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Resourcing Goal-directed Networks: Toward A Practice-based Perspective

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Abstract

This paper proposes a practice-based perspective on how managers resource goal-directed networks in the public sector, especially those governed by a network administrative organization. While previous literature shows that network managers need to acquire and allocate resources in order to achieve network goals, little is known about specific resourcing practices and related challenges to resourcing goal-directed networks. To shed light on these issues, we outline a processual, multilevel, network-centric perspective that focuses on network resourcing practices and takes their interplay with network rules and goals into account. This paper shows that, to attain network goals, network managers need to mitigate developing tensions arising from the different interests of network members, external stakeholders, and the network itself, while navigating a trajectory of network resourcing. The paper contributes to the literature on public networks by examining potential sources of network-level resources; outlining basic resourcing practices of controlling, producing, reproducing, and transforming such resources; discussing multilevel tensions around network resourcing; and exploring trajectories of network resourcing. In addition, we propose avenues for empirical research on network resourcing.

Interorganizational networks have become an important organizational form, not least for the delivery of public services (e.g., Agranoff and McGuire 2001; Isett et al. 2011; Provan and Lemaire 2012; Provan and Milward 2001). In recent decades, the number and variety of networks as well as the scholarly interest in this phenomenon have constantly increased. Among them are goal-directed networks that follow aims whose realization is relevant for the network and its member organizations, for external stakeholders, and possibly even for society at large (Provan and Milward 2001; Turrini et al. 2010).

Having access to adequate resources is a central prerequisite for the network to attain such goals (Provan and Milward 2001; Raab et al. 2015; Sedgwick et al. 2021; Turrini et al. 2010; Wang 2016). A key task for network managers is, therefore, to secure such resources, tangible as well as tacit (Provan and Kenis 2008). Thereby, network managers are conceived as being individuals who typically occupy roles at the boundaries of the member organizations of an interorganizational network (Williams 2002), including a network administrative organization (NAO). Network managers are equipped with either formal authority or informal power, or most likely with both, to manage the network.[1]

Although several studies underline the need networks have for resources in order to provide a public service, and although that research highlights the task of network management to acquire and allocate resources, they do so only selectively and overlook at least two salient issues. First, structural and configurational approaches dominate in research on networks in the public management domain (e.g., Hu et al. 2016; Isett and Provan 2005; Provan et al. 2009; Raab et al. 2015; Wang 2016), not shedding much light on the process or specific resourcing practices within networks over time. Nor do those approaches help illuminate ways to go beyond the possibility of acquiring resources externally, for networks themselves may also be able to create resources. Second, although previous research has amply illustrated that networks use resources provided by member organizations as well as external stakeholders such as the state or local authorities (Agranoff and McGuire 2001; Provan and Kenis 2008; Provan and Milward 2001), it has not addressed tensions that are likely to arise in the process of network resourcing (Provan and Kenis 2008; Saz-Carranza and Ospina 2011).

Network resourcing, as we will explain subsequently in detail, can be understood as practices of network management to control, produce, reproduce, and transform network-level resources to reach network goals. In this process, tensions resulting, for instance, from competing interests and goals of network members (e.g., Berthod and Segato 2019), can endanger the constant availability of resources usable by network management. Network managers thus need to address such tensions in order to secure the resources needed by the network in the long run.

The omissions noted are remarkable. Scarce resources for sustaining the network as a social structure, along with abundant tensions around resource acquisition and allocation, may prevent public-sector interorganizational networks from achieving their goals. Resource scarcity and failure to manage,

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[1]Therefore, we subsequently understand all individuals taking part in the management of the network to be network managers, irrespective of whether they have the formal title of a network manager. While sharing the conception that network managers cannot rely on hierarchical fiat, our understanding is broader than those of others (e.g., McGuire 2002).

often to mitigate tension may eventually lead to reduced network effectiveness,[2] if not undesired network shrinkage and even dissolution (Chen 2008; Human and Provan 2000; Van de Ven 1976). Despite both clear identification of the need for resources and the useful discrimination between several categories of tangible and tacit resources, the process, not to mention actual social practices of network resourcing to accomplish network goals, has been largely ignored. This lack of treatment is surprising, as practice-based theorizing is not new to public management research (e.g., Quick and Feldman 2014).

The aim of this paper is, therefore, to theorize how network management, with the help of resourcing practices, not only exogenously acquires and allocates but also endogenously creates network-level resources to reach goals of interorganizational networks such as, ultimately, network effectiveness (Provan and Milward 1995). Because networks often lack network-level resources and, as polycentric systems, do not have the hierarchical fiat (Agranoff and McGuire 2001; Herranz 2008; McGuire 2002) to directly access resources of member organizations, it is challenging for network managers to retain control of this process. Against this background we ask how network managers can practice network resourcing to reach network goals in the course of time.

To answer this question and to open new avenues for empirical investigation, we engage in building theory on network resourcing. A process perspective on interorganizational networks offers the advantage of staying in touch with sequences of critical events and detailed courses of managerial actions and reactions over time—that is, of both remaining aware of and understanding the development of management practices (cf. Berthod and Segato 2019), including those that target resources and mitigate tensions. Such a process perspective, employing a recursive style of theorizing (Cloutier and Langley 2020), can also account for the role of initial and changing conditions that affect network resourcing on different levels, as well as existing structures and past actions that may cause tensions and shape current and future resourcing practices.

To open the black box of actual resourcing practices in goal-directed networks, we engage in practice-based theorizing, which, outside the field of public management, has advanced to one of the foremost theoretical perspectives on management and organization (e.g., Feldman and Orlikowski 2011; Jarzabkowski and Spee 2009; Kohtamäki et al. 2022; Nicolini 2012). To call attention to the processual nature of resources themselves (e.g., to their activation and adaptation over time), we refer in particular to the resourcing perspective (Feldman 2004; Feldman and Worline 2012). This view holds that assets (e.g., knowledge) are turned into resources that serve certain goals (e.g., knowledge used to address a certain managerial problem) with the help of practices in a

resourcing process. Initial steps in applying the resourcing perspective to dyadic interorganizational collaboration have been successfully taken in the private sector to explore the strategic use of resource complementarities (Deken et al. 2018). As explained below, however, whole networks are different, and how they satisfy their basic resource need beyond strategic considerations is still unexplored.

Our theorizing contributes to the public-sector literature on interorganizational networks by offering a processual, practice-based view on resourcing goal-directed networks that outlines particular challenges. This perspective helps to open the black box on how network managers can satisfy the resource need of the network as a social system. More concretely, we add to that research, first, by unearthing potential sources of network-level resources that go beyond the acquisition of such resources. Second, we outline basic practices of network resourcing, including controlling, producing, reproducing, and transforming network-level resources, and discuss multilevel tensions around network resourcing that network management needs to manage and mitigate. Third, we explore trajectories of network resourcing that influence how networks can satisfy their idiosyncratic resource need over time and thereby accomplish network goals and subsequently achieve network effectiveness.

Goal-directed Networks and Their Need for Resources

Goal-directed interorganizational networks are defined as "a group of three or more organizations connected in ways that facilitate achievement of a common goal" (Provan et al. 2007, 482). Such networks "have become exceptionally important as formal mechanisms for achieving multiorganizational outcomes, especially in the public and nonprofit sectors, where collective action is often required for problem solving" (Provan and Kenis 2008, 231). For the public sector, these networks were recently categorized as "purpose-oriented" (Nowell and Kenis 2019) in order to indicate that the goals of such networks are neither strategic nor fixed or given.

It is in that dynamic sense that we, like Vangen and Huxham (2012), understand network goals as emerging and malleable in the more or less tension-laden process of collaboration. Goal or purpose orientation points above all to interorganizational networks as a form of governance and distinguishes them from serendipitous networks that are often at the heart of social network analysis (Kilduff and Tsai 2003). Goal-oriented networks increasingly consist of both public and private for-profit and not-for-profit organizations (Herranz 2008; Huang and Provan 2007b; Provan et al. 2009) aiming, for instance, for service delivery (e.g., in healthcare or workforce development). Unlike policy networks, goal-oriented networks thus focus on policy implementation (Lundin 2007; Rethemeyer and Hatmaker 2008; Vangen and Huxham 2012).

Goal-directed networks can have various forms, especially with regard to their governance (Provan and Kenis 2008): they can either rely on shared governance with a more or less symmetrical distribution of power between network members, be governed by a lead organization with a centralized power position, or rely on governance by an NAO. We develop our theorizing for this last specific type often found in the public sector (e.g., Raab et al. 2015; Saz-Carranza and Ospina 2011),

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[2]In line with Provan and Kenis (2008), we acknowledge that network effectiveness is a construct with challenges regarding conceptualization and measurement, not least due to the different stakeholders involved and the different outcomes a network can achieve. We define network effectiveness as being "the attainment of positive network level outcomes that could not normally be achieved by individual organizational participants acting independently" (Provan and Kenis 2008, 230). Different stakeholders such as network members, the NAO as representative of the whole network, and external stakeholders such as clients can evaluate network effectiveness. Each group can conceptualize network effectiveness differently from its individual perspective (Provan and Milward 2001), which also adds to conflicts about resource use within the network.

where an NAO supports network management, not least because it brokers relationships and coordinates practices, mostly without controlling the network (Provan and Kenis 2008). To us, the very existence of an NAO nicely illustrates the network-level need for resources (see also Human and Provan 2000), among others for the installation, operation, and maintenance of such units. An NAO can thereby be of varying structural complexity in terms of organizational design and staffing (Iborra et al. 2018)—a possibility that may have consequences for the types and amount of resources needed to sustain the NAO.

Challenges of Resourcing in Goal-directed Networks

Goal-directed networks not only constitute a distinct (whole-network) level of analysis (Provan et al. 2007) but also face very specific challenges when it comes to resourcing. Three structural characteristics of goal-directed networks account for this issue: They lack hierarchical fiat, must handle additional goals on the network level, and exhibit more fluid boundaries than organizations do. These characteristics test conventional wisdom about resource orchestration within single organizations, particularly firms (e.g., Bower 1970; Sirmon et al. 2007).

As a first challenge, goal-directed networks, like any form of "collaborative governance" (Ansell and Gash 2008), lack the archetypical formal hierarchy of single organizations (Van de Ven 1976), a point made early and often in research on public networks (Agranoff and McGuire 2001; Rethemeyer and Hatmaker 2008; Vangen and Huxham 2012). Network members are legally autonomous organizations, pursuing their own—organizational—interests and decide independently about joining and exiting a network, at least in the case of nonmandated networks. In mandated networks, network members still have control over organizational resources. Despite the possibility of power asymmetries (e.g., if a lead organization exists or if influential external stakeholders become involved), network management cannot exert formal hierarchical control. It thus needs to reach decisions via other mechanisms such as consensus among network members (Provan and Kenis 2008), de facto (rather than hierarchically authorized) asymmetrical power and attendant negotiations (Agranoff and McGuire 2001; Clegg et al. 2016), and norms of more or less generalized reciprocity (Powell 1990). This lack of hierarchical access to resources is even reinforced by the lack of legitimacy from which the network as a form of organizing may still suffer (Human and Provan 2000).

A second challenge is that networks face complex goal conflicts deriving from the diverse interests and agendas of the many participating organizations. Member organizations, particularly in cross-sector collaboration (Cloutier and Langley 2017; Eden and Huxham 2001), need to negotiate and agree upon additional network-level goals. Aside from the varying goals among network members, networks can also face fundamental conflict between organizational goals and those of the network itself (Eden and Huxham 2001). For instance, resources for organizations and networks are typically limited, so conflicts are likely to arise over the supply and/or use of resources with which to realize either the organizational goals or those of the network or the external stakeholders.

As a third challenge, the boundaries of goal-directed networks are more fluid than organizational ones (Provan et al. 2007; Saz-Carranza and Ospina 2011). Consequently, networks are volatile, a characteristic that can entail frequent changes in temporary interorganizational relationships and potential membership. It can impact network practices, goals, and rules, affecting the pool of resources available to network management. Although this flexibility of networks is frequently advantageous (e.g., Powell 1990), it can become a liability to network survival: To ensure themselves a steady supply of resources, goal-directed networks need some continuity, or at least predictability (Klaster et al. 2017), especially if network-level resources are in danger of diminishing with the exit of network members.

These three network-level challenges limit the continuous access of network managers in boundary-spanning roles (Williams 2002) of the NAO and the member organizations to and their control over the resources that serve the network. Moreover, complex tensions due to conflicting goals are likely to arise among the collaborating organizations—with important implications for resource management.

Extant Approaches to Managing Resourcing Challenges of Goal-directed Networks

Of all the disciplines interested in the management of interorganizational networks, strategic management research has the longest record of studies on resource management within networks. Strategy research typically focuses on resource access as a driver of network instigation (Gulati 2007). From this perspective, joining networks is often associated with gaining competitive advantages (Das and Teng 2000b). Strategy scholars also shed light on the process of resource management within private for-profit organizations. The main goal of this stream of research is to explain the development of competitive advantages, a topic that is less essential for the public sector, where desired outcomes are effectiveness of policy implementation (Lee and Whitford 2013) and public value creation (Bryson et al. 2014). Nevertheless, these works deliver key insights about managing resources more generally, including different types of resourcing practices as well as insights into conflictual issues and activities necessary for resource orchestration along the lifecycle of a firm (Sirmon et al. 2011).

Research on public networks accords resource acquisition and allocation a significant part in network management (Agranoff and McGuire 2001; Provan and Kenis 2008). Sufficient resources are considered a prerequisite for achieving network goals such as network effectiveness (Provan and Milward 1995; Raab et al. 2015; Turrini et al. 2010; Wang 2016). For instance, Raab et al. (2015) find that resources, in combination with other conditions, are significant for attaining network effectiveness, whereby administrative and financial resources can substitute for each other to some extent. Along with these "material-institutional resources" (Rethemeyer and Hatmaker 2008), social structures such as strong ties within dense networks are likely to matter, and their development and maintenance, in turn, requires material-institutional resources (ibid.). However, these works do not fully leverage the opportunity to focus on the malleable nature of resources. A more processual, practice-based perspective would help envision additional sources of network-level resources that network managers can exploit, including the possibility of transforming existing resources over time.

Other authors (Berthod and Segato 2019; Klaster et al. 2017; Saz-Carranza and Ospina 2011) propose a process view on public networks that also includes questions of resource dependencies and allocation. However, they focus on neither specific resourcing practices nor resourcing trajectories, which greatly help explain how network managers are supplied with and use resources over time. We will continue this line of processual theorizing about network resourcing because it promises to unearth not only the complexities and interdependencies involved but also the way network managers can secure resourcing in light of manifold tensions.

Toward a Practice-based Understanding of Network Resourcing

To understand how goal-directed networks in the public sector can manage resources to satisfy their resourcing need and to reach network goals over time, we propose a practice-based understanding of network resourcing that is based on structuration theory (Giddens 1984). This social theory has been mobilized in process research on collaborative governance in the public sector before (Bryson et al. 2020; Crosby and Bryson 2005; Sedgwick et al. 2021). A practice-based approach is able to take account of the everyday, more or less powerful actions of network managers and is thereby sensitive to rising tensions as well as to the interplay with structures and actions on the organizational, network, and field levels. Structures, which include rules and resources (Giddens 1984), constrain as well as enable action or, more precisely, practices understood as situated but recurrent interactions. To make systems such as interorganizational networks survive and be effective, individual and/or collective actors enact structures and, thereby, either reproduce or transform them with the help of social practices. Thereby, structures are conceived as rules of signification and legitimation as well as resources of domination existing only in practices or in the memory traces of "knowledgeable" actors (Giddens 1984). In our context, particularly network managers as individual actors or member organizations and the NAO as collective actors enact structures with the help of network management practices. In Giddens's duality view, structure enables and constrains social interaction and is thus as much a medium as it as an outcome of practices.

To clarify our ontological understanding of resources further, we adopt the resourcing perspective that has become popular in management and organization research and that is informed by structuration theory, not least with regard to the subtle interplay of rules and resources (e.g., Deken et al. 2018; Feldman 2004; Feldman and Worline 2012; Keating et al. 2014). According to this approach, resources are considered to be central for creating and maintaining social systems but not to be fixed entities. Rather, not unlike social systems, including interorganizational networks, assets rely on enactment, reproduction and transformation, and only become resources—and provide their corresponding services (Penrose 1959)—through their use in practice. Thereby, "*resourcing* refers to the process through which actors turn potential resources [i.e. assets]—technologies, knowledge, material objects—into resources-in-use to accomplish objectives" (Deken et al. 2018, 1923). Today, for instance, knowledge that one or more organizations have within a network about managing with the help of digital technology is likely to be

regarded as a valuable asset. When enacted and reproduced in practice conforming to prevailing rules (of signification and legitimation), this knowledge will become a resource (of domination) for the individual organizations as well as the network as a whole, depending on its particular use. This example illustrates, incidentally, an asset whose usage does not lead to its exhaustion. Instead, the asset is available for further use and may even grow over time. Conversely, other assets may be drawn on only once, for they erode through their use, like a one-time grant provided to an interorganizational network. Network managers can draw assets from multiple endogenous and exogenous sources, as we will outline below. The enactment of a network-level resource, either by a member organization or an NAO, often creates subsequent dynamics.

In the remainder of this section we outline several fundamental elements of a practice-based perspective on network resourcing. They emphasize, as is consistent with structuration theory in general and the resourcing perspective in particular, the recursive, multilevel interplay of network goals, rules, and tensions with network resourcing practices that turn assets into value-creating network-level resources and thereby contribute to network survival and other forms network effectiveness (Provan and Milward 1995).

Within a practice-based perspective on network resourcing, network-level resources are the first important element because they are generated when actors, particularly network managers, put assets (potential network resources) to use in practice. A network-level resource, whatever its origin, is anything that creates value and can become a source for empowering social interaction (Sewell 1992) toward developing and achieving network goals. Value can come in several guises, and different actors may assess it differently. Individual organizations, such as for-profit organizations that are part of the public network, can aim to capture value in terms of monetary rewards received from the network. Network members may also be interested in the creation of public value (Moore 2000), as when they tackle societal problems (Bryson et al. 2014; Kenis and Raab 2020).

Acknowledging the Multilevel Nature of Network Resourcing

For a practice-based perspective on network resourcing, it is also necessary to keep in mind the multilevel nature of resourcing practices and their closely connected network goals, network rules, and tensions (see also Nowell and Kenis 2019, who call for including multiple levels of analysis in network research). Ascending from the micro- to the macro-perspective, these multiple levels encompass (a) individual network managers who, in their boundary-spanning roles, enact network resourcing practices and potentially pursue their idiosyncratic goals; (b) member organizations, which also have their own goals and rules and can provide assets that potentially become network-level resources but which, usually in return, aim to appropriate value from network resources; (c) the whole network as a social system with its own goals and rules as well as the ability to enact network-level resources from assets initially under the control of its members or the network in order to appropriate value from these resources; and (d) the external environment or field in which the network is embedded (e.g., governments and state agencies, philanthropic organizations, banks, and even

competing networks). These network-external stakeholders can also provide assets to the network and, in turn, influence its goals, rules, resourcing practices, and the use of network-level resources, sometimes only after thorough evaluation (Provan and Milward 2001; Provan and Sydow 2008; Sydow and Windeler 1998).

Considering Adaptable Network Goals

Within a practice-based perspective on network resourcing, network goals are another basic element, for the resource's requirement to attain certain goals is the starting point for network resourcing practices and thus becomes a network goal itself. At the same time, network goals, which may emerge or change with the availability of resources, can guide or constrain network resourcing practices. Before or during the process of resourcing, participants in networks—all possibly equipped with different resourcing opportunities, a notable source of power differentials (Agranoff and McGuire 2001)—can agree on several collective goals. These goals might range from the installation and maintenance of structures and practices needed to keep the network afloat to more "ambitious" ones, such as creating internal and external network legitimacy (Human and Provan 2000) or realizing other forms of network effectiveness (Provan and Milward 1995) while creating value, particularly public value. To reach such goals, network managers need to enact assets in such a way that the assets become network-level resources that then allow them to govern the collaboration and manage the network.

As already implied, network goals are not static; they can either emerge or change in the collaboration process (Huxham and Vangen 2005; McGuire 2002) as well as in light of different and changing interests and power positions (DiMaggio 1988) of member organizations. Like the interorganizational complementarities investigated by Deken et al. (2018), network goals are often constituted only in the process of collaboration, not least with regard to available resources. Huxham and Vangen (2005) capture the processual nature of network goals with the notion of "making aims" in multiparty collaborations. Accomplishing goals, in turn, can at least potentially lead to an augmentation of resources but also to a reinterpretation of resources and eventually to new resourcing practices (Deken et al. 2018). In addition, the outcome of resourcing practices can affect—that is, reinforce or undermine (Alimadadi et al. 2019)—the goals of organizational actors. However, especially in case of mandated networks or networks that are heavily dependent on resources from external public authorities, goals may be less malleable, as they are set by these external stakeholders (e.g., Saz-Carranza et al. 2015).

Leveraging Complementary Network Rules

Another prominent element of a practice-based perspective on network resourcing is network rules, which, like network goals, enable and constrain resourcing practices (Giddens 1984). Network rules correspond to cognitive and normative institutions (Scott 1995), refer to structures such as shared views and norms prevailing on the whole network level (Agranoff and McGuire 2001; Sydow and Windeler 1998), and resemble the schemas proposed by the resourcing perspective (Feldman 2004). They are either reinforced and thereby institutionalized, or they are changed by the outcome of network resourcing and mutually influence network goals and tensions. Moreover, network rules affect both the creation and the appropriation of value created by network-level resources, for instance by regulating the selection or "activation" (Agranoff and McGuire 2001) of new members bringing specific assets to the network. While network rules may evolve through interactions of network members, power differences are, by contrast, based on an asymmetric allocation of resources (of domination). If imbued with meaning and legitimacy (i.e., rules of signification and legitimation), this can pervade the formulation of the rules. In addition, external stakeholders (e.g., the state) may impose network rules.

Emerging Network Tensions

Lastly, we argue that tensions around the use of network-level resources by different actors (network members and external stakeholders alike) and over time need to be part of a practice-based perspective of network resourcing. Such tensions are closely connected to organizational and network goals, facilitate and constrain resourcing practices, and are either reinforced or mitigated by these practices. Such tensions and their management recursively influence network goals and rules (Berthod and Segato 2019). Network-specific tensions can evolve around issues far beyond those around different or even divergent goals or interests of network members, external stakeholders, and the network itself (e.g., de Rond and Bouchikhi 2004). To develop theory about network resourcing, we chose to focus on two deep-seated tensions related to such distinct interests and the use of resources within networks and obviously also relevant in networks with an NAO.

The first tension, that is, resource use by the organization(s) rather than by the whole network, is driven by possibly diverging interests and can manifest itself either on or across levels.[3] On-level tensions around resource use occur when different, but similarly powerful, member organizations compete to use the value created by network-level resources (e.g., Dyer et al. 2008). This tension is broadly discussed, mostly with reference to the private sector, as tension between cooperation and competition within networks (e.g., Das and Teng 2000a; de Rond and Bouchikhi 2004; Rethemeyer and Hatmaker 2008). It also matters in interorganizational networks built on common purpose and collaborative consensus, not least in the public domain (Vangen and Winchester 2014). This tension, which is probably particularly hard to manage by an NAO because that structure requires consensus among the usually more powerful member organizations, becomes even more prevalent when, along with public organizations, firms are involved in the delivery of services. Tensions around the use of network-level resources, however, may also become manifest across levels. We propose that an NAO, too, in fact representing the network itself, can compete with member organizations for the value created by network-level resources, as when it seeks to satisfy its resource need as an

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[3] By "on-level" and "across-level," we refer to activities that either take place between actors at the same level (on level, e.g., the whole network, between different member organizations) or actors on different levels (e.g., whole network and member organization; whole network and external stakeholder).

administrative entity. Furthermore, external stakeholders such as customers or financiers of a network may claim parts of the value created by network-level resources.

The second fundamental tension, resource use for short- versus long-term goals, manifests itself mainly on the level of the whole network, although the goals of member organizations with their different time horizons may be entangled there as well. Different temporal orientations, not only among member organizations, but also among these organizations and the whole network or the NAO, are possibly at the core of this tension. While private firms may be subject to market-driven short-termism, public organizations may, at least under specific circumstances, be able to strive for the effectiveness of a network in the longer term. Independent of the type of member organization, Klaster et al. (2017) describe the challenge of network managers to either attain more short-term goals or use resources to build up enduring network relations that show their value over an extended period. Similarly, a study about networks for waste disposal illustrates that network managers need to balance the use of resources for different kinds of network projects (e.g., replication of successful projects versus projects to bring new members in) and to decide whether to establish internal or external network legitimacy first (Paquin and Howard-Grenville 2013; for the tension of building external versus internal legitimacy, see also Human and Provan 2000).

Managerial Practices of Network Resourcing

Managerial practices of network resourcing are recurrent, more or less routinized everyday activities that are, like all social practices, "ordered across time and space" (Giddens 1984, 2). The emphasis on practices accentuates governing collaboration or practicing collaborative governance (Bartelings et al. 2016; Saz-Carranza and Ospina 2011). The accent, however, is less on the situated action or behavior of individuals than on recurrent, structured, and structuring practices that individual or collective actors enact in their day-to-day activities. The actors thereby reproduce or transform the very structures that enable these activities, not least because they constrain the activities (Giddens 1984). In the remainder of this section, we outline managerial practices to address the fundamental challenge of gaining and maintaining control over network-level resources. These practices are a foundation for other practices to produce, reproduce, and transform network-level resources for value creation.

Controlling Network-level Resources in a Polycentric System

A first set of network resourcing practices centers on gaining and securing control over assets to use them for value creation and goal achievement. Resource control is an important requirement for value creation and appropriation both within single organizations and for the whole network. Avoiding the restrictive focus on strategic resources, Pfeffer and Salancik (1978, 48) define the extent of resource control as being "the capacity to determine the allocation or use of the resource" as part of organizations' attempts to avoid resource dependencies (see also Lundin 2007). Also work using the resourcing perspective has recently emphasized that access to resources is important, finding "that who can access the resources is as consequential as how they are used" (Sutter et al. 2022,

1). Network managers endure great uncertainties regarding resource control. These vicissitudes stem from the challenges of networks: their lack of hierarchical fiat, conflicting goals among their members and with reference to the use of resources, and interorganizational dynamics involving the possibility of membership changes and resource drain. Against this background the control approach for networks is sometimes appropriately termed "social steering" (Rethemeyer and Hatmaker 2008).

For controlling potential network-level resources, network management can rely on at least three types of practices that help allocate assets for value creation on the network level. First, owning and possessing constitute classic sources of resource control (Pfeffer and Salancik 1978). Formal contracts allow network managers to transfer assets into the ownership and control of the network, facilitating decisions on resource use (Grandori and Soda 1995; Huang and Provan 2007a). An NAO may also de facto possess assets that are already produced on the network level (e.g., knowledge about network management). However, most networks do not accumulate a significant share of the assets possessed by the network and recurrently rely instead on resources from network members.

Accessing assets that stay in the ownership or possession of others thus constitutes a second source of resource control (Grandori and Soda 1995; Pfeffer and Salancik 1978). Network managers can practice this kind of resource control both formally and informally (see also Ring and Van de Ven 1994). Contracts between network partners constitute the formal way of granting network managers authority over the use of assets that stay in the ownership or possession of others. The network managers' personal relationships, their expectations of reaching common goals through interorganizational collaboration, norms of reciprocity, or any combination of these relational forms of governance (cf. Cao and Lumineau 2015) represent rather informal ways of controlling assets that are in the ownership or possession of others.

Third, beyond these two types of rather direct control over assets, the practice-based perspective we propose builds sensitivity for a further component of control over network-level resources: Network managers need to have at least partial control also over the practices that ultimately turn an asset into a value-creating resource. Based essentially on defining formal and informal rules (for rules as means of control, see Clegg 1981) or "schemas" that provide access to resources (Sutter et al. 2022), this particularly challenging requirement to control practices of resource usage is crucial when several actors can activate the services of the same resource. Controlling practices can help to manage, and in particular to mitigate tension that may arise from this potentially conflict-laden competitive situation, as when they exclude certain actors from resource usage from the outset. Consequently, resource control on the level of the whole network relies heavily on political negotiation and renegotiation (Mayntz 1993) and is usually more fragile than it is within organizations.

In all three ways, controlling network-level resources and their usage is closely related to the exercise of relational power through resourcing (Coelho et al. 2022; Giddens 1984) within networks (Agranoff and McGuire 2001). Accordingly, not only does power allow for the control over assets and resources ("power over"), but resources and, hence, resourcing practices become a source for reproducing or changing existing power structures ("power to").

Producing, Reproducing, and Transforming Network-level Resources

A second set of network resourcing practices builds on controlling practices and has to do with the production, reproduction, and transformation of network-level resources. These practices revolve around the creation of public value and refer to the "structuration" (Giddens 1984) of network-level resources, which are to be enacted on-level or cross-level (for an overview of the respective practices, see table 1).

On-level resourcing practices of production, reproduction, and transformation make use of assets that are in the long-term ownership or possession of the network as represented by the NAO, for instance. Network managers can, first, create new resources on the network level. Examples of such creation are the co-construction of new complementary resources in the process of collaboration (Deken et al. 2018), the generation of idiosyncratic and deeply embedded knowledge on network management via network learning (Knight and Pye 2005), and the building of interorganizational trust (Coelho et al. 2022; Provan et al. 2009). Second, network management can reproduce existing potential network-level resources by maintaining or accumulating (Sirmon et al. 2007) these resources on the network level. The maintaining of network-level resources includes their possible stabilization or augmentation, that is, the expansion of the value-creating potential of resources, which corresponds to the "ampliative cycles" (Feldman and Worline 2012) in the resourcing literature. Third, network managers can transform existing network-level resources by exaptation and divesting. Exaptation, the "cooptation of existing traits for new functions" (Garud et al. 2018, 125), accounts for the malleable use of potential network resources and the possibility of adapting them to serve a new purpose and solve new problems (Garud et al. 2016). Divesting network-level resources (Agranoff and McGuire 2001; Sirmon et al. 2007, for releasing firm-level resources) refers to shedding network-controlled resources and thereby creating new alternatives. This transformative practice often allows for the reproduction of resources that can create higher value.

Unlike on-level practices, which focus on the whole network, *cross-level* resourcing practices of production, reproduction, and transformation refer to the use of assets that are not in the long-term ownership or possession of the network but rely essentially on "mobilizing partners' resources towards the achievement of joint goals" (Vangen et al. 2015, 1241), a frequently discussed task of network managers in the public domain (Agranoff and McGuire 2001; McGuire 2002). Network managers can, first, access potential network-level resources from sources external to the network (see also Provan and Kenis 2008; Provan and Milward 2001). Such assets may well remain in the possession of member organizations (e.g., organizational personnel temporarily serving the network).

External stakeholders who are not part of the network, such as state agencies, philanthropic organizations, or customers, particularly "lead users" (Von Hippel 1986), can also provide vital assets to the network. Second, network managers can maintain assets that are needed to enact network-level resources but that remain in the ownership or possession of member organizations or organizations at the field level. For this purpose, network managers, including those employed by an NAO, need to encourage their organizational counterparts to maintain these assets and to put them at the future disposal of the network (via contracts, for instance). Third, network managers can engage in transposing assets that are in the possession of member or field-level organizations but that are then turned into network-level resources serving a different purpose. Berthod et al. (2021, 173) define "resource transposition as the process of managerial practice turning assets that are in the possession of other organizations into resources that become useful for a different, collective purpose." This practice adds one more aspect to the bricolage approach that managers can bring to bear in response to resource scarcity (Baker and Nelson 2005; Williams and Shepherd 2016). Based on these basic reflections, we propose:

> P1: The better network managers are able to gain and maintain control over network-level resources, the more likely it becomes that they can produce, reproduce, and transform network-level resources.
>
> P2: The better network managers are able to produce, reproduce, and transform network-level resources on and across levels in accordance with the network's rules, the more likely it becomes that they will achieve the network goals.

The first proposition, as a kind of summary statement, points to managerial control as being an important but rather elusive precondition in interorganizational networks for producing, reproducing, and transforming network-level resources. The second proposition builds on this and emphasizes the role of on- and across-level management practices in this process, and—importantly—relates them recursively to network goals and rules.

Mitigating Tensions around Network Resourcing

Mitigating tensions of different kinds supplements previous resourcing practices focused on resource control and value creation. As already mentioned, tensions during network resourcing arise partly through, first, opportunistic resource use by one or more organizations as opposed to common resource use by the network, or, second, through resource use in pursuit of short-term rather than long-term goals. These tensions can

Table 1. Practices of Network-level Resourcing

		Producing Network-level Resources	Reproducing Network-level Resources	Transforming Network-level Resources
Practices for controlling network-level resources	On-level	Creating network-level assets and resources	Maintaining network-level resources	Exaptating network-level resources Divesting network resources
	Across-level	Accessing assets that become network-level resources from the organizational or field level	Maintaining resources of organizations or the field to allow future network access	Transposing resources from the organizational or field level

cause conflicts over the distribution of limited value created by network-level resources among network members and the wider public, often in relation to previously contributed assets (Dyer et al. 2008) and out of fear of free-riders.

To deal with such tensions, network management needs to establish rules of network resourcing. Such network resourcing rules, often guided by corresponding "field frames" (Ansari et al. 2013), may either underline or undermine the norm of reciprocity in the network. Beyond this normative obligation, network rules typically reflect a rather collective logic of action (Olson 1965) based on the insight that the partners' fates are interconnected. The partners have to accept joint responsibility beyond organizational interests, and some network-level consensus on goals, rules, and practices for managing and mitigating tensions is helpful for securing the resourcing of the network. Whether network goals, rules, and practices are engineered or emergent, formal or informal, is less important from a practice-based perspective than is the sheer adherence to them (Berthod and Segato 2019), which is indicative to a high degree of institutionalization (Giddens 1984; Scott 1995). Because networks lack hierarchical fiat, the validity and reach of such goals, rules, and practices may, however, be continuously contested and negotiated in relation to power differentials between network members.

Tensions around network resourcing may be mitigated with the help of an NAO that can invest time and effort into balancing the two contradictory poles characteristic of each tension, such as resource use by member organizations versus resource use by the network, as well as the pursuit of short-term versus long-term network goals. Saz-Carranza and Ospina (2011) demonstrate this possibility in their study of four public networks supporting immigrants in the United States, with the networks being governed by NAOs and facing another tension, that between unity and diversity. To this end network management concentrates on particular aspects of "creating unity in diversity" by uniting the member organizations "along one set of dimensions (a meta-goal, the value of diversity, and a shared immigrant identity) and sustain[ing] diversity along a set of others (organizational characteristics, subissues addressed by each member, and different national identities)" (Saz-Carranza and Ospina 2011, 357).

Such practices do not directly affect how an asset is turned into a value-creating resource, but they do have notable implications for the long-lasting ability of networks to do so in order to realize goals. Unresolved tensions can impede controlling resources on the network level and contribute to the political or, more precisely, micropolitical character of network management (Benson 1975; Brattström and Faems 2020; Hardy and Phillips 1998). If network management is unable to handle the tensions around network resourcing successfully in the face of such political struggles, then the respective resourcing practices will not receive the internal and external legitimacy needed for the network's existence (Human and Provan 2000). Therefore, we propose:

> P3: To achieve network goals effectively in the long run, network managers need to manage, and more often than not mitigate on- and cross-level tensions around network resourcing by developing appropriate resourcing rules.

This proposition extends former theorizing (e.g., McGuire 2002) by adopting a practice-based perspective, distinguishing on- and cross-level tensions, and pointing to the importance not only of goals, but also of rules to manage or mitigate the tensions that are likely to arise in processes of network resourcing.

Outlook: Trajectories of Network Resourcing

To understand the role of resourcing practices for attaining network goals effectively over time, we propose to be sensitive to interorganizational dynamics (Majchrzak et al. 2015). Resourcing practices may reinforce or change the network goals, rules, and tensions that shape them and require contingent alterations in the behavior of managers (Alimadadi et al. 2019; Miller and Le Breton-Miller 2021). In what follows, we draw on the concept of the trajectory (Strauss 1993) to discuss some temporal aspects of network resourcing.

Analyzing Network Resourcing Trajectories

Network resourcing trajectories are patterned outcomes of past resourcing practices that guide future patterning, not only of network resourcing practices but also of related goals, rules, and tensions. This understanding is consistent with Strauss (1993), who defines a trajectory as being a sequence or pattern of actions and interactions performed by multiple actors and directed toward a goal formulated with contingencies in mind. Nevertheless, with equal emphasis on structure and agency and with the recursive interplay and co-constitution of both (Giddens 1984), the particular development of the trajectory's characteristics can be neither entirely anticipated nor managed.

Details about the course of network resourcing trajectories lack sufficient empirical insight. After the development of seven interorganizational projects in the construction industry, Oliveira and Lumineau (2017) were able to distinguish, with an eye on process outcome, "high performance" from "low performance" coordination trajectories. Such an analysis of network resourcing trajectories, which may produce either a beneficial or negative outcome, would be valuable but would require fine-grained longitudinal data. We must also leave for the future a more modest empirical undertaking that focuses on establishing stable versus fragile resourcing trajectories for the network (see below). The same is true with regard to distinguishing between different process courses, such as continuous versus episodic or convergent versus radical change (Street and Gallupe 2009), whether simultaneous or sequential.

To analyze network resourcing trajectories in the public domain empirically, we propose to bracket them into different episodes consisting of a sequence of activities and events (Langley et al. 2013). Initial conditions (Doz 1996) during the foundation of the network set the start of any network resourcing trajectory (Episode 1). From a resourcing perspective, initial conditions refer to existing potential network-level resources connected to organizational and field levels, organizational and network goals, existing rules on all levels, and tensions already arising on and across levels. Once enacted, these initial conditions guide, enable, and constrain network resourcing practices that feed back into the shaping of these conditions and constitute revised conditions across the following episodes of network resourcing. During these subsequent episodes, potential on- and cross-level network-level resources can, for instance, be maintained or newly created or can erode what may impact the stability of resource flows

to the network. A recent study of resourcing practices in the context of an e-government platform shows how the early phase of resourcing strongly influences subsequent resourcing practices (Coelho et al. 2022).

Network resourcing practices, whether initiated or cultivated by managers of the member organization or by the NAO, impact the stability of resource flows and, in the end, of the network as a social system. They may also either reinforce or more or less radically change the initial or revised conditions (e.g., continued low versus increasing goal consensus between network members). In accordance with structuration theory and the resourcing perspective, we regard both the reinforcement and the change of initial and revised conditions largely as active, albeit not necessarily intended, accomplishments of the network agents. In any case, a more active or more passive style of network management is, in interaction with power differentials within the network, likely to imprint this resourcing trajectory.

Trajectories of network resourcing, too, may have definitive turning points that affect their outcomes. External shocks (e.g., the present pandemic) that trigger a substantial reallocation of resources can cause such critical junctures or internal second-order learning processes that alter network goals and rules and concomitant resourcing needs and practices. Arriving at such a point is likely to influence the future course of resourcing practices. In addition, changes in network membership can become turning points for the outcomes of network resourcing. An example is the entrance or withdrawal of certain member organizations that contribute significant potential network-level resources. Another example is other kinds of network change, such as shifts of formal and/or informal power (Lashley and Pollock 2020) or rapidly increasing or decreasing interorganizational trust (Provan et al. 2009).

Stable versus Fragile Network Resourcing Trajectories

A network resourcing trajectory influences, as one critical outcome, a network's ability to satisfy its continuous and episodic resource need and, hence, the possibility of realizing its goals in a rather stable and predictable manner. The stability of network resourcing trajectories is, however, contingent on the initial or revised conditions and constituted by the interplay of structure and agency on different levels.

Within *stable* resourcing trajectories, network managers are able to align different goals and to manage and mitigate tensions in each episode (see also Paquin and Howard-Grenville 2013). They do so with the help of practices that align with the pertinent rules of the network, the organization, and (as with field frames) the field, providing the network with the necessary internal and external legitimacy (Human and Provan 2000). Under these circumstances, the network can sustain its own structure and continuously create sufficient value for all relevant stakeholders.

Within *fragile* resourcing trajectories, by contrast, network managers are not able to align goals and/or mitigate tensions, which therefore subsequently increase, leading to further conflicting interests, a possible delegitimization of the network, and an insufficient supply of network-level resources. Moreover, fragile resourcing trajectories may emerge if the network managers' practicing of network resourcing lapses, leading to resource rigidities in the face of changing revised

conditions (Gilbert 2005) and to networks operating at a low level for a number of years. The worst outcome, then, is either network termination or the continuation of the network, including its NAO, as a facade that is unable to reach its goals or create any value but that continues to consume public resources.

Again, it must be emphasized that network managers do not have full control over such network resourcing trajectories. Like Keating et al. (2014) on resourcing newly created ventures, we argue that the network participants' strategic planning for network resourcing is limited. One reason is that initial conditions often turn out, despite concerted planning efforts, to be beyond the reach for network managers. Unfavorable initial conditions include, for instance, highly distinct and possibly even divergent goals of network members and/or the whole network as well as network rules that inhibit rather than support collaboration. Another factor limiting the strategizing of network participants is that network resourcing trajectories can become institutionalized, even self-reinforcing and consequently difficult to abandon, shift, or break. For example, goal-directed networks that may initially have relied on network-level resources from external stakeholders (e.g., state agencies) to establish and operate an NAO could have trouble legitimizing membership fees at a later stage of network development. In this context, self-reinforcing network resourcing practices may lead not only to virtuous but also to vicious cycles in and across organizations (Masuch 1985; Tsoukas and Pina e Cunha 2017). They are pivotal aspects for network managers to think about, for these practices often become operative behind the backs of actors, producing both unintended and unacknowledged consequences. With regard to network resourcing trajectories, we propose, with a compelling caveat, that network managers cannot purposefully shape all conditions that affect network resourcing trajectories:

> P4: The more network managers are able to align different goals and to manage and mitigate tensions across resourcing episodes with the help of adapted network rules, the more likely it is that a goal-directed network will develop a stable resourcing trajectory that secures the network's survival and the effective achievement of its goals.

Concluding Discussion

Figure 1 summarizes our theoretical understanding of a practice-based perspective on resourcing goal-directed networks and helps us answer the question of how managers in the public sector can practice network resourcing to reach network goals over time. These conceptual considerations regarding whole networks are necessary, for such systems—in contrast to organizations—not only constitute a distinct level of analysis and intervention, but also create specific resourcing challenges because they lack hierarchical authority and have more complex goals and dynamics than are to be found in more monolithic organizations. In light of our theorizing effort, we can now understand *network resourcing* more precisely as practices of network management to control, produce, reproduce, and transform network-level resources *with the help of network*
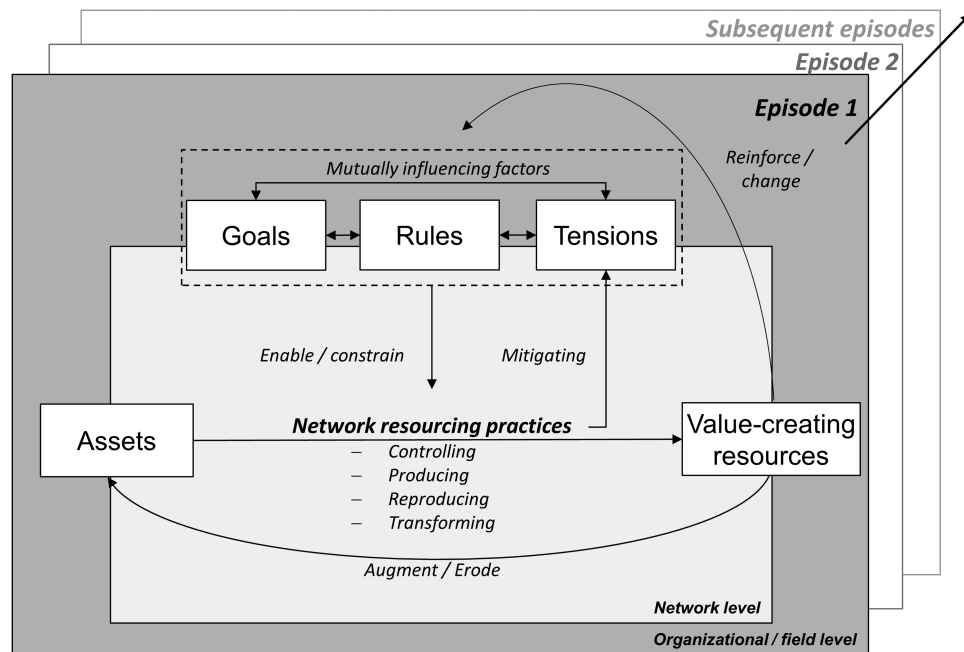
Figure 1. A Resourcing Perspective on Goal-directed Networks.

rules in order to reach network goals *while mitigating tensions over time*. Drawing on structuration theory in general (Giddens 1984) and on the resourcing perspective (Feldman 2004) in particular, we argue that network-level resources arise through the use of assets, providing potentially valuable services to the interorganizational network, its member organizations, and some external stakeholders. Through their use, assets can either erode, prevail, or augment. The public value created by network-level resources secures the network's survival as a social system in its own right and helps attain network goals. From a practice-based perspective, such value is never a final outcome but the starting point and, hence, the input for a new process cycle. Network goals and tensions enable and constrain the enactment of resourcing practices that change or reinforce network rules and together form a particular network resourcing trajectory.

Contributions to Research on Goal-directed Networks

By offering a processual, practice-based framework for studying the resourcing of goal- or purpose-oriented networks, we complement previous research on resource management in public networks, which mainly takes either a structural or a configurational approach (e.g., Isett and Provan 2005; Provan et al. 2009; Raab et al. 2015; Wang 2016). An improved understanding of network resourcing practices adds to the still rather rare process-theorizing of these social systems in the public sector (Berthod and Segato 2019; Saz-Carranza and Ospina 2011) and yields the following contributions.

First, our thorough examination of potential sources of network-level resources has shown that network managers are able to acquire and allocate such resources as well as create them either on the level of the whole network or across different levels. This insight helps us to broaden thinking about the sources of network-level resources, which has been limited mostly to partner organizations and

external stakeholders (e.g., Agranoff and McGuire 2001; Provan and Kenis 2008). Together with the heretofore limited research on the behavioral or work dimension of goal-directed public-sector networks (Bartelings et al. 2016; Saz-Carranza and Ospina 2011), it helps open the black box of resource creation and adaption, processes that have remained fairly elusive in works on network management in the public (Provan and Kenis 2008) and private sectors (Müller-Seitz 2012).

Second, we outline basic practices of network resourcing, including controlling, producing, reproducing, and transforming network-level resources, and discuss multilevel tensions around network resourcing that need to be mitigated by network managers with the help of network rules. By highlighting the adaptability of network-level resources and concrete network resourcing practices that influence the attainment and formulation of network goals, our perspective complements the existing studies on network management practices in the public sector (e.g., Agranoff and McGuire 2001) and the private sector (Deken et al. 2018; Ness 2009; Sydow and Windeler 1998) and shows the complexity of managing resources.

Third, we explore trajectories of network resourcing that influence how networks can eventually satisfy their idiosyncratic resource needs, realize network goals, and subsequently improve their effectiveness. We argue that network resourcing is a significant, still underexposed aspect of explaining how public networks develop over time and create public value. Our work shows that researchers should not limit the study of network development to an organization-centric perspective in terms of how the network can provide value to participating organizations, as is common in the private sector, or to the embeddedness of individual organizations within the network (Huang and Provan 2007b). Dynamics related to resourcing practices also matter in their own right for the long-term survival of networks. The deepening of our understanding of the process of network resourcing may help researchers fathom

the resourcing trajectories of networks that effectively create public value. It may also expand our view on resourcing-related causes that keep many other networks from doing so as well.

Boundary Conditions and Implications for Research and Practice

Despite the potential contributions of our practice-based perspective on network resourcing, it is subject to boundary conditions. They offer opportunities for future research, however. First, we have developed our argumentation with only one particular type of network in mind: interorganizational networks governed with the help of an NAO. Nevertheless, elements of the proposed theory are likely to be applicable to other types of goal-directed networks with other governance forms as well. When applied to other types of networks, resourcing practices remain the same in principle but may assume a different contour and may be enacted by various actors (e.g., the employees of an NAO versus organizational managers in brokering positions). The resourcing needs of goal-directed networks with a lead organization, for instance, may not be as obvious as those of our specified type of network, but they still need to be addressed in a way that promotes the effective achievement of network goals. It is, however, possible for some tensions around network resourcing to shift from an inter- to an intraorganizational level. The change could occur, for example, if managers of an internally more or less fragmented lead organization (Brattström and Faems 2020) must decide if they ought to invest in the network or the organization. Further research could systematically compare resourcing practices in networks with different governance forms, purposes, and origins (e.g., mandated versus self-initiated). It could also detail how networks consisting of organizations with highly divergent goals manage tensions around network resourcing. For instance, cross-sectional partnerships that aim to address grand challenges (Jarzabkowski et al. 2019) may have very different goals and resource requirements than a local health network (Mitterlechner 2019).

A second boundary condition of our paper is that it does not address the role of space during network resourcing. This shortcoming is notable because practices, including those of network resourcing, always play out in time *and* space (Giddens 1984). The fact that goal-directed networks exist in key spatial variants (local, regional, national, and transnational) implies ample opportunities for future research. In transnational networks, for instance, resourcing needs and practices must be coordinated across different national institutional systems. Moreover, given ongoing digitalization, the embeddedness of networks in virtual spaces may also affect their resourcing practices.

Obviously, the proposed theory of network resourcing awaits application and refinement in rigorous empirical research that uses longitudinal process designs in a broad range of public-sector settings. Other focal research questions touch on resourcing trajectories and the ability of public networks to attain their goals. For instance, how do certain initial conditions influence the course of a network resourcing trajectory? How can network managers cope with unfavorable initial conditions? What are critical turning points in network resourcing trajectories, and which resourcing practices that network managers need to employ

do those watersheds influence? How do practices of network resourcing interact with other network management practices, such as mobilizing member organizations or potential member organizations for common goals (Agranoff and McGuire 2001)?

In addition to prospects for future research, the resourcing perspective presented here on public sector networks already has practical implications. They arise for network managers of a planned or established network, for network resourcing is a signal issue when thinking about network governance and power differentials within networks. After all, it can enable networks to survive, and practices of network resourcing rely on and may become a main source of power (Coelho et al. 2022) for reaching organizational and network goals. Matters of network resourcing are salient during the process of collaboration, as in practices of selecting or reselecting members, where the ability of a potential partner to contribute to network resourcing could be a significant criterion. Moreover, the proposed practice-based perspective sensitizes network managers to other possibilities to create and maintain network-level resources. With an eye on process, increased "trajectory awareness" (Oliveira and Lumineau 2017, 1057) may offer insights about the long-term character of network resourcing and may help develop strategies for adequately resourcing a network over time.

For policy-makers who aim to facilitate the formation and maintenance of networks in the public domain, it is particularly necessary to ensure that a promising network survives the period after an initial resourcing episode, often supported by start-up resourcing through a government grant (e.g., Sedgwick et al. 2021). One way to secure such initial investments can be to include prerequisites for allocating a grant that addresses the network's further resourcing needs. Only a stable resourcing trajectory secures the survival and future development of a goal-oriented network. Policy-makers could consider whether the legal framework in a given context (e.g., health care, education, urban planning) allows a network to create network-level resources on its own or if the network remains primarily dependent on government funding. Policy-makers should carefully decide if the network's goals legitimize permanent external resourcing and/or if they want to change contextual (i.e., legal) conditions in order to increase the network's leeway. A theory of network resourcing that fosters awareness of such issues can thus become an important resource in itself for communities of practice and researchers alike.

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No new data were generated or analyzed in support of this research.

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