of trust and collaboration. The following two quotes clearly express the effects of the availability of informal communication routes:

> We have attained more in one meeting with the alderman than in two years of writing letters. (member of an Utrecht neighborhood council)

R1: For us the Deventer Wijkaanpak meant getting acquainted with the business of a municipality, the administrators. Sometimes in the past, some one would come by, but that was someone whom you didn't know. Partly because of the Wijkaanpak we have gotten in touch with the administrator, the person behind the administrator. Z [the neighborhood administrator] took care that we had a direct channel to one level up in the municipality. If we have problems we don't get stuck with someone, and if nothing works than Z regularly meets the alderman.

R2: Also because of Z, and the community worker, you become aware that you can approach someone, where you can ask how to do this or how to do that . . . we have a really great cooperation. (conversation between two members of the Deventer neighborhood councils)

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The second quote suggests that, from the citizens' perspective at least, the quality of communication is crucial in these emerging democratic spaces. It is not just about getting things done but also about getting to know each other better, treating each other cordially and with respect, being open for questions and suggestions. In fact, the interviews reveal that citizens more often relate instances in their encounters with public officials in which the quality of communication was at stake than instances of instrumental success or failure (although the latter were far from absent, of course). It seems that the availability of informal communication lines opened the possibility to pay attention to such issues as predictability, reciprocity, and reliability. Particularly reliability was seen as important. Citizens expected the city administration to be a reliable partner. For the citizens, that meant that they can expect that public officials react to their communicative actions, that they are informed, and that they take citizens seriously. But citizens themselves emphasize that they also want to be seen as a reliable partner. That implies, among others, continuity (not too many changes in the membership of the councils) and a serious, professional style. ("The city knows that we don't present them with nonsense and empty gestures;" resident.)

In addition, time and again citizens emphasized the importance of cordiality in the exchanges between citizens and public officials. The emphasis on cordiality and rules of etiquette must be understood against a background of the sometimes surprisingly sloppy and careless manner with which public officials treat citizens. For example, in the aftermath of a council meeting, the chairman of one of the Utrecht councils said, with barely suppressed rage, that he would immediately resign from the council and terminate his many activities for the neighborhood. The occasion was that for the umpteenth time he had not received any reaction to questions that he, in his function of council chairman, had addressed to the board of mayor and aldermen. His actions were motivated, he said, by "the Board's simple lack of respect, and, if I may say so, civil decency."

Respect is key in the communication with citizens. Citizens set high value on being taken seriously by public officials. Failure to reply to questions is obviously interpreted as lack of respect. But there are many other ways that citizens may feel slighted. In my interviews, I encountered failure to follow up on promises (citizens who took an afternoon off to suggest ways to improve safety in their neighborhood in a highly publicized public meeting and were never informed about what was done with the results), manipulating the dates of hearings (by scheduling them in the middle of school holidays), not acting in good faith (officials suddenly and without explanation siding with shop owners after a year of talks among city officials, citizens, and shop owners about resolving parking problems in a congested shopping street), officials who spring a plan in a meeting while bypassing a deliberative forum in which they had agreed to discuss such plans, officials who show up at a public hearing uninformed and unprepared or, a particularly grating practice I encountered on several occasions, officials who misguidedly feel that they must bridge the gap between city government and citizens by organizing some game that is experienced by citizens as childish and inane. The effect on the citizens' trust in public officials is devastating.

Finally, quite a few of the citizens I interviewed emphasized the importance of constructive conflict management. It struck me not only that these citizens approached conflicts in a remarkably realistic way, but that they also were quite articulate about the rationale for conflict management. Conflicts were seen as an intrinsic element of the landscape of problems in which they moved about. Therefore, with regard to the handling of

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conflict, citizens took a long view. Collaboration with the city was not a one-shot affair. As one council member put it: "You always have to be careful that you will have to cooperate tomorrow with the person with whom you have a conflict today." Citizens displayed a keen awareness that their encounters with public officials carried the potential for conflict. Interests diverge, and from their perspective, citizens often had trouble convincing officials of the validity of their observations or position. Realistically speaking, they knew that conflict was unavoidable, and they did not shun it when it announced itself; but, this was not necessarily considered an obstacle for collaborative problem solving. In fact, a situation of contained conflict could be productive as it invites both sides to articulate their points of view as convincingly as possible. This requires, however, that you do not alienate the other party with your style of conflict resolution. Part of the art of conflict resolution resides in rules of etiquette; both citizens and officials valued gracious and pleasant ways of getting along. For example, officials expressed how they appreciated it when citizens were present at official occasions, such as New Year parties. This message was not lost on the citizens.

Another aspect of constructive conflict management is the necessity to separate the professional from the personal. For example, one of the organizers of the Night Prevention Project disparaged some of her fellow citizens, who, as she saw it, had become "personal" toward an alderman during a public hearing. As she explained:

> It's all right to be critical. Very critical even if the situation asks for it. But you should always focus on the case at hand, where it failed, or where the administrator or alderman didn't do his job, and not attack the person. That's not fair towards that person.[28]

Through such practices of conflict management, a climate emerges that makes it possible to discuss contentious subjects despite widely diverging positions on issues. Differences in political opinions need not be an impediment to good interpersonal relations. Time and again, I observed a particular quality of friendship that characterized the interactions among citizens and, in some cases, citizens and officials in participatory arrangements. Citizens seemed to genuinely enjoy the meetings with each other, but it would be misleading to see these merely as an occasion for socializing. In fact, these meetings were an interesting hybrid of socializing and a focus on the task at hand. For example, before the citizens of the Night Prevention Project hit the streets for their nightly patrol, they made it a habit to first go swimming in the municipal pool and then have a bite to eat in a small restaurant. And in my meetings with officials and citizens in Deventer, I was struck by the pleasant way with which both parties interacted.[29]

What explains the citizens' emphasis on quality, reciprocity, and respect? Two types of explanation might apply here. On an experiential level, the citizen is—and perceives himself or herself—as the weakest party. As a result, citizens are, initially at least, wary of officials' intentions and sensitive to any sign that the latter will misuse their stronger position in the field of governance. Communicative etiquette has the effect of leveling the playing field between citizens and officials, thereby introducing a measure of communicative rationality into the process of neighborhood governance.

However, there is a deeper mechanism at work here, of which citizens and officials might not necessarily be aware. Cordial interactions and constructive conflict management should be seen as one of the necessary conditions for harnessing complexity in complex

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social systems. The emergence of a network of short, informal communication routes is a key element in harnessing complexity in neighborhoods. Increasing the amount and quality of communication is equal to increasing the number of interactions in a complex system. This has two major effects on the adaptability of the system. First, and most straightforward, it increases the knowledge and information that flows through the system, distributing these to parts of the system that were hitherto deprived of it. For example, when citizens inform public officials that the garbage company, to which the city administration has contracted out garbage collection, picks up the garbage not twice a week (as the contract stipulates) but only once, this increases the system's capacity to deal with an environment of privatized municipal services. But it also works the other way around, with city officials making citizens aware of the intricacies and action implications of policies of which they were not aware. For example, citizens are often upset about drug houses in their neighborhood. The dealers (who often carry arms) and the addicts create a public nuisance and are experienced as a threatening presence in the neighborhood. Citizens want the police to close these houses. The following quote of a police officer explains the police's quandary when they crack down on drug dealers in a neighborhood.

> So I tell the residents: between now and two years from now I'm going to close all those drug houses. However, I say, we are also going to agree about a few things. And that is, that when I am going to empty those drug houses, that you have to realize that in some of those houses there are 10 to 20 junkies living, and that means that when between now and two years from now, I am going to empty those 147 houses, that, if you multiply that by 10 or 20, that a lot of those guys will be out on the street. So, you will run into those guys in your neighborhood. What you didn't see behind those walls, you will now encounter on the street or in your doorway. That is a phase of the process that we will have to get through. But we will try to find solutions for that too.

Second, increasing the density of communication in a neighborhood alters the balance of proximity and distance in the system. One way to look at complex systems is as physical and conceptual spaces that locate and organize the interaction of actors (Axelrod & Cohen, 1999, p. 74). For example, when a citizen is elected chairperson of a neighborhood council, the probability of him or her meeting one of the city's aldermen increases. In this sense, a resident's location in the political-geographic system of a neighborhood increases or decreases the probability of him or her communicating with officials. If those meetings are scheduled to take place once a month, then the logic of their roles makes them likely to interact (Axelrod & Cohen, 1999). The distance between the alderman and the citizen in this example is thus measured more in conceptual than physical terms. In a similar way, all sorts of procedures may impede or facilitate citizen-government interaction. Having to wait 3 hours when filing a complaint with the police obviously belongs to the first category. A formal procedure that regulates access to an alderman may however filter productive from nonproductive interaction. Seen in this way, rules of communication etiquette are powerful means to raise (when you violate them) or bring down (when you obey them) barriers to communication. Citizens who have been disrespectfully treated by a city official are likely to lose trust in the official and refrain from interaction. Conversely, where relations are cordial, communication channels will open up, and knowledge and information will likely flow through the system. Communicative ethics is a powerful organizer of the interactions in complex human systems.

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Conclusion: Harnessing Complexity Through Democratic Governance

What does all this add up to? Let's reiterate. The argument in this article originated in the observation that in liberal democracies, policy making, complexity, policy epistemology, and participatory democracy are practically and conceptually interrelated. That is, reform proposals that target one inevitably presuppose assumptions about the other three. In the ensuing analysis, this observation led to the following claims:

- Representative democracy forms the democratic foundation of hierarchical-instrumental policy making. Hierarchical-instrumental policy making is part and parcel of an institutional arrangement in which the formulation and implementation of public policy are uncoupled and in which experts and administrators are wedged in between elected officials and the polity to provide intelligence to elected representatives and to prevent civil strife and the tyranny of the majority (deLeon, 1997; Held, 1996).[30]
- Hierarchical-instrumental policy making is limited in its ability to deal successfully with social and physical complexity.
- Neighborhoods can be seen as dynamic complex systems. Complex systems are collections of agents that are located in physical and conceptual space. (Conceptual space consists of a set of categories that structure the probability of interaction.) Agents are collections of properties, capabilities, identities, and action preferences that interact with other agents (Axelrod & Cohen, 1999, p. 153).
- When such complex systems become the subject of public policy, the agents in the system adapt by changing their interaction patterns (intensifying, opening new channels, abandoning old ones, leaving the system altogether). What this implies is that policies, once the agents of a system absorb them, get dispersed, fragmented, and deflected. In complexity terms, policy effects are emergent properties. They arise out of the interactions of the individual agents. One obvious implication is that traditional, hierarchical-instrumental modes of policy making are limited in handling this kind of complexity in a productive way (Dryzek, 1990, chap. 3).
- Participatory democratic arrangements are superior to representative arrangements in dealing with system complexity. The standard argument is that giving actors who are affected by a policy genuine decision-making power results in an alignment of interests and cognitions that will improve the probability of arriving at action-oriented consensus (Dryzek, 1990, p. 70; see also deLeon, 1997; Torgerson, 2003, p. 198).

What is left is the question of how participatory schemes are able to expand the limits of instrumental policy making; how, in other words, collaboration among citizens, public officials, and other social actors harnesses complexity. Drawing on fieldwork on citizen participation in a number of inner-city neighborhoods in the Netherlands, I attempted to show how participation and deliberation contributed to collective problem solving. In particular, I identified a number of participatory practices that enabled citizens and local officials to collaborate in a constructive, fruitful manner. In this concluding section, I will now bring this material back to complexity theory by identifying mechanisms that help neighborhoods, seen as complex systems, constructively adapt to a continuously changing social, economic, and demographic environment.

The general mechanism at work here is the following: By giving citizens genuine influence in local governance, we effectively change both the architecture of and the interaction patterns

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in the neighborhood system. Giving citizens influence effectively changes the conceptual space of the system—the institutional and procedural categories that influence the proximity of actors in a system. Proximity expresses the probability that the agents in a system will interact. And interaction is essential for stimulating diversity and variety; both are conditions for generating creative solutions to problems. To quote Axelrod and Cohen (1999): "Interaction patterns help determine what will be successful for the agents and the system, and this in turn helps shape the dynamics of the interaction patterns themselves" (p. 63). The system becomes, in effect, a self-sustaining, adaptive loop in which posititive feedback generates further positive effects. Or, in the terminology of complexity, the system exhibits positive coevolutionary dynamics; the changing interaction patterns and the positive feedback that result from this effectively change the environment of the agents in the neighborhood system (p. 8).[31] These agents then react to the changing context by, for example, continuing their efforts, by an increased confidence in their participation capacity, and by improving skills of listening, empathetic understanding, and so on (Warren, 1992). How is this possible?

I see the following specific mechanisms at work:

- Giving citizens genuine influence in real decision-making situations allows for knowledge and information, which was hitherto unavailable in the system, to reach actors who are in a position to act on this information. Participatory arrangements have the effect of removing traditional barriers to the exchange of knowledge and information in the neighborhood system (Axelrod & Cohen, 1999, p. 80). For example, creating a neighborhood council physically brings together citizens and local officials. Informal contacts do the same. Similarly, rules of communication etiquette and friendship ties remove conceptual barriers to communication; people who belonged to different social categories are able to transcend these. Instead of a collection of atomistic agents, the neighborhood starts to function as a coherent, integrated system.
- The nature of the knowledge that flows through the system is important to the adaptive capabilities of the system in two ways. First, much of this knowledge is experiential, indexical, or "local" (Geertz, 1973; Suchman, 1987; Wagenaar & Cook, 2003); that is, knowledge that is acquired in the process of dealing with everyday situations. The significance of this is that this kind of practical knowledge is usually not available to administrators and elected officials who operate at a distance from the situation at hand. A simple example is the citizen who informs the city administration that the privatized garbage collector does not abide by the terms of the contract. But as Sabel, Fung, and Karkkainen (2001) have shown, this kind of practical, performance-based deliberation is particularly effective in situations where problem definitions are diffuse and contested, where there are a large number of actors involved, where problems are unstable, and where problem monitoring is difficult. Second, as we saw in the preceding section, citizens' knowledge is often narrative. This is more than merely a different or even lesser way of expressing local knowledge. According to Bruner (1986), narrative knowing, as opposed to analytical knowing, is a distinctive way of ordering experience that is particularly well equipped to deal with ambiguous, personal, intentional, affectively loaded, and action-oriented situations (Wagenaar, 1997b). This kind of detailed, experiential knowledge has the effect of preventing the premature reductionism that is central to analytical modes of policy making (Dryzek, 1990, p. 70).
- Increased interaction among a larger number of actors increases variety within a system. Increased variety in turn increases the number of potential solutions to whatever problem the system faces. Heterogeneity breeds creativity. There are a number of mechanisms at

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work here, such as recombination and copying. Recombination involves the combining of strategies already in use by different agents in the system to create a new solution. The Night Prevention Project, in which the patrol function of the police was combined with the information gathering activities of the residents, is a good example. Copying and adapting them to different contexts can then spread such strategies, as happens now in the city of The Hague and even on an international level within a European network of similar citizen initiatives (http://www.r4r-europe.com/).

- Participatory schemes in a setting of dynamic complexity solve the problem of coordination overload at the center. One of the recurrent problems of instrumental policy making is the breakdown of the planning and coordination function of centralized policy makers. Decentering problem solving to the actors who are both involved and affected, and by fostering deliberative cooperation, builds on the "spontaneous" coordination that is characteristic of self-organizing complex systems. Coordination occurs through a "harmonization of the volitions of disparate actors" (Dryzek, 1990, p. 71), through feedback on different solutions, and through the creation of trust and cooperation in diverse settings.
- Finally, I believe that the observations about the interaction of citizens, officials, and professionals in these participatory arrangements point to a deeper truth about participatory democratic governance. Human systems, as we saw, develop and adapt through coevolution. Coevolution is a subtle process. It is a form of cooperation without a central director. It is conjectured that on the micro level, coevolution proceeds with each actor reacting to his or her immediate environment. The aggregate effect can be a form of cooperation "on the fly," as when a collection of birds manages to cohere as a flock as the emergent effect of each bird reacting to the two or three birds in its immediate environment according to a few simple algorithms. "By constantly seeking mutual accommodation and self-consistency," as Holland states, "groups of agents manage to transcend themselves and become something more" (cited in Waldrop, 1992, p. 289), the something more being an adaptive system.

Now, this spontaneous cooperation of agents in complex systems does not happen in every circumstance. In fact, the level of stability seems to be a crucial ingredient. Some systems seem to be frozen. In such systems, the number and nature of the connections among agents are so sparse that little information flows between them, and agents basically live in an unchanging environment. Even when an agent sends information through the system, it will quickly fade and die. It is tempting to see an analogy here with rigid, hierarchical, representative systems of governance in which carefully processed information flows from officials to residents, with little or no possibility (because of procedural rules and carefully circumscribed positions and mandates) for a reverse flow of information. Even if information would flow from the bottom to the top, it would not affect the agents there. The opposite extreme is anarchy. Here, the number of connections is so dense, and procedures and roles so badly described, that, although information flows freely among agents, it never has a chance to stick, to make an impact. Issues are endlessly debated in groups of actors without anyone ever being able to reach consensus or force a decision. What these observations suggest is that for participatory arrangements to function at all, they need to hover between order and chaos. For complex governance systems to benefit from the broadened knowledge base, they need to be loose enough to let the information freely flow along the nodes and effect the agents, yet structured enough to let the changes and adaptations coalesce into emerging cooperation and system adaptation. As Waldrop puts it, drawing an analogy with the behavior of cells: "Like a living cell, they [complex systems] have to regulate themselves with a dense web of feed-

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backs and regulation, at the same time that they leave plenty of room for creativity, change, and response to new conditions" (p. 294). Then, citing Doyne Farmer, one of the key actors in complexity theory,

> Evolution thrives in systems with a bottom-up organization, which gives rise to flexibility. But at the same time, evolution has to channel the bottom-up approach in a way that doesn't destroy the organization. There has to be a hierarchy of control—with information flowing from the bottom up as well as from the top down. (Waldrop, 1992, p. 294)

The system has to be "at the edge of chaos." Brought back to the subject of democratic governance, these formulations can be read as an accurate characterization of the conditions for effective citizen-government collaboration.

Notes

1. The Dutch urban sociologist Arnold Reijndorp (2004) calls them "original residents," which he distinguishes from "new city dwellers" and "immigrants." What distinguishes the three groups is that they came to old inner-city neighborhoods "in a different way, for different reasons, and with a different purpose" (p. 17). Original residents are born in their neighborhood.

2. The terms *participatory*, *deliberative*, and *discursive* are often used interchangeably in the literature. To add to the confusion, different kinds of participation are sometimes assigned to diferent stages of the policy process. Strictly speaking, citizen participation is neutral toward type of democracy. It can take place in representative and deliberative settings. A referendum would be an example of the first, a citizen jury an example of the second. Klausen and Sweeting (2003, p. 13), for example, distinguish between aggregative and deliberative participation. I have my doubts about some of these distinctions (referenda are often an occasion for public deliberation; the policy stage distinction does not hold water in the ordinary world of policy making), but I do not intend to join the debate here. For purposes of clarification, the subject of my research is experiments in citizen involvement in local governance that are both participatory and deliberative. (Although the last characteristic was conjectured and was part of the research question.) In this article, I use the terms interchangeably, except where a distinction is conceptually relevant for the argument I want to make.

3. The Night Prevention Project and the Deventer Neighborhood Councils are not isolated examples of local participation. In the last decade, in dozens of neighborhoods in Dutch towns and cities, citizens have taken initiatives to govern their own environment, many of which originated in the same combination of intensified immigration, the negative fallout of urban renewal, and policy stagnation. Sometimes citizens cooperated with local government from the very start, sometimes the initiative began as a collaboration between citizens and private housing corporations, and sometimes the initiatives originated in a protest movement. Many of these initiatives are rooted in a Dutch tradition of what one could call, somewhat paradoxically, "state-sponsored participation": interactive government and neighborhood activism in the context of the national Urban Policy Program. It seems that citizen participation, defined as collaboration among citizens, elected politicians, local administrators, and other social actors, is a readily available governance paradigm in the Netherlands, a paradigm that is itself rooted in a long tradition of consensus politics and "interactive policy making" (Andeweg & Irwin, 2002; Geul, 1998).

4. For an excellent discussion of the intricate relation among policy, policy analysis, and democracy, see Dryzek (1990, pp. 112-114). For contemporary statements, see Hajer and Wagenaar (2003) and Bogason and Musso (2006).

5. Dryzek (1990) speaks in this respect of the "policy science of tyranny," by which he means "any elite controlled policy process that overrules or shapes the desires and aspirations of ordinary people" (p. 114). That this characterization is not a caricature of real-world policy making, is amply demonstrated in Healy (1997). In fact, while employing the language of democratic involvement and collaboration with citizens, Healy shows how urban renewal in Newcastle was always a top-down, dirigiste affair.

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6. In his own inimitable style:

> At first glance, the purely intellectual mode seems ideally suited to policy analysis, which seeks to bring intelligence to bear on policy. But this identity is achieved at the cost of triviality. Instead of innumerable minds, each with somewhat different perspectives, there is really only one. Instead of conflict, there is consensus. Instead of problem solving, in short, there is suppression of problems. Everyone either gets what he wants, or has to want what he gets. Thought is made surpreme at the expense of having anything worth thinking about. (Wildavsky, 1979, p. 125)

7. One could think of the common situation of a family coping with the sudden death of one of the children. Although the number of "parts" in the family system even decreases, the density of the interaction network makes for a high level of unpredictability, both of the various dyadic relationships and of the functioning of the family qua family. An example of a system with many parts but few and controlled interactions is a car engine. Under normal circumstances, the engine simply repeats a particular interaction pattern over and over again.

8. A recent example comes from the Netherlands. The social demographer Jan Latten (2005) has concluded that the social segregation between a "White" elite and a largely ethnic lower class has increased during the past decade in the Netherlands. Latten observes that a "sorting-out" mechanism is at work that is largely driven by choice of marital partner. Both ethnic minorities and the White elite marry within their own group, thereby handing social advantages and disadvantages down to he next generation. The result is that, increasingly, social classes retreat within their own schools, move in different parts of the labor market, live in their own neighborhoods, and move almost exclusively in their own social networks.

9. Some policy areas begin to exhibit an understanding of the emergent properties of the policy system as something above and beyond the properties of the individual parts. For example, the food sector is now regularly framed as a chain, in which problems in one part of the chain can have disastrous consequences higher up in the chain. Similarly, among some scholars and policy makers, the Dutch disability law is regarded as a complex system of employers, employees, administrators, certifying physicians, overseers, and others, whose interactions add up to undesired outcomes that are extremely resistant to policy intervention.

10. Cilliers (2005): "Asymmetrical structure (temporal, spatial and functional organization) is developed, maintained and adapted in complex systems through internal dynamic processes. Structure is maintained even though the components themselves are exchanged or renewed" (p. 257).

11. In complexity theory, such stable states are called *attractor* states. The simplest example is that of a pendulum. After a while, the pendulum will, through the drag of friction, have come to rest at a fixed point in the center. Feedback mechanisms are central to the occurrence of attractors. Again, a simple example is the negative feedback of a central heating system in which the temperature is always brought back to a particular range specified by the feedback system. But perhaps more important for social systems are positive feedback mechanisms. Positive feedback occurs when a change tendency is reinforced instead of damped down, leading the system away from an earlier equilibrium to unspecified, indeterminate states. The earlier-mentioned development of social segregation through marital preference is a good example that illustrates both the indeterminacy of system evolution and the presence of attractors fueled by positive feedback mechanism that lock the system in a particular state.

12. One of the most fascinating chapters in complexity theory concerns dynamic systems that balance between chaos and order, "systems at the edge of chaos," as Kauffman (1995, p. 86) calls it (see also Innes & Booher, 2003, p. 36). Kauffman: "Perhaps networks just at the phase transition, just poised between order and chaos, are best able to carry out ordered yet flexible behaviours." And: "Yet, since the system is at the edge of chaos, but not actually chaotic, the system will not veer into uncoordinated twitchings. Perhaps, just perhaps, such systems might be able to coordinate the kind of complex behaviour that we associate with life" (p. 90). Underlying the "edge of chaos" concept is a set of arguments about the interactions within a system, particularly, as we will explain later, the balance between diffusion and intensity of interactions (Axelrod & Cohen, 1999, p. 72). For the moment, it suffices to conclude that these border states simultaneously contain risk and challenge. They can be a source of renewal and innovation, but they can also augur a period of disintegration and stability (Innes & Booher, 2003, p. 36).

13. Waldrop (1992) provides an estimate that there are 10^{120} possible moves in chess, to add to this that it is "a number so vast to defy all metaphor" (p. 151).

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14. The term *trajectory* is from Strauss (1993). It denotes both a development of something from A to B and the essentially contingent nature of that development.

15. See Uitermark (2003) for the story of the many adaptations in Dutch urban renewal policy in the 1970s. Stung by vehement protests of residents who were forced to leave their neighborhoods, city officials were forced to change their renewal strategy.

16. On the importance of detail in citizens' stories, see Forester (1999, p. 133; see also Wagenaar, 1997a).

17. Latour (2003) speaks in this context of society being "reflexive," by which he means that "the unintended consequences of actions reverberate throughout the whole of society in such a way that they become *intractable*" (p. 36).

18. The citizen's story of the decline of an inner-city neighborhood as the combined result of policy interventions and immigration trends is a good example of these two dimensions of complexity. The outcome is a real-world social system that not only resists understanding but also may lead to mistaken conclusions among experts and officials, as the following quote of a seasoned urban sociologist makes clear:

> The neighborhoods that from the 1960s onwards demonstrated characteristics of what urban sociologists called transitional zones—the areas around the city center that knew a high population dynamics of in- and outflow—had become heterogeneous, but stable inner-city neighborhoods. Or so we thought. Population dynamics simply continued. The relation between the three main groups (original city dwellers, new city dwellers, immigrants) has changed considerably, but important developments also occurred within these groups. For many the neighborhood is only a way station in their life cycle. But those many life courses that crisscross in some neighborhoods, result in a social mosaic, or rather a kaleidoscope, a mosaic that is continually changing (Reijndorp, 2004, p. 23; translation HW).

19. For example, notice the anger at local authories of a resident of a low income neighborhood that Reijndorp (2004) quotes: "The demarcation between lack of understanding and foot-dragging is paper thin: they don't know anything and they don't do anything. They are consciously destroying it all" (p. 52; translation HW).

20. See, for example, Forester (1999): "Inspired by liberal models of voice and empowerment, many analyses unwittingly reduce empowerment to 'being heard' and learning to considering seriously local as well as expert knowledge. Participation is thus reduced to speaking, and learning is reduced to knowing" (p. 115).

21. Forester (1999): "By 'democratic deliberation' I refer to the practical public imagination of the future in a variety of real decision-shaping discussions, in community meetings or negotiations, involving either representatives of public constituencies or directly affected citizens themselves" (p. 85). He then adds that democratic deliberation also involves two more "complex and challenging kinds of practical work," namely, an exploration of ends and a "subtle but real recognition" of other parties.

22. In their path-breaking study of empowered participatory governance, Fung and Wright (2003) identify three process principles: a practical orientation on concrete concerns, bottom-up participation, and deliberative solution generation. The overlap with my three principles is obvious; here I comment on the differences. What I call *pragmatism* is similar to Fung and Wright's practical orientation, although, as we will see, the broader term *pragmatism* expresses a more inclusive understanding of what it means to be practical. A bottom-up approach forms the heart and soul of these participatory experiments. I do not consider it a separate practice. In fact, the practices identified here are a way to make the bottom-up approach work. I consider an integrated approach to problem solving one of the most striking findings of this research. It came up time and again in the interviews and observations, both as a requirement for and an effect of succesful citizen participation. Deliberative solution generation is embedded in my *democratic communicative space*; my term is again more inclusive as it includes both the systemic aspects of democratic deliberation, as the rules of communication etiquette that proved to be so important in citizens' stories.

23. I do not know yet if this observation counteracts Fung and Wright's (2003, p. 16) concern that the practical orientation in citizen participation distracts them from more important, broader conflicts and inequalities (see also Torgerson, 2003). The citizens in our study displayed awareness of the broader issues in which the concrete problems in their neighborhood were embedded. I do not know, however, if this extends to a deeper insight into the structural causes of these problems and the opportunity and ability to put this insight to use in participatory governance.

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24. In the Netherlands, the term *black school* refers to schools where the majority of the students belongs to one of the Muslim minorities. In the Dutch integration debate, they are seen as problem schools, educational ghettos that are simultaneously the result and the cause of the continued segregation of Muslim ethnic minorities.

25. For this reason, it is essential in the design of participatory arrangements that citizens do not have to accept the categories and problem formulations of government officials but instead have the opportunity to frame problems in their own terms (see also Innes & Booher, 2003).

26. That citizens, by engaging in public deliberation, are able to overcome narrow parochial views is a key claim in deliberative theory. Benhabib (1996), for example, characteristically states:

> This process of *articulating good reasons in public* forces the individual to think of what could count as a good reason for all others involved. One is thus forced to think from the standpoint of all involved for those whose agreement one is "wooing." Nobody can convince others in public of her point of view without being able to state why what appears good, plausible, just, and expedient to her can also be considered so from the standpoint of all involved. Reasoning from the standpoint of all involved . . . forces one to adopt a standpoint that Hannah Arendt, following Kant, had called the "enlarged mentality." (pp. 71-72)

I have my doubts about the frequent recourse to the term *force* in this passage. I think, as the argument on listening that follows makes clear, that the process of influencing and being influenced is messier, more contingent, and less determined than the theory suggests. Exposure to other people's points of view in a public setting of joint problem solving is how I would describe the ordinary deliberative setting. Somehow, sometimes, people change their points of view and adjust their preferences in such a way that they become more inclusive—more complex in terms of this article. I am at a loss to explain exactly how this process occurs.

27. Strictly speaking, learning is a universal phenomenon in complex systems that will not necessarily lead to positive outcomes for the neighborhood as a whole. For example, the well-known dynamic in which higher income residents decide to sell their house when low-income ethnic minorities move into a neighborhood is also a form of learning (to try to beat falling property prices) but one that sets in motion the notorious spiral of decay that ultimately leads to the ghettoization of the neighborhood. In this section, I am primarily interested in positive learning: collectively improving the situation.

28. Another resident told me that he became involved in neighborhood projects because he felt bad once about personally attacking an alderman in a public hearing. He called the alderman the next day to apologize. In the ensuing conversation, the resident concluded that he should be involved in a more constructive way.

29. The role of friendship in participatory arrangements is an area that needs to be explored. Innes and Booher (2003, p. 43), in their analysis of collaborative policy making, also observed that participants often developed personal friendships. They speculate that an empathic understanding of the other evolves into friendship. Forester (1993, pp. 196-202), in a fascinating discussion of the role of stories in planning practice, discerns a parallel between the way we learn from others through the act of listening and the way we learn from friends.

30. deLeon (1997):

> If we are in fact dealing with the policy sciences of democracy, than it is a strained democracy, one at its most indirect and removed, in which unelected analysts and administrators are being entrusted (often by other unelected officials) to represent popular interests and necessities. (p. 65)

31. The concept of coevolution has been introduced in complexity theory to deal with the circumstance that complex systems evolve without a central planner who directs the system toward a preconceived goal. In fact, complex systems, physical, biological, and social, self-organize and evolve without there being very clearly defined problems for the agents to struggle with and without clearly circumscribed criteria of fitness or reward to decide in advance who might win or lose out. As Axelrod and Cohen (1999) put it: "Harnessing complexity involves acting sensibly without fully understanding how the world works" (p. 45). Coevolution answers to this that agents evolve and system states emerge because everyone is constantly adapting to everyone else. Agents and systems evolve because they form each other's environment, effectively dissolving the age-old dichotomy

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between actor and context. As Waldrop (1992) puts it: "Any given organism's ability to survive and reproduce depends on what niche it is filling, what other organisms are around, what resources it can gather, even what its past history has been" (p. 259).

References

Akkerman, T. (2004). *Deliberatieve democratie: Een pleidooi voor vernieuwing van de politieke cultuur* [Deliberative democracy: A plea for a renewal of political culture]. Unpublished manuscript.

Andeweg, R. B., & Irwin, G. A. (2002). *Governance and politics of the Netherlands*. New York: Palgrave Macmillan.

Axelrod, R., & Cohen, M. D. (1999). *Harnessing complexity: Organizational implications of a scientific frontier*. New York: Free Press.

Beck, U. (1999). *World risk society*. Cambridge, UK: Polity.

Benhabib, S. (1996). Toward a deliberative model of democratic legitimacy. In S. Benhabib (Ed.), *Democracy and difference: Contesting the boundaries of the political* (pp. 67-94). Princeton, NJ: Princeton University Press.

Bickford, S. (1996). *The dissonance of democracy: Listening, conflict, and citizenship*. Ithaca, NY: Cornell University Press.

Bogason, P., & Musso, J. A. (2006). The democratic prospects of network governance. *The American Review of Public Administration, 36*(1), 3-18.

Bohman, J. (1996). *Public deliberation: Pluralism*: *complexity, and democracy*. Cambridge, MA: MIT Press.

Bohman, J. (1998). Survey article: The coming of age of deliberative democracy. *The Journal of Political Philosophy, 6*(4), 400-425.

Bovens, M., & Hart, P. T. (1998). *Understanding policy fiascoes.* New Brunswick, NJ: Transaction.

Bruner, J. (1986). *Actual minds, possible worlds*. Cambridge, MA: Harvard University Press.

Cilliers, P. (2005). Complexity, deconstruction and relativism. *Theory, Culture & Society, 22*(5), 255-267.

Cohen, J. (1996). Procedure and substance in deliberative democracy. In S. Benhabib (Ed.), *Democracy and difference: Contesting the boundaries of the political* (pp. 95-119). Princeton, NJ: Princeton University Press.

deLeon, P. (1997). *Democracy and the policy sciences*. Albany: State University of New York Press.

Dewey, J. (1927). *The public and its problems*. New York: Holt.

Dryzek, J. S. (1990). *Discursive democracy: Politics, policy, and political science*. Cambridge, UK: Cambridge University Press.

Dryzek, J. S. (2000). *Deliberative democracy and beyond*. Oxford, UK: Oxford University Press.

Fay, B. (1975). *Social theory and political practice*. London: George Allen & Unwin.

Fischer, F. (2000). *Citizens, experts, and the environment: The politics of local knowledge*. Durham, NC: Duke University Press.

Forester, J. (1989). *Planning in the face of power*. Berkeley: University of California Press.

Forester, J. (1993). Learning from practice stories: The priority of practical judgment. In F. Fischer & J. Forester (Eds.), *The argumentative turn in policy analysis and planning* (pp. 186-209). Durham, NC: Duke University Press.

Forester, J. (1999). *The deliberative practitioner. Encouraging participatory planning processes*. Cambridge, MA: MIT Press.

Friedman, J. (1973). *Retracking America: A theory of transactive planning*. Garden City, NY: Anchor.

Fung, A., & Wright, E. O. (Eds.). (2003). *Deepening democracy: Institutional innovations in empowered participatory governance. (The Real Utopias Project, Vol. 4).* London: Verso.

Geertz, C. (1973). Thick description: Toward an interpretive theory of culture. In C. Geertz (Ed.), *The interpretation of cultures* (pp. 3-32). New York: Basic Books.

Geul, A. (1998). *Beleidsconstructie, coproductie en communicatie. Zes beproefde methodieken van beleidsontwikkeling* [Policy design, co-production, and communication. Six reliable methods for policy development]. Utrecht, Netherlands: Lemma.

Gutmann, A., & Thompson, D. (1996). *Democracy and disagreement*. Cambridge, MA: Belknap.

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Hajer, M. (2003). A frame in the fields: Policymaking and the reinvention of politics. In M. Hajer & H. Wagenaar (Eds.), *Deliberative policy analysis: Understanding governance in the network society*. Cambridge, UK: Cambridge University Press.

Hajer, M. (2004). Vernieuwd democratisch bestuur—Een pleidooi voor activerend burgerschap [Renewed democratic governance—A plea for active citizenship]. *Socialisme & Democratie, 61*(1/2), 14-21.

Hajer, M., & Wagenaar, H. (2003). Introduction. In M. Hajer & H. Wagenaar (Eds.), *Deliberative policy analysis: Understanding governance in the network society* (pp. 1-33). Cambridge, UK: Cambridge University Press.

Hartman, I. (2000). *Democratie van de grote bekken* [A democracy of loudmouths]. Amsterdam: Instituut voor Publiek en Politiek.

Healy, P. (1997). *Collaborative planning: Shaping places in fragmented societies*. London: Macmillan.

Heijden, J. v. d. (2006). *Bestuur door de burger, bestuurskunde voor de burger* [Governance by citizens, public administration for citizens]. Unpublished manuscript.

Held, D. (1996). *Models of democracy* (2nd ed.). Cambridge, UK: Polity.

Holland, J. H. (1998). *Emergence: From chaos to order*. Oxford, UK: Oxford University Press.

Innes, J. E., & Booher, D. E. (2003). Collaborative policymaking: Governance through dialogue. In M. Hajer & H. Wagenaar (Eds.), *Deliberative policy analysis: Understanding governance in the network society*. Cambridge, MA: Cambridge University Press.

Kagan, R. A. (1978). *Regulatory justice: Implementing a wage-price freeze*. New York: Russell Sage.

Kauffman, S. (1995). *At home in the universe: The search for laws of self-organization and complexity*. London: Viking.

Klausen, J. E., & Sweeting, D. (2003). *Legitimacy, citizen participation, and community involvement in governance*. Unpublished manuscript.

Lasswell, H. D. (1951). The policy orientation. In D. Lerner & H. D. Lasswell (Eds.), *The policy sciences: Recent developments in scope and method* (pp. 3-15). Stanford, CA: Stanford University Press.

Latour, B. (2003). Is re-modernization occurring—And if so, how to prove it? A commentary on Ulrich Beck. *Theory, Culture & Society, 20*(2), 35-48.

Latten, J. J. (2005). *Zwanger van segregatie. Een Toekomst van sociale en ruimtelijke segregatie?* [Pregnant of segregation. A future of social and spatial segregation?]. Amsterdam: Amsterdam University Press.

Lindblom, C. E. (1977). *Politics and markets: The world's political-economic systems*. New York: Basic Books.

Lipsky, M. (1980). *Street-level bureaucracy: Dilemmas of the individual in public services*. New York: Russell Sage.

Manin, B. (1997). *The principles of representative government*. Cambridge, UK: Cambridge University Press.

Mouffe, C. (2000). *The democratic paradox*. London: Verso.

Pierre, J., & Peters, B. G. (2000). *Governance, politics and the state*. New York: St. Martin's.

Reijndorp, A. (2004). *Stadswijk. Stedenbouw en dagelijks leven* [Urban neighborhoods, city planning and everyday life]. Rotterdam, Netherlands: NAi Uitgevers.

Rhodes, R. A. W. (1996). The new governance: Governing without government. *Political Studies, 44*, 652-667.

Rittel, H. W., & Webber, M., M. (1973). Dilemmas in a general theory of planning. *Policy Sciences, 4*, 155-169.

Sabel, C., Fung, A., & Karkkainen, B. (2001). Beyond backyard environmentalism. *Boston Review*, *24*, 4-11.

Sanders, L. M. (1997). Against deliberation. *Political Theory, 25*(3), 347-376.

Self, P. (1993). *Government by the market? The politics of public choice*. London: Macmillan.

Stokkom, B. v. (2003). Deliberatie zonder democratie? Ongelijkheid en gezag in interactive beleidsvorming [Deliberation without democracy? Inequality and authority in interactive policy making]. *Beleid en Maatschappij, 30*(3), 153-165.

Strauss, A. L. (1993). *Continual permutations of action*. Hawthorne, NY: Aldine de Gruyter.

Suchman, L. A. (1987). *Plans and situated actions: The problem of human-machine communication*. Cambridge, UK: Cambridge University Press.

Torgerson, D. (2003). Democracy through policy discourse. In M. Hajer & H. Wagenaar (Eds.), *Deliberative policy analysis: Understanding governance in the network society*. Cambridge, UK: Cambridge University Press.

Uitermark, J. (2003). Beheersing door verweving. De sociale controle van Europese acherstandswijken [Control by mixing. The social control of disadvantaged neighborhoods in Europe]. *Ruimte en Planning, 23*(3), 177-196.

Urry, J. (2003). *Global complexity*. Cambridge, UK: Polity.

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Wagenaar, H. (1995). Het onbedoelde gebruik van beleid [The unintended use of public policy]. In L. Aarts, P. de Jong, R. van der Veen, & H. Wagenaar (Eds.), *Het bedrijf van de verzorgingsstaat. Naar nieuwe verhoudingen tussen staat, markt en burger* (pp. 234-260). Amsterdam: Boom.
Wagenaar, H. (1997a). Beleid als fictie: Over de rol van verhalen in de bestuurlijke praktijk [Policy as fiction: On the role of narrative in public policy]. *Beleid & Maatschappij, 24*(1), 7-21.
Wagenaar, H. (1997b). Verhalen in de beleidspraktijk [Narrative in policy practices]. *Beleid & Maatschappij, 24*(1), 2-7.
Wagenaar, H. (2005). *Stadswijken, complexiteit en burgerbestuur* [Urban neighborhoods, complexity and citizen participation]. den Haag, Netherlands: XPIN.
Wagenaar, H., & Cook, S. D. N. (2003). Understanding policy practices: Action, dialectic and deliberation in policy analysis. In M. Hajer & H. Wagenaar (Eds.), *Deliberative policy analysis: Understanding governance in the network society* (139-171). Cambridge, UK: Cambridge University Press.
Waldrop, M. M. (1992). *Complexity: The emerging science at the edge of order and chaos*. New York: Simon & Schuster.
Warren, M. (1992). Democratic theory and self-transformation. *American Political Science Review, 86*(1), 8-23.
Wildavsky, A. (1979). *Speaking truth to power: The art and craft of policy analysis*. Boston: Little, Brown.
Wilson, W. J. (1978). *The declining significance of race*. Chicago: University of Chicago Press.

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