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Organisational change and knowledge management in urban regeneration planning

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Abstract

Place-based urban policy interventions have added new and innovative solutions to increasingly complex and intertwined economic, social, and physical planning problems in urban locations. Whereas these approaches in the first place were initiated top-down, they eventually result in the cultivation and production of new local knowledge of planning needs and on-site experiences with implementation of planning. Thereby, new knowledge is brought into the open, and it confronts existing local government planning as well as the traditional bureaucracy's division of labour between specialised sections. Thus, long-term, sustainable implementation of innovative models of municipal public service provision is paradoxically often hindered by organisational inertia, inflexibility and lack of organisational dynamics in the local government organisation itself. Theories of organisational learning and knowledge management are normally used to analyse potentialities for agile organising in commercial organisations but, as shown in this paper, they can also shed new light on the challenges confronting local government.

Keywords

Urban planning, urban regeneration, complexity, organisational learning, knowledge management

Introduction - Growing social complexity and urban policy innovation

Throughout the late 1980s and 1990s it became evident in a number of European countries that local governments often had failed in solving everyday problems in many urban neighbourhoods. Frequently expressed explanations to this were insufficient policy implementation, growing ethnic and social problems, local rivalry between groups of citizens, and conflicts between citizens and local government. Generally, policy response seemed inadequate in response to a new complex ethnic, social and spatial reality in Europe's inner cities following post-Fordism economic restructuring and growing international integration. From the early 1990s and onwards a common reaction from central government public planners and decision-makers across Europe was the initiation of place-based and integrated urban neighbourhood regeneration programmes. Examples of these are the Single Regeneration Budget and New Deal for Communities in the UK, Urban Partnerships and Priority Partnership Areas in Scotland, the German Soziale Stadt, the Dutch Grote-Stedenbeleid and Urban Programmes, the Sociaal Impulsfond in Belgium, Politique de la Ville in France, and the Swedish Storstadssattsningen (De Decker, Vranken, Beaumont and

Nieuwenhuyze 2003; Groth-Hansen 1998). In Denmark followed in 1997 the integrated neighbourhood programme Kvarterløft I succeeded by Kvarterløft II in 2003. These are all spatially-focussed programmes targeted, at a neighbourhood of limited extent and operating an integrated approach across a time span of 3-10 years. They emerged as a response to a combination of a bottom-up demand from residents in troubled neighbourhoods and local governments asking central government for help combating overwhelming ethnic and social problems and physical decay. Programme design was generally based on the premise that when single sector policies fail, the appropriate answer must be multi-sector approaches. Moreover, when city government could not cope with the urban challenges at a general policy level, then targeted efforts in smaller, geographically limited parts of the city, so-called hot spots, was an alternative approach. Notably, the basic principles of programme design were in most cases designed at central government level and from there communicated downwards to municipal implementation at neighbourhood level. One of central government's more convincing arguments was the provision of ample central government subsidy to this new type of urban regeneration projects. Local governments were expected to involve community-based organisations and individuals and groups of residents to participate in planning and implementation of neighbourhood regeneration activities.

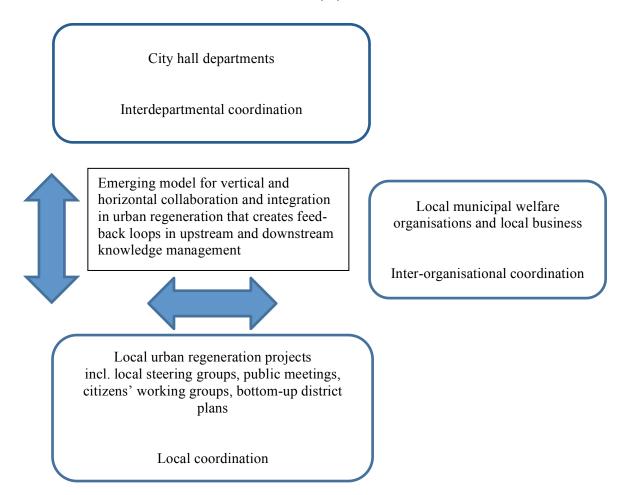
Outcomes of innovative place-based approaches

Place-based urban regeneration policies and practices have been implemented across deprived urban neighbourhoods in European cities for more than two decades now. In some places with success in others with more limited effect. In Denmark integrated and place-based initiatives were intensely promoted by central government since mid-1990s and outcomes have been analysed and evaluated in several studies. These include all-embracing studies of two generations of the Kvarterloft programme (Larsen et. al. 2003; Andersen et. al. 2009), analysis of the efficacy of the Urban Renewal Act as regards area-based urban regeneration (Andersen et. al. 2002; Engberg et. al. 2008; Ærø et. al. 2008) and examinations of specific topics related to such programmes, for example citizen participation and exclusion (Agger & Larsen 2009) and governance innovation (Engberg & Larsen 2010)., Results and effects of the different Danish programmes are generally assessed to be good although limited. Moreover effects are not always easily separated from economic and social macro-trends (Andersen et.al 2010; Larsen et.al 2003). Also, a divergence between aim and goal of programmes on the one hand, and actually implemented projects and activities, on the other hand, was found in a number of cases. This obviously had consequences for goal achievement (Andersen et.al. 2009). Nevertheless, it appears that there is a general consensus among involved professionals as well as local civil community actors that place-based initiatives in their approach do add significantly innovative elements to urban regeneration planning. Through innovative project approaches a richness of local urban knowledge of possibilities and needs is invoked and routed into local government administration. However, the inter-disciplinary and network-based nature of these programmes, and the knowledge that originate from them, simultaneously challenge the very organisation of local government administration to renew itself through innovation in internal processes (Engberg & Larsen 2010; Larsen et.al. 2003; Engberg et.al. 2000).

At the core of this challenge to local government organisation is lack of communication and knowledge-sharing between departments and teams, lack of co-ordination and collaboration across administrative boundaries, rivalry between departments, etc. These phenomena tend to overshadow otherwise constructive public service innovations and lock otherwise dynamic development processes in stalemate. Engberg et.al. (2008) showed that three out of four respondents from local government organisations found lack of collaboration and interdepartmental knowledge sharing to be crucially linked to poor performance of place-based initiatives. As such, the local government organisation itself, with its bureaucratic routines and rules, and strict hierarchical and departmental division of labour, hampers the sustainable embedding of the new knowledge generated from the place-based strategy that activates local urban communities. In this knowledge lies the potential for continuously improved urban regeneration planning. If the potential is not fulfilled the municipal organisation risks remaining in bureaucratic path dependency and knowledge acquired in place-based initiatives remains ad hoc. It is the aim in this paper to explore and discuss how organisational learning theory and knowledge management can shed light on the situation of municipal urban planning trapped between organisational inertia and new knowledge mushrooming from innovative experimenting and extensive collaboration with citizens and other private actors.

The context: A new complexity challenging the knowledge of the planning system

Denmark has developed a planning tradition that combines a top-down governed spatial planning system (national, municipal and local plans) with citizens' consultation and project-oriented and network-based urban development and urban regeneration programmes. Further, in the legislative framework (The Urban Renewal Act) that regulates urban and housing regeneration at the local level, it is emphasised that it is a goal to enhance mobilisation and integration of nonpublic sector parties in programme development and implementation. Non-public groups include local private market-based actors, non-governmental organisations, civil community-based groups and individuals. To expedite a closer public-private relationship in urban planning and regeneration programmes, local governments need to develop new organisational knowledge and capability, for example as regards new ways of collaborating with groups and individuals with no previous knowledge of urban planning processes. In many ways this is an entirely new field, where knowledge of traditional systemic planning does not suffice. Typically, the new modes of publicprivate co-operation are characterised by an ambivalent combination of practical complexity and potential synergy. Frameworks of the new modes are unclear or unknown, it is not clear how costs and benefits are shared and with whom. Interactions with citizens and users of new services in the planning field give rise to complex negotiations and troublesome collaboration in hitherto unfamiliar constellations. Specific activities and projects influencing the daily life of individual shop owners or residents need to be embedded in overall plans and strategies in order to ensure future sustainability of activities. In addition to taking into account needs and wishes local residents and businesses, it is necessary to coordinate with public and private welfare service providers, investors and developers. This is all very time consuming and demanding and outcomes are difficult to direct and anticipate due to often very high numbers of process participants and because many and sometimes conflicting issues and viewpoints are presented. All this is quite different from traditional, linear planning procedures where public authority provides a planning framework based on endogenous knowledge and ideas, and private actors fill out the framework subsequently. Traditional planning is based on an inside-out logic where municipal planners almost per definition are experts. In integrated place-based urban policy programmes and projects momentum often has exogenous origin, and the municipal organisation does not necessarily possess the needed knowledge ex ante. The municipal organisation has to adapt to changing conditions in its environment and develop new and adequate services accordingly. It is challenged much the same way a market-based organisation is continuously forced to react to changes in its market, however rather than coordinated through competition the municipal organisation operates other forms of coordination (see figure). The role of organisational learning in this coordination is discussed in the second half of the paper.



A national place-based integrated urban regeneration programme typically consists of several projects each of which embraces dozens or perhaps hundreds of micro-projects, meetings, conferences and all sorts of activities. The bottom-up flow of information and knowledge from this extended knowledge base is almost endless and contains all sorts of useful – and less useful – information about citizens' needs and wishes for finance, resources and services related to public transport, meeting places, employment, safety, culture, jobs, etc. Potentially, it contributes greatly to enrich the knowledge base of the local government organisation, provided there are many and facilitating connections among individuals, networks and departments in the organisation. If this is not the case the stream of information and knowledge into the municipal organisation risks ending in a cul-de-sac. Meanwhile another stream of information flows in the opposite direction top-down from central government through local government to local programmes and projects,

committees, citizen associations and individual households and residents in the neighbourhood. It includes information on the rules of the game, resource allocation, and higher-level policies that determine the overall frames and requests that specified rules are abided by and controlled.

Therefore, neighbourhood regeneration programmes and projects are from the beginning embedded in, and contribute to, a hugely complex environment. The complexity is partly due to the huge number of actors, but even more caused by the tremendous number of interactions across and in between organisations as well as between internal sub-organisational entities. This obviously presents an enormous challenge to the planning and implementation of urban regeneration as well as urban planning and policy generally. In the next section we examine in some detail the nature of this challenge.

Complexity and management control

Basically, there is nothing new in the fact that public planning and urban regeneration organisations need to be permanently developed in order to be able to cope with ever changing economic, social, and physical conditions in contemporary cities. Klosterman (1985) points out, that an objective evaluation of many decades' experience with town and country planning would have to recognize the tremendous gap between planning's potential and its performance. At the outset, the legitimacy of public intervention in urban development comes from a general acceptance that market forces do not by themselves provide certain services and do not resolve distributional issues in a socially acceptable manner. Practical experience rather shows a practice characterised by avoidance of political controversy and routine administration of overly rigid and conservative regulation. Since Klosterman's analysis we have witnessed many changes in the challenges that confront urban planning and urban regeneration as well as new ways of tackling these issues in collaboration with private actors, both community partners and market-based partners. This includes more general administrative models such as new public management as well as more network-type governance models. Yet Klosterman's description of a routine administration of rigid and conservative regulation is still valid. It is often seen that the complexity of the environment often goes beyond the capabilities of individual organisations and forces organisations to cooperate with other organisations and firms to reduce inherent uncertainties associated with novel activity areas (Vanhaverbeeke and Cloodt, 2007). For complex organisations in complex environments to benefit from a 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' (Wagenaar 2007:43). Why is it that the municipal urban policy administration and organisation does not learn, the same way as do commercial organisations when significant changes occur in the organisations immediate environment?

Wagenaar (2007) suggests that system complexity is better dealt with in participatory, deliberative democracy governance models compared to representative arrangements because it increases system diversity and system interaction. Increased diversity and interaction contribute to "a flow of knowledge through the system so that the actors in the system are enabled to produce, appreciate and select productive intervention strategies and arrive at coordination of problem solving and decision-making." (Wagenaar 2007:29). Reality seems to contradict this point quite consequently. Whereas Wagenaar (2007) explores the relationship between complexity and

democratic participation, the focus of this paper is on the relationship between complexity and the flow of experimental knowledge in the governance system. We accept that complexity is increased and place-based and participatory governance arrangements contribute to diversity and interaction and consequently should be expected to enable actors to coordinate and improve problem solving and decision-making. Nevertheless, it seems that despite 10-20 years of experimentation with new policy instruments and governance models such as the Danish Kvarterloft-programmes the municipal planning organisation is left pretty much unchanged. Wagenaar suggests that the system has to be 'at the edge of chaos'.

'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.' (Wagenaar 2007:44)

While this may be an accurate description of the conditions for effective citizen-government collaboration, the situation inside the local government organisation may very well be that too many actors, especially in the group of middle managers, may not want to balance at the edge of chaos because it diminishes their control of the system. The existence of a hierarchy of control with information flowing from the bottom up as well as from the top down - does not by itself enable organisation-wide learning, development of needed new capabilities or prevent stagnation as an outcome of the dominance of organisational inertia, strict management control and hierarchical operational practice. The sources to organisational inertia and continued exercise of top-down control systems may be many. Incentives to maintain an existing structure rather than giving in to bottom-up and outside-in impulses for change are almost always related to individuals' position, privileges and benefits. These may relate to personal status and power, but more often than not there is a systemic dimension. The very logic of local government administration and planning is that it can be held publicly accountable by means of the municipal representative political system based upon general elections every four years. Moreover, planning decisions (and all other decisions) need to be rooted justifiable from general principles rather than specific contextual circumstances or interests. This requires transparency, rules and procedures and individual staff members' career depend on whether rules and procedures are kept or not. When it comes to informal networking with external partners from outside the municipal administration or partners from other sections of the administration, as is often the case in integrates, placebased projects, this is generally considered legitimate and is often encouraged. However, the closer it comes to a formalisation of external, collaborative linkages with for example local community-based organisations, a local business community or groups of residents, the trickier it becomes because the principle of universality cannot be maintained. In other words, it may look like bad planning or administration, which in turn may make the planner concerned look like a bad planner. This gives rise to uncertainty, which makes administrators pull back to safe procedures. Obviously, this is detrimental to new networking and the integration of new knowledge and innovative thinking.

One of the central arguments for the development of integrated, place-based strategies was, in the first place, increased complexity, i.e. a multitude of socio-economic challenges in vulnerable contemporary urban neighbourhoods. These challenge economic growth, welfare of the population, stability and safety. Complexity also refers to the fact that there are limits to

government in the sense that it is increasingly difficult for public authorities and public institutions to deliver the services they are expected to and traditionally did. Moreover, for some groups of citizens this is viewed also as a lack of democratic legitimacy. Also, economic restructuring that gained speed from the end of the 1980s contributes to economic stagnation as well as an increase in the rate of economic and demographic change and turbulence in urban communities. Besides addressing the new challenges, the place-based urban regeneration programmes were often allegedly linked to policy reform where more democratic governance substituted traditional topdown planning, and concepts such as democratisation and empowerment were associated with the need for change. What we witness now, after 10-20 years of place-based initiatives, is that there have been added further dimensions to the complexity that confronts urban policy makers and local government organisations. An important consequence of the new turn in urban policy is an increase in the flow of information and knowledge to the urban planners. Hitherto, the most common movement was a flow of information from local government planners to the community. The traditionally hierarchic-instrumental organisation of local government administrators is not well-suited to cope with this new bottom-up or outside-in influx of insights, knowledge, viewpoints and information from the city's local neighbourhoods. Confronted with this

'... senior managers ... must give up their monopoly on strategy making. Strategy has to be informed by insights that percolate from the bottom up, from the outside in. Traditional strategic planning tends to be little more than a calendar-driven ritual in which deeply held assumptions and industry conventions are reinforced rather than challenged. Managers must learn to embrace a process that will give voice to the renegades that exists in every company.' (Brown 1997)

In some Danish local governments politicians and senior managers have managed to collaborate across sector divides in planning urban regeneration at strategic level, for example in the city of .Copenhagen (Engberg & Larsen 2010). While this obviously is a major step forward, it still requires more openness to accept that new knowledge percolate into the municipal organisation from down-up and outside-in. This is where Brown's organisational renegades may have a role in bringing in new stimuli from frontline staff members and external partners, even when they inconveniently contradict senior managers' strategy-making. In spite of the organisation's rules renegades find new ways of connecting and interacting with new network partners inside and outside the organisation.

Organisational learning

The development of new practices as regards the reduction and prevention of physical and social decay in urban neighbourhoods is an innovation in public service delivery in the sense that it represents novelty as encountered by the individual citizen as well as the (public or publicly subsidised) service producer. It therefore implies both processing and creation of new knowledge. Whereas there are obvious and important differences between innovation in market based firms and innovation in public, local government organisations — not least as regards individual members' incentives to contribute to innovation — there are also fundamental similarities between the two. It has become common to talk of knowledge or learning of organisations and firms but it is crucial to recognize that the firm or the organisation as such does not learn or possess any knowledge. Firm knowledge is composed of knowledge sets controlled by individual agents in the organisation (Foss and Mahnke 2005). Consequently, issues such as the development, or innovation, of new public services in the context of urban regeneration fundamentally depend on

the motivation of individual employees and the interaction in-between both individuals and groups of employees. As mentioned before complexity is further raised by the fact that most of the services that come out of such development activities are produced in networks and alliances that transcends the boundaries of the organisation.

Typically, the process of creating new knowledge is risky, unpredictable, long-term, labour intensive, idiosyncratic and often requires substantial human capital investments. In organisational economics such characteristics are associated with what is often termed contract problems (Foss and Mahnke 2005). This means problems related to the motivation of employees and to the organisation's capturing of the benefits of the new knowledge produced by individuals in the course of the development of the innovation.

Since the organisation as such cannot know anything, the accumulation, development and retention of the organisation's knowledge require sharing of knowledge between individuals in the organisation. Although costs associated with internal knowledge sharing may be lower compared to the costs of sharing knowledge between individuals belonging to different organisations of a network, there are still costs associated with knowledge sharing anyway. These may encompass IT costs etc. as various forms of databases and IT-systems are often used as means to compile and store organisational knowledge. However this does not take into account that important knowledge may be context-specific, tacit and not be easily stored or retrieved. Moreover other, not less significant, costs include costs that are caused by bounded rationality of individuals, that is, their limited capacity (or motivation) to identify, absorb, process, and remember knowledge on behalf of the organisation (Foss and Mahnke 2005). In relation to place-based urban regeneration programs a major point, although often argued on the basis of a steering (governance) logic or management raison d'être, is that delegation of decision rights (to decentralised neighbourhood administrations and committees) offers more efficiency in service provision to deprived communities compared to traditional hierarchical-instrumental operations. Paradoxically it should be expected that decentralisation increase coordination costs, but in practice decentralisation of service production is necessitated by excessive costs related to traditional hierarchicalinstrumental top-down control with service production even in the smallest and most distant local government office. In the short run there may well be lower costs, but in the long run these benefits are counteracted by impeded or missing organisational learning. The organisation may learn to implement a new service provision model once, but it does not learn how to learn from it, to perform so-called double-loop learning (Argyris and Schön 1996).

Put differently the trade-off is between exploration of new possibilities and exploitation of existing options, or as March formulates it, the challenge is to strike the balance between exploring new possibilities and exploiting old certainties. What happens if an organisation engages in exploitation to the exclusion of exploration is that it is likely to be trapped in suboptimal stale equilibrium (March 1991). It seems that the local government organisation readily adopted the new approach to service delivery in troubled and deprived urban neighbourhoods, but somehow failed to take advantage of this 'product innovation' to adjust and adapt its own organisation to a changed environment. Consequently, the innovative service solution works only ad hoc and there will not be any new generations of ever more innovative public service solutions. Obviously, alterations in the local government organisation may entail unfavourable changes for some members of the

organisation when traditional privileges and power bases are replaced by new roles in the organisation. This in itself may effectively block any changes. But there may other explanations to the persistent stability and animosity towards change in the local government organisation as well. It is not only in the extended urban regeneration network that knowledge is distributed on many agents. Even within the local government organisation itself, knowledge is distributed and this may cause discrepancy between the management's knowledge and the distributed knowledge of the organisation's individual members and communities of individuals.

The organisation as a distributed knowledge system

The knowledge of an organisation is distributed in the sense that it is emergent, it is not possessed by a single agent, it partly originates outside the organisation, and it is never complete at any point. The resources an organisation possesses and makes use of are not important as such. It is the services extracted from those resources that are important. 'The services depend on how resources are viewed, which is a function of the knowledge applied to them. The carriers of such knowledge are a firm's routines and, from the point of view of how novelty emerges, a firm's members' (Tsoukas 1996:21). The organisation as such, or one single mind, cannot know this knowledge in its totality. A firm's knowledge is distributed "in the sense that it is inherently indeterminate: nobody knows in advance what that knowledge is or need to be. Firms are faced with radical uncertainty: they do not, they cannot, know what they need to know ...they lack the equivalent of a control room' (Tsoukas 1996:22). Choo (1998) characterises the knowing organisation as an organisation based on (1) its members' sense-making in which environmental change is subject to interpretation, construction of meaning and retention of knowledge, (2) new knowledge creation that takes place and forms the basis for the organisation's continuous development of its capabilities and (3) decision-making that takes place based on rules and routines accepted by its bounded rational members. A very similar view is associated with the communities of practice concept, which views organisations as composed of a number of communities of practice that learn, share and develop knowledge. One of the strengths of such communities is their ability to process tacit knowledge that otherwise is impossible for managers, knowledge management systems and organisations to get hold of (Wenger 1998, Duguid 2005). Nonaka and Takeutchi (1995) apply a much more instrumental view of (tacit) knowledge. They posit that tacit knowledge can be converted or translated into explicit knowledge. This is, however, a misunderstanding of Polanyi's original argument about tacit knowledge. The very point is that tacit knowledge cannot be operationalized thereby giving rise to new explicit knowledge. That is not how new knowledge is created. New knowledge is created through social interaction, fresh forms of interacting and novel ways of distinguishing and connecting (Tsoukas 2005). If organisations should become learning organisations, this is what should be facilitated (by management).

For management the challenge is to permanently encourage creative human action and in the same time co-ordinate the individuals of the organisation. Management of knowledge production is about management of people, not management of assets or resources. This has two dimensions, (1) an intra-organisational and (2) an inter-organisational. As regards the internal side of things Tsoukas found that management of people "does not so much depend on those 'higher-up' collecting more and more knowledge, as on those 'lower-down' finding more and more ways of getting connected and interrelating the knowledge each one has (....) sustaining a discursive

practice is just as important as finding ways of integrating distributed knowledge" (Tsoukas 1996:22). However, this entails a certain element of unpredictability and instability and most senior managers experience this as anxiety provoking and stressful. The logic of networks and networks as mode of operation becomes more important in local government service production, because they constitute a source of relevant knowledge input in the complex collaborative planning process. But simultaneously, it accentuate the organisational frustrations deriving from the uncertainty that is caused by increasing number of actors and interactions, escalating amounts of information and growing complexity (Engberg & Larsen 2010). Whereas such frustrations affect both senior managers and middle managers seriously, frontline and service production personnel may experience new openings, opportunities and innovations. There is a gap between the hierarchic command-and-control structure in local government bureaucracy and the organisational prerequisites necessary to facilitate the horizontal relations of co-operation in relation to specific programme and project activities is strongly influenced by conditions for organisational learning and knowledge management.

When municipal frontline professionals commit themselves in collaborative arrangements with external network partners, they gradually insert and embody new knowledge within the framework of the bureaucratic organisation. If this new knowledge becomes established as acknowledged knowledge, the hierarchy's bureaucratic policy and strategy-making is beginning to be influenced – and challenged – bottom-up. This entails committing political and administrative leaders to the issue, forming working alliances with committed colleagues in other departments, negotiating with and handling external parties who lobby without knowing the system from within. Project leaders will work continuously to secure progress and quality in service and programme development. This corresponds very much to Brown's (1997) notion of organisational renegades. Further, if the network process results in a real organisational footprint, it is likely to clash with existing organisational priorities, routines, rules and modes of operation, especially the bureaucratic division in departments resulting, at best, in coordination problems and in worst case in loss of new knowledge, conflict and dismantling of innovative achievements when senior management regains control and stops freely unfolding creativity and experimenting.

The inter-organisational dimension of knowledge management regards the relation between the municipal organisation and its counterpart s in the external networks. In integrated, place-based urban regeneration external counterparts include all sorts of non-public organisations and actors in the neighbourhood: individual business, families and residents (also called citizens and sometimes users), non-governmental organisations, ad hoc community-based associations, etc. Almost all of these civil society or market-based actors were there in the neighbourhood long time before the city started to think about planning urban regeneration activities. Equally importantly, these actors will also be there after the termination of the municipal regeneration project. City managements' ability to engage in reciprocal and trust-based relationships to these actors is decisive for the institutional sustainability and economic viability of the urban regeneration effort. Such long-term collaboration will be greatly facilitated if the management of the municipal administration acknowledges the crucial value of bottom-up knowledge ex ante as well as after the public actors have exited the neighbourhood.

Conclusion

In 1980s and 1990s the emergence of a new social, economic, ethnic and physical reality in many Danish inner-city neighbourhoods forced urban policy makers in local government to urgently develop new instruments in order to prevent accelerating urban decay and deprivation. Local politicians were encouraged to develop new policy instruments by relatively abundant central government subsidy in combination with a new urban regeneration policy framework. The new integrated, place-based approach developed through 1990s and 2000s deviated significantly from earlier instruments used in urban planning and regeneration. Therefore, the integrated approach generates a range of new issues to be dealt with by municipal planning organisations, and this challenges existing organisational knowledge. An increased amount of knowledge generated from a multiplicity of new external partners necessitates organisational agility. It is often more demanding to cope with emerging new knowledge needs, and to tackle permanent changeability of the organisation's environment, than what a top-down managed traditional hierarchically controlled professional municipal bureaucracy is capable of handling.

When knowledge creation and the organisation's continuous development of its capabilities is mainly induced top-down, taking its outset in top and middle management's strategies, probability of sustainable success is often curbed. In the case of place-based urban regeneration the initial strategy was framed top-down, communicated from central government level through municipal urban planning and further down through local steering committees and finally implemented in project strategies in each of the targeted single neighbourhoods. Participation of citizens and local business in the neighbourhood and in the single project activates bottom-up visions and abundant local knowledge. In this way large quantities of knowledge and new ideas were presented to teams and individual planners in the municipal organisation. However, in the organisation knowledge management is performed according to rules and routines grown in management's own garden. Knowledge and information in the professional bureaucracy is produced for the purpose of keeping management informed about goal achievement. This is how professional municipal administrators feel they best ensure politicians accountability towards their constituency. From this view abundance of incoming local knowledge from the city's neighbourhoods is at best interpreted as a disturbance.

Oppositely, the main contribution of knowledge management and theory on learning organisations is to view input from external networks, new knowledge and challenges as an opportunity to develop and improve the organisation's practices and routines, in other words to innovate. This requires the facilitation of feedback loops and organisational learning in communities of practice of limited size. In an agile, learning organisation it is acknowledged by top management as well as middle-managers that, what the organisation knows is basically what its members know individually and, to a degree, in teams. If the individual members of an organisation are allowed to perform sense-making in which environmental change is interpreted, meaning constructed and knowledge retained, it is possible to adjust and adapt planning practices to changing circumstances and new exogenous impulses. This requires that management acknowledge that there is no such thing as a control room from which all knowledge of the organisation can be controlled or known. For the municipal organisation to develop its capability to make use of new knowledge and the momentum created by integrated, place-based urban activities, it needs to implement some of the characteristics of a learning organisation. This

includes accepting that the organisation develops features of an adhocracy, which, with its highly organic structure and little formalisation, relies on mutual adjustment as the key coordinating mechanism within and between project teams. Adhocracy-like organisations allow their members space for reflexivity and responsiveness towards new impulses from exogenous network partners. Sustainable innovation in urban regeneration planning and policy requires inclusion and acceptance of contextual and situated knowledge. This is best achieved through trust-based and respectful collaboration with external partners be it private businesses, local citizens or voluntary associations. When the targeted and time-limited public project is over, future sustainability depends on these actors. Awareness of this fact still remains to penetrate many city administrations.

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