

We are IntechOpen, the world's leading publisher of Open Access books Built by scientists, for scientists

4,700

Open access books available

121,000

International authors and editors

135M

Downloads

Our authors are among the

154

Countries delivered to

TOP 1%

most cited scientists

12.2%

Contributors from top 500 universities



WEB OF SCIENCE™

Selection of our books indexed in the Book Citation Index
in Web of Science™ Core Collection (BKCI)

Interested in publishing with us?
Contact book.department@intechopen.com

Numbers displayed above are based on latest data collected.
For more information visit www.intechopen.com



Collaboration: Long-Term Partnerships for Local Development¹

Elisabeth Schauppenlehner-Kloyber

Additional information is available at the end of the chapter

<http://dx.doi.org/10.5772/intechopen.70650>

Abstract

Collaboration, as a process of social learning, facilitates the integration of different perspectives, forms of knowledge, and approaches to encounter multifaceted issues, such as climate change, energy transition, globalization, etc. Thus, political decision-makers increasingly involve a broad variety of actors in order to improve the efficacy and legitimacy of solutions. Also, for local development, the participation of citizens in processes of decision-making or planning has widely turned into common practice, but often does not reach beyond brief “on-off” involvement of citizens into government controlled activities. As the ability of local actors to interact and collaborate in a continuing social learning process is seen as a prerequisite for sustainability and resilience, obtaining knowledge on how governments and citizens may collaborate and work together successfully in the long run is of high relevance. This chapter follows the question on how to develop flexible, but reliable, local collaboration structures. Therefore, it moves beyond Sherry Arnstein’s theory of participation, and introduces Elinor Ostrom’s design principles for the management of the commons as valuable reference points. It concludes that acknowledging time-consuming group processes, the joint development of common goals, structures, and collaboration rules as well as flexibility and openness towards adaptive processes are prerequisites for long-term oriented collaboration.

Keywords: collaboration, local development, participation, social learning, co-management

1. Introduction

Collaboration is often referred to as a twenty-first-century trend and concurrently as the key to sustainability and resilience building [1–4]. Indeed, we can observe a notable global trend towards the formation of alliances and partnerships in order to develop sustainable solutions

¹ The chapter presents parts of the author’s PhD-thesis as submitted in May 2017.

for everyday real-world problems [4–8]. One may not only think of initiatives such as food cooperatives, urban gardening, energy collectives, or crowdfunding initiatives but also of partnerships between governments and non-state actors for the purpose of joint policy- and decision-making.

The growing need in society to think and work together derives from an increasing complexity of current challenges, such as climate change, energy transition, globalization, or other multifaceted issues and the resulting need to integrate a broad variety of actors, knowledge bases, and perspectives. Collaboration is expected to increase the substantive quality and legitimacy of solutions and decisions to mitigate conflicts among competing interests, to value lay knowledge and expert knowledge equally well, to build trust in institutions or to educate and inform the public [9, 10]. Thus, even local decision-makers are challenged to develop new forms of collaboration with their citizens, as processes of collective learning, planning, and decision-making are widely seen as key components towards viable, liveable communities, and cities as well as for sustainable development at large [11, 12].

But one might say this is nothing new, and indeed, citizen involvement in issues of community development has already turned into common practice. However, in the last years, we can notice a trend away from more occasional forms of *citizen participation* (case-related “on-off”-participation) towards long-term oriented processes of *collaboration* (local co-management). An increasing number of communities and cities are searching for alternative approaches to integrate their citizens into reliable and future-oriented partnerships, in order to develop common future visions, development goals, and implementation strategies, and to jointly bring concepts into life.

This trend raises the following questions: How can collaboration agreements be designed—in contrast to long-experienced case-related forms of citizen participation? And which structures, processes, regulations, incentive systems, etc. are necessary to allow meaningful collaboration in the long run?

Based on a comprehensive literature review, this chapter briefly discusses limitations of “more traditional,” case-related forms of citizen participation and in contrast reflects on the characteristics of collaboration and the requirements of meaningful long-term collaboration (moving beyond “on-off”-participation). It follows the question on how to develop flexible, but reliable, local collaboration structures, and therefore relates to Elinor Ostrom’s design principles for the management of the commons as valuable reference points. Finally, it presents empirical insights from the city of Korneuburg (Austria), in order to illustrate one possible solution pathway for long-term collaboration among actors at the local level.

2. Of ventures and marriages: participation and collaboration in local development

In order to provide a better understanding of the issue at hand, we first take a closer look at the terminology. What does the term collaboration exactly mean? And what is the difference to what we recognize as participation? To cut a long story short, there is no single definition or

consistent use of the term collaboration, neither in our everyday language nor in the scientific discourse [13, 14]. It is derived from the Latin word *collaborare*, that is, to labor (work) together and it is often used interchangeably with cooperation. Yet, there is a considerable difference in meaning, as illustrated by the following metaphor: “*Dating is a cooperative venture, while marriage is a collaborative one*” [15]. This quote points at the different levels of commitment and involvement required for these interactive processes. Following this idea, cooperation may refer to a less closely intertwined, additive working process characterized by the division of labor and functions [16, 17], while collaboration requires participants to share the process of knowledge creation [18] and comprises the “*development of the mode of joint planning, joint implementation, and joint evaluation between individuals or organizations*” [15]. Collaboration involves different actors “*who use shared rules, norms, or organizational structures to act or make collective decisions*” [19] and who commit to a process of mutual learning [13].

In turn, the term participation stems from the Latin word *participare* (pars: part and capere: to take) and refers to the action or state of taking part in something, or to become involved into something. Citizen participation in particular allows for direct involvement of citizens in public decision-making. Participation may range not only from voting in elections but also to additional (non-mandatory) forms and tools, where again the actual depth of involvement may vary considerably (from mere information to consultation or even joint decision-making). Typically, these processes remain within the regimes of the public government and governmental actors hold a strong position, inviting citizens to assume a consulting role [20–22]. Broadly speaking, participation in this sense may rather be understood as a cooperative approach (clear division of tasks and accountability, hierarchical structures) than as a collaborative relationship.

These considerations based on etymology and simplified definitions of course only offer rather vague interpretations of the phenomena at hand. Thus, we will take a closer look on differences and meanings in the following.

2.1. Why a ladder is not an appropriate tool to break down hierarchies

As already indicated in Section 1, the participation of citizens in local decision-making has widely turned into common practice [23]. Thereby, site-specific participation cultures may differ considerably, as the respective situation, purpose, demands, and objectives of course vary from case to case. In some communities, eye-level partnerships and stable processes of co-management are already well implemented, while in others, participatory processes neither reach beyond the frequently cited fig leaf nor result in effective collaboration. This may inter alia be traced back to the fact, that processes mostly continue to be unilaterally controlled by governments and that traditional hierarchies remain [21, 22]. Citizens usually get only involved after the problems have been pre-defined by government representatives. Then they are invited to express their opinions, needs, and ideas, and finally may again be excluded once again from solution finding and decision-making at the end [21, 24]. This common practice contrasts not only with findings from theories on collaboration, group work, and social learning but also with participation literature itself, which emphasizes the importance of joint problem framing, early involvement, and partnership at eye-level (dissolving hierarchical

structures) [4, 25–27]. Furthermore, citizens themselves are usually not empowered to actively prompt and initiate their own participation [28].

The theoretical foundation of citizen participation builds on Arnstein's pioneering work from 1969. Her ladder of citizen participation [29] strongly influences the conceptualisation of participation as well as its implementation in practice to date [22, 26, 30]. With her metaphor—developed at a time, when governments slowly began to involve citizens—Arnstein pictured participation as the re-allocation of case-related decision-making power from government to citizens [22]. She illustrated “*the extent of citizens' power determining the end product*” as hierarchical rungs, ranging from levels of non-participation (manipulation and therapy) through levels of tokenism (informing, consultation, and placation) to levels of citizen power (partnership, delegated power, and citizen control) [29] (for a more comprehensive review on Arnstein's theory see for example [22, 26, 31]). Thus, the ladder as hierarchical metaphor measures the quality of citizen participation by the intensity of case-related participation—suggesting higher levels to be preferable to those on lower rungs [32–34]; but it lacks a process- and actor-oriented perspective by ignoring changing demands during the runtime of participatory processes or the complexity of social learning processes [9].

Yet, socio-political conditions and the relationship between citizens and governments are transforming [30, 35]. Arnstein's hierarchical conception of participation fails to capture the full complexity of the shift from a traditional government perspective (hierarchical and central steering, “top-down”) to governance (interactive policy-making, involving society on a common ground) and towards collaborative partnerships. In fact, given our present democratic system, local authorities still play the leading role in city or community management, but this does not necessarily mean, that it has to be the predominant one [30], and that hierarchies cannot be dismantled or flattened to some extent. Arnstein's focus on the allocation of power may even support an adversarial picture of participation, as a struggle between citizens trying to move up the ladder and the government [36], and may prohibit and exclude opportunities for trustful collaboration, meaningful learning processes, sharing of experience and knowledge, harnessing multiple perspectives and for shared decision-making [27, 36]. Thus, it seems worth to shift the focus from traditional hierarchies towards arenas of social learning on eye-level [31–33, 36].

2.2. Collaboration—entering an arena of shared creation and social learning

In contrast to hierarchical organized and additive working processes, collaboration describes an inseparable and synchronized process of co-construction and self-directed interactive processes of exchange (partners do the work together) [16]. It tends to solve a problem via divergent thinking, resulting in “*collective creativity*” [37] and it requires close relationships and connections [38]. Schrage [39] defines collaboration as “*the process of shared creation: two or more individuals with complementary skills interacting to create a shared understanding that none had previously possessed or could have come to on their own. Collaboration creates a shared meaning about a process, a product, or an event. In this sense, there is nothing routine about it. Something is there that wasn't there before.*” Collaboration aims “*to draw together partners with diverse relevant attributes*” [40] and thus harvests its benefits “*from differences in perspectives, knowledge and approaches, solving problems while at the same time offering benefits to all those involved in the process*” [4].

As a practice that uses collective creativity to process issues that are novel in nature, collaboration is inextricably linked with social learning [37, 41]. Social learning may change mental models and behaviors, allows to deal with new circumstances and thus is supposed to have wide transformative potential [42, 43]. It takes place through processes of knowledge sharing and deliberation, and fosters co-creation of knowledge and means, required to transform a situation, and therefore it leads to concerted collective action [26, 44]. It starts at an individual level, being the vital base for group, organizational, and social learning; whereby in a group the “combined intelligence in the team exceeds the sum of the intelligence of its individuals, and the team develops extraordinary capacities for collaborative action” [43]. Social learning processes, therefore, may lead to an increase of knowledge and a growing capacity to make use of the knowledge but also to “increasing ownership of solutions by different stakeholders, active, democratic and responsible citizenship, inclusive governance and self-governing capacities” [41]. **Figure 1** illustrates the role of social learning for changes on individual and collective level in order to support collaborative efforts for future. It becomes obvious that collaboration is much about trial-and-error processes and learning by doing; participants learn how to collaborate by collaborating [14].

These considerations emphasize the creative and innovative potential of collaboration with respect to processing problems that cannot be solved by means of well-known procedures and (expert) knowledge as they are novel in nature and involve and affect a broad variety of actors asking for creative solutions and new knowledge to be generated. This makes collaboration promising for complex sustainability issues and participatory approaches—from joint problem definition to joint planning, implementation, and evaluation [15].

2.3. Support and obstacles for meaningful collaboration on eye-level

Within collaborative settings, actors with different mindsets, experiences, knowledge bases, etc. come together, at best to share a common vision and to reach a common goal. Thus, it is a deeply human activity and quality, success or failure is directly shaped by the humans involved. Hence, long-term collaboration is no easy endeavor and the results often do not meet the expectations, as conflicts and obstacles hinder meaningful partnerships [2]. That is why

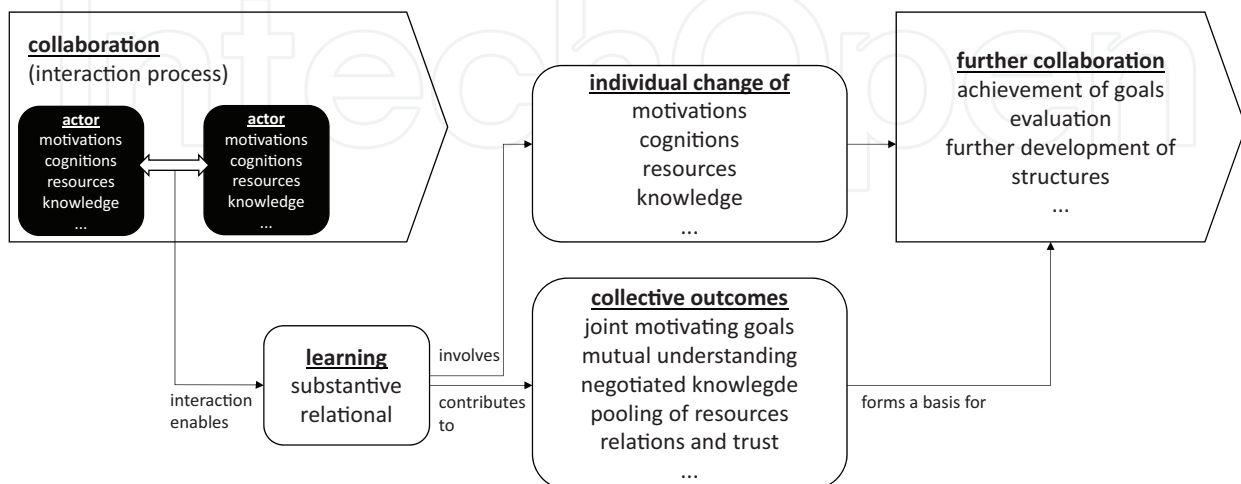


Figure 1. Relations among learning, individual, and collective outcomes in the context of collaboration (altered according to [44]).

obtaining knowledge on how people may learn and work together successfully and on how to design fruitful collaboration frameworks is of high relevance for local decision-makers [25].

In order to promote social learning and long-term collaboration, it is necessary to facilitate interactive settings, *“in which actors can share and reflect upon different perspectives, experiences, and types of knowledge”* [44]. Thus, the role of power relations and hierarchies is of particular importance [45]. Situations can be characterized as collaborative if there is a certain degree of symmetry in the interaction (symmetry of action, knowledge, and status), that is, *“peers are more or less at the same level, can perform the same actions, have a common goal and work together”* [46]. Related thereto, mutual respect, understanding, and trust, the clarity of roles within the group as well as open and frequent communication are of core relevance [47]. Furthermore, clarity of shared goals, a common vision, an appropriate cross-section of members (i.e., a representative variety of group members with regard to the community affected by activities) as well as the flexibility of the group to organize itself (and if necessary to vary its ways of organization) can be referred to as being crucial. Even previous history of collaboration, sufficient funds, and shared risks the support successful collaboration [47].

Of course, collaboration also faces many inherent difficulties which are directly related to personal and organizational capacities of the humans involved. On one hand, collaboration causes costs, more specifically coordination costs, which refer to the *“operational dependence between the activities of the different actors”* [4]; and on the other hand, information flow, bargaining (how to split gains and to deal with intangible gains and values) or free riding are challenging efforts. Furthermore, incompatible or conflicting needs and interests as well as latent conflicts may impede successful collaboration. A lack of trust between the actors involved, *“difficulties in relinquishing control, the complexity of a joint project, and differential ability to learn new skills”* can also be referred to as barriers to meaningful collaboration [48].

3. How to design reliable and long-lasting partnerships for local development?

Referring to the success factors and stumbling blocks of collaboration as briefly described in Section 2.3, conceptual thinking about participation according to Arnstein’s ladder hardly offers reference points for designing long-term partnerships for local development [26]. Accentuating traditional hierarchical structures and a focus on power allocation lacks a processual dimension where sufficient priority for underlying social learning processes, joint problem framing, or for time consuming trust building is missing. Moreover, it neglects citizens as active agents and hardly fulfills the preconditions for meaningful collaboration or inclusive involvement of all actors [9]. *“On-off”* public participation thus cannot be considered as urban co-management, which requires *“some institutionalized arrangement for intensive user participation in decision-making”* [49]. Thus, it seems necessary to learn from other fields of research, to gain insights into supportive structures for collaboration in local development.

For this purpose, Ostrom’s design principles for the sustainable management of the commons [50, 51] have proofed as valuable suggestions for the design of effective long-term

collaboration [22]. In order to find out how and why self-organized and collective management of shared natural resources (such as forests, pastures, or waterbodies) turns out to be successful in the long run, Ostrom carried out a profound analysis of a large number of case studies. Based on her findings, she identified eight design principles, which support robust, long-surviving institutions for collective resource management [51]. They explain, *“under what conditions trust and reciprocity can be built and maintained to sustain collective action”* [52]. These design principles are listed below [22, 51, 52], and possible concluding questions for collaboration agreements for local development are added in italics:

1. Well defined boundaries: social (community of users) und physical (spatial extension of the resource system) boundaries; *“Who is in and who is out? What is (not) part of the system (task) at hand?”*
2. Proportional equivalence between benefits and costs: congruence between costs incurred by users and benefits received by users via their participation in collective action; *“Are earnings worth efforts of collaboration? Is there a fair and balanced relation/distribution among actors?”*
3. Collective choice arrangement: individuals affected by operational rules can participate in defining and modifying the rules; *“Can participants really govern themselves? Are they empowered to define and alter their own collaboration rules?”*
4. Monitoring: compliance with regulations to facilitate rule enforcement and to understand the behavior of those who comply with the rules; *“How can the behaviour of group members, changing conditions of the system, effectiveness of rules etc. be monitored?”*
5. Graduated sanctions: for deterring participants from (excessive) violations of community rules; *“Are sanctions for non-compliant behaviour transparent and actually executed?”*
6. Conflict-resolution mechanisms: low-cost conflict resolution to resolve conflicts *“Is the collective able to solve developing conflicts? Are there fair conflict resolution mechanisms the group can draw on? “*
7. Minimal recognition of rights: the right of local users to make their own rules should be acknowledged by governments (or higher level authorities); *“Do governmental authorities acknowledge self-organization and rule setting power of the collective?”*
8. Nested organizations: governance activities are organized in multiple nested layers (more relevant for larger systems); *“Is there effective interlinking to the local government as the next higher level as well as to relevant higher levels (e.g., in terms of policies facilitating local development, funding agencies etc.)?”*

The relevance of establishing common sense rules and procedures (which is subject of several design principles from different perspectives), to make collaborative efforts successful in the long run, was already identified as a core success factor in Section 2.3 and is also highlighted by Imperial [14]: *“One way to make productive collaborative relationships endure is by institutionalizing them in a higher order set of rules or by creating new organizational structures.”* Collaborative efforts often have an evolutionary and emergent character, and starting point for their

institutionalization is repeated and frequent interaction which facilitates a common understanding, mutual learning and trust building and therefore allows for added benefits in contrast to “on-off”-participation, where actors usually are not included into more profound learning processes: “[...]When individuals or organizations interact frequently in a specific decision situation, the level of common understanding will be higher than when individuals participate sporadically on different issues. Thus, collaborative organizations ensure that interactions are repeated over long periods of time, which in turn promotes the development of strong social networks, cooperation, and, most important, trust” [14 referring to 53].

As also indicated by Ostrom, the attitude and openness of local authorities towards collaborative approaches, and the acknowledgement of rules and decisions made by the collective, play a central role in the success or failure of joint efforts. Local authorities can be seen as the “key entity in creating an atmosphere of collaborative action” in a community or city [30]. Half-hearted cooperation, insufficient transparency of decision paths or the omission of collective needs, rules or resolutions will inevitably lead to loss of trust or even distrust, discourage participants, and can sustainably damage the will to collaborate among all actors. Thus, cities and communities heading for close collaboration with their citizens should carefully weigh up in advance, if and to what extent they are willing to share responsibility and to enter an open-minded process of co-management. In some cases, the principle of “less is more” might be the better approach in order not to risk unfulfilled expectations and broken promises at the end.

Also, the question of how to dissolve or at least flatten traditional hierarchies may challenge local collaborative efforts. It might be feasible to facilitate an eye-level approach, almost free of hierarchies, within processes of negotiation and discussion; nevertheless formal decisions finally are made within the democratically legitimized political system. While this is the most legitimated, adequate, and proven procedure for the majority of tasks that are necessary to manage urban life, it contrasts with principles of learning processes on eye-level and co-developing solutions and may threaten trustful collaboration.

Besides the benefits associated with the institutionalization of collaborative efforts [14], the resultant stability also bears risks in terms of inflexibility or even gridlock, as “organizational processes that promote stability also make it difficult to adapt and respond to changing environmental conditions” [14]. This also refers to the question of membership (balancing between experienced members and new participants), in order not to end up as a freezing “exclusive circle.”

4. Practical implementation of collaboration for local development: the City of Korneuburg

The Austrian city of Korneuburg, with approximately 12,800 inhabitants, is one recent example for the institutionalization of collaborative structures for local development. In a multi-annual process, the city established a long-term oriented “urban advisory board” comprising governmental actors (from politics and administration) as well as citizens. The case affirms the emergent character of collaborative processes, as it evolved from what we could call a “traditional” and clearly delineated citizen participation project towards a written and implemented

long-term collaboration agreement among local government and citizens. The whole process was supported by an interdisciplinary team of scientists (from landscape planning, regional development, geography, architecture, spatial planning, also including the author of this chapter) and professional facilitators. For managing the process, a steering group was established comprising up to 42 local political and administrative actors as well as citizens. Additionally, all citizens of Korneuburg were invited to participate at several process steps. Finally, the city's endeavor was awarded with the Austrian Sustainability Award 2016 (ÖGUT Umweltpreis) in the category of participation and civic engagement and was honored as URBACT good practice city in 2017.²

It all began in 2011, when engaged citizens of Korneuburg convinced the local government to start a participatory process in order to formulate a common vision for the cities' future development. From the very beginning all actors involved were aware that the mere elaboration of a common vision for the city's future development will not be enough to undergo a meaningful urban transformation process and that specific implementation steps were needed to be defined. The mission statement, which was finalized in 2014 and unanimously adopted by the municipal council, comprises values and goals for urban development and specific development targets for nine core fields of action, that is, urban planning, mobility, social issues and health, environment and energy, communication and participation, diversity and culture, habitats and leisure, economy, as well as education and learning. Moreover, it set a clear focus on social cohesion and active citizenship as a guiding principle for the city's future.

In order to bring the visions of the mission statement to life, a master plan with almost 120 implementation measures for all 9 core fields of action was completed in 2016. One key element of the master plan is a charter for citizen participation, which entails rules, structures, and processes for long-term collaboration between citizens and the local government. Here, the urban government commits itself to a regulatory framework for long-term urban co-management with the citizens. As conditions (political, environmental, social, etc.) may change over time, the design of flexible and adaptive instruments for urban planning (a dynamic master plan document) seemed at least as important as learning structures and institutions, which allow for ongoing adaptation to changing frameworks. Thus, the charter of citizen participation aims at securing the commitment and structures for long-term collaboration, and also comprises mechanisms for monitoring and adoption. This is of specific importance as the process revealed that the trust in collaborative efforts, which is significantly shaping the success, depends on the actual persons involved, their individual characteristics, credibility, and engagement. Of course the rules set in the charter document cannot prevent changes in the collaborative attitude (e.g., as result of changing power structures after elections), but at least they may create a stronger commitment for urban co-management.

Centerpiece of the charter is the establishment of a steering committee (local advisory board) with a working period of 5 years (analogous to municipal elections) where citizens and municipal actors are equally represented (7 citizens among 14 members plus 2 substitute members each). It supervises the implementation of the measures according to the mission




² URBACT is a European exchange and learning program promoting sustainable urban development (<http://urbact.eu/>).

statement and the master plan, as well as quality and effectiveness of the long-term collaboration between citizens and the government itself. The commitment of the local council to an ongoing collaboration with this committee paves the way for future urban co-management.

Acknowledging frontiers, costs, and efforts for long-term oriented collaboration, the charter for citizen participation comprises both, structures and procedures for case-related citizen participation as well as the strategic collaboration within the committee (as shown in **Figure 2**). While participation in the committee requires membership for a certain period and asks for a high level of time commitment, willingness to collaborate, and certain openness to learning processes and innovation, low-threshold offers for citizen participation are also provided. Thus, engaged citizens can choose whether to get active for urban development in the long run or just to participate case-related on project level.

The process in the City of Korneuburg showed that what had started more or less as “traditional” citizen participation project has developed its own dynamics and thus has come up against borders of conventional participation projects. During the design of long-term co-management structures, especially the institutionalization of the advisory board, questions arose on the legitimacy and transparency of the committee (Who is in and out—membership criteria?) as well as on efforts and earnings (How can time resources be managed in a responsible way? Most of work by citizens is done voluntarily and unsalaried while representatives from the city administration or council members often complete tasks during their working time.). But even questions of how to formulate effective and useful collaboration rules challenged the process.

In the constitutional rules that define the citizen members of the steering committee, to date there is no consensus on a valid and viable procedure guaranteeing representativeness and increased legitimacy. Even coordination costs for all actors involved are quite high, which

duration and level of collaboration	committee	core tasks
continuous collaboration, no temporal restriction, membership for at least one legislative period (5 years) <i>Interface between local council and „LEBENSBEREICHS-Teams“</i>	steering committee „STEUERSTERN“* 	<ul style="list-style-type: none"> • strategic and steering function • coordination, monitoring/evaluation of participatory processes • monitoring of implementation of mission statement and master plan • further development of master plan and Charter for citizen participation • advisory support for city council
continuous collaboration (team leaders) + project/content related participating members <i>Interface between local council, STEUERSTERN and citizens</i>	9 teams in key fields of action „LEBENSBEREICHS-Teams“** 	<ul style="list-style-type: none"> • strategic as well as content-related tasks within specific field of action (e.g. urban planning, health, mobility,...) • further elaboration of implementation measures of master plan, preparation for implementation • communication of results and suggestions within STEUERSTERN
project related participation, temporally restricted level of participation depends on specific issue	action groups, teams for specific projects** 	<ul style="list-style-type: none"> • content-related tasks • engagement in specific implementation projects, bringing in knowledge and experience
	open space for citizens initiatives, self-organisation – ideas can be introduced to LEBENSBEREICHS-Teams	

* Involvement requires previous participation at other levels and will be legitimated by delegation or vote in future – commitment for at least one legislative period
 ** Involvement in these groups is open to all citizens who are interested in specific topics/projects – no commitment for longer collaboration

Figure 2. Levels of collaboration and participation as defined within the charter for citizen participation [22].

bears a risk of returning to former strategies of acting separately and relying only on representative democracy. As accepting the efforts require a high degree of motivation and conviction of the usefulness of the undertaking, it is much too early to draw final conclusions about the long-term perspective of the process in the City of Korneuburg. For deeper insights into the process, results, and challenges see [22, 54].

5. Conclusions

Against the background of sustainability and resilience, the ability of local actors to interact and collaborate as well as to continuously adapt and transform their collaborative structures is deemed to be of central importance. Nevertheless, collaboration among a broad variety of actors is no easy endeavor and asks for quite different conceptualisations, criteria, and instruments/procedures than well experienced forms of case-related citizen participation. Effective long-term collaboration requires for acknowledging time-consuming group processes, the joint development of common goals, structures and collaboration rules as well as flexibility and openness towards adaptive processes (which often challenges our given democratic system or “streamlined” process designs).

Ostrom’s design principles for the management of the commons offer some useful reference points to overcome restrictions of case-related citizen participation. Especially, the design principles 1, 3, 4, 6, and 7 (social boundaries, collective-choice arrangements, monitoring, conflict resolution, and minimum recognition of rights) were confirmed as highly relevant by the case study of the city of Korneuburg, despite the lack of attention they gained in traditional participation literature [22]. However, the design principles focus first and foremost on self-organized communities of resource users, and consider governments and formal regulations as external, contextual factors. Thus, they only provide restricted insights on how to bridge the perceived gap between government and citizens and on how to design arenas with “both groups” collaborating on eye-level.

Currently, an increasing number of cities and communities are heading to institutionalize citizen participation and local co-management. Of course, not all attempts will directly lead to meaningful collaboration and even well-meant collaboration agreements may lack shared responsibility, reliability, or transparency. To date, best practice experiences and findings often remain unshared and without reflection in broader communities or networks. If we are to learn from individual cases as well as from already more generalized insights, the exchange and collaboration on an intermediary level (including research and practice) is of core importance. Networking among communities and actors from science and society, and pioneering examples can provide useful insights and may prevent every community from reinventing the wheel when designing collaborative structures. Against the background of local co-management, a systematic scientific analysis of different collaborative approaches developing within site-specific circumstances would be promising in order to differentiate context-specific aspects such as agency and local communication culture from generalizable institutional patterns.

Author details

Elisabeth Schauppenlehner-Kloyber

Address all correspondence to: Elisabeth.Schauppenlehner@boku.ac.at

University of Life Sciences and Natural Resources, Vienna, Austria

References

- [1] Laal M, Laal M, Kermanshahi ZK. 21st century learning; learning in collaboration. *Procedia—Social and Behavioral Sciences*. 2012;**47**:1696-1701
- [2] Fadeeva Z. Promise of sustainability collaboration—Potential fulfilled? *Journal of Cleaner Production*. 2005;**13**(2):165-174
- [3] Lee Y, Schottenfeld M. Collaborative knowledge creation in the higher education academic library. *Journal of Learning Spaces* [Internet]. 2014;**3**(1): Available from: <http://libjournal.uncg.edu/jls/article/view/714>
- [4] Lozano R. Collaboration as a pathway for sustainability. *Sustainable Development*. 2007;**15**(6):370-381
- [5] Pero M, Moretto A, Bottani E, Bigliardi B. Environmental collaboration for sustainability in the construction industry: An exploratory study in Italy. *Sustainability* [Internet]. 2017;**9**(1):125. Available from: <http://www.mdpi.com/2071-1050/9/1/125>
- [6] Guerrero AM, Bodin Ö, McAllister RRJ, Wilson KA. Achieving social-ecological fit through bottom-up collaborative governance: An empirical investigation. *Ecology and Society* [Internet]. 2015;**20**(4):41. Available from: <http://www.ecologyandsociety.org/vol20/iss4/art41/>
- [7] Curtin CG. Resilience design: Toward a synthesis of cognition, learning, and collaboration for adaptive problem solving in conservation and natural resource stewardship. *Ecology and Society* [Internet]. 2014;**19**:15. Available from: <http://hdl.handle.net/10535/9367>
- [8] Nkhata AB, Breen CM, Freimund WA. Resilient social relationships and collaboration in the management of social–ecological systems. *Ecology and Society* [Internet]. 2008;**13**(1):2. Available from: <http://www.ecologyandsociety.org/vol13/iss1/art2/>
- [9] Stauffacher M, Flüeler T, Krütli P, Scholz RW. Analytic and dynamic approach to collaboration: A transdisciplinary case study on sustainable landscape development in a Swiss prealpine region. *Systemic Practice and Action Research*. 2008;**21**(6):409-422
- [10] Beierle TC, Cayford J. *Democracy in Practice: Public Participation in Environmental Decisions* [Internet]. Washington, DC: RFF Press; 2002. 149 p Available from: <https://books.google.at/books?id=OO2gt1oHb0YC>

- [11] Cuthill M. Exploratory research: Citizen participation, local government and sustainable development in Australia. *Sustainable Development*. 2002;**10**(2):79-89
- [12] Kim D, Lim U. Urban resilience in climate change adaptation: A conceptual framework. *Sustainability*. 2016;**8**(4):405
- [13] Wondolleck JM, Yaffee SL. *Making Collaboration Work: Lessons from Innovation in Natural Resource Management*. Washington, DC: Island Press; 2000. 280 p
- [14] Imperial MT. Using collaboration as a governance strategy. *Administration and Society*. 2005;**37**(3):281-320
- [15] Hord SM. *Working Together: Cooperation or Collaboration?* Research and Development Center for Teacher Education. (R&D Report No. 3123). Austin, TX: The University of Texas; 1981
- [16] Bornemann S. *Kooperation Und Kollaboration: Das Kreative Feld Als Weg Zu Innovativer Teamarbeit*. Wiesbaden: Springer; 2012. 264 p
- [17] Kozar O. Towards better group work: Seeing the difference between cooperation and collaboration. *English Teaching Forum*. 2010;**48**(2):16-23 Available from: americanenglish.state.gov/english-teaching-forum
- [18] Dillenbourg P, Baker MJ, Blaye A, O'Malley C. The evolution of research on collaborative learning. In: Reiman P, Spada H, editors. *Learning in Humans and Machine: Towards an Interdisciplinary Learning Science*. Bingley, UK: Emerald Group Publishing Limited; 1995. p. 189-211
- [19] Wood DJ, Gray B. Toward a comprehensive theory of collaboration. *The Journal of Applied Behavioral Science*. 1991;**27**(2):139-162
- [20] Feichtinger J, Pregernig M. Beyond mandated participation: Dealing with hydropower in the context of the water framework directive. *Environmental Policy and Governance*. 2016;**26**(5):351-365
- [21] Boonstra B, Boelens L. Self-organization in urban development: Towards a new perspective on spatial planning. *Urban Research & Practice*. 2011;**4**(2):99-122
- [22] Schuppenlehner-Kloyber E, Penker M. Between participation and collective action—From occasional liaisons towards long-term co-management for urban resilience. *Sustainability*. 2016;**8**(7):664
- [23] Koontz TM. Collaboration for sustainability? A framework for analyzing government impacts in collaborative-environmental management. *Sustainability: Science, Practice, & Policy* [Internet]. 2006;**2**(1): Available from: <http://search.proquest.com/docview/1428624188?accountid=26468>
- [24] Klages H, Vetter A. *Bürgerbeteiligung auf kommunaler Ebene: Perspektiven für eine systematische und verstetigte Gestaltung*. sigma ed. Vol. 43; 2013. p. 131
- [25] Mobjörk M. Consulting versus participatory transdisciplinarity: A refined classification of transdisciplinary research. *Futures*. 2010;**42**(8):866-873

- [26] Collins K, Ison R. Jumping off Arnstein's ladder: Social learning as a new policy paradigm for climate change adaptation. *Environmental Policy and Governance*. 2009;**19**(6):358-373
- [27] Newig J. Does public participation in environmental decisions lead to improved environmental quality? Towards an analytical framework. *Communication, Cooperation, Participation (International Journal of Sustainability Communication)*. 2007;**1**(1):51-71 <http://nbn-resolving.de/urn:nbn:de:0168-ssoar-431965>
- [28] Turnhout E, van Bommel S, Aarts N. How participation creates citizens: Participatory governance as performative practice. *Ecology and Society* [Internet]. 2010;**15**(4):26. Available from: <http://www.ecologyandsociety.org/vol15/iss4/art26/>
- [29] Arnstein SR. A ladder of citizen participation. *Journal of the American Institute of Planners*. 1969;**35**(4):216-224
- [30] Kotus J, Sowada T. Behavioural model of collaborative urban management: Extending the concept of Arnstein's ladder. *Cities*. 2017;**65**:78-86
- [31] Hurlbert M, Gupta J. The split ladder of participation: A diagnostic, strategic, and evaluation tool to assess when participation is necessary. *Environmental Science & Policy*. 2015;**50**:100-113
- [32] Foster S. Collective action and the urban commons. *Notre Dame Law Review*. 2011;**87**:57
- [33] Aarts N, Leeuwis C. Participation and power: Reflections on the role of government in land use planning and rural development. *The Journal of Agricultural Education and Extension*. 2010;**16**(2):131-145
- [34] Wilcox D. *The Guide to Effective Participation*. Brighton, UK: Partnership; 1994
- [35] Gardesse C. The fraught 'menage à trois' of public actors, private players and inhabitants: Problems of participation in French urban development projects. *Urban Studies* [Internet]. 2015;**52**(16):3035-3053. DOI: 10.1177/0042098014555631
- [36] Tritter JQ, McCallum A. The snakes and ladders of user involvement: Moving beyond Arnstein. *Health Policy*. 2006;**76**(2):156-168
- [37] Elliott MA. *Stigmergic collaboration: A theoretical framework for mass collaboration* [thesis]. 2007. Victorian College of the Arts, University of Melbourne. URI: <http://hdl.handle.net/11343/39359>
- [38] McNamara M. Starting to untangle the web of cooperation, coordination, and collaboration: A framework for public managers. *International Journal of Public Administration*. 2012;**35**(6):389-401
- [39] Schrage M. Shared Minds. In: *The New Technologies of Collaboration*. New York: Random House; 1990. p. 227

- [40] Bammer G. Enhancing research collaborations: Three key management challenges. *Research Policy*. 2008;**37**(5):875-887
- [41] Bouwen R, Taillieu T. Multi-party collaboration as social learning for interdependence: Developing relational knowing for sustainable natural resource management. *Journal of Community and Applied Social Psychology*. 2004;**14**(3):137-153
- [42] Dlouhá J, Barton A, Janoušková S, Dlouhý J. Social learning indicators in sustainability-oriented regional learning networks. *Journal of Cleaner Production*. 2013;**49**:64-73. DOI: /10.1016/j.jclepro.2012.07.023
- [43] Lozano R. Creativity and organizational learning as means to foster sustainability. *Sustainable Development*. 2014;**22**(3):205-216
- [44] Vinke-de Kruijf J, Bressers H, Augustijn DCM. How social learning influences further collaboration: Experiences from an international collaborative water project. *Ecology and Society* [Internet]. 2014;**19**(2):61. Available from: <http://www.ecologyandsociety.org/vol19/iss2/art61/>
- [45] Reed MS, Evely AC, Cundill G, Fazey I, Glass J, Laing A, Newig J, Parrish B, Prell C, Raymond C, Stringer LC. What is social learning? *Ecology and Society* [Internet]. 2010;**15** (4):r1 Available from: <http://www.ecologyandsociety.org/vol15/iss4/resp1/>
- [46] Dillenbourg P. *Collaborative Learning: Cognitive and Computational Approaches*. 2nd ed. Oxford: Pergamon; 1999. p. 246
- [47] Mattessich PW, Monsey BR. *Collaboration: What Makes it Work. A Review of Research Literature on Factors Influencing Successful Collaboration*. St. Paul, MN: Amherst H. Wilder Foundation; 1992. p. 57
- [48] Powell WW, Kenneth W, Koput KW, Smith-Doerr L. Interorganizational collaboration and the locus of innovation: Networks of learning in biotechnology. *Administrative Science Quarterly*. 1996;**41**(1):116-145. DOI: 10.2307/2393988
- [49] Berkes F. Evolution of co-management: Role of knowledge generation, bridging organizations and social learning. *Journal of Environmental Management*. 2009;**90**(5):1692-1702. DOI: 10.1016/j.jenvman.2008.12.001
- [50] Ostrom E. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge: Cambridge University Press; 1990
- [51] Ostrom E. Design principles of robust property rights institutions: What have we learned? In: Ingram GK, Hong Y-H, editors. *Property Rights and Land Policies*. Cambridge, MA: Lincoln Institute of Land Policy; 2009. p. 25-51
- [52] Cox M, Arnold G, Villamayor TS. A review of design principles for community-based natural resource management. *Ecology and Society* [Internet]. 2010;**15**:38. Available from: <http://hdl.handle.net/10535/7430>

- [53] Kiser LL, Ostrom E. The three worlds of action: A metatheoretical synthesis of institutional approaches. *Polycentric Games and Institutions*. 2000;1:56-88
- [54] Schauppenlehner-Kloyber E, Huemer J. Korneuburg 2036—eine Stadt plant sich selbst. Die Frage nach Langfristigkeit und Flexibilität in der kollaborativen Stadtentwicklung. In: Schrenk M., Popovich VV, Zeile P, Elisei, P Beyer C. editors. REAL CORP 2016—SMART ME UP! How to Become and How to Stay a Smart City, and Does this Improve Quality of Life? Proceedings of 21st International Conference on Urban Planning, Regional Development and Information Society. CORP—Competence Center of Urban and Regional Planning; 2016. p. 411–421

IntechOpen