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Review

The Qualities Needed for a Successful Collaboration: A Contribution to the Conceptual Understanding of Collaboration for Efficient Public Transport

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Abstract: The creation of an efficient public transport system requires collaborations between formal independent organizations. This paper examines collaborations between public and private organizations and passengers, with the aim of contributing to the conceptual understanding of collaborations on public transport. The study begins by describing previous research on collaboration in the public transport area and in other research fields analytically relevant for public transport. Accordingly, collaboration is defined as an attempt to overcome problems with collective action and to transform a situation in which the various organizations operate independently into a situation where they act in concert to achieve shared objectives. The collaboration process involves the establishment of joint rules and structures that govern the relationship and behavior of the organizations. According to this definition, collaboration is a more sophisticated form of collective action than is indicated by terms such as “co-operation” or “coordination”. Fully-functioning collaboration can be described as a form of “co-action”, as opposed to “individual action”. In co-action, formal independent organizations together reap the benefits of working together and achieve more than if they had acted alone. Co-action can be regarded as a gradual trust-building process that requires qualities such as mutual confidence, an understanding of other organizations’ motivations, and joint problem formulation.

Keywords: public transport; collaboration; governance; co-action

1. Introduction

Public transport is planned and provided in a complex and dynamic institutional context. Institutional reforms in Western Europe [1] have made it more difficult to establish well-functioning public transport systems, due to an organizational fragmentation that has resulted in coordination problems between public transport authorities, companies, and the local authorities, among others. In some countries, these institutional reforms have, in fact, resulted in greater fragmentation in transport operations on the ground [2,3]. Efficient public transport increasingly requires the successful collaboration of a number of discrete organizations, each with its own budget and areas of responsibility, working across organizational boundaries on shared priorities and implementation. The importance of good collaboration is emphasized by both researchers and practitioners [4–6].

The challenges of collaboration have received little attention in the literature on public transport (for example [5,7]). Research shows that an ability to set up functioning forms of collaboration, centered

on real understanding and a clear allocation of responsibilities, is often critical to the ability to join forces and achieve the optimal outcomes [8,9]; however, there is no definition of collaboration in a public transport context, and the few studies that exist have not carried the theory further or resulted in practical recommendations on how to establish and sustain a functioning collaboration. The aim of this paper is to summarize existing knowledge in order to contribute to the conceptual understanding of collaboration in public transport. Thus, it provides a detailed conceptual analysis of how best to achieve a functioning collaboration in the type of fragmented institutional setting so common in public transport in Europe today. The paper has a theoretical focus (empirical studies are indeed needed, and in a forthcoming article we will analyze actual collaborations in public transport). Our working premise is that the institutional context of public transport, with formal, discrete organizations, raises questions about how functioning collaborations can be accomplished in public transport planning and decision-making to increase travel by public transport. Collaboration in this instance means the interaction between public and private organizations and passengers. The study addresses the following questions:

- How best to understand collaboration conceptually?
- What in theory are the essential qualities for a successful collaboration on public transport?
- What in theory are the essential qualities for a successful collaboration, as determined in other analytically-relevant research fields?

In this, we have been inspired by the different approaches that characterize two influential fields of research, “governance and planning” (Section 3.1) and “business studies” (Section 3.2). The governance and planning literature reviewed describes how collaboration in terms of governance or network control is becoming standard, at the expense of the traditional hierarchical government control. This transition from government to governance is not only driving much of the need for collaboration, it also generates demands for other forms of control. The same issues are also problematized in the business studies literature reviewed here, but based on the assumption that independent organizations are becoming increasingly common in various societal functions as a consequence of new public management and the rise of “audit society” (an important element in new public management (NPM) is the transition from central control to decentralized decision-making, combined with a focus on performance measurement and evaluation, which goes hand in hand with the introduction of market principles. It is fundamental to NPM that “customers” are expected to take part by deciding what services should be provided, and how. See Sørensen and Longva [5] for NPM in transport in general, and Hrelja and Antonson [10] for users regarded as market “customers” by roads administrations. The term audit society reflects how auditing has become a principle of social organization and control. The traditional financial audits are supplemented with evaluations and risk management practices based on systematic work and computer support. Aiming at reducing risk and establishing control various audit forms have become influential in organizations, even if the capacity to reach the desired aims is questioned [11,12]). Demands for accountability from clearly-defined organizations are matched by growing calls for collaboration. According to organizational theory, any collaboration must, therefore, be viewed in light of the tension between two simultaneous societal ideals: one, the privileging of independent organizations; the other, the necessity of collaboration, because no single organization is perceived to control all the necessary resources and means required to fulfil society’s goals. The paper is, thus, driven by the question of how to reconcile the conflicting approaches adopted within governance studies and business studies.

The paper begins with a survey of the literature on collaboration, first in public transport and then, because of the evident lack of suitable studies, in other research fields analytically relevant to public transport. Since they cover the trends in the various institutional changes seen in European public transport in recent decades, each of these fields can be regarded as covering areas of theoretical interest in understanding collaboration on public transport, including the differences already noted.

Collaboration as a concept is defined in the discussion section of the paper, which also presents our conclusions on the qualities that enable efficient collaboration.

2. Public Transport Literature on Collaboration

The literature on collaboration in the public transport area, for example [5,7,9,13,14], has identified a number of critical areas or interfaces where better collaboration is needed in order to deliver measures and policies that will help make public transport more efficient. According to Monios *et al.* [6], this involves such issues as the integration of local land use and regional public transport planning, and decisions as to where to provide public transport services and at what level, as there is often a conflict between regional and local priorities (we elaborate on this below, see Section 3). The need for collaboration arises in these areas because of differences in objectives and the allocation of responsibilities. Calls for a “collective vision for regional transportation” [13] (p. 253), “greater dialogue among transit agencies, organizations, and planning bodies” [7] (p. 68), and “arguments that persuade diverse organizations and organizations to collaborate and take action on the basis of their shared meanings” [9] (p. 19), are all mentioned in the public transport literature. This points to the need for functioning collaborations.

There has been some research to catalogue the collaboration mechanisms used by public transport organizations. The mechanisms considered thus far are the contractual, partnership (formal or informal agreements, which do not include penalties for not fulfilling obligations), organizational (the need for coordination is met by organizational changes), and discursive (shared ways of viewing problems and solutions) mechanisms [5,15]. However, Rivasplata *et al.* [7] (p. 69) argue that more research is needed on the mechanisms that can be used, and ways to adapt these mechanisms to local conditions and contexts. So, while public transport research has, thus, identified some of critical areas in which public transport organizations need to collaborate, and has partially mapped the methods used in practice, the essential qualities that make it possible for organizations to collaborate efficiently have not been analyzed, even though the literature indicates that dialogue and shared goals are important.

The concept of quality is difficult to define and has been investigated on the basis of wildly differing assumptions. Against the background of this wide-ranging research, we have opted to adopt a pragmatic approach inspired by Lorino and Mourey [16]. This involves maintaining an enquiring and explorative perspective when analyzing the context-dependent subject of collaboration. It is not possible to present definitive results within this type of research; it is only possible to provide indications of important issues that can be investigated in further studies. The research field does not involve legal cases with clear verdicts, so the explorative approach is necessary. Moreover, in this tradition, exact collaboration qualities cannot be pinned down, only approximated. For us, quality was taken to mean the inputs and measures perceived as practicable and functional in setting up collaborations on efficient public transport. We would argue that establishing a “good” collaboration is, thus, a situated, social learning activity, and decisions about how to do collaboration are based on practical judgments situated in specific contexts.

3. Other Literature on Collaboration

One way to obtain information about the practical qualities that enable functioning collaborations is to analyze what is reported about collaboration in other analytically relevant research fields. A lack of studies on collaboration in the public transport literature is the main reason why it is necessary to analyze this complementary literature; another is the increasing demand for collaborations across a range of societal functions, and not within the public transport area alone. Private and public organizations, and their hybrids, are being forced or encouraged to cooperate on issues, such as healthcare or urban planning. The issue of collaboration in order to supply societal functions is central in many countries. Moreover, discussions of public control and management are being conducted in terms of network control or “governance” instead of “government”, further indicating the prominent position collaboration now occupies outside the public transport domain.

This section thus describes other research fields that are of potential relevance, based on the various characteristics and institutional changes seen in public transport in recent decades. These changes did not take place in a vacuum, but reflect general tendencies in society, where an increasing degree of specialization and institutional complexity has made collaboration an important topic of research in many policy areas. This is not to say that we provide a full description of all the institutional changes or all the relevant research fields that might be of some significance: again, our approach has been pragmatic, involving a search of the literature in two broad fields (first governance and planning and then business studies). First, however, it is necessary to provide a brief summary of the transformation of public transport that has given rise to the need for collaboration.

An important institutional characteristic of public transport is that its control is divided between a number of organizations with sometimes differing interests. Thus, O'Sullivan and Patel [2] claim that the institutional changes that have led to the reallocation of areas of responsibility in certain countries have also impaired the functioning of the public transport system [3,5]. Such reforms have created points in the planning and organization of public transport systems where institutional structures may produce suboptimal outcomes. Examples include regional and local coordination of the integration of local land use and regional transport planning. For example, in Sweden, the public transport legislation that came into force in 2012 established regional public transport authorities with responsibility for the strategic planning of public transport, including definitions of service supply, while at the same time the fragmentation still remains, for instance between public transport and land-use planning. With few exceptions (such as London in the UK), land-use planning remains, legally, the exclusive competence of local authorities, with any regional planning function being advisory. In view of this, the present analysis examines how collaboration has been analyzed in the field, called here "governance and planning". Governance and planning research often focuses on state-funded organizations at various levels and with different areas of responsibility, because of their disciplinary links to political science or planning-related subjects [17,18].

Other examples of important institutional changes in Europe in recent years are deregulation, privatization, and the introduction of competition [1,3]. Transport authorities usually retain the power to define transport services—for example, the definition of the social function of public transport—but in a truly market-driven public transport system [19] free entrepreneurs are entitled to create new transport services autonomously from requests by public transport authorities. The role played by such market regimes is growing in Europe, for example in Germany, having been first introduced in the UK (outside London) in 1986 [19]. A watered-down version was introduced in Sweden in 2012, since when regional public transport authorities have been entitled to define public service obligations for services in its area, which means that it announces which services it intends to put to contract. This new legislation also allows operators to initiate new lines on a commercial basis, the requirement being that the regional public transport authority must be notified about such services with a 14-day period for entry and exit registration.

Public transport has, thus, become a service supplied by a market or involving profit-driven organizations. Collaboration on public transport is unavoidably more complex when organizations with differing logics are involved. Thus it is relevant to examine how collaboration has been analyzed in the field of business studies, with an eye to organization theory and marketing, for while attempts at a more precise definition are irrelevant here, it remains the case that privately-owned companies have cooperated with public organizations and with one another for many years, and some of these instances have a bearing on public transport.

3.1. Governance and Planning

The research referred to here as governance and planning is a heterogeneous perspective united by a clear analytical interest in the qualities that enable agreement and coordinated action in contexts where many formal independent organizations are involved. This research analyzes the collaborations that occur outside established political and administrative processes

for decision-making and planning [20], and also collaborations within established political and administrative processes. The conditions for this have been strongly altered as a result of the social, political, and economic changes that have affected the institutional landscape, with public services and services increasingly supplied by different public and private organizations working together in networks. Ansell and Gash [17] describe collaboration as a form of governance that brings together public organizations and other interests in joint forums to pursue consensus-based decision-making. A similar theoretical standpoint—that collaboration involves consensus-based decision-making—is the common denominator for research in the governance and planning field.

In the governance and planning, collaboration is viewed as a process whereby organizations, working together, can achieve something that each individual organization cannot achieve alone. Dialogue is considered to be an essential (but not the only) prerequisite for success: it is critical for building trust, mutual respect and understanding, involvement in the process, and for breaking stereotypical conceptions and other barriers that prevent the exploitation of joint benefits [21–28].

Innes [26] emphasizes the importance of dialogue where all are listened to and respected and have equal opportunity to participate. Discussions between the parties must also be “authentic” [20,21] in order to identify the common denominator on which to base the collaboration and to avoid a dialogue characterized by manipulation and secrecy. Authentic dialogue means that the party stating a position must be a legitimate representative of the organization it claims to represent, and it must also be honest, upright, and intelligible. Dialogue between parties can result in an agreement on how to act in relation to the joint issue; however, there can also be other important outcomes, including a joint understanding and a collective identity [20]. This, in turn, can enable joint action in complex, controversial planning situations [29].

Through dialogue, a shared understanding can be reached on what can be achieved through collaboration [17]. Joint understanding [26] can be referred to in different terms, such as “common ground” [30], “common purpose” [31], “common aims” [32], or “clear goals and strategic direction” [33,34]. A shared understanding can also involve reaching an agreed definition of a problem [35,36] or consensus on the type of knowledge needed to handle a certain problem. Shared understanding can also be viewed as part of the basic learning process in a collaboration, which involves developing an understanding of the other organizations’ motivations, objectives, and visions [37,38]. An open attitude to sharing information between organizations is mentioned by Innes [26] as an important part of this learning process.

Studies have shown that dialogue and shared understanding can lead to gradual, and initially quite modest, results, which, relatively early in the process, provide concrete and obvious examples of the potential advantages of further joint work. Stepwise outcomes can be particularly significant for the creation of trust and long-term involvement in a context characterized by conflict and antagonism between organizations. One type of stepwise outcome that can have a positive effect on trust is shared data collection [39]. In some situations where the aim is to realize objectives and visions of a more strategic nature and it is difficult to translate this into stepwise outcomes, trust-building can instead involve jointly researching the overall value of collaboration at an early stage [32].

The collaborative process is, thus, not only about negotiation, but also about building trust [34,40–43]. When there is a background of conflict and antagonism between the parties, instilling trust is often the most important and difficult aspect early in the collaborative process. An important lesson from this is that if the starting phase is characterized by conflicts between organizations, time must be set aside for trust-building measures [17]. An important factor highlighted in many studies, for example [32,43–48], is that leadership is critical in establishing clear and transparent rules, building trust, promoting dialogue, and investigating mutual benefits.

Engagement is considered essential for a successful collaboration [31,40,48,49]. A common problem according to Ansell and Gash [17] is that public organizations that are forced to collaborate do so half-heartedly, or support at the central level in the organization is weak. Engagement requires organizations to be convinced that coordinated action is the best way to achieve the desired results.

Innes [26] also highlights the importance of participants having meaningful tasks in the process. Moreover, it is evident that the degree of engagement is tied to how the participants view their possibilities to influence the outcome of the collaborative process.

The dilemma with committing to a collaboration is that organizations may fear they are buying a pig in a poke. Overcoming this requires determination among the organizations to comply with the results of the collaborative process, even if the outcome goes in a less favorable direction [39]. Engagement is based on trust that all will respect all parties' perspectives and interests. This highlights the importance of clear, fair, and open processes to achieve engagement by the participants. In order to become involved in a collaboration that may take an unforeseen direction, the organizations need to feel that they have ownership and share responsibility for the process [22]. Their perceptions of the ownership of the process in turn affect their perceptions about roles and responsibilities [50,51]. Once again, this highlights the importance of trust, as parties are unlikely to share responsibilities with those they do not trust.

The critical lesson from the field "governance and planning" is that collaboration is a learning process, which can enable collective action based on shared objectives. This requires a well-managed dialogue in which the organizations develop trust, respect, and understanding of their mutual goals and ways of working. Given this, we would argue that the word "co-action" better captures the essential qualities of the interaction between organizations than the word "collaboration".

- In co-action, formal independent organizations investigate joint benefits and achieve more than if each had acted independently; and
- The organizations create a shared understanding or shared problem formulation, which results in them co-acting. The opposite of co-action is a form of interaction that can be described as negotiation—where organizations try to gain an advantage in competition with other organizations.

3.2. Business Studies

In studies of organizational theory, institutional changes that resemble those in the public transport sector have been analyzed in various studies. These changes have raised questions about how an organization should be understood or perhaps even defined [52] which, in turn, have affected the conditions for collaboration. Organizations, such as schools and hospitals, have a fixed budget and clear boundaries relative to other organizations. These other organizations, which operate in their own capacity instead of receiving directives from above, appoint managers with a mandate to act, and they have an organizational identity, as opposed to comprising an interlinking chain of activities, such as education. An unavoidable consequence of formation of this type of organization is that its boundaries become critical, as does the way in which these boundaries are maintained. An organization's boundaries and its financial resources become a prerequisite for such things as accountability, and discussions about new public management and the audit society. A tension then arises between viewing an organization as a discrete entity with full accountability for its operations and its financial results, on the one hand, and promoting collaboration between these independent organizations on the other. This tension is the starting point for a number of studies on collaboration and collaborative processes.

With the emergence of new forms of organization in the public sector, problems arose in balancing the independence of these organizations and the associated demands for performance in any collaboration between these organizations. A study by Lindberg and Czarniawska [53] sought to analyze this conflict by looking at a healthcare chain involving a number of different organizations—the county hospital care system and the provision of primary care under county council and local authority control—and found that collaboration between formal independent organizations in this healthcare chain was essential. The apparently loose connections between organizations created by their actions were regarded in the study as a strength. These loose connections meant that each organization's independence was preserved and, importantly, was also never threatened.

This conclusion appears to contradict public transport research, which describes collaboration as a ladder where the top step involves organizations being merged [54]. Another lesson is that if a collaboration is to be established, this requires more than regulations and shared norms—it also requires individuals from different organizations to actually work together so that their different patterns of action become the launch pad for others in the collaborative process. In other words, mimicking and co-acting can enhance collaboration. Once again, it emerges that the word “co-action” better captures the essential collaborative qualities than the word “collaboration”.

While organizational studies often address fundamental questions about how an organization should be understood and defined, marketing research offers a more applied perspective on collaborative qualities. Individuals and individual companies in competition originally formed the basis on which company sales were studied. In marketing research this approach has gradually been altered, and now it is claimed that collaboration is the true foundation of value creation when different parties produce similar services or products. The boundary between products and services is also erased when traditional industrial companies also become service companies; for example, when a mobile telephone or car is sold with extensive aftersales services, including software upgrades and maintenance.

Some influential researchers have described this change as transition from goods-dominant (G-D) to service-dominant (S-D) logic [55,56]. The difference lies in the perception of how value is created. In G-D logic, with its goods perspective, customers are assumed to create value completely separately from producers; in S-D logic, value creation is, instead, a joint process. G-D translated into the public transport area offers a picture of a sector that produces personnel logistics that are consumed by passive customers. If these customers can be encouraged to co-create instead, the result is the opposite: S-D logic. When products (goods) serve as the dominant focus, goods become a way for customers to create value in isolation, and customer relations stretch only to satisfying customers. Where the logic is based on services, customers are assumed to co-act in value creation by buying services, and therefore, with services as the main focus, the actual consumption and interaction *together* increase the value. Four different value creation methods can be used to exemplify collaboration or interaction between customers and businesses:

- Customer engagement (for example, eliciting customers’ opinions for use in marketing);
- Self-service (for example, electronic tickets, self-scanning, or self-check-in at airports);
- Customer experiences (for example, gathering narratives that reflect customers’ experiences of interaction); and
- Problem formulation and shared formation of new service functions (co-designing).

These activities form the basis for a study by Gebauer *et al.* [57], who apply the approach to public transport in Switzerland. The study shows how S-D logic and the co-production of value between customer and supplier are indeed applicable. The Swiss train company SBB is found to use all four value-creating activities, which according to Gebauer *et al.* [57] is both practical and efficient. The lesson to be learned here is to not base customer relations solely on one’s knowledge of the customers, but to seek out the knowledge that customers themselves possess and, in a later step, share this knowledge and ensure that it is leveraged. This requires quality in the relationship between customers and the transport company; passengers’ experiences really being taken into account; and provision of a context where the exchange of experiences is possible. Collaboration is once again based on action and is extended in this approach to include end-customers which, in this case, means all passengers who use public transport.

Naturally, in the field of business studies there are differences between organizational and marketing studies on the issue of collaboration—their fundamental approach is different, as is the way in which data are collected—yet, nevertheless, they still have some features in common. Here, too, collaboration is considered a learning process, where all the parties concerned develop an understanding for one other, and using that understanding as a basis for their actions. The more

enduring lessons to be learned from the business studies research tradition, complementing those learned from governance and planning, are as follows:

- Establishing real value in a collaboration or co-action is in essence not a theoretical task, but rather requires action and active learning. It is co-action that is important, rather than collaboration. Customers are particularly relevant here, and it is only a short step from co-action to co-production, which is significant from a public transport and passenger perspective. Innovative solutions are needed to find forms in which passengers' experiences can be utilized.
- Moreover, collaboration, co-action, or co-production of value does not necessarily require close or fixed associations; there may even be advantages with loose links between independent organizations when it comes to finding a form of joint action that is not perceived as threatening, but rather as mutually beneficial. This, in turn, means that it is equality in the relationship and the creation of trust that should be prioritized, and not subjugation or coordination. In an apparent paradox, co-action requires independently-operating organizations.

4. Discussion—Collaboration as Co-Action between Organizations in Networks

Collaboration is a very extensive field of knowledge, and this paper can, thus, only present a limited compilation. Various starting points are used: previous public transport research, the institutional changes underway in European public transport, and two research fields (governance and planning, and business studies) that are relevant for today's public transport. Research to date on collaboration on public transport is too limited to provide a reasonable knowledge base; hence, the inclusion of different empirical research traditions where collaboration is a subject of interest. The assumption made here about the knowledge base for collaboration within public transport is that the ability to create functioning forms of collaboration, mutual understanding, and the clear allocation of responsibilities between organizations is often critical for all parties' ability to work in a particular direction to achieve the best results.

4.1. Definition of Collaboration

Given the literature on public transport research and other fields analytically relevant to public transport, we would argue that collaboration is best defined as the attempt to overcome problems by collective action and to change a situation in which the parties would otherwise act independently into a situation where they act together to achieve shared objectives—a definition which also reflects findings in the literature not reviewed in this paper; for example, Ostrom [58]. The collaboration process involves the establishment of joint rules and structures that govern the nature of the relationship and the behavior of the organizations.

In this definition, collaboration appears as a more sophisticated form of collective action than is implied by the concepts of co-operation, co-organization, or coordination [18]. The difference is that collaboration is characterized by a higher degree of complexity and a long-running interaction between a number of discrete organizations. Fully functioning collaboration can be described as a form of "co-action", as opposed to "individual action". Collaboration processes are often described as being messy, conflictual, and dynamic, often with unexpected or unintended results, since the organizations apply different perspectives and approaches [59]. This means that collaboration takes place in fragile systems or networks, which increase the complexity and decrease the organizations' control over their environment [18].

4.2. Collaborative Qualities

It is obvious that a review of the literature cannot provide a generally applicable procedure for how collaborations should work. The reason is not only that it is difficult to distinguish the conditions because of the breadth of perspective, but also because collaborations are always influenced by local

and specific circumstances. This provides every reason to resort to the pragmatic approach that characterizes the present analysis.

The review of literature on governance and planning and on business studies identified a number of important factors that can be taken as the essential qualities of collaboration. The need for dialogue and trust-building figures large, as does the importance of establishing common objectives, mutual understanding, and leadership, married with a focus on stepwise results and finding ways to enable co-action while maintaining organizational identities and boundaries. Crucially, however, there is no universal recipe for how collaborations should be attempted, and there are no pre-established criteria to evaluate how well collaborations have succeeded. Indeed, applying the conceptual building blocks identified here to specific cases of collaboration in the public transport sector would, no doubt, highlight the importance of context-specific views on what constitutes a successful outcome. Nonetheless, it remains important to identify the building blocks of collaboration, since it establishes a level of analysis that could be further developed by focusing on concrete examples of collaboration on public transport.

To this end, we have structured the important collaborative qualities discussed in the paper in three stages: co-action conditions, secondary values, and primary values (see Table 1). The different stages all comprise key qualities in any collaboration, but also illustrate that there is an important issue concerning sequence. Primary values—actual collective action—are contingent on the achievement of secondary values, which in turn can only be achieved if the co-action conditions are met. Hence, the term “building block”: the qualities build on one another in sequence.

Table 1. Co-action as a stepwise trust-building and learning process.

Co-Action Conditions	Secondary Values	Primary Values
Impossibility of any of the parties achieving the desired outcome on their own	Understanding the motivations and roles of other organizations	Joint problem definition and shared objectives
Honest, open, respectful, and inclusive dialogue to investigate mutual benefits	Mutual respect	Agreement on how to act in relation to the subject of the collaboration
Action orientation	Trust	Joint action, enabling achievements the individual organizations would not have been capable of alone
Resources—for example, finances, knowledge, mandate, leadership	Engagement	Shared creation of value where different parties produce services or products

It could reasonably be argued that power is not taken sufficiently into consideration in the governance and planning literature reviewed here, and that powerful organizations will co-opt other organizations and dominate the outcome of the collaborative processes. Conflicts are probably unavoidable in public transport planning and management, so collaborative processes need to be designed and managed in ways that take full account of key *co-action conditions* (see Table 1), such as resource asymmetries in finances, knowledge, mandate, and leadership. Indeed, it is difficult to imagine that other conditions for co-action, such as an open and honest dialogue, could exist were the resource asymmetries substantial.

Arguably, *secondary values of collaboration* such as understanding, mutual trust, and engagement can only be achieved if the co-action conditions are favorable. If the secondary values are achieved, this initiates a learning process through which *primary values* such as an understanding of the organizations' motivations, joint problem formulation, agreement on how to act, decisions for joint action, and the shared creation of value can develop. Previous public transport research does not define collaborative qualities, but, as noted, it calls for “collective visions” and “greater dialogue” between organizations. The understanding of how to achieve these qualities of collaboration is however limited.

Behind this there is also a view that collaboration requires activities that are perceived as meaningful by all organizations; there must be something to gain. Collaboration in definitive terms thus starts from action: there must be a task of some sort that brings the organizations together. Only then can engagement be created, and it is this engagement that can result in a conviction that working together is the best way to achieve the desired outcome.

In the public transport sector there are some activities that at first glance do not seem immediately action-related: preparing documents or plans, for example, or general declarations of intent, or structures for the exchange of views and transfer of information. While these activities do not necessarily lead to the co-actions that characterize collaboration, they can fill important functions as “scenes” or platforms for achieving secondary and primary values of collaboration, such as understanding, mutual respect, trust and, of course, definitions of joint problems. Arguably, joint action to deliver, say, concrete measures to achieve planning objectives, or to permit the shared creation of value presupposes an agreement on both the objectives and the means.

Another more general insight relates to the question of time, and the fact that a collaboration process must be understood in terms of the stepwise creation of trust, rather than trust being present or absent—and mutual trust at that. If a collaboration process involves an activity that the organizations perceive as meaningful and important, this often means that time and incremental results become an important factor. Time for temporary setbacks is also needed if essential trust-building is to be possible. If early results are possible, this can provide concrete examples of the advantages of in-depth collaboration.

The key question is thus how to achieve fully functioning collaborations in the areas we have identified as critical for public transport. Trust-building is required in fragile constellations of independent organizations where the business of collaboration is conducted in sequence. How, then, is this possible to attain? Some examples of attempts to manage the problems that arise in the absence of formal structures of governance have begun to emerge in Europe.

For example, in the UK over the past 10 years, it has become typical for local public transport-coordinating bodies, bus operators, and local authorities to form what are known as voluntary quality partnerships to improve bus services in urban areas. These are based on a memorandum of understanding and have no legal status [6]. The local authorities can legally require bus operators to deliver quality improvements as a condition for the use of infrastructure, for example bus lanes; however, in practice very few have done so. Most have, instead, brokered voluntary agreements, not seeing the additional benefits of a statutory partnership due to the legal complexities. In addition to a growth in passenger numbers, these voluntary partnerships have resulted in improved driver training and customer service, bus priority, and newer and cleaner vehicles [60]. However, it is hard to isolate how much of this is due to the quality partnership [6,61].

In Scandinavia, there have been attempts to integrate regional public transport and local land-use planning by developing visions for regional identity, with developments that encourage regional public transport authorities and local authorities to collaborate and take action on the basis of shared goals [9,61]. For example, in Sweden, the concentration of land-use planning instruments in local government hands makes any attempt at regional coordination or formal control very controversial. Instead, some regional and local authorities’ plans result in joint statements on how the local authorities should pursue land-use planning in accordance with regional goals and land-use plans, the latter having no statutory status and, thus, little formal power. In these projects, the main outcome has been a process whereby different perspectives and opinions can be aired. It is, thus, as much a process of generating “buy-in” and understanding from the local authorities, as it is regional public transport and land-use strategy documents (for an example, see [62]). However, research shows that this way of handling the integration of land use and public transport planning between formal independent organizations has its limits. Many of Sweden’s local authorities make land-use planning decisions that undermine public transport’s attractiveness and long-term competitiveness with cars, even in regions

where organizations are trying to create integrated regional public transport and land-use planning through deliberative approaches [63,64].

These examples, and others, can be seen as attempts to create a more ordered and functional public transport system by establishing effective collaborations through networks, even within the increasingly complex formal institutional structures of public transport in Europe. Both the British and Swedish examples are promising expressions of the potential primacy of trust-building over written agreements and binding contracts.

Evidently, the strength of networks lies not in the cooperating organizations, but in the ties that bind the organizations together. Further, the circle of participants in collaboration should also be considered, since the business studies literature demonstrates that customers or users are better regarded as co-producers rather than as passive consumers [57]. In the public transport case, passengers are a resource with regard to setting demands, and also as providers of constructive suggestions.

To describe a functioning collaboration as network-based co-action is to recognize that there is an inherent conflict when it comes to presenting collaboration as increasingly important—with public transport serving as a good reminder of this—set against the strong existing tendencies to emphasize each individual organization's results and boundaries. This situation, outlined above (Section 3.2), requires a balancing act from the collaborating organizations, who have to take responsibility for shared actions that may not necessarily be to their direct benefit. When the drive for collaboration emphasizes relationships, this comes into conflict with measuring the performance of the clearly-defined organizations. The question is how to resolve this. The solution seems to be that collaboration can take place more easily if independence is maintained. When the focus is on relationships, there is less emphasis on the individual organizations. This means, in turn, that their independence is not the problem: the objective of collaboration is not for participating organizations to merge or share similar objectives in any formal sense. In fact, their independence is surely a prerequisite for successful collaboration, since it helps to promote relational roles and tone down the role of organizations.

5. Conclusions

Two partly-diverging schools of thought on collaboration have inspired this conceptual paper. The selection of “governance and planning” and “business studies” was motivated not only by a lack of collaboration studies in public transport research but also by how these two fields can shed additional light on a crucial issue for the sector. “Governance and planning” is mostly rooted in studies of public organizations, while “business studies” commonly take commercial organizations as its object of study. This dual perspective not only mirrors the situation of public transport in many countries in an era of institutional change—deregulation, privatization, and increased competition—but it underscores the extent of the collaboration, as organizations in the public transport sector are forced to collaborate. There is no option but to act together with a broad variety of organizations. When a range of commercial and public organizations jointly shape public transport, we also need to merge insight from both “governance and planning” and “business studies” if we are to understand the conditions for collaboration.

Some of the conclusions from this survey of the various fields might appear obvious: trust-building takes time, power affects both organizations and the process itself, and the need to collaborate can be positive, but can also infer that some of the organizations participate out of duty more than motivation. The short empirical illustrations from the UK and Sweden bear out this picture of a growing dependence on trust-building work, as regulation in detail is seen as overly complicated and hampers action. We believe the discussion can move further if one accepts that the concept of “co-action” has a useful part to play, and, crucially, if one sees collaboration as a stepwise process (see Table 1). Hence, collaboration can be condensed into gradual shifts, starting from the situation where a desired outcome is impossible to reach in isolation, and collaboration is needed (“co-action condition”). The aim is to move on to the stage where problems are jointly described and objectives

are shared (“primary values”). This qualitative transition cannot be achieved in one instant step, but must be taken incrementally. An intermediary step (“secondary values”) is needed in order to foster trust, create mutual understanding, and enhance engagement. The term “co-action” is an attempt to capture this daily collaborative practice in fragile networks, where the participating organizations can keep their independence but have to devote their energies to the collaboration.

A focus on “co-action” and “secondary values” points to the futility of talking in terms of “agreeing on common goals” as essential for collaboration. “Common goals” are, in our view, the result of the work—something possible to attain if the work is progressive. The key issue is to look at the processes and understand “Secondary values” as an intermediary step in public transport, too. The institutional changes currently affecting this sector in many countries are commonly described in terms of “de-regulation”. A more proper description would probably be “re-regulation”—the relations between various actors are almost always formalized in legally-binding contracts, with the aim of making the linkages all-covering. Our findings question such endeavors, as they risk jeopardizing the work we would suggest comes under “secondary values”. With the increased focus on day-to-day activities and co-action implied by this stage, the participating organizations are drawn closer together and the legal aspect dwindles in importance. This work could preferably include various documents, letter of intents or planning prospects, but these need not be based on a “see you in court” mentality. Such an attitude is ultimately based on distrust: the underlying assumption is that collaborating organizations will, in the future, have problems so severe that they will have to be resolved in a legal setting. That is the very opposite of the aims of the “secondary values” stage in collaborative efforts.

Understanding asymmetries when it comes to formal power, size, and knowledge is crucial in any collaboration. Our next conclusion is how a formal and legal approach tends to strengthen these differences. This has to do with another characteristic in the public transport sector, namely the pre-eminence of experts: they tend to dominate not only due to the institutional complexity touched on in this paper but, more importantly, because of the technical challenges. In a collaboration where trust-building, correct sequencing, and temporality are crucial, the dependence on experts probably cannot be avoided, but it could be less salient. When the aim is to co-act beyond formal arrangements, the experts will have to frame their arguments in an understandable way to ensure they are understood in an exchange of ideas. This, in turn, could also open up possibilities for new actors to take part in the collaboration such as passengers or property owners. True, the differences in power will probably not be resolved as easily as this, but to de-emphasize the formal aspects of collaboration and to see true “secondary value” ambitions as an essential stage have the potential to address both the asymmetries and the dependence on experts.

This conceptual reasoning offers various adaptations to local conditions. Collaboration is, by nature, contextual, and the way in which trust is created in the “secondary values” stage is, thus, dependent on local preconditions and how “co-action” is assessed under specific circumstances. This is the reason no specific recipe can be prescribed for collaborations on public transport, even if an understanding of how trust is shaped and maintained is an essential insight.

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