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How Ongoing Involvement Impacts Outcomes of Co-creation
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Continuous Co-creation: How Ongoing Involvement Impacts Outcomes of Co-creation

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Abstract

Co-creation is on the rise as a strategy for solving wicked problems in the public sector. It is broadly recognized that co-creation calls for extensive involvement of relevant and affected actors. Moreover, researchers generally agree that early high-level involvement of relevant and affected actors affects the outcomes of co-creation processes. However, few have paid attention to whether levels of involvement in co-creation at later stages matter for outcomes. This article develops a continuity perspective on patterns of involvement in co-creation, and applies it to two case studies of co-created reforms in a local public bureaucracy in Denmark. The study shows that continuous, high-level involvement strengthens the outcomes of co-creation in terms of innovation, higher ownership of solutions, and the development of trust among participants.

Keywords: Co-creation, Involvement, Outcomes of Co-creation, Public Sector Innovation, Trust
Introduction

Co-creation is on the rise both amongst practitioners and public administration scholars (Horne and Shirley 2009; OECD 2011; Vesnic-Alujevic et al. 2019). Inspired by ideas associated with the New Public Governance paradigm, public decision makers are turning to co-creation as a tool for solving wicked societal problems (Rittel and Webber 1973; van Bueren, Klijn, and Koppenjan 2003; Osborne 2006). Co-creation relies on the mobilization of all relevant and affected actors in mutual collaboration in order to define problems, develop solutions and implement them in practice (Nabatchi, Sancino, and Sicilia 2017; Torfing, Sørensen, and Røiseland 2019).

Several scholars have contributed to our understanding of co-creation by stressing the importance of extensive involvement of involved actors (Arnstein, 1969; Geissel & Newton, 2012; Nabatchi, 2012). Involvement is often portrayed as a ladder, or spectrum, which spans from limited (or even vague, symbolic) information provided by formal power-holders to mutual, engaged dialogue among all involved actors regardless of their formal power. The time of involvement has also received attention in the co-production literature, which is distinct in its focus on involvement in later stages of implementation (Brandsen & Honingh, 2018). While co-production designates a certain mode of user-involving in service delivery, co-creation points to a participatory and capacity-enhancing mode of governance in which not only services but also plans, strategies and policies are co-created (Ansell & Torfing, 2020; Brandsen & Honingh, 2018). Hence, co-creation, emphasises the importance of initial involvement: relevant actors must be involved early on in defining problems and designing solutions in order to include their knowledge and mobilize their resources (Brandsen & Honingh, 2018; Voorberg, Bekkers, and Tummers 2015). While the importance of extensive and early involvement has been addressed in the literature, the argument
that the different phases of co-creation are interconnected and that positive outcomes of co-creation hinge on continuously high levels of involvement has not been made.

Although the conditions for co-creation have received substantial scholarly attention, the outcomes of co-creation are still debated within the literature (Fledderus 2018; Torfing, Sørensen, and Røiseland 2019; Fledderus 2015; Voorberg, Bekkers, and Tummers 2015). Some scholars suggest that co-creation can strengthen both innovation, ownership of solutions and as well as strengthen trust among participants (Torfing, Sørensen, and Røiseland 2019, Fledderus, 2016). However, several scholars stress that knowledge about the outcomes of co-creation is still scarce and that co-creation is by no means a guarantee of success (Fledderus 2015; Voorberg, Bekkers, and Tummers 2014; Fledderus 2018). This study will focus on innovation as an intended outcome, and on more relational outcomes in terms of ownership of solutions and trust among participants.

This article proposes that the outcomes of co-creation depend not only on the initial level of involvement of relevant actors but also on continuously high levels of involvement throughout later stages of co-creation. Hence, the research question guiding this study is:

How does the continuity of involvement in co-creation processes, impact outcomes of co-creation in terms of innovation, ownership of solutions, and trust among participants?

Drawing on existing research, the study develops a conceptual framework for analysing patterns of involvement from a continuity perspective and applies it to two case studies from a Danish municipality that is actively pursuing co-creation reforms. To test the proposition, the cases are similar in their initial high levels of involvement, but differ significantly in levels of involvement at later stages of co-creation. Drawing on interviews, observations and policy documents, the studies indicate that continuity in cases of early high-level involvement matters for innovation, ownership of solutions, and trust development among participants.
Firstly, the theoretical framework is developed, allowing us to analyse the impact of levels and temporal patterns of involvement in a co-creation process. Secondly, case selection and methods are accounted for, followed by analyses of the two empirical cases. The article ends with a discussion of the findings and concluding remarks specifying directions for practitioners and agendas for future research.

**A Continuity Approach to the Study of Involvement in Co-creation**

Inspired by network-based theories of collaborative governance, collaborative innovation and participatory governance, co-creation highlights the potential of bringing together relevant and affected public and private actors in a shared endeavour to solve wicked problems (Hartley, Sørensen, and Torfing 2013; Emerson and Nabatchi 2015; Nabatchi 2012; Ansell and Gash 2008; Torfing, Sørensen, and Røiseland 2019; Voorberg 2017; Kooiman 1993). Co-creation can be defined as a process in which several actors collaborate voluntarily in a mutual and balanced way in defining problems, finding solutions and implementing them in practice (Nabatchi, Sancino, and Sicilia 2017; Torfing, Sørensen, and Røiseland 2019). Co-creation may both be used as a strategy for strengthening policy making, public service provision or, as in the case of this study, administrative problem solving (Bentzen, Sørensen & Torfing, 2020).

Co-creation shares common ground with “co-“ concepts such as coordination, cooperation and collaboration, though also distinct in a number of ways. Cooperation, coordination and collaboration are located at different points on a continuum of integrative mechanisms, depending on the timely period of interaction, levels of knowledge sharing and trust as well as intensity of interaction, power sharing and mutual interdependence (Keast and Mandell 2014; Keast, Brown & Mandell 2007). While *Cooperation* entails short term relations, relatively few invested resources and low levels of relational intensity and mutual risk taking, *Coordination* advances risk taking and investment of resources as planning, decision-making and policies are increasingly shared (Ciger
Collaboration takes the density of relations a step further, characterized by long-term relationships, high levels of reciprocal interdependency and vast resource investment as well as acceptance of high risks (Gray 1989; Ciger 2001). Co-creation is an even more decentered version of collaboration (Ansell & Torfing, 2020) in which public authorities are merely one among many actors involved in distributed forms of interaction, aimed at joint and often co-initiated agendas. Hence, risks in co-creation are heightened and power distances lowered even further, in order to enable the capacity to mobilize diverse and complementary resources as well as pursue innovative solution (Ansell & Torfing, 2020).

The co-creation literature has paid particular attention to the involvement of citizens and users, who are even considered obligatory actors in co-creation among some scholars (Brandsen et al., 2018; Taco Brandsen & Honingh, 2016; Voorberg et al., 2015; Voorberg, Bekkers, Timeus, & Tonurist, 2017). Other scholars merely underlines the key principle that everybody who can contribute to solving the problem at hand should be encouraged to participate (Stickdorn & Schneider, 2012; Bryson, Sancino, Benington and Sørensen 2017). Such potential, relevant actors could include politicians, public managers, professionals, and voluntary groups of citizens, civil society organizations, social enterprises and private corporations (Torfing, Sørensen, and Roiseland 2019; Nabatchi, Sancino, and Sicilia 2017). Following this line of argumentation, co-creation is not characterized by the participation of any one specific group of actors. Rather, all actors, relevant to solving a problem, should be gathered in engaged collaboration to define problems, develop solutions and implement them robustly. The understanding of co-creation in this study is in line with this latter perspective.

Levels of Involvement

Arnstein’s ladder of citizens’ participation constitutes one of the earliest attempts to conceptualize various forms of interaction between citizens and public authorities, spanning from non-
participation to full citizen control (Arnstein 1969). The co-creation literature, however, distances itself from the ideal of full citizen control as the optimal level of involvement, and instead offers an alternative collaboration ideal. Since co-creation entails power sharing, Nabatchi suggests a modified spectrum of participation focusing on the mode of communication: in addition to non-participation (no information), actors may experience one-way communication (uni-directional information), two-way communication (bi-directional flow of information) and deliberate communication (engaged dialogue) (Nabatchi 2012). Engaged dialogue is characterized by a mutual, respectful exploration of all involved actors’ perspectives, low power distance and a high level of shared power (Geissel and Newton 2012; Smith 2009). Nabatchi’s spectrum of involvement describes a role development ranging from passive actors decoupled from top-down decision-making processes to highly active actors thoroughly engaged in a co-creative partnership in which formal power is shared among all involved actors. Hence, engaged dialogue becomes the ideal mode of communication in co-creation processes. Nabatchi’s spectrum of participation and the ideal of engaged dialogue will constitute the vertical dimensions in the developed theoretical framework, enabling analysis of levels of involvement throughout co-creation processes.

**Time of Involvement**

Timelines in policy processes are central both in classical implementation theory as well as in policy-making theory, in which agenda-setting, problem definition, solution development; implementation and evaluation are well-known phases or parts of policy cycles (Kingdon 1984; Sabatier and Mazmanian 1980; Hill 2009).

The time of involvement has, however, also received attention within the co-creation and co-production literature. Inspired by design innovation theory, a common distinction is between the actors as *co-initiators* who define problems, *co-designers* of solutions and *co-implementers* of the selected solutions (Voorberg, Bekkers, and Tummers 2015; Bason 2010; Brandsen and Honingh
As mentioned, co-creation is characterized by its emphasis on early co-initiation and co-design, while co-production mainly focuses on involvement later in the implementation of service solutions (Brandsen, Verschuere, and Steen 2018). While describing different roles for actors, this debate also highlights the importance of the time of involvement: the initiation and formulation of the problem at hand comes before the design of solutions, which can then be implemented. Hence, the time of involvement is an essential factor that shapes what may legitimately be debated. Early influence allows actors to engage in agenda setting and influence the understanding of the problem, which may fundamentally impact the choice of solution. When involvement happens later in the process, previous decisions about e.g. the type of solution will often be closed for debate, delimiting involvement to questions of how to implement the solution, for instance. Involvement in implementation is consequently more limited than involvement in the formulation of problems. In addition, co-evaluation has been highlighted as an emerging field which points to the importance of involving relevant actors in evaluating processes, outputs and outcomes of co-creation (Emerson and Nabatchi 2015; Koontz and Thomas 2006, Brandsen and Honingh 2018). Hence, the time of involvement is certainly present as a latent theme in the debate, although it has not been consistently linked to discussions about levels of involvement. In this study, the timeline of involvement will be used as the horizontal dimension in the theoretical framework, focusing on the phases of problem definition, solution development, implementation and evaluation.

**Conceptualization: A Continuity Approach to Co-creation**

Building on these literatures, a theoretical framework for studying involvement in co-creation should assume that co-creation ideally entails high levels of involvement both in problem definition, design of solutions, implementation and evaluation (Nabatchi et al., 2017; Torfing et al., 2019; Voorberg, 2017). While early and extensive involvement are frequent recommendations in the
literature, this study proposes that both the time and level of involvement affect outcomes and must be analysed as two interplaying yet independent dimensions in co-creation processes.

Figure 1, below, combines the two dimensions on two axes, allowing us to analyse levels of involvement continuously throughout co-creation processes.

![Conceptual Framework: a continuity perspective on co-creation](image)

**Figure 1:** Conceptual Framework: a continuity perspective on co-creation

The horizontal x-axis describes the timeline of central phases in the process. The first three phases of problem definition, solution development and implementation largely correspond to the roles of co-initiator, co-designer and co-implementer that are widely used in the literature (Brandsen et al., 2018; Voorberg, 2017). In addition, a fourth phase - evaluation - has been added, inspired by an emerging field of scholars discussing prospects of co-evaluating processes, outputs and outcomes of co-creation (Emerson and Nabatchi 2015; Koontz and Thomas 2006, Brandsen and Honingh, 2018).

The vertical y-axis illustrates varying levels of involvement. Drawing on Nabatchi’s spectrum of participation according to mode of communication, the y-axis spans from non-communication
through one-way communication and two-way communication, ending up with deliberative communication at the top of the scale (Nabatchi 2012).

As indicated by the grey area at the top of the figure, co-creation ideally entails continuous, deliberate communication throughout all phases of the process. Combing the two scales allows for an analysis of all phases of co-creative processes, which despite great ambitions for involvement may differ significantly when applied in practice throughout the later phases.

**Outcomes of Co-creation**

The study of co-creation has been more concerned with identifying the conditions for the emergence of co-creation than with measuring and assessing its impact. Hence, there is still limited knowledge about the outcomes of co-creation (Pestoff, Brandsen, and Verschuere 2012; Brandsen, Verschuere, and Steen 2018). However, the co-creation literature suggests several prospects for engaging actors in a collaborative approach, which are indirectly related to enhancing the effectiveness and legitimacy of governance initiatives.

Co-creation is believed to foster more innovation, understood as the development and practical realization of new and creative ideas that generate added value within a given context (Bommert 2010; Torfing and Ansell 2017; Sørensen and Torfing 2011, Hartley 2005). Hence, innovation is characterized by a newness of ideas (within a specific context) and by actually being brought into practice. While, some scholars stress that innovation may also foster valuable outcomes in terms of incremental changes (Arundel, Bloch, and Ferguson 2019; Bugge and Bloch 2016), others require more radical changes to view it as innovation (Ansell and Torfing 2020; Demircioglu and Audretsch 2020; Moore and Hartley 2008). However, added value, within a given context, is a consistent requirement for innovation, which should ideally contribute to solve the defined problem at hand (Bason 2018; Moore and Hartley 2018). Several scholars argue that co-creation is likely to
spur innovation given its ability to create divergence in perspectives on problems, as well as strengthening realisation of ideas given high commitment among key actors (Bason, 2018, Hartley 2005). Nevertheless several scholars warn that solutions to wicked problems are not necessarily easy to innovate (Voorberg, Bekkers, and Tummers 2015; Brandsen, Verschuere and Steen 2018; Agranoff 2016; Triantafillou 2019). Aspects such as hierarchy, silo structures, closed and top-down processes characterize bureaucratic government, creating barriers for co-creation processes actually leading to innovation (Boomert 2010; Hartley, 2005). The few empirical studies that have addressed this question show diverging results, and several scholars point to the need for more research about the potential of co-creation in regard to spurring innovation (Voorberg, Bekkers, & Tummers, 2014; Voorberg et al., 2015)

Co-creation can foster higher ownership of solutions, and perceptions of higher quality in solutions (Voorberg, Bekkers, & Tummers, 2014). Higher ownership of solutions may partly be explained by the value of participation and empowerment of local actors (Norris 2011; Warren 2009; Torfing, Sørensen, and Roiseland 2019). Several studies suggest that when organizational actors can exercise influence over the chosen solutions, they tend to support and comply with them to a greater extent (Coletti, Sedatole, & Towry, 2005; Frey & Jegen, 2001; van Thiel & Yesilkagit, 2011). However, other studies suggest that co-creation does not guarantee higher levels of ownership and satisfaction (Fledderus 2015). Co-creation may also counter ownership if it is perceived as a pseudo-process primarily used to legitimize decisions that have already been taken (Steen, Brandsen, and Verschuere 2018).

Another potential outcome of co-creation is building trust, defined as willingness to take the risk of making oneself vulnerable to another person or party in the belief that they will take care of your interests (Möllering 2006; Fledderus 2018; Rousseau and Sitkin 1998). Trust functions as an important lubricant in social processes, allowing the reduction of transaction costs and enabling
smooth operations. Although trust is thought to be a potential outcome of co-creation, existing research does not point to univocal conclusions (Fledderus 2018). Co-creation may even erode the future conditions for engaging in co-creation if involvement is perceived as symbolic rather than genuine (Steen, Brandsen, & Verschuere, 2018). Hence, trust as an outcome of co-creation may also play a decisive role regarding willingness to engage in future co-creation processes. However, existing knowledge about trust as an outcome of co-creation is still scarce (Fledderus 2018; Brandsen, Verschuere, and Steen 2018).

Summing up, the limited existing research on innovation, ownership of solutions and trust development among participants as potential outcomes of co-creation points to a number of potential benefits, although several studies also point out that outcomes co-creation are no guaranteed success and stress the need for more knowledge on the subject (Fledderus, 2015; Voorberg et al., 2014).

**Case Selection and Methods**

This study draws on the case study method as the research design calls for in-depth knowledge about the proposed dynamics of continuous co-creation. The study draws on two case studies from a Danish Municipality actively pursuing co-creation as a strategy to solve the wicked problem of administrative burdens in the municipality. The first case is from the Day Care Department while the second case is from the School Department. The two cases are similar in their high ambition to use co-creation as a strategy. However, in order to gain insight about *how the continuity of co-creation impact outcomes of co-creation*, the cases are, selected as “most different” cases (Flyvbjerg 2006) regarding one key aspect: the level of involvement at later stages of co-creation. Levels of initial involvement are high in both cases, but differ significantly at later stages of co-creation. This
allows us to analyse how the outcomes of co-creation are impacted by variations in later involvement in initially high involvement processes.

A number of methods are triangulated in the study. In order to gain insight from the perspective of all involved actors, semi-structured interviews were conducted with the Municipal CEO, the CEO of Day-care and Schools, the Chief of Day-care and the Chief of Schools; Consultants from the administration (3 from the school Center and 3 from the Day care Center); 6 local leaders at institutions (3 schools and 3 kindergartens) and 4 focus group interviews with employees at local institutions (2 schools and 2 Kindergartens). Individual interviews lasted approximately 1 hour while focus groups lasted approximately 1.5 hour. 12 central policy documents including project descriptions, communication materials, invitations to meetings and status rapports were used to understand decision processes prior to the decision to use co-creation as a strategy for solving problems of administrative burdens. 6 observations were made of meetings in workings groups, presentations and educational activities providing tacit knowledge and insight into real-life interaction among the involved actors. However, as the time of empirical touch-down varies between the two cases, only one observation is from the school case while 5 observations were made in the Day-care case, which was empirically more accessible throughout the whole process.

In the Day Care center a survey among all involved employees and leaders in the institutions testing the new control system, was conducted in collaboration between the researcher and the Administration. The survey was conducted in 2019 after the first test of the newly co-created supervision system with extensive actor involvement, aiming to explore ownership of the developed solutions. 99 out of 260 respondents from institutions that had tested the new supervision system were invited, resulting in a response rate of 38%. Unfortunately, it was not possible to conduct a
similar survey in the School center, which would have strengthened comparability regarding the quantitative data.

The two cases share pronounced ambitions to co-create and involve all actors with stakes in the problem at hand, but they differ in other ways: first, the professionals in the School Department are primarily teachers, while pedagogues constitute the main group of professionals in the Day-care Department. Teachers are often considered a stronger profession than pedagogues, which could affect approaches to, and willingness to, co-create (Noordegraaf 2007). It must also be taken into account that co-creation in the School Department has a much broader focus compared to the relatively narrow problem of supervision in the Day-care Department. While sharing the same ambition of involving affected actors, the more diffuse process in the School Department could create more challenges in terms of narrowing down key involved actors.

All empirical data from the two cases were coded in N-Vivo along the two dimensions of time of involvement and level of involvement. Data were also coded for perceptions of outcomes in terms of ownership of solutions, innovativeness of solutions, and Trust among participants. Based on the coding, the results will now be presented: first, levels of involvement in the Day-care Department and School Department will be analysed using a continuity perspective. Second, the outcomes of the two processes will be analysed in terms of innovation, ownership to solutions and trust among participants.

**Results**

The purpose of this study is to gain insight into how the continuity of involvement throughout later stages of co-creation processes affects the outcomes of co-creation. Hence, we begin by analysing involvement in the two cases using a continuity perspective.
Involvement in the Day-care Department seen from a continuity perspective

The first case focuses on the co-creation of a new supervision system in day-care institutions, which took place from 2018 to 2019. Both employees and users in the day-care institutions experience supervision as time-consuming, decoupled from the institution’s practical life and development, and as undermining trust between the local and central level of the organization. Decisions about supervision systems have traditionally been taken by the top management of the municipality, but it is now decided that all relevant actors are to be involved in the process of finding a better control system. This case is, as we shall see, characterized by continuously high levels of involvement throughout all the phases of co-creation.

Traditionally, control systems are developed in the administration and implemented top down. The new ambition to co-create, however, calls for new approaches:

“It would be much easier for me to ask some of my consultants to develop a new control system. Like we tend to do. But that is not the way we create good solutions. We need to involve the people who will be working with the supervision” (Chief of Day-care).

Hence, the approach to problem solving has changed towards an ideal of engaging all involved actors - especially the frontline workers. The process in the Day-care Department begins with a common problem exploration in which local leaders, employees and union representatives are involved in a number of facilitated workshops and local dialogues to build a common understanding of problematic administrative burdens. The emphasis in these workshops are on creating a common diagnosis, but all actors are also involved in processes of prioritizing which problems are to be addressed first. Among many diagnosed administrative burdens, the supervision system stands out as a key challenge.
“They experience the supervision as resource-demanding and decoupled from their pedagogical practice. They feel like supervision is not really contributing. It just takes time from the daily tasks and does not really create learning’ (Consultant in the Day-care Department)

Summing up, the explorative process among all involved actors consistently points to the system of supervision as a problem in need of attention. The co-creation ambition requires a new approach towards organizing the process. A group of local leaders and employees constitutes a working team, facilitated by a consultant from the administration. However, other groups of employees, local leaders, union representatives, parents on boards, supervision consultants, and central leaders in the Day-care Department are frequently in dialogue with the group and continuously provide input into their work. Inputs from all employees are also collected through an initial survey aimed at exploring the problems and benefits of the existing supervision system. Hence, problem-definition is characterized by many platforms and fora experienced as supporting engaged dialogue among the involved actors.

Based on those inputs, the Chief of Day-care decides to allocate resources to start a process in which a solution to this specific problem is to be developed and implemented through co-creation among all actors. The decision is formally taken by the Chief, but ongoing bi-directional communication, especially with the core working group is taking place both before and after the decision. Although the working group is not formally engaged in the decision, there is widespread acceptance of the chief making the formal decision. In fact several leaders stress, that being transparent about the decision-making process, is better than “pretending that we have full power” when in fact this decision is dependent on approval in the formal hierarchy. Hence, aligning expectations appears to be of importance when levels of involvement are lowered.
After the decision to pursue a new supervision system, the process of developing a new solution begins. This process is also anchored in the core-group and facilitated by the consultant, but the involvement of other actors intensifies at the same time. An ongoing question in the working groups is when to involve other actors in the process, and how to secure good communication to the rest of organization about what is going on. Day-care consultants, especially the supervision consultants are now involved in several dialogues with the core group about their concerns and professional wishes for the new system. After a period of exploring possible solutions, the core group as well as a group of local leaders and Day-care and Supervision consultants are given the task of choosing between three solutions. Although several actors describe this process as challenging due to many different needs, concerns and suggestions, many feel it has been valuable both in regard to developing the new supervision system, but also in terms of understanding other actors’ needs:

’It was certainly no chit-chat! And it is important to stress that co-creation is not an open buffet for us leaders and our employees (…) It made me realize that this solution should not just make sense to us (the local leaders) but also to the Day-care and Supervision consultants, who spend a lot of time on this task’ (local leader).

Generally, both local and central actors experience the development of the solution as characterized by engaged dialogue among all involved actors.

After several rounds of dialogue with leaders, employees, union representatives and consultants, the core group decides on a solution, which is now to be implemented. However, rather than doing a full scale implementation in the whole organization, they decide on testing the solution in one area in order to further develop the supervision system. This gives the supervision consultants and local actors the chance to share their experiences with the core group from a pilot test: “Choosing to let
us and the local leaders and employees test the new system is such a good idea. People don’t panic about the new system because they know we can adjust things”. (Supervision consultant)

Knowing that the implementation procedure is not final and that things can still be changed is mentioned by several informants as vital to the results achieved in the process. After the first trial, experiences both among local and central actors are collected and explored, and a few changes are made to the supervision system. In addition, efforts are made to communicate continuously about progress and upcoming activities in the project to all relevant actors who are not directly involved in the working groups. Hence, the process of implementing the supervision system is permeated by engaged dialogue among all involved actors.

After the initial test and adjustment, a follow-up survey among all local employees, leaders and involved consultants is conducted in order to evaluate the new supervision system. A consultant explains: “We depend on feedback from the people working with this in practice. It is so vital to use that feedback to adjust our conception about what works’. The many inputs from all involved actors is discussed in the core working group and time is spend communicating back to the organizations about their experiences and learning so far. However, the decision to recommend the new supervision system for political approval, is ultimately taken by the Department leader. Hence, evaluation of the new system is characterized by bi-directional communication.

Figure 2 depicts the level of involvement in all the phases of co-creation of the new supervision system in the Day-care Department, showing a pattern of continuously high levels of involvement throughout the whole process, predominantly through engaged dialogue. Although phases which require formal decisions draw only on bi-directional communication, the overall process is generally characterized by co-creation in which all involved actors continuously shape
Involvement in the School Department seen from a continuity perspective

The second case concerns the process of dealing with administrative burdens in a municipal Department of Schools. A process is initiated in which the administration involves a significant number of local actors in identifying administrative burdens. Traditionally, administrative processes are kept within the administration, but in this case, the School Department decides to embark on a co-creative process with pronounced ambitions to engage all involved actors. The process takes place from 2017 to 2019. This case is characterized by high initial involvement, which nonetheless, drops significantly throughout the later phases of co-creation.

The process in the School Department starts out with a number of rather ambitious activities aimed specifically at engaging local actors in identifying administrative burdens. Consultants from the...
administration visit 6 out of 18 local schools and conduct 12 interviews with leaders, local union
representatives and employees. The interviews are followed up with a workshop to which all the
formerly interviewed actors are invited. At the workshop, the local actors are presented with their
suggestions, which has been organized in clustered themes by the consultants. During the
workshop, participants discuss the identified problems and debate priorities and possible solutions.
Both the CEO, the Area Chief and a number of administrative consultants are present and
participate in the group debates. Hence, the problem definition phase (here, identifying
administrative burdens) is characterized by engaged dialogue among all involved actors.

The output of the workshop is a long list of administrative burdens, which is then handled by the
administration. Although the actors at the workshop prioritized suggestions and began to give their
input as to how the problems could be solved, they are not directly involved in the development of
solutions. The Chief of Schools decides which suggestions are rejected and which are given
priority. A central administrator reflects on this in hindsight: ‘Some of their suggestions have just
been rejected. But do they know why? Maybe we couldn’t do anything about it, but shouldn’t we
then have informed them about the reasons for the rejection?’

Most of the prioritized ideas are delegated to already established groups which are already working
on related themes. For instance, a working group dedicated to implementing a new system for
parent-communication at the schools is presented with a number of problems identified at the
workshop. Ultimately, no communication is attempted with local actors about the rejection of
proposals or the development of solutions to the problems they have identified: ‘I remember the
workshop. That was nice and all. But honestly – I don’t know what has happened after that?’
(Teacher at local school). From this point, on the feeling of being disconnected from the process is
pronounced among almost all local actors, who also started to question the motives of the
administration: are they genuinely interested in solving the administrative burdens at the local level or are they only interested in legitimizing decisions they have already made? ‘Frankly - I have doubts how much they really listen. It feels a little like decisions are made beforehand” (local union representative). The initial, engaged dialogue between local and central actors has rapidly died out and growing suspicion is emerging from the local level.

From the perspective of the administration, solutions to a number of the locally diagnosed problems are being addressed in the working groups or elsewhere in the administration. However, a central consultant is very much aware that local and central perceptions of the process is diverging: ‘People outside the working groups tend to say: ‘Administrative burdens? Is that still a thing?’’ Although some solutions are being effectuated, implementation is characterised by non-communication with local actors.

The progress of the project is monitored in the administration. Working groups in charge of the various challenges report back to the consultant responsible, who then register the status in a common overview. However, evaluation is primarily conducted in writing through email correspondence with the working groups, and involves very little direct communication. As with solution development and implementation, local actors from the schools are not involved in the evaluation. Evaluation is (once again) characterized by non-communication with local leaders, union-representatives and teachers, who at this point have not yet heard anything about the fate of the suggestions they generated at the workshop.

As illustrated in Figure 3, the continuity of involvement in the School Department differs remarkably from the Day-care Department. Although the process starts out with several activities aimed at creating engaged dialogue among all involved actors, involvement drops dramatically
during the solution development, implementation and evaluation phases. Hence, the initially good conditions for deliberative communication are followed by a complete information vacuum, creating immense discontinuity in involvement across the different phases of co-creation.

Figure 3: Continuity of co-creation in the Daycare and School Departments

**Outcomes of Continuous Versus Discontinuous Co-creation**

In the following, outcomes of co-creation in terms of innovation, ownership of solutions, and trust among participants are analyzed. As indicated in table 1, below, the overall result of the study is that continuous co-creation produces better outcomes than discontinuous co-creation. In the following, these differences in outcomes are analyzed in relation to the variations in involvement in the two cases.

Table 1: Outcomes of co-creation in continuous versus discontinuous co-creation
## Outcomes of co-creation processes

<table>
<thead>
<tr>
<th>Continuous co-creation (Daycare Department)</th>
<th>Discontinuous co-creation (School Department)</th>
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<tbody>
<tr>
<td><strong>Innovation</strong></td>
<td><strong>High:</strong> Solutions reflect new ideas (within the context) that are actually turned into practice. Ideas are perceived as highly contributing to solve the problem at hand as well as value adding.</td>
</tr>
<tr>
<td><strong>Ownership of solutions</strong></td>
<td><strong>High:</strong> Ownership of the developed solutions is high among all actors – also local actors who have not participated directly in working groups.</td>
</tr>
<tr>
<td><strong>Trust among participants</strong></td>
<td><strong>High (increased):</strong> Trust among local and central actors has been strengthened and they express enthusiasm about engaging in future co-creation processes.</td>
</tr>
</tbody>
</table>
Innovation

The new supervision system in the Day Care Department introduces a number of new ideas which are new in this context: While external supervision has exclusively been conducted by supervising consultants in the old system, the new system allows for scaling and adjusting the supervision to local conditions. In institutions that have continuously been performing well, peer leaders from other day-care institutions in the municipality are now carrying out the supervision. The rationale behind this change is partly to strengthen learning between institutions, but also to focus the limited resources of the professional supervision consultants on the institutions with the most challenges. Hence, the differentiated system of supervision allows for a tailored fit to local needs. In addition, the local leader and an employee each spend one day making observations that are also incorporated into the supervision process. ‘Now we include three different perspectives, based on 24 hours of individual observations (...) I really think this is a new way to create a stronger level of insight.’ (Chief of Day-care). Hence, local involvement in collecting the information which is used as a basis for the supervision is much higher. Another radical change is that in the new supervision system, visits will be unannounced rather than planned, meaning that institutions must, in principle, be ready to receive supervision at any time. According to the Chief of Day-care, this is an idea that she would never have been able to introduce top down, but which became possible due to the joint collaboration. Hence, the new supervision system, can be defined as innovative in terms of introducing and realizing new ideas (within this specific context), as well as being perceived as highly value-adding among key actors.

Perceptions of the innovativeness of solutions in the School Department are, on the other hand, less convincing: Although a few respondents stress the value of establishing new forms of dialogue between the local and the central levels, few or no concrete changes are experienced from the
perspective of the local level: ‘The dialogue at the workshop was fine. But if you ask me if it has resulted in anything? I cannot really come up with anything.... ’ (Employee at school). This is perhaps not surprising given the lack of involvement after the initial problem definition, which is characterized by no information to local actors. At the central level among administrators working with the selected problems, things appear a little more positive. A project leader says: ‘I am actually surprised how many problems we are working on.’ However, even the most involved central actors convey the feeling, that solutions are not necessarily very innovative. ‘Maybe it is mostly small things. Cosmetic changes you could say. We are not really revolutionizing anything.’ (consultant in the school administration). This is supported by a leader in the administration who fundamentally questions, whether the process has fostered solutions that solve the problems at hand: ‘We have spent so much energy on this. But I honestly don’t think that these small changes make a real difference’. Changes are viewed as small, cosmetic or even absent, and despite some solutions taking shape, both local and central actors perceive them as insufficient to actually solve the identified challenges. Hence, the co-creation process has not produced innovation, defined as new, realized and value-adding ideas within the context.

Ownership of solutions

The process in the Day-care Department has resulted in a new supervision system characterized by widespread ownership both among local and central actors. An employee who was not directly involved in the working groups, but who has tested the new supervision system, remarks: ‘It really gives us ownership of our professional practice, since the supervision involves us from the beginning to the end’. Across all groups of actors, the new solution is perceived as supportive to the professional work and both employees and leaders who have tested the system express enthusiasm about working with it: ‘It has become something we can really use and not just a dusty report in the cupboard’ (Leader in an institution). Despite sharper control, the survey results show that 9 out of
10 respondents agree (completely, highly or somewhat) that the new supervision system is better than the old one (see table 1 below).

Table 2: Overall perception of the new supervision system versus the old one (Day Care Center).

<table>
<thead>
<tr>
<th>Perception</th>
<th>Completely agree</th>
<th>Mostly agree</th>
<th>Somewhat agree</th>
<th>Somewhat disagree</th>
<th>Highly disagree</th>
<th>Completely disagree</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;The new supervision system is, all in all, better than the old one&quot;</td>
<td>25,0%</td>
<td>42,1%</td>
<td>22,4%</td>
<td>5,3%</td>
<td>2,6%</td>
<td>2,6%</td>
<td>76</td>
</tr>
</tbody>
</table>

Hence, a clear outcome in this case is that ownership of the new supervision concept is pronounced among all involved actors, even local actors who have not been directly engaged in the process.

In the School Department, several local respondents feel that the dialogue about defining problems in itself has been valuable. ‘Asking people was important. Perhaps more important than what concretely came out of it afterwards.’ (local leader). However, despite ownership of the initial dialogue, ownership of the developed solutions is generally low, mainly due to the fundamental lack of even basic information about the faith of these. Local actors generally have no overview of which solutions have actually been developed. At the central level, a number of consultants are certainly committed to solutions, but even some of the central actors who play a decisive role in the process express little ownership: ‘Honestly... I don’t have great engagement or ownership in this’ (central leader). In this and a few other cases, this lack of ownership reflects the opinion that administrative burdens are not the most pressing problems in the organization. Hence, organizational ownership of solutions is lacking at the local and limited even at the central level.
Trust Among Actors

Several local and central actors in the Day-care Department stress that the level of involvement in this process exceeds anything they have experienced before. It is widely acknowledged that such intense collaboration between local and central actors has created a stronger feeling of trust among the involved actors: ‘The more you collaborate, the closer you feel and the more trust we develop for each other. This process has helped us to understand and respect each other’s roles more’ (Supervision consultant).

Although levels of trust were perceived as relatively high before, several actors feel that the continuously, engaged collaboration has tested but also strengthened trust even further. This is especially true for vertical relations of trust between the central and local level.

The continuous, engaged dialogue in which all actors perspectives are explored has also contributed to higher trust, because participants have gained insight into other actors needs and concerns. ‘Working together closely over time in the group really creates a new sense of security and trust’ (Employee). For instance, the process has enabled a central consultant to explain why a certain documentation procedure that local actors found a waste of time is fundamental to securing transparency in decision-making processes. Hence, engaged dialogue allows local actors to better understand central actors’ concerns and motives (and vice versa), making it easier to trust them. Both interviews and observations show that face-to-face dialogue and the lowering of power distance are vital factors that contribute to strengthening trust.

In the School Department, on the other hand, several respondents feel that the initial, high levels of involvement of all actors followed by silence has shaken trust at the local level. Local actors have previously been invited to dialogues with the administration that have not been followed up by concrete changes or even information about decisions. Such disappointing experiences are now
exacerbated by the total lack of information. ‘Why should I spend time on collaborating with them? Nothing comes out of it. I have participated in so many meetings and nothing came out of it. Not that we can see anyway.’ (Teacher). Hence, disappointed encounters with the administration reinforce suspicions of being involved in a merely superficial pseudo-process aimed at legitimizing already decided solutions. A central consultant explains it this way: ‘If you don’t see results from previous collaborations you are bound to be more distrustful about the next one’. Hence, in this case initially high involvement processes followed by low involvement end up eroding local actors’ trust in the central level as well as their willingness to engage in future co-creative processes.

Discussion

This article argues that outcomes of co-creation processes rely on the continuity of involvement both throughout earlier and later stages of co-creation. However, other factors may also mediate the outcomes of co-creation. The specific Danish, municipal context of this case-study must be taken into consideration: Danish public employees are accustomed to high levels of discretion and involvement and especially the municipalities enjoy extensive autonomy compared to most other countries (Ladner, Keuffer, and Baldersheim 2016). In addition, the study focuses on co-creation within pedagogical professions, which may have different norms regarding involvement than i.e. health care professions (Noordegraf, 2017). Hence, reactions to dis-continuous involvement in this study must be interpreted within this specific context of a high-involvement culture. Generalizations of the results therefor require more research to further test, discuss and validate the results within other national, sectorial and professional contexts.

While the two cases differ in regards to involvement in later phases of co-creation, other differences may also explain variations in outcomes of co-creation. The scope of the co-creation in the School Department has a much broader focus compared to the relatively narrow problem of supervision in the Day-care Department. Arguably, creating ownership to solutions may be easier with a clear
rather than with a more diffused scope. Disappointing outcomes in the school centre could hence, be explained by a higher complexity of the task, which is known to create barriers to generating outcomes in terms of innovation (Torugsa and Arundel 2016). In addition, lack of motivation among central leader in the chain of command as well as absence of feedback loops, could also be contributing factors eroding conditions for innovation (Demircioglu and Audretsch 2017).

Regarding different outcomes in terms of trust among participants, existing levels of trust must also be taken into account. While lacking comparable data on levels of previous trust in the two cases, the qualitative data indicates a history of former trust breaches in the school centre, which may also play a part when explaining the dramatic erosion of trust in this case (Vlaar, van den Bosch and Volberda 2007, Möllering 2005). However, the different power distances and involvement levels in the two cases are still likely to contribute significantly to the dramatic differences in trust development among participants (Rousseau and Sitkin 1998; Six 2013).

While early and engaged involvement constitute clear ideals in the conceptual framework of continuous co-creation presented in this study, a central question is whether all wicked problems in the public sector lend themselves to such increased involvement? In a democratic system, problems may be politically defined or solutions decided at higher administrative levels, effectively leaving space for co-creation in only some phases of the process. Is it possible to ‘fence’ co-creation into certain phases without encountering problems such as those illustrated in this case study? Arguably, clear communication about the limits of involvement, as well as aligning expectations among formal power holders and low-power actors, may provide better conditions for discontinuous co-creation. This and other dilemmas of continuous co-creation constitute important questions for further research.
Another challenge is that co-creation involves extensive resource consumption for facilitation, coordination and participation (Agranoff 2016). Co-creation may produce ‘value for money’, but requires investment of resources (Bovaird & Loeffler, 2012). Meetings and dialogue without added value may seem like victimless crimes, but they draw resources from service provision that can only be compensated for by significant service or quality improvement (Brandsen et al., 2018; Steen, Brandsen, & Verschuere, 2018). On the one hand, this study supports that concern, as continuous co-creation certainly requires more resources than discontinuous co-creation. On the other hand, the findings in this study emphasize the positive outcomes of continuous co-creation, which could also raise questions about the reasons for diverging, empirical results regarding the outcomes of co-creation (Agranoff, 2016; Brandsen et al., 2018; Triantafillou, 2019; Voorberg, Bekkers, & Tummers, 2014; Voorberg et al., 2015). Hence, future studies are encouraged to analyse diverging outcome of co-creations, from a continuity perspective to nuance the findings in this study as well as the debate about outcomes of co-creation within the literature.

Analysing co-creation in terms of both the level and time of involvement provides a more nuanced understanding of how to support successful co-creation. For policy makers, the results of this study underlines the importance of carefully considering and planning co-creation processes in a continuity perspective. The ideal of engaged dialogue throughout all phases of co-creation means that policy makers should be attentive of how initial high involvement practices are followed through as outcomes hinges on the continuity of involvement. Even if processes do not allow engaged dialogue throughout all phases, the model can help policy makers to articulate this, create transparency in the process and perhaps adjust expectations among the involved actors. Establishing a common language about continuity in co-creation may also be beneficial in networks collaborating on wicked problems, as a tool for discussing the possibilities of securing involvement of various, relevant actors throughout the co-creation process. For administrators facilitating such
networks, a continuity perspective may also serve a useful tool to discuss how competing values in processes of co-creation can be balanced (Sørensen & Bentzen, 2019). Hence, the results of this study may spur critical dialogue among practitioners about how best to facilitate continuous co-creation.

**Conclusion**

While it is broadly recognized that co-creation calls for early and extensive involvement, the importance of involvement at later stages has received less attention in the literature. This article develops a *continuity perspective on patterns of involvement in co-creation*, and proposes that the outcomes of co-creation in terms of innovation, ownership to solutions and trust among participants, are conditioned by continuous involvement throughout all phases of co-creation. The model is applied to two case studies from a Danish municipality that is actively pursuing co-creation reforms. While both cases are characterized by high initial involvement, they differ dramatically in levels of involvement in later stages of co-creation, allowing comparison of outcomes of continuous versus discontinuous involvement. The study shows that outcomes in terms of innovation, ownership of solutions and trust among participants are strengthened by continuous involvement throughout the later stages of co-creation. Discontinuous involvement, on the other hand, fail to produce innovation, ownership to solutions and even risks hampering existing trust due to disappointed expectations and suspicions of pseudo-involvement among low-power actors. Hence, discontinuous involvement risks eroding not only trust, but also the future conditions for co-creation.
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