Managerial Networking Behaviour and Resource Munificence: The case study of the Dam Removal Europe coalition

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TABLE OF CONTENTS

I. INTRODUCTION

1.1. Background of the problem

The world faces an unprecedented climate crisis. Among the myriad of problems, the damage to freshwater ecosystems and the decline of about 93% of freshwater fish populations in Europe since 1970 (The Living Planet Index, 2020) stand out as threats to natural life, ecosystem balance, and the livelihoods of communities that depend on fish for sustenance.

Healthy rivers are a crucial habitat for freshwater biodiversity. At the same time, rivers provide a livelihood for communities formed by millions of people around the world. Although policymakers have shown concern, for example, through the implementation of policies such as the EU Water Framework Directive and Biodiversity Strategies, 60% of Europe's rivers still fail to reach good ecological status (Wouter, 2020). Additionally, river connectivity remains a pressing issue.

Artificial river barriers, such as dams and weirs, are among the most impactful causes of this problem. More than 1 million river barriers block European rivers and impede migratory fish from completing their natural life cycles (Belletti et al., 2020), severely harming biodiversity and freshwater ecosystems. Moreover, many of those barriers are obsolete and fulfil no function.

The urgency of tackling this wicked problem led to the emergence of a promising solution. The last six years marked a breakthrough of a new movement within European nature conservation: Dam Removal Europe (DRE). Dam Removal Europe is a network of river enthusiasts, volunteers, activists, practitioners, biologists, experts, environmental agencies, and other actors related to water management and nature restoration. The whole network joins more than four thousand individuals, but the core of the movement is a coalition formed by seven partner organisations: WWF, The Rivers Trust, The Nature Conservancy, the European Rivers Network, Rewilding Europe, Wetlands International, and the World Fish Migration Foundation.

As a global movement, Dam Removal Europe has one primary goal: restoring the free-flowing state of rivers and streams in Europe by removing obsolete dams while mainstreaming dam removal as an effective river restoration tool.

Similarly to other non-profit entities, the DRE coalition faces some organisational challenges, such as the need to access vital resources in a competitive environment, such as monetary funds. External funding is a primary resource to support the existence of Dam Removal Europe

as a collaborative project. Belonging to the coalition entitles no financial commitment and the absence of a permanent source of funding makes the financial environment unstable. For this reason, the coalition must frequently indulge in fundraising efforts to guarantee its survival.

1.2. Theoretical approach

This investigation is underpinned by three grand theoretical ideas: the resource dependence theory, the managerial networking perspective, and the ego network approach. This section briefly introduces and explains them.

It has been long established in the organisational literature that organisations are not self-sufficient; they rely on other organisations and external actors to acquire critical attributes for their survival and growth (Pfeffer & Salancik, 2003). Hence, organisations are dependent on the context in which they operate, in other words, they depend on their external environment and the resources that exist in it and are available to them.

Resource dependence theory emerges from this premise and poses that organisations must interact with others to obtain the resources they need to survive (Pfeffer & Salancik, 2003). Resources can be of many kinds, from information to human capital, funding to infrastructure, and others. In this study, the focus is on financial resource munificence.

As a theoretical concept, munificence is a dimension of the environment and refers to “the scarcity or abundance of critical resources” accessible to an organisation (Castrogiovanni, 1991, p. 542), consisting of two sub-dimensions. Capacity, or the level of resources available to an organisation, and growth, which refers to the variation in capacity (Castrogiovanni, 1991).

As already mentioned, organisations must tap specific resources controlled by actors in their environment, and to do it effectively, “managers often develop networking relationships with key stakeholder groups in order to make critical resources available” (Andrews & Beynon, 2017, p. 237). *Networking* can be defined as “regular interaction with the external field” (Agranoff & McGuire, 1999, p. 22). This type of conduct was categorised by Yukl (2012) as an externally oriented behaviour often employed by leaders in order to access resources in the environment, among other goals. As argued by the author, “it is important for most leaders to build and maintain favorable relationships with peers, superiors, and outsiders who can provide information, resources, and political support” (Yukl, 2012, p. 74).

It has been found in the literature that the more managers employ networking behaviours, the better their organisations are expected to perform, as active networking results in better exploitation of the organisational environment. For example, O'Toole and Meier found out that higher managerial networking behaviour of superintendents of Texas school districts had positive effects on various indicators of the performance of their district. The authors exposed how managerial networking behaviour enabled managers to access and use resources, contributing to better social outcomes (Meier & O'Toole, 2001).

Likewise, Akkerman and Torenvlied (2011) amplified the concept of managerial networking to several dimensions and delved into public managers' networks, investigating if they differentiated between several types of contacts and what effects these had on agency performance. They applied a typology of environmental ties to nine cases and concluded that "contacts to different types of actors reflect different levels of ambition in the network management" (Akkerman & Torenvlied, 2011, p. 159). In turn, the level of network ambition was found to be positively associated with performance, as more ambition (connected with higher levels of networking) led to better performance.

Another study by Andrews and Beynon (2017) highlighted how "managers in public service organisations adopt different patterns of networking with external stakeholders" (Andrews & Beynon, 2017, p. 251). Subsequently, those distinct patterns were found to influence the level of support that managers received from stakeholders and, subsequently, their organisation's performance.

Moreover, when comparing the networking behaviour of public and non-profit managers, networking appears particularly vital to non-profit organisations (Johansen & LeRoux, 2013). In contrast to public agencies who have "conferred legitimacy" and "a permanent funding source" (Johansen & LeRoux, 2013, p. 356), non-profit organisations must work hard to acquire and maintain these attributes.

The referred studies emphasise a positive relationship between networking behaviour and performance, showing how this type of managerial behaviour generally helps managers access resources in their external organisational environment. This investigation follows the same line of thought, aiming to understand how managerial networking behaviour impacts financial resource munificence regarding a particular case within the non-profit sector.

To examine the presumed effects of one variable over another, this research follows the ego network perspective. Before diving into the "ego" part, we shall introduce networks in general.

O'Toole (1997) was one of the first authors to signal the relevance of networks. According to the scholar, one of the reasons behind the rapid rise of networks was the pressing need to solve wicked problems. Wicked problems are those that cannot be isolated and solved individually or handled by a single organisation in isolation (O'Toole, 1997), such as climate change, poverty, or a global pandemic. In this sense, networks, hand-in-hand with co-creation, became fundamental to tackling complex issues.

Networks form structures of interdependence (O'Toole, 1997) in which actors are connected by a set of stronger or weaker ties (Borgatti & Foster, 2003; Granovetter, 1973). The units that compose networks are not restricted to individuals. Instead, networks can consist of families, organisations, or even countries (Marsden, 2005).

Two major perspectives under which one can study networks are the whole network approach and the egocentric approach, also known as the ego network approach (Provan et al., 2007).

When following the whole network approach, the researcher carries out the analysis at the macro level, considering all the relationships existing in the network (Provan et al., 2007). The interest is on all the nodes (units that compose the network) and all the ties or the absence of ties. When this is the case, the data is collected by inquiring and analysing several or all units that compose the whole network.

In turn, when following the ego network approach, the attention falls on a single unit called the ego (Provan et al., 2007). The researcher works at the micro level, and all the information – from the ego, the alters and the ties between them – is provided by the ego. In essence, ego networks map the connections of and from the perspective of the ego (Marsden & Hollstein, 2022).

The classic discussion of ego networks separates two levels of alters: the "first-order zone", which refers to the alters that are directly connected to the ego, and the "second-order zone", encompassing those that are indirectly related to the ego through one intermediary. Although it is theoretically possible to incorporate alters outside of the first-order zone, doing so presents significant practical difficulties for locating and engaging the alters in research (Marsden & Hollstein, 2022).

In ego network analysis, the relationships surrounding the ego are often studied, minding the content of interaction and the potential outcomes of such interactions on the ego's performance (Marsden & Hollstein, 2022). Moreover, ego networks are often seen as a "stock of potential alters/relationships/resources on which the focal actor might draw" (Marsden & Hollstein, 2022, p. 2). This logic guides the present research, as it is expected that the ego,

represented by the Dam Removal Europe coalition, obtains critical resources from networking with external alters, such as other organisations and public and private sources of monetary funds.

The reason for opting for the ego network perspective relates to the object of interest in this investigation. The aim is to understand how managerial networking behaviour, manifested through the frequency of contacts between the coalition and external parties, influences financial resource munificence, presuming that the first positively contributes to the latter. The interest is thus not on how the alters relate between themselves but on how the ego relates to its alters and what outcomes arise from such interactions.

Managerial networking behaviour is presumed to be a vehicle to tap needed resources into the coalition, and one of the research ambitions is to assess the impact of each type of contact on resource munificence within the networked environment.

The ultimate purpose of this research is to answer the question: *How does managerial networking behaviour influence financial resource munificence within the Dam Removal Europe coalition?*

1.3. Research approach

To answer the research question, this investigation relies on an explanatory single-case study research design to access a presumed causal link between two main variables: managerial networking behaviour and resource munificence.

Although most case studies rely on qualitative data, this thesis also integrates questionnaires, considered a quantitative data collection method. Qualitatively, data collection relies on document research and interviews with the network manager and representatives of the core partner organisations.

The analysis follows a purely qualitative approach, as no statistical analysis occurs. Instead, the questionnaires were used to measure the main variables better, and the results were integrated into narrative text analysis. Data from the interviews is reduced and examined via transcription, coding and explanation building.

As mentioned in previous sections, the case under study is the coalition of organisations forming Dam Removal Europe's core network. The focus is on managerial networking behaviour and its subsequent outcomes on resource munificence. More specifically, a closer

look is taken into the interactions between the coalition and the actors in the external environment to whom it relates.

In sum, this investigation builds on the three grand perspectives explained in the previous section to explore a presumed causal link between networking behaviour and financial resource munificence within the specific case of the Dam Removal Europe coalition.

1.4. Academic and societal relevance

The literature on managerial networking has mostly focused on the individual level (Gibson, 2014). Nevertheless, "networking behaviors also have important implications at the organisational level" (Gibson, 2014, p. 155). For this reason, contrary to what is often the case in empirical research, the unit of analysis in this study is not the individual manager but a group of organisations, taken as a single actor, representing the ego in an ego network analysis. As a result, the researcher sheds light on the Dam Removal Europe coalition, composed of seven partner organisations, addressing networking behaviour as an aggregate effort of all seven partners. While this stood as a differentiating point, this investigation recognises the network manager's particular role and addresses this specific element's networking behaviour in a more detailed way.

Another distinctive feature of this research is the option for a single case study design to study managerial networking goals, directions and outcomes. Studies on this topic have relied heavily on large-N designs and quantitative methods. While such research designs hold a considerable advantage for the generalizability of conclusions, a "black box" has remained uncovered. Statistically, the positive effects of networking on organisational performance have been proven, but several questions lack comprehensive answers. This investigation expects to contribute to "opening" that black box by providing deeper insights into why and how organisations network with their environment and which outcomes derive from those networking efforts.

Additionally, this research aims to apply existing theoretical background to a specific case, assessing if the central theoretical assumption is supported by empirical evidence. For this reason, the present investigation is expected to contribute to the theory of managerial networking.

Moreover, this study yields practical relevance for managers and professionals of the nonprofit sector. Although generalizability is somewhat compromised in single case studies, the research methodology used in this study can be adopted by similar networks or multi-partner

projects. In this sense, the impact of managerial networking behaviour on environmental munificence can be studied within their specific contexts.

Furthermore, the researcher hopes to create a helpful analysis of the managerial networking behaviour within the scope of the coalition, providing valuable insights for the partner organisations regarding their networking efforts and subsequent outcomes on acquiring needed resources. The findings of this research constitute a potential source of strategic input for developing future fundraising and external relations action plans.

Ultimately this study expects to provide additional scientific insight into the managerial networking-environmental munificence relationship by exploring this causal link and applying theory to a specific case.

1.5. Outline of the content

The following content is organised as follows. The first section outlines the theoretical framework guiding this paper, extracting the two main concepts from the research question and explaining them in light of academic work produced by previous scholars.

A second chapter dives into the research design and methodology, making clear the operationalisation of the concepts and methods of data collection and analysis. The first part of the analysis provides a thorough description of the case, including information obtained from the data collection process.

Afterwards, a qualitative analysis of the data is conducted, building explanations for the results obtained.

The final section wraps up the key findings, answering the research question and connecting the findings to the initial proposition.

II. THEORETICAL FRAMEWORK

From the research question, *How does managerial networking behaviour influence financial resource munificence within the Dam Removal Europe coalition?,* it is possible to retrieve the two main concepts underpinning this study: managerial networking behaviour and resource munificence.

As seen in the previous chapter, extensive empirical research on public, private, and non-profit organisations has shown that managers can improve organisational performance through networking (Johansen & LeRoux, 2013). Nevertheless, rarer are times when a direct connection between networking behaviour and resource munificence has been established and applied to a specific case in the non-profit sector.

Unlike public agencies, which are almost automatically endowed with secure sources of funding and legitimacy, non-profit organisations must indulge in systematic efforts to acquire and maintain these attributes (Johansen & LeRoux, 2013). One of the primary vehicles to "earn the resources and tools they need to survive" (Johansen & LeRoux, 2013, p. 356) is networking with others or, in other words, interacting with their external environment.

In this chapter, the theoretical foundations that support this research are presented, introducing the central concepts and tracing the connections between them.

2.1. External Environment & Resource Munificence

Right at the beginning of their book *The External Control of Organisations*, originally published in 1978, Pfeffer and Salancik raised a crucial point claiming that "to understand the behavior of an organisation you must understand the context of that behavior" (Pfeffer & Salancik, 2003, p. 1), referring to the environmental conditions that bound up organisational behaviour.

Despite the importance of the external environment for organisations, a significant part of studies has merely focused on "the problem of using resources" rather than the challenge of acquiring them (Pfeffer & Salancik, 2003, p. 3). Nonetheless, as argued by the same authors, a fundamental aspect of organisational survival is "the ability to acquire and maintain resources" (Pfeffer & Salancik, 2003, p. 2), which exist in the external organisational environment.

In his seminal work, *Organisations and Environments*, Aldrich (1979) defines the environment as a resource controller "through the process of making available or withholding resources"

(Aldrich, 1979, p. 61). Resources, in turn, are finite and frequently coveted by several organisations simultaneously (Aldrich, 1979).

It is important to note that organisational environments “are not given realities” (Pfeffer & Salancik, 2003, p. 13). Instead, the environment is an interpretation of ambiguous events. For this reason, it is critical to understand how organisations construct their perceptions of reality, in other words, how the environment is perceived (Pfeffer & Salancik, 2003).

The environment impacts the organisation in two ways: by providing a pool of resources and by setting constraints (Pfeffer & Salancik, 2003). Following this dual logic, two categories can be distinguished: the task environment and the institutional environment. The first comprises munificence, complexity, and dynamism (Dess & Beard, 1984), whereas the second refers to policies from the government, rules and regulations (O’Toole et al., 2011).

The task environment usually refers to “the nature and the distribution of resources in environments, with different values on each dimension implying differences in appropriate structures and activities” (Aldrich, 1979, p. 63). Its dimensions can be easily understood using dichotomies.

Dynamism can be interpreted as the contrast between stability and instability, and it has been measured through the examination of “turnover, absence of pattern, and unpredictability” (Dess & Beard, 1984, p. 56). It “comprises the rate of change in external circumstances (instability), and the unpredictability (or turbulence) of that change” (Andrews, 2009, p. 4).

Complexity refers to the homogeneity-heterogeneity dichotomy. Following Child’s (1972) conceptualisation, environmental complexity indicates “the heterogeneity of and range of an organisation’s activities” (Child, 1972 in Dess & Beard, 1984, p. 56). In a heterogeneous task environment, the organisation offers services to diverse groups of customers, whereas in a dispersed environment, the organisation delivers services throughout a wide geographic range (Dess and Beard, 1984; Andrews, 2009).

Munificence relates to the abundance or scarcity of critical resources (Castrogiovanni, 1991) or resource capacity (Aldrich, 1979). More detailed exploration is provided below as the scope of this research project was circumscribed to financial resource munificence.

The motive for focusing the attention on munificence is connected to Dess and Beard’s central assumption that “the resources required for organisational survival are the most relevant focus in defining organisational environments” (Dess & Beard, 1984, p. 52). Likewise, without the acquisition of the necessary attributes, especially monetary funds, the coalition representing

the case under study will most likely cease to exist, hence the relevance of studying managerial networking behaviour within the scope of resource munificence.

As a concept, munificence has faced high ambiguity making a single definition challenging. Following authors like Starbuck (1976) and Aldrich (1979), Dess and Beard (1984) designate munificence as environmental capacity or "environments that permit organisational growth and stability" (Dess & Beard, 1984, p. 55). According to the same authors, such growth can provide organisations with resource slack, which helps buffer them in periods of scarcity.

Castrogiovanni (1991) also includes the notion of scarcity when addressing environmental munificence. In his article *Environmental Munificence: A Theoretical Assessment*, the author provides a clear definition of munificence as "the scarcity or abundance of critical resources" available to an organisation (Castrogiovanni, 1991, p. 542). In the same article, the author offers an overview of how the concept had been covered in prior literature:

> "Some (e.g., Chakravarthy, 1982; Koberg, 1987; Lawrence & Dyer, 1983), for example, have discussed resource scarcity, whereas others have discussed resourcefulness (Pennings & Tripathi, 1978), capacity (Aldrich, 1979), hostility (Miller & Friesen, 1984), or industry attractiveness (Wernerfelt & Montgomery, 1986) in the way that still others (e.g., Brittain & Freeman, 1980; Dess & Beard, 1984; Pfeffer & Salancik, 1978; Randolph & Dess, 1984; Starbuck, 1965; Staw & Szwajkowski, 1975; Tushman & Anderson, 1986; Whitehead & Blair, 1987) have explained munificence" (Castrogiovanni, 1991, p. 551).

Attempting to create a complete single conceptualisation, Castrogiovanni (1991) identifies three types of munificence. The first is capacity which refers to the level of resources available to an organisation. In turn, the growth/decline dimension refers to the change in capacity. Finally, the opportunity/threat dimension focuses on the level of unexploited capacity.

Munificence often comes hand-in-hand with another term already touched upon earlier in this chapter: resources. From a resource-based perspective, Pfeffer and Salancik (2003) determine environmental munificence as the availability and accessibility of resources necessary to an organisation. Furthermore, the resource-dependence view suggests that managers and organisations depend on their surrounding environment and thus must establish contact and relationships with other organisations based on that resource (inter)dependence (Pfeffer & Salancik, 2003).

When conceptualising resources alone, Yuchtman & Seashore (1967) refer to them as "generalised means, or facilities" that some organisations control and that are potentially

usable (and needed) by other organisations (Yuchtman & Seashore, 1967, p. 900). Some examples of resources can refer to financial means, human capital, raw materials, knowledge and expertise, influence, or power (van den Bekerom, 2016). Although resources can be of several kinds, this investigation mainly targets financial resources as these are expected to be the most fundamental type of resources for organisational survival within the scope of this study.

This research looks at resource munificence following a resource-dependence perspective, enclosing the interaction between the organisation and the environment (Dess & Beard, 1984). The ultimate research goal is to explore a presumed causal link between networking behaviour and resource munificence. Munificence is expected to depend on the type and frequency of interaction between the organisation and external environmental actors. Resource munificence is thus narrowed down to the financial aspect and conceptualised as the level of critical resources available to an organisation, using Castrogiovanni's (1991) dimensions of resource capacity and resource growth.

As no permanent funding source exists, it is presumed that financial resource munificence is unstable within the case under analysis. Hence, looking merely at the capacity dimension could culminate in a limited understanding of resource munificence – as the coalition could be facing a prosperous time (i.e. after receiving a significant donation) that did not reflect its usual environment. Perceived munificence at the time of data collection could then be rated as highest than in reality. Thus, by including the growth dimension in conceptualising (financial) resource munificence, the researcher gains a broader overview of resource availability over time.

2.2. Networks & Managerial Networking Behaviour

As seen above, organisations exist in a larger context that includes "suppliers, customers, competitors, and broader society" (Gibson et al., 2014, p. 155). The capacity to coordinate and foster these numerous relationships, both inside and outside the organisation, is a managerial talent required for organisations to succeed. Thus, establishing networks and employing managerial networking behaviour is fundamental to organisational success (Gibson et al., 2014).

When defining networks, Borgatti and Foster (2003) put it in straightforward terms: "A network is a set of actors connected by a set of ties" (Borgatti & Foster, 2003, p. 992), in that the ties correspond to the "relations" between actors.

For Agranoff and McGuire (1999), networks refer to social structures in which inter-organisational interactions occur. These interactions occur based on exchange, concerted action and joint production (Agranoff & McGuire, 1999). The same authors also designate networks as “multiorganisational arrangements for solving problems that cannot be achieved, or achieved easily, by single organisations” (Agranoff & McGuire, 2001, p. 296), as is the case of wicked problems (O’Toole & Meier, 2011).

Likewise, Provan and Kenis (2008) define networks as “cooperative endeavours” in the sense that they are formed by autonomous organisations that align with the same mission (Provan & Kenis, 2008, p. 231).

In sum, the concept of networks usually englobes the notions of connectedness, collaboration, relationships, collective action, and cooperation.

Agranoff and McGuire (1999) pointed out several elements that inspired the rise of networks, such as the interdependent orientation in public and private organisations. Signalling the work of Alter and Hage (1993), the authors list the following factors as motors of network emergence: a wider information diffusion, a fast technological advancement and replacement, a growth in knowledge bases, a rise in the culture of trust in organisational settings and increasing levels of cognitive complexity and qualification requirements (Agranoff & McGuire, 1999, p. 22).

Although research within this field has been increasing only in recent decades, the network approach is not new. Its roots can be attributed to Henry Mintzberg and his notorious book *The Nature of Managerial Work*, in which the author highlighted the role of managers as key to making and maintaining a web of contacts with actors outside the organisation (Mintzberg, 1973). Although the classical management approach has influenced how public and business organisations operate, managing in network settings should be distinguished from managing hierarchies (Agranoff & McGuire, 1999).

In networks, the manager operates through several forms of “collaborative problem solving” (Agranoff & McGuire, 1999, p. 21), acting more like “a mediator, a process manager or a facilitator” (Edelenbos et al., 2011, p. 422), instead of as a hierarchical superior. Additionally, network managers are assigned specific tasks, such as enabling interactions and bringing partners into contact.

Moreover, because networks are structures of interdependence (O'Toole, 1997) and are not considered legal entities, the requirement for governance is not strictly present as it is for private companies or public organisations (Provan & Kenis, 2008). Nevertheless, in the case

of goal-directed networks, some form of governance is necessary due to the need to align and coordinate the network participants for collective efficiency (Provan & Kenis, 2008).

Provan and Kenis (2008) define goal-directed networks as “groups of three or more legally autonomous organisations that work together to achieve not only their own goals but also a collective goal” (p. 231). Although less frequent, these types of networks are beneficial for accomplishing multi-organisational milestones, particularly in the non-profit sector, where the resolution of complex and wicked problems requires collective action (Provan & Kenis, 2008).

The relationships established among the members of the network are usually nonhierarchical and characterized by considerable autonomy (Provan et al., 2007). Network members can be linked by flows of information, materials, financial resources, services, or social support. In sum, the whole network consists of “multiple organisations linked through multilateral ties” (Provan et al, 2007, p. 482).

Theoretically, two different grand perspectives arise when studying networks: the egocentric network approach and the whole network approach.

When using the latter, network analysis is carried out at the macro level, including the nodes (organisations), the ties (relationships between the nodes), the absence of relationships, and the implications of existing or non-existing relationships for outcome achievement (Provan et al., 2007). The network is thus seen as a whole system, including all interactions between all elements.

In contrast, when adopting the ego network perspective, the researcher investigates an individual or single organisation working at the micro level (Provan et al., 2007), which is the approach taken in this research.

Ego networks, also known as neighbourhood networks, are attractive to researchers as the data collection process is fairly simpler when compared to the whole network approach. Instead of reaching out to all organisations in the network, data regarding the ego, the alters, and how these elements are connected is obtained from the ego alone (Everett & Borgatti, 2005, p. 31).

Everett and Borgatti (2005) define this type of network as “networks consisting of a single actor (ego) together with the actors they are connected to (alters)” (Everett & Borgatti, 2005, p. 31). The “ego” is nothing more than the focal actor on which the researcher focuses its attention. The “alter” refers to any actor with whom the ego has a relationship (Perry et al., 2018).

Each alter represents a different type of external actor with whom the ego interacts and forms ties. As explained by Kenis and Oerlemans (2008), “dyadic ties connect pairs of actors and define the substantive relationships that exist between ego and the alters” (Kenis & Oerlemans, 2008, p. 291). The ego’s ties with alters are vehicles through which the ego can access needed resources, and “different kinds of ties have different capacities for extracting resources” (Borgatti & Foster, 2003, p. 1004). The interactions established with the alters in the external environment can be considered as networking behaviour performed by the ego.

Following Michael and Yukl (1993), networking behaviour can be comprehended as the “activities engaged in by managers to develop and maintain networks” (Yukl & Michael, 1993, p. 328). The same authors argue that managers employ “a wide array of behaviors designed to build informal interpersonal relationships with people inside and outside of the organisation” (Yukl & Michael, 1993, p. 328), corroborating O’Toole and Meier's claim that it is impossible for managers to indulge in “network-like behaviour with other actors in the environment” without actually interacting with those actors (Meier & O’Toole, 2014, p. 132).

The public management literature has used the concept of managerial networking to describe how managers hold relationships with several organisations and actors. Akkerman and Torenvlied (2011) define networking behaviour as “the frequency of contacts with different types of actors” (Akkerman & Torenvlied, 2011, p. 160; Meier & O’Toole, 2001). It is generally found that managers with more frequent contacts are better able to tap vital resources in the environment, as these are exchanged through more robust and closer network ties (Akkerman & Torenvlied, 2011).

Torenvlied et al. (2013) conceptualise managerial networking as an externally oriented behaviour which comprises the “contact frequency of relationships that (high-ranking) managers maintain with external actors and organisations” (Torenvlied et al., 2013, p. 251). Integrating an “internal context” component, van den Bekerom (2016) defines managerial networking as “the relational behavior of managers”, combining “the scope and the intensity of relations (…) in both the internal and external environments of the organisation” (van den Bekerom, 2016, p. 21).

Managerial networking can occur in four directions: upward, downward, sideward and outward. For the purpose of this study, only the last two will be addressed.

Networking sideward is considered to take place in the “internal” environment of the organisation (van den Bekerom et al., 2016). It can be considered as “horizontal” networking in the sense that it occurs in the direction of peers and not superiors or subordinates. In this

study, networking sideward is conceptualised as the interactions maintained within the ego. Although the ego in this research is taken as a single unit, it represents a group of organisations (the Dam Removal Europe coalition) thus the relationships between the seven partner organisations fall under this direction of managerial networking.

Alternatively, the interactions established with actors and organisations external to the coalition are referred to as networking outward, as these contacts are established between the ego and its external environment. Managing outward is defined by O'Toole et al. (2005) as “behavioral networking or interacting with key actors in the organisation's environment” (O'Toole et al., 2005, p. 53). Complementing the definition, Torenvlied et al. (2013) add to it the total of interactions that managers have with “various types of external actors and external organisations” such as “suppliers, external stakeholders, alliance partners, regulatory agencies, or political institutions” (Torenvlied et al., 2013, p. 252).

Meier and O'Toole (1999) approach similar concepts in their infamous model. Although their focus was on the general impact of public management on program performance, managerial networking was also addressed, as the authors considered “all managerial contacts with other partners” as evidence of networking (Meier & O'Toole, 2005, p. 534). In fact, the authors operationalised managerial networking (corresponding to M_2, in the model) through “the actions of the manager in the networked environment of a public agency” (Meier & O’Toole, 2014, p. 132), assuming that it was impossible for managers to exhibit network-like behaviour without going into contact with actors in the environment.

It has been long established that actors in the external environment represent potential sources of support and resources (Torenvlied et al., 2013). Nevertheless, “not every organisation (…) is a potential source of resources for every other organisation” (Galaskiewicz, 1985, p. 286). As discussed by Torenvlied et al. (2013), not all external organisations provide the same type of resources, information, and support, therefore “some relationships are likely to be more valuable than others” (Torenvlied et al., 2013, p. 254). Accordingly, organisations make strategic choices regarding the employment of networking efforts. Although this may seem obvious, empirical research has often overlooked the multiple dimensions of managerial networking (Torenvlied et al., 2013), merely exposing different levels of networking activities, as was the case in O'Toole and Meier's model.

The work of Torenvlied et al. (2013) is an example of how the multidimensional character of managerial networking is highlighted. The authors pose that managerial networking behaviour has multiple facets, “each related to a specific type of support to the agency that can be provided by external actors and organisations” (Torenvlied et al., 2013, p. 255). From the

analysis of Texas school district data, the authors identify three main dimensions: bureaucratic coping, political support and co-production. All in all, their research empirically supported the notion that “agencies are able to draw on different types, and different sources, of support in their environment” (Torenvlied et al., 2013, p. 266).

Additionally, the fact that different types of actors offer distinct kinds of support urges managers to be selective when employing external networking efforts (Andrews & Beynon, 2017; van der Heijden & Schalk, 2018) as they face several options for action (Meier & O'Toole, 2001). Making choices about networking strategies implies a cost of opportunity, as investing a significant amount of time in networking with an existing stakeholder might result in a lost chance to connect with a new source of support (Agranoff & McGuire, 1999). Therefore, as argued by O'Toole and Meier, “the decision about how much time and energy to work in the network, and in which directions” is crucial.

Not only in terms of time and effort, “networking can be a costly endeavour” but also in terms of financial expenses (Agranoff & McGuire, 1999, p. 27). Nevertheless, despite the transaction costs that network behaviours put on managers, it has been found that it generally compensates when it comes to accessing essential resources and information in the external environment (Akkerman & Torenvlied, 2011).

Pfeffer and Salancik (2003) summarise the benefits of networking in three main propositions. First, networking contributes to higher information acquisition and exchange, which can be crucial for an organisation's activities. As argued by Gibson, vast and well-developed networks foster access to a broader range of information (Gibson, 2014). Then, networking aids in developing the commitment of partners and stakeholders to the organisation's activities. Finally, networking in the inter-organisational field can stabilise the environment and reduce uncertainty (Pfeffer & Salancik, 2003).

In this research, managerial networking behaviour is conceptualised according to the ego network approach and includes two dimensions. First, it comprises the interactions between the ego and the alters, including the different types of alters with whom the ego interacts and the frequency of such interactions (Meier & O’Toole, 2001; Torenvlied et al., 2013). Second, it shines a light on the level/degree and directions of networking behaviour employed by the ego in relation to its environment (Yukl, 2012; Agranoff & McGuire, 1999). This study does not consider managerial networking behaviour as an exclusively externally oriented behaviour as the interactions between the members of the coalition are also taken into account as networking sideward.

2.3. Connecting the dots: Managerial Networking Behaviour and Resource Munificence

Given the interdependence between organisations and the environment they operate in, it is expected that managers allocate time and effort to interacting with external actors (O'Toole et al., 2011).

Managerial networking covers distinct functions, such as "buffering the organisation from negative environmental shocks, exploiting opportunities in the environment, and establishing collaborative relationships with long-term partners in the environment" (Hicklin et al., 2008, p. 255). By maintaining frequent relations with suppliers, stakeholders, agencies, and political actors, managers strengthen ties which may lead to the reduction of environmental uncertainty, enhance legitimacy, and increase resource acquisition (Johansen & Leroux, 2013, p. 355).

Resource munificence is thus related to networking in the sense that organisations interact with outsider actors and entities to tap resources that guarantee organisational continuity and growth (Pfeffer & Salancik, 2003).

Although the logic is relatively simple, "resource acquisition may be problematic and uncertain" (Pfeffer & Salancik, 2003, p. 258). As explained by Galaskiewicz (1985), "variation in the resource environment could affect the options open to decision-makers". As the environment "becomes richer or leaner, more or less stable, more homogeneous or heterogeneous, or more concentrated or dispersed" (p. 286), the possibilities open to organisations also vary.

According to the same author, inter-organisational relations occur in three arenas: "resource procurement and allocation, political advocacy, and organisational legitimation" (Galaskiewicz, 1985, p. 282). The central point of the inter-organisational approach is that the environment of organisations consists of other organisations. In turn, "organisations engage in exchange relations with each other and a network of mutually dependent actors emerges" (Klijn & Koppenjan, 2000, p. 139).

Before exploring the first arena, which is the one that interests the most for this research, it is pertinent to briefly explain the latter two, which compose alternative motives for relations between organisations or, in other words, networking.

Within the political advocacy arena, Galaskiewicz argues that inter-organisational relations "affect the mobilisation and success of organisations and coalitions" (Galaskiewicz, 1985, p. 292). The legislative environment significantly impacts organisations by, among other factors,

facilitating or hindering access to needed resources. In this regard, organisations try to leverage the government and “the power of the larger social system” to pass legislation favouring them or their mission (Galaskiewicz, 1985, p. 282). Together with other elements of society, organisations persistently work to ensure their interests integrate “the mainstream of societal values”, which ultimately safeguards their legitimacy (Galaskiewicz, 1985). Some strategies used to achieve this are lobbying actions with legislators and decision-makers, information dissemination, and education and awareness programs (Galaskiewicz, 1985).

A second arena referred to by Galaskiewicz is organisational legitimation. The author underscores the difference between participating in political arenas and legitimacy arenas. In the latter, mobilisation efforts are not around any specific subject, “there is no decision-maker or decision-making body on which to target one's energies” (Galaskiewicz, 1985, p. 296), whereas in the first the opposite takes place. In the legitimacy arena, the issue is “the adequacy of the organisations’ goals” and, in this line, the efforts are targeted at “licensing boards, funding agents, intellectuals, and public opinion” (Galaskiewicz, 1985, p. 296). A common strategy to accomplish legitimacy is to connect the organisation with cultural symbols or power figures in the field, for example, by recruiting reputable and influential individuals to the organisation (Galaskiewicz, 1985).

Finally, organisations relate in the resource procurement and allocation arena due to the need to acquire resources possessed by others, which can be of several natures, such as “facilities, materials, products, or revenues” (Galaskiewicz, 1985, p. 282). On one extreme, organisations can act as competitors, each attempting to accomplish its own goals. In this case, the final allocation of resources results from “a large number of small decisions negotiated at the level of the interorganisational dyad” (Galaskiewicz, 1985, p. 282). On the other hand, organisations can operate in “centralised redistributive structures” (Galaskiewicz, 1985, p. 282), which coordinate how resources are distributed to member organisations.

In both scenarios, the issues of power dependence and uncertainty are present, as these relations occur within a social exchange framework (Galaskiewicz, 1985). Confirming this rationale, Aldrich (1979) debated that when exchange relations between organisations are defined in terms of resource dependence, power differentials are inevitable among those exchange partners (Aldrich, 1979). Focal organisations, seen as central actors in the inter-organisational field, are perceived as more influential in the sense that they hold the majority of resources. The higher the dependency of other organisations upon the focal organisation, “the more likely that organisations are going to view the focal organisation as powerful” (Galaskiewicz, 1985, p. 284).

This relates to resource dependence theory, which is based on the premise that organisations are highly dependent on other organisations and, to function successfully, “organisations must obtain certain resources controlled by actors in their environment” (Andrews & Beynon, 2017, p. 237). The connection to managerial networking is thus reasonably obvious as networking relationships are seen as essential vehicles for getting and maintaining external resources “such as time, money, information, and legitimacy” (van der Heijden & Schalk, 2018, p. 730; Hicklin et al., 2008).

Building on this rationale and the theoretical framework exposed on this chapter, the central proposition of this study arises:

Proposition: The higher the networking behaviour, the higher the financial resource munificence within the coalition.

III. RESEARCH DESIGN

Laid down the theoretical framework for this research, it becomes momentous to introduce its methodology. This chapter introduces the single case study approach to research, the methods used for data collection and analysis, and the operationalisation of the main concepts.

3.1. Using the case study approach

Following Yin (2018), who developed extensive work on case study methods and applications, this type of research design becomes particularly useful when the goal of the researcher is to answer "how" or "why" questions. Likewise, case studies are the primary choice of design when the event studied is contemporary, when contextual conditions are being studied, and when the investigator cannot control the subjects of the study (Yin, 2018; Baxter & Jack, 2015), all of which verify within the case under analysis in this investigation.

Another distinctive feature of case-study research, particularly within-case analysis, is the examination of many observations of a single case (Neuman, 2014; Toshkov, 2016). In this sense, the use of multiple sources of data allows the data collection process to be "detailed, varied, and extensive" (Neuman, 2014, p. 42), providing an in-depth examination of the case at hand (Yin, 2018). In addition, although most case studies rely on qualitative data, quantitative sources may also be incorporated (Neuman, 2014; Yin, 1981), which was an option in this investigation. Likewise, case study research does not entail a specific type of evidence (Yin, 1981). Using a diverse range of sources, from questionnaires to interviews and documentation, enriches the research design (Yin, 2018).

At this point, it is important to clarify what a case is. According to Toshkov, "a case always remains a case of some broader phenomenon" (Toshkov, 2016, p. 288), meaning that a case is always a case of something (Rohlfing, 2012). Therefore, a case depends on the context in which it "lives" as well as temporally and spatially bounded (Toshkov, 2016; Yin, 2018). Case studies can be descriptive, exploratory, or explanatory.

In the present investigation, an explanatory case study research design was elected to study a presumed causal relation between two variables: managerial networking behaviour and resource munificence (Berg & Lune, 2017; Neuman, 2014). Building on the managerial networking perspective and the ego-network approach, this research looked at the Dam Removal Europe coalition as a single organisation. Thus, the unit of analysis was the coalition formed by the seven partner organisations (the ego) and the networking relations maintained

within the broader network as well as with external actors. Because the aim is to answer an inferential research question, investigating an expected causal link, this research can be classified as an explanatory case study (Berg & Lune, 2017; Neuman, 2014; Yin, 2018). In the next chapter, a thorough description of the case is provided.

3.2. Research Methods: Data collection

Rohlfing has compared the data collection and data analysis processes in within-case analysis to a jigsaw puzzle: “every piece is more or less different from every other piece, but when put together, they deliver a full picture of the phenomenon of interest, which consists of the causal process” (Rohlfing, 2012, p. 30).

This paper relied on quantitative and qualitative data collection, although the analysis is carried out from a purely qualitative perspective. The reasoning for mixing qualitative and quantitative data collection methods refers to one main criterion to guarantee higher quality in case-study designs discussed early in this chapter: combining multiple sources of evidence (Yin, 2018).

In summary, three sources of information were employed: online questionnaires to representatives of the partner organisations of the Dam Removal Europe coalition, including the network manager, online interviews with the same set of respondents, and archival and documentation research, through the consultation of internal documents, public reports and the Dam Removal Europe's official website.

Questionnaires were included for two reasons. First, it represented a complementary source of information primarily relying on quantitative data. Second, respondents tend to be more receptive to answering questionnaires that require only a few minutes of their day than participating in more extended interviews. The probability of obtaining more honest answers also rises in questionnaires, as the respondents are not in direct contact with the inquirer.

Interviews complemented the questionnaires’ data in a sense they promoted longer and more detailed answers and thus contributed to a deeper exploration of the topics under research. Using interviews as a data collection method is fairly common in case-study designs, especially if the object under study is a contemporary event. One of the main advantages of using interviews is the opportunity to ask tailormade questions to the interviewees (Yin, 2018), which can be adapted to the conversation flow at the moment of the interview. Moreover, because they generally presuppose direct contact with the respondents, interviews are more insightful than surveys, providing more thorough explanations (Yin, 2018).

Finally, archival research, referring to “any information that existed prior to a research project and was not produced for the purposes of research” (Perry et al., 2018, p. 57), was used to provide objective indicators and more accurate measurement of the variables.

A thorough explanation of each type of source, as well as the operationalisations, is provided in the following section.

All participants in the data collection process were informed about the purpose of this research and gave their consent to use the information provided. In the online questionnaires, consent was given by ticking an informed consent form; in the interviews, participants gave verbal permission.

3.3. Operationalisation of the main variables

Before starting the data collection process, it was fundamental to operationalise the main concepts under study. As explained by Berg and Lune (2017), “operational definitions concretise the intended meaning of a concept in relation to a particular study and provide some criteria for measuring the empirical existence of that concept” (p. 32).

3.3.1. Managerial networking behaviour

Although there were several studies focusing on networking in the past decades, networking behaviour as a variable has been measured in various ways. Thus, no universal set of measures or indicators has been agreed upon by researchers. Gibson et al. (2014) confirmed this issue, posing that “one of the greatest challenges in conducting research on networking is deciding how best to measure it” (Gibson et al., 2014, p. 152). Additionally, Andrews and Beynon (2017) discussed that there is still much to be known about the networking behaviour of managers, “especially about broad patterns in their networking activity”, which can be associated with “varying levels of stakeholder support” (Andrews & Beynon, 2017, p. 238).

Based on the theoretical framework and previous research authored by O'Toole and others, this investigation measured managerial networking behaviour through two leading indicators: the frequency of contact with several types of actors (Granovetter, 1973; Johansen & LeRoux, 2013; Meier & O’Toole, 2001; Torenvlied et al., 2013) and the perceptions of networking behaviour within the coalition (Yukl, 2012; Agranoff & McGuire, 1999).

Managerial networking behaviour thus encompassed the following indicators: Networking behaviour, Networking sideward, Networking outward, Interaction with external actors and organisations, Interaction with private donors, and Interaction with public funds and grants.

Networking behaviour was measured based on the conceptualisation offered by Agranoff and McGuire (1999) and Yukl (2012) and referred to 1) the extent to which the Dam Removal Europe coalition makes continuous efforts to tap the skills, knowledge and resources of others, and 2) the extent to which Dam Removal Europe coalition pursues cooperative relations with individuals and organisations who can provide resources and assistance.

Following van den Bekerom et al. (2016), networking sideward was assessed by the extent to which the organisations formally belonging to the Dam Removal Europe coalition maintain favourable relationships between them.

Similarly, based on the work of O'Toole et al. (2005) and Torenvlied et al. (2013), networking outward was measured by the extent to which the Dam Removal Europe coalition maintains favourable relationships with outsiders, in other words, individuals and organisations that don't formally belong to the coalition.

The frequencies of interaction with the several external actors were assessed in a similar fashion. In the questionnaires, the respondents were asked how frequently the coalition interacted with external organisations (actors outside the coalition), with private sources of funding and with public sources of funding, on a six-point scale from "Never" to "Daily".

Moreover, participants were asked to characterise the networking behaviour within Dam Removal Europe and to indicate what kind of specific behaviours they made use of in this regard. The interviews included a question about the objectives that motivated networking efforts and the subsequent outcomes from these efforts.

3.3.2. Resource Munificence

As discussed earlier, the theoretical conceptualisation of resource munificence encompasses resource capacity and resource growth. Accordingly, this variable was operationalised as the "amount of funding" the coalition (taken as an organisation) "receives from its members or external parties" (Raab et al., 2015, p. 486; Cristofoli & Markovic, 2016). To measure it, both subjective and objective indicators were used.

Subjectively, munificence was measured by the respondents' perceptions of the availability and accessibility of resources (Pfeffer & Salancik, 2003; Castrogiovanni, 1991), financial

resource abundance (Castrogiovanni, 1991), and financial resource growth (Castrogiovanni, 1991). Moreover, respondents were asked about their perceptions on the amount of funding coming from several sources, such as private donors, public funds and grants, and other external organisations and actors.

Objectively, the researcher had access to a financial overview of the income, expenditure, and results (calculated as the difference between income and spending) regarding Dam Removal Europe's projects. This overview comprised data from 2016 until 2021 and provided accurate data on the financial resource growth associated with the activities carried out in the name of the coalition.

3.3.3. Using questionnaires

Quantitatively, both variables were measured through an online questionnaire distributed to all seven partner organisations forming the Dam Removal Europe coalition. The questionnaires were built online using Google Forms software. Two separate files were created: one for the coordinating organisation (World Fish Migration Foundation), to which the network manager belongs, and another one for the remaining six partner organisations (WWF Netherlands, the European Rivers Network, The Rivers Trust, Rewilding Europe, The Nature Conservancy and Wetlands International). Most questions required multiple-choice answers, which made it easier and more appealing for respondents.

In terms of distribution, the questionnaire destined for the coordinating organisation was sent via email directly to the manager of the Dam Removal Europe network in mid-November, who was then asked to forward the second version of the questionnaire to representatives of the partner organisations. In total, representatives of five out of the seven partner organisations answered the questionnaire. Respondents belonged to the World Fish Migration Foundation, WWF, The Nature Conservancy, Rewilding Europe and the European Rivers Network.

The final sample was composed of 3 female respondents and 2 male respondents aged between 38 and 60. In terms of tenure, the amount of time working in the same position varied between 3 months and 24 years.

The difference between the two versions of the questionnaires relates to the number of questions addressing networking behaviour. The survey distributed to the coordinating organisation asks more questions on this topic, as managerial networking responsibilities were expected to fall more heavily on the coordinating organisation and the network manager. A second difference was the questionnaires distributed to the partner organisations included a

question about whom they believed to be responsible for networking, as the roles and tasks of each partner organisation are not formally established within the coalition. For this reason, different perceptions of who should be responsible for networking could manifest when answering this question.

In terms of structure, the questionnaires began with six short-answer questions regarding demographic variables, such as age, gender and job title. Then, a second section accessed managerial networking behaviour through questions divided into two subsets. In the first subset, respondents were asked to rate the networking behaviour within the network by reacting to different statements on a six-point scale in which 1 = “Completely Disagree” and 6 = “Completely Agree”. Statements were developed based on the literature review and included affirmations such as “Dam Removal Europe maintains favourable relationships with outsiders (individuals and organisations that do not formally belong to the network)”. The second subset of questions accessed the frequency of contact with external actors using O'Toole et al.'s (2011) six-point scale ranging from “Never” to “Daily”.

The final module of the questionnaire aimed to measure resource munificence and assess the sources of financial resources through perceptual measures. Recurring to a previously used six-point scale, in which 1 = “Completely Disagree” and 6 = “Completely Agree”, the respondents rated a set of affirmations regarding the availability, accessibility, and growth of resources. Moreover, the respondents were asked about the sources of financial resources, using the same scale to rate affirmations such as “A significant part of DRE's financial resources come from private donations”.

A full version of the questionnaires can be found in the Appendix section as well as a table with the answers of all respondents, and the average, minimum, and maximum values given to each indicator.

3.3.4. Using interviews

Instead of rigidly scripted inquiries, the researcher opted to use semi-structured interviews. This type of interviewing method mostly resembles “guided conversations” (Yin, 2018, p. 118) or a “conversation with a purpose” (Kahn & Cannell, 1957, p. 149).

Similarly to the questionnaire procedure, the target audience for the interviews were the representatives of the seven partner organisations, including the network manager. The ultimate goal was to capture the interviewees' perspectives and experiences (Billups, 2021;

Galletta, 2013) to complement and go beyond the quantitative data gathered via the questionnaire.

Of the seven partner organisations, four were available to participate in interviews. Interviewees belong to the World Fish Migration Foundation, WWF, Rewilding Europe, and the European Rivers Network. The final sample was composed of 2 female and 2 male respondents, out of which 3 were also respondents in the questionnaires.

In terms of procedure, a 40-min online interview was conducted with the manager via Zoom to collect further data on managerial networking behaviour, mostly related to its objectives and outcomes. Questions about the external environment, focusing on resource munificence, were also asked. The interviews with the partners lasted an average of 20 minutes and covered the same themes. In both scenarios, a set of questions was predefined, but the researcher remained open and adaptative to the ongoing dialogue, keeping the questions fluid although guided by a logical flow (Yin, 2018).

The complete scripts of the interviews can be found in the Appendix. Interview transcripts may be facilitated upon request.

3.3.5. Using documentation

Another source of qualitative information used in this investigation was documentation. One of the main strengths of using archival research as a data collection method is its stability, as documents can be reviewed repeatedly and do not derivate from the case study itself (Yin, 2018).

Besides accessing publicly available information, such as annual reports, the researcher managed to obtain data from internal documents in order to enrich the analysis with objective data. By contacting the network manager and the financial manager of WFMF, the researcher had access to internal strategy plans and a financial overview of the yearly income and spending regarding the coalition's projects from 2016 until 2021.

In sum, there was a successful attempt to access and analyse the following documents:

- Internal documents: A strategy document dated May 2022; The Memorandum of Association of Dam Removal Europe; A financial overview of Dam Removal Europe's income, expenditure and results from 2016 until 2021; and a media clipping monitoring document from September 2022 until December 2022.

- Public documents: The Dam Removal Europe Report 2021 and the Dam Removal Europe Strategy 2020-2030;
- Public information sources: The World Fish Migration Foundation and the Dam Removal Europe official websites.

3.4. Research Methods: Data analysis

Although a significant part of scholars defends that, when conducting a case study, the analysis phase is concurrent with data collection (Yin, 2018), before formally displaying and interpreting the data collected, these must be processed and categorised (Yin, 2018; Neuman, 2014).

According to Miles and Huberman (1984), data analysis consists of three main activities: data reduction, data display, and conclusion drawing (Miles & Huberman, 1984, p. 21), which will be further explained in the following paragraphs.

Moreover, although less ordinary, another technique of qualitative research was adopted in the present investigation: network analysis. Network analysis aims “map the connections” between a set of people or organisations (Neuman, 2014, p. 501). Since two of the guiding theoretical foundations of this paper were the ego network perspective and the concept of managerial networking, it was plausible to include this technique, displaying the set of relations between the ego and alters through a sociogram.

3.4.1. Data reduction

The first refers to “the process of selecting, focusing, simplifying, abstracting, and transforming the “raw” data” (Miles & Huberman, 1984, p. 21). The illustrative method was followed, applying the theoretical framework to this concrete case study, and organising the collected data based on theory (Neuman, 2014). As explained by Neuman (2014), one of the variations of the illustrative method is case clarification. In essence, the illustrative method determines that preexisting theory can provide “conceptual empty boxes” that the researcher fills in with empirical evidence. This evidence subsequently “confirms, modifies or rejects the theory” (Neuman, 2014, p. 489).

Data gathered via questionnaires was already pre-coded in the sense that each question corresponded to an indicator of either managerial networking behaviour or resource munificence. Answers to the questions regarding the same indicators were merged into a

single average value. In sum, the following indicators were used to measure managerial networking behaviour: Networking behaviour, Networking sideward, Networking outward, Interaction with external actors and organisations, Interaction with private donors, Interaction with public funds and grants (to measure managerial networking behaviour). In turn, Availability of resources, Accessibility of needed resources, Abundance of financial resources, Resource growth (focus on financial resources), Resources from external organisations, Resources from private donors, Resources from public funds and grants, Resources from within the coalition (comprising Resources from WWF, Resources from ERN, Resources from The Rivers Trust, Resources from Rewilding Europe, Resources from TNC, Resources from Wetlands International, Resources from WFMF), were used to subjectively access resource munificence.

The sum of responses was reduced and displayed in an excel table, revealing an average, a minimum and a maximum value for each indicator and an average score for the main two variables. With the exception of the demographic module, which was removed to guarantee the anonymity of respondents, the excel table can be found in the Appendix section.

Regarding the qualitative information gathered during the interviews, the data was reduced via transcription, editing, and coding (Yin, 2018). The interview coding procedure was based on the previously used indicators when building the questionnaire. The researcher looked for statements that would fit within those pre-established “codes”. Nevertheless, new relevant indicators arose from analysing the interviews – fundraising responsibility, networking goals, and networking outcomes.

3.4.2. Data display

The second activity of data analysis is data display, and it can be defined as “an organised assembly of information that permits conclusion drawing”, with narrative text being the most usual form of display (Miles & Huberman, 1984, p. 21). In qualitative analysis, the data usually appears in words instead of numbers, in opposition to quantitative studies (Miles & Huberman, 1984). Because this research design mixed both data collection methods, data was organised in several ways.

As already mentioned, quantitative data was displayed in a table showing the average response as well as the minimum and maximum values for each indicator.

For the qualitative data, a text table was built in which statements from the interviewees were connected to the indicators established for the questionnaire questions. In order to triangulate

the information from all data sources, the main findings from the questionnaires, as well as those from archival research, were added to this table.

As mentioned previously, new indicators arose when analysing the edited transcripts, which were included in a separate table also found in the Appendix.

3.4.3. Conclusion drawing

The final data analysis activity, conclusion drawing, inevitably starts with the data collection process itself. From the beginning, the researcher had to “decide what things mean” and note “regularities, patterns, explanations, possible configurations, causal flows and propositions” (Miles & Huberman, 1984, p. 22).

In this case study, conclusion drawing was achieved via explanation building. In a nutshell, building explanations consist of “(a) an accurate rendition of the facts of the case, (b) some consideration of alternative explanations of these facts, and (c) a conclusion based on the single explanation that appears most congruent with the facts” (Yin, 1981, p. 61).

Explanation building was based on the impartial interpretation of the information provided by all data sources. Through this technique, this case study aimed to link the collected data to the initial proposition of this case study (Yin, 2018), either confirming or refuting it.

3.5. Reflection on validity

Single case studies are often considered less rigorous when compared to other research designs. One of the justifications for this is the fact that it is challenging to generalise from case studies as statistical methods do not apply (Kennedy, 1979). However, case studies possess comparative advantages to large-N designs, like the opportunity to dive deeper into the object of study, examining a wide range of details, which simply cannot be done through statistical analysis. Moreover, several criteria guarantee the quality of the research design. Four tests can be realised to assess its rigour: construct validity, internal validity, external validity and reliability (Yin, 2018).

Construct validity concerns the correct identification of measures for the concepts under study (Yin, 2018). It can be secured by using multiple sources of evidence (Yin, 2018). It is plausible to assign the present study with satisfactory construct validity since the data was collected from different sources using different data collection methods (quantitative and qualitative). This facilitated data triangulation and more accurate measurement of the key variables.

Nevertheless, the fact that mostly perceptual and subjective measures were used constitutes a limitation of this study, hindering objective conclusions.

Internal validity is particularly relevant for explanatory case studies, as it refers to a causal relationship “whereby certain conditions are believed to lead to other conditions” (Yin, 2018, p. 42). In this case, it was expected that managerial networking behaviour influenced resource munificence in the way that higher networking behaviour led to greater (financial) resource munificence (Proposition). The assessment of such a causal link was studied via explanation building (Yin, 2018), linking the collected data to the propositions. In this regard, limitations connect to the researcher's own interpretation of data which were, in essence, subjective. A double subjectivity could have harmed the research design, stemming from both the respondents' and the researcher's bias. The inclusion of objective archival data represented an attempt to minimise partiality.

External validity is connected to the potential for replication and generalisation of findings (Yin, 2018). In this scenario, because the object of study is a single case, generalisation may only apply to similar cases sharing the same environmental conditions.

Finally, reliability is assured when the repetition of the research process achieves the same results (Yin, 2018). This constitutes the main limitation of this investigation as “opportunities for repeating a case study rarely occur” (Yin, 2018, p. 46). Because a case is context-dependent, results will most likely differ if the same research is carried out, for example, years from now. The general tactic to approach the reliability issue is to “make procedures as explicit as possible”, which this research project has done through a thorough explanation of the data collection and data analysis methods.

IV. ANALYSIS

This thesis explored the research question "*How does managerial networking behaviour influence financial resource munificence within the Dam Removal Europe coalition?".* Using a qualitative research method, the Dam Removal Europe coalition was examined as the case under study. The evidence gathered via online questionnaires and interviews with representatives of the organisations belonging to the coalition, merged with data retrieved from internal and public documentation, was used to scrutinise this investigation's proposition: "The higher the networking behaviour, the higher the financial resource munificence within the coalition".

For purposes of feasibility within the given timeframe, the researcher opted to focus on resource munificence and narrowed the focus down to financial resources. Nevertheless, complementary information regarding other types of resources provided during the data collection phase was not neglected.

The raw information gathered was organised, edited, reduced and coded according to the methods explained in the previous chapter. Quantitative data was reduced and displayed in a table regarding each pre-established indicator. Qualitative data from the interviews was reduced via transcription and editing. The coding of the interview transcripts occurred in two phases. First, the researcher looked for information that would fit into the already existing indicators from the questionnaires. Secondly, an open coding analysis was conducted in which the researcher searched for extra relevant information that did not fall under any of the previously used indicators. Three new indicators arose and were included in the analysis.

Regarding archival research, information from the several data sources listed in the previous chapter was allocated to the corresponding indicators.

Following the illustrative method, the information from all three sources of data collection was combined in a data display and triangulation table which can be found in the Appendix. The table displays the main findings from the questionnaires, regarding the average, minimum and maximum values attributed to each question; the most relevant statements retrieved from interview transcripts; and important information found in public and internal document sources. This table allowed the researcher to triangulate the data, comparing the information retrieved from distinct sources and uncovering patterns and contrasts.

The final analysis of the data is provided in this chapter. The content is organized as follows. First, a case description provides more details about the case under study. Then, the triangulated data is analysed regarding the 17 indicators. Afterwards, a final discussion

recapitulates the most relevant findings and connects the main concepts underpinning this research. Finally, a sociogram maps the relationships and frequencies of interaction between the ego and the alters.

4.1. Case description

Dam Removal Europe, from now on designated DRE, is one of the leading movements in the removal of river barriers in the European continent. DRE was founded in 2016 by several organisations, gathering experts from a diversity of backgrounds, from engineering to public policy, conservation, biology, and more, with a common vision: opening the gates to free-flowing rivers.

The coalition, or core network, is currently composed of World Fish Migration Foundation (WFMF), World Wide Fund for Nature (WWF), the European Rivers Network (ERN), The Rivers Trust, Rewilding Europe, The Nature Conservancy (TNC), and Wetlands International. Apart from joint production and collaboration between the seven partner organisations, the coalition interacts with a wider network that unites many supporters, practitioners, and river enthusiasts. The coalition stays open to other organisations, such as water management authorities, environmental agencies, NGOs, and energy companies. that may bring their expertise to make dam removal a mainstream river restoration method (information retrieved from an internal strategy document, 2022).

Since it was created, and as the name suggests, DRE took the lead in one of the most effective ways to recover nature: the removal of river barriers. The overall ambition of DRE is “to restore rivers in Europe (…) that are fragmented by obsolete dams and weirs” by mainstreaming dam removal as an effective solution for nature restoration (Dam Removal Europe, n.d.).

According to the coalition’s memorandum of association, the aims of DRE are: “To restore rivers in Europe that have high natural or cultural importance; To reclaim the diversity, abundance and wealth of Europe’s rivers by inspiring the strategic removal of thousands of unused, unsafe and unnecessary dams; To build a movement that sets the standard for dam removal and collectively delivers the above through development of knowledge sharing and network, scalable demonstration projects, communication, development of finance and funding potential and advocacy” (retrieved from Memorandum of Association of Dam Removal Europe).

Furthermore, Dam Removal Europe aims to be the “organisation with absolutely all the information, cases, knowledge, and actions happening on dam removal” (quote retrieved from the interview with Respondent 1).

The reasons for choosing this network as a case study are related to its relevance to the contemporary environmental context. Dam removal operations have been scaling up across Europe in the last years partly due to the work of this network. Dam removal was not a realistic option in the 20th century and those who suggested it were considered “radical dreamers”. Only in the past decade has this nature restoration practice become increasingly common (Brewitt, 2019).

2021 was a record-breaking year for dam removals, with about 239 river barriers removed (Dam Removal Europe, n.d.; Green, 2022). Moreover, since the European Commission included the goal of restoring 25.000 km of free-flowing rivers in the Biodiversity Strategy 2030, the topic has been getting increasing social and political attention (European Commission, 2021).

For 2025, DRE has the ambitious goal of taking down 150.000 obsolete barriers in European rivers, by growing its community and engaging more donors with the network’s mission. However, several obstacles such as a “lack of awareness, knowledge, support, and funding for dam removals” (Dam Removal Europe, n.d.) difficult DRE’s mission. The continuity and effectiveness of DRE's work are significantly dependent on acquiring the necessary resources. These resources include updated information about dam removal operations at the European scale, necessary funding to finance or help finance dam removals, and monetary funds to finance the coalition’s activities. Besides lack of funding, the coalition has been facing other obstacles, such as a lack of awareness regarding the benefits of dam removal, a lack of

specialized knowledge in several areas, and a lack of political support to scale up the movement at an optimal level (World Fish Migration Foundation, n.d.).

4.2. Data Analysis

4.2.1. Networking behaviour

Through the questionnaires, it was verified that the partners have different perceptions when it comes to who is responsible for the major networking efforts within the coalition. Some partners pointed out specific individuals, such as Pao Fernández Garrido, the network manager, or Herman Wanningen, one of the founders of the coalition and Director of the World Fish Migration Foundation (WFMF); others felt like the task falls on each of the members of the coalition. This was verified in the interviews, in which statements like "[networking] is also the responsibility of each of the individual member organisations" (Respondent 2) or "[networking] has been mostly driven by Herman and Pao basically" (Respondent 5) pointed out to a divergence in perceptions. Nonetheless, the majority recognised the most prominent role of WFMF when it comes to developing and maintaining favourable relationships with external actors.

An explanation as to why it is not clear to all partners who should be in charge of major networking efforts may be related to the nature and structure of the core network. Because Dam Removal Europe operates as a coalition of seven partner organisations, without any formal hierarchical structure, specific roles are not assigned to its members as they operate in a logic of cooperation and co-production.

Moreover, the individual partners present different organisational structures and resources. Some simply do not have enough means and tools to invest in networking, thus considering it a secondary task regarding their participation in the coalition. During the interviews, one of the respondents confirmed the differences between the seven partners, mentioning that some are bigger in size and resources, such as WWF, while others have less capacity to invest in networking efforts. For this reason, the networking behaviour within the coalition "differs from partner to partner" (Respondent 2).

Overall, although networking responsibility was found to be unclear, the coalition's networking behaviour was rated high in the questionnaires with an average of 5,2 points on a scale ranging from 1 to 6.

4.2.2. Networking sideward

The role of WFMF was also highlighted when it comes to networking sideward, rated with an average of 4,8 in the questionnaires. A possible explanation for this may be the fact the

network manager belongs to this organisation and is the one in charge of scheduling all-partner monthly meetings and bringing the members together in a concerted strategy and collective discussion.

During the interviews, it was verified that networking sideward within the coalition is mainly done via monthly online meetings and direct e-mails. One of the participants in this research characterised the communication as “regular” and described the coalition as a great platform for “knowledge sharing and having a joint strategy” (Respondent 3).

Within managerial networking behaviour, it’s possible to conclude that the networking sideward direction is perceived as high within the Dam Removal Europe coalition.

4.2.3. Networking outward and Interaction with external actors and organisations

The coalition is perceived to be strong at networking outward. This indicator reached the highest value amongst all measured in the questionnaires, with an average of 5,4 points. When it comes to interacting with external actors and organisations, the figure was slightly lower, with an average of 4,25.

These high values may be explained by the need to access external updated information on dam removal operations constantly; accompanying local, national and European progress regarding environmental and freshwater policies; and gathering external stakeholder support and funding. As explained by Respondent 1, Dam Removal Europe aims to gather all the latest information regarding dam removal in the European continent. For this reason, so frequent interaction with many actors spread across different countries is crucial.

Moreover, as it will be further developed in the sections below, the coalition does not possess a stable funding source, which also implies an enduring effort to tap financial resources in the external environment via interaction with public and private sources of funding.

Another factor that may contribute to such a high score on networking outward is the fact that the DRE coalition is inserted in a broader network within the dam removal movement. The entire network is composed of about 4,700 individuals contacted by the network manager at least once a month via email. This contact is predominantly informative and unidirectional, as the emails are destined to inform the whole network about new dam removals, upcoming events and seminars, or to notify about the launch of important reports.

Within this broad network is a sub-group denominated “key contacts”. As clarified by Respondent 1, these key contacts are “people who directly work on dam removal”. Networking

with these people is essential for the coalition as they represent the primary sources of information on dam removal across European countries. For this reason, they are frequently contacted by the network manager via direct email or zoom interviews to get updated information and feedback. Examples of entities integrating these key contacts are River Basin Authorities, NGOs, practitioners, and Ministries of Environment.

Another critical aspect that contributes to a high level of networking outward is the fact that WWF Netherlands integrates the coalition. WWF, being a giant network with offices spread across the globe, has a European Policy Office (WWF EPO) in constant contact with the European Commission and policymakers. At WWF EPO, the individuals in charge of freshwater topics frequently send and receive information from the coalition to better advocate for European dam removal policies.

4.2.4. Interaction with private donors and Interaction with public funds and grants

Although networking outward received a high score (5,4), the coalition's perceptions of the frequency of interaction with private and public sources of funding were rated relatively low. Looking at the results from the questionnaires, the interaction with private donors was rated with an average of 3 points, whereas the interaction with public funds or grants reached only 2 points.

When it comes to interacting with these alters, WFMF was once again highlighted as the main contact point within the coalition. One of the respondents even mentioned that the coalition has only managed to stay active in more recent years due to the networking efforts of WFMF's Director: "DRE has pretty much survived because of the funding of Postcode Lottery and funding that Herman has gotten through public organisations like Dutch water agencies (…) Herman networks with other organisations and then he gets 20,000 here, 40,000 there" (Respondent 1).

These figures led to the conclusion that the coalition's external networking efforts are more often canalised to the acquisition of other types of resources other than monetary funds from public and private donors.

4.2.5. Fundraising responsibility

As mentioned at the beginning of this chapter, the process of coding the interviews led to the emergence of three new variables. "Fundraising responsibility" was one of them. The task to

fundraise in the name of the coalition was often attributed to WFMF, as confirmed by the statement in the paragraph above.

Other quotes retrieved from the interviews strengthened this finding: “World Fish Migration Foundation, which has one of the main roles inside of our network, they have the role to raise money”, “It's up to World Fish Migration Foundation to raise money for the coalition”, and “The financial engine is Herman. It's his efforts to try to get funding to make these activities. The coalition at this point has been helpful in disseminating and sharing things, but that's all”.

In contrast, one of the respondents remarked that all partners ought to fundraise individually: “We do our own fundraising, each of us. Sometimes we do joint fundraising for specific funding streams that become available. So, it's varied. I can tell you about our case. Every time that we find a donor that has a freshwater type of focus, we move and put the dam removal agenda forward and fundraise for that. And I think every partner does that. So, every single partner that is part of the coalition has freshwater conservation objectives, and it is within that scope that we fundraise” (Respondent 5).

Moreover, although one of the respondents argued for the need to create a common budget to be shared by all partners, another participant drew attention to an important aspect, stating that “the financial responsibility to keep staff time working for the coalition basically sits with everyone in the network. So, people have to cover their own time and costs for that”. This quote is in line with the information provided in the Memorandum of Association with Dam Removal Europe coalition, in which is specified that “The group does not have its own bank account. All finances associated with the group’s activities will be managed by the individual group members as agreed by the committee” (Memorandum of Association of Dam Removal Europe).

4.2.6. Availability and Accessibility of needed resources

The availability of resources in the external environment was considered high by the questionnaire respondents, with a score of 5 points average. In contrast, the accessibility of critical resources was rated at 3,4 points.

It was verified that all respondents had similar perceptions when it came to the availability of resources. However, a greater discrepancy was found in the answers about the accessibility of such resources: three respondents considered access to needed resources fairly easy, giving it 4 points, one respondent found it not so easy, answering with 3 points, and another respondent deemed it hard, rating it with 2 points.

The interviews offered deeper insights into these two variables, explaining the contrasting values and giving an overview of the different types of resources considered crucial by the coalition's members.

In general, the respondents recognised the existence of funding opportunities but also the high competition in getting them. When it comes to financial resources, these were considered "really difficult to get" (Respondent 1) as there are thousands of NGOs applying to the same sources of funding, such as grants and major donors. Respondent 2 affirmed the need to make big efforts to get these financial resources, mentioning that "financially, there are funds out there (…) but the funds available are quite limited. So, you need to actually fundraise and put a lot of effort in it".

When it comes to information resources, these were considered abundant but also difficult to access. Respondent 2 referred to the need for more scientific data to support the dam removal movement and bring more supporters on board: "In order to inspire other people to remove dams, you also need data, of course. And that is one of the things that's currently lacking a bit. We all know that by removing dams fish can swim up, restore natural flow, and so on. But where's the proof? We need more proof to show this and tell a story with more confidence".

Although information resources were considered fundamental by almost all participants in the interviews, the accessibility to this resource was found to face considerable challenges.

The Dam Removal Europe Report of 2021, which annually aggregates all dam removals that took place across Europe, notes the final count of barriers presented to be an underestimation. The explanation is provided in the same document: "We haven't included data from at least a few organisations/countries, due to several reasons, including the complexities in tracing barrier removals (…), lack of relative inventories, unsuccessful attempts to contact the appropriate people in public authorities, and limited data collection timeframe" (Dam Removal Europe Report 2021, p. 4).

As already touched upon, having constant access to the most updated information implies frequent contact with a vast number of people located in many countries, which can constitute an explanation for the difficult access to this type of resource.

Likewise, a language barrier was pointed out as one of the main obstacles to accessing critical data. Dam Removal Europe acts at a European level with the aim of being the "organisation" compiling all updated information regarding dam removal which implies constant contact with several people that are not always fluent in English. As confirmed by Respondent 1: "Enough material to talk about, yes, there is a lot out there and that we need still to discover. But we

cannot do it because we have a language barrier. We don't have the needed staff to investigate (…) So there is a bunch of information out there, but we don't have the resources to access it".

In this regard, another participant pointed out a lack of human resources not only to foster information sharing but also for scaling up dam removal on the field: "When it comes to human resources, that's not easy either, especially in countries where people are used to building dams because they think that's good (…) You need dedicated people on the ground to remove those dams or to get the process started" (Respondent 2).

In conclusion, several types of external resources, from funding to information and human capital, were perceived as more or less available but hard to access.

4.2.7. Financial resources from external organisations, private and public donations or grants

Recalling previous findings: networking outward was given an average score of 5,4, and consistently, the frequency of interactions with external actors and organisations ranked an average of 4,25. In turn, resources arising from this source were perceived as high, with an average of 4,75 points. These values support the theoretical proposition as it is shown that the higher the frequency of interaction with a specific actor, the higher the resources coming from that same actor.

Concerning private donors, the interaction with this type of actor was given an average score of 3. In contrast, the resources from this source were considered only slightly higher, with an average response of 3,2. Again, the level of interaction is translated into the level of resources obtained.

Regarding public funds and grants, the findings were quite unexpected. The level of resources coming from this source was rated almost double the level of interaction, with 3,8 and 2 points, respectively. This finding contradicts the theoretical proposition in the sense that if it is expected that a high level of networking results in higher resources originating from the source of contact, then the reverse should also verify (low levels of interaction = low levels of resources). However, this finding showed that despite the low frequency of interaction, resources generated by this particular actor remained considerably superior. The level of networking was shown to have no impact on the level of resources.

A possible explanation is hinted at by Respondent 5: “We have seven partners now, but it doesn't mean that we are on every single proposal together. Some proposals make sense that it's just three partners or two partners, it varies a lot”. Often, the funding driven from public funds and grants requires almost no networking effort. If the coalition is applying for a grant as a group, then networking sideward will be necessary, for example, to delegate tasks and coordinate the application procedure among all partners. However, suppose one organisation, say WFMF, which is entrusted with fundraising by most partners, is applying in isolation. In that case, the financial resources might be granted despite the level of interaction and networking behaviour.

4.2.8. Financial resources from within the coalition

The Memorandum of Association of Dam Removal Europe clearly states that belonging to the coalition entails no financial commitment. For this reason, it was not expected that the indicator regarding the financial resources from the coalition’s members would reach high values.

However, it was found out during the interviews that WWF Netherlands funded the coalition for the first three years, with the goal of providing a starting structure and kick-off the project of Dam Removal Europe. Although the financial resources were coming from WWF, the coordinating role was given to WFMF: “WWF has financed WFMF for a long time to undertake the activities [within the Dam Removal Europe movement]. Basically, to give them a key role in mobilising the network” (Respondent 2).

According to Respondent 1, when WWF’s funding came to an end, WFMF took the lead in getting financial resources to keep the coalition active.

During the interviews, the fact that the organisations belonging to the coalition have marked differences was recalled. Respondent 5 argued that “not every partner has the same capacity to raise funds. These are very different organisations. Two global organisations, TNC and WWF, and Wetlands International as well. These are global in reach, and they have a gigantic fundraising machine. And then you have organisations like Rewilding Europe and WFMF which are relatively small compared with those giants. I think everybody feels responsible for doing it, but the results are not the same. And there should not be an expectation that results are the same”.

In sum, financial resources coming from within the coalition scored an average of 2,5 in the questionnaires. Most resources were perceived to be coming from WFMF and WWF, which

both scored 3,75. Right after, TNC scored an average of 3,25. The lowest scores were attributed to ERN, The Rivers Trust, and Rewilding Europe.

These low values can be attributed to the inexistence of financial commitment when joining the coalition, the pronounced structural differences between the partner organisations, and the uncertainty of general fundraising responsibility among the coalition.

4.2.9. Abundance of financial resources and Resource growth (in terms of financial resources)

When asked solely about the munificence of financial resources, the respondents considered the abundance of this type of resource to be low. The average response in the questionnaires was 2,4 points, and there was not a significant variation in the answers, which revealed a common trend in the perceptions.

Although the abundance of financial resources was rated low, the perceptions of resource growth reached an average of 4 points, with 5 being the maximum score given and 3 being the minimum. This result was somewhat unexpected as most participants believed the coalition would face challenging times securing funding for the upcoming years.

All interviewees considered the coalition operating in unstable circumstances. Respondent 1 confessed that the coalition was only stable in the short term: “We have budget until 12 more months until December of 2023. After that, we don’t have the budget”. Respondent 3 confirmed this by affirming: “[The coalition] is not financially sustainable how it is”.

A document facilitated by the financial manager of WFMF provided an overview of the coalition’s financial status since its creation, allowing the researcher to assess the financial resource growth objectively.

Illustrated in the table below, the numbers show that the coalition rapidly increased its funding between 2016 and 2019. However, the values in the results column, which were calculated as the difference between income and expenditure, were only positive in 2016 and 2019.

Year	Income (Annual)	Result (Difference between annual income and annual spending)
2016	39.545	7.283
2017	70.212	0
2018	185.000	-10.683
2019	191.715	40.652
2020	181.989	8.948
2021	178.377	15.628

Fig. 1: Table illustrating DRE financial overview 2016-2021.

In 2019 the coalition gathered the highest amount of income since its foundation, reaching almost 200.000 euros. However, in 2020 and 2021, this figure gradually decreased to reach approximately 178.400, which may be explained by the break-out of a worldwide pandemic that slowed the global economy in general.

Despite the decline in funding, the coalition managed to keep its results positive, with almost 9.000 euros in 2020, and about 15.600 in 2021.

Nevertheless, one of the participants in the interviews disclosed that the coalition is far from being in a position that guarantees sustained growth: “I think you need more for that and you need to diversify the different sources of income (…) It's a continuous fundraising effort (…) it's not guaranteed nor sustainable yet” (Respondent 2).

From an overall analysis of the respondents’ perceptions and the data from internal documentation, it is possible to conclude that the abundance of financial resources within the coalition is low, but resource growth can be considered medium-high.

4.2.10. Networking goals and Networking outcomes

The interviews provided insightful information about the coalition’s networking efforts that were not covered by the questionnaires. As previously mentioned, the coding of the interviews led to the emergence of three new variables. The first one, fundraising responsibility, was already explored, but two others remain to be addressed: networking goals and networking outcomes.

The participants in the interviews pointed out that one of the main reasons driving networking was access to critical information. As confirmed by one of the respondents: “What is behind

the effort of networking is to try to collect what are all the actions happening in dam removal at the European level and sometimes even outside Europe (…) our ultimate goal is to be the organisation with absolutely all the information, cases, knowledge, and actions happening on dam removal" (Respondent 1).

In turn, it is through the coalition's networking efforts that crucial information is fed into the network, mainly through the contact established between the network manager and the key contacts. Access to critical information is thus both a goal and an outcome of networking behaviour.

Another goal is knowledge sharing. One of the interviewees claimed that their primary objective when joining the coalition was to share their competencies and experiences regarding dam removal. Alternatively, another participant highlighted the pedagogical aspect of knowledge sharing as an outcome of networking. "Knowledge sharing, not just in terms of how to do things, but coming up with lessons learned. If somebody wants to remove a dam, you have lessons from other people that have removed dams, and so you can learn from that" (Respondent 5).

In this way, and similarly to access crucial information, knowledge sharing is both a goal and an outcome of Dam Removal Europe's networking efforts.

A third mentioned goal referred to increasing support for the movement. Respondent 5 mentioned that networking was "mostly about building a movement for the removal of dams across Europe" and getting "individuals, organisations, and governments motivated to remove dams and connect rivers across the continent". Furthermore, Respondent 2 assigned WFMF a distinct role in creating such support "because they really want to help grow the movement of dam removal. Communicate a lot about it, bring the people together" (Respondent 2).

Two different aspects can be identified in this regard. First, networking to create higher support for dam removal as a movement. This would translate into tangible operations in European rivers and include the objectives of dam removal and free-flowing rivers in European environmental policies. Second, networking to increase public awareness, which would be achieved by making the movement known and supported by a wider audience. Respondent 1 made this explicit during the interview, stating: "We want to publicise that [dam removals taking place across Europe]. To highlight and help these little actions (…) To put them in the spotlight".

In terms of networking outcomes, these two goals were found to be associated with positive impacts. First, dam removal has been scaling up across Europe in recent years. "If you look

at the number of dams that have been removed since dam removal Europe started, and you compare it maybe with the number that was there before dam removal started, I think you can have an assessment of the impact of the network" (Respondent 5). In fact, 2021 was a record-breaking year for dam removal, with more than 239 river barriers dismantled, representing an increase of 137% of barriers removed compared to the previous year (Mouchlianitis, 2022; Green, 2022). The coalition also drove new countries to join the movement, and Portugal, Montenegro, and Slovakia had their first removals in 2020.

Moreover, an increased presence of dam removal in policy documents has been observed. Since the Water Framework Directive's implementation in 2000, dam removal has gained political momentum. As Member States were urged to achieve good ecological status for most of all water bodies by (at the very latest) 2027, dam removal appeared as a cost-effective option for accelerating the recovery of freshwater ecosystems. Additionally, the EU Biodiversity Strategy for 2030 also reflected DRE's goals. According to this Strategy, Member States should identify and prioritise barriers that could be removed to help restore 25,000 kilometres of free-flowing rivers. Another indicator is stated in the Dam Removal Europe Strategy 2020-2030, where it is possible to read that the coalition's efforts have resulted in "proven policy change in favour of dam removal in at least 3 countries (Finland, Lithuania and Sweden)" (Wouter, 2020, p. 7).

Furthermore, networking was shown to have positive outcomes in the political advocacy arena. Respondent 5 acknowledged that "another advantage I see in the network is when we come together to push joint agendas at a higher level, with European Union mostly, or with national governments. That requires not the action of one, but the action of many together. If you're speaking with a monster, you need to be a monster as well in terms of size, otherwise, they won't hear you. So yeah, that unity and voice and message is very important".

Regarding outreach and media attention, Respondent 5 highlighted how the partners' networks pushed the coalition's networking efforts to a larger scale. "When something is put out, the ability of the coalition to really project the message across their communication networks is really, really powerful. So, the reach is much bigger because we do it together at the same time and in a coordinated fashion". Because the information is spread by seven distinct partners located in several countries, the reach of Dam Removal Europe's messages is much broader. When consulting an internal media clipping document, it was discovered that between October and November 2022, Dam Removal Europe was mentioned in media outlets in Spain, Portugal, France, Belgium, Germany and the USA.

Confirming this networking outcome, Respondent 5 noted that “you see dam removal spoken about in the media far, far more. You see policy documents embedded with the removal of dams objectives, which is something that wasn’t there before”.

Another outcome pointed out during the interviews was that networking generated further networking, in the sense of gaining access to “the right people” to make the dam removal movement scale faster in certain parts of Europe. As this nature restoration tool is still not mainstream, “the networking in terms of contacts and the knowledge about who can do what and where (…) is very important because dam removal is still on the fringes of the conservation work” (Respondent 5).

A final outcome reported by Respondent 2 was the development of new funding opportunities for dam removal. The participant claimed that “probably without Dam Removal Europe, this Open Rivers program[1] would not have been there. This network does create the opening for philanthropists to step in and create these funds. (…) Probably, if you keep on telling the stories, and talking to the right people, hopefully, they will also be dedicated to subsidy programs from the European Commission which we can apply to. The network creates these opportunities for sure”. Although this outcome suggested a causal link between networking behaviour and resource munificence, a concrete relationship cannot be defined as the development of new funding mechanisms increases resource availability but may not translate into real resource munificence as the coalition may fail to catalyse these fundings to itself.

4.3. Network analysis: Mapping the ego’s interactions

Network analysis relies heavily on sociometric data, which is a method for determining the connection between actors (Tichy et al., 1979). These connections, or relationships, are often mapped in graphs or sociograms, illustrating the degree to which each actor is related to another.

Following the ego network perspective, it was possible to build a sociogram mapping the ties between the ego and the alters to whom it relates.

As displayed below, the alter with whom the ego, represented by the coalition, interacts the most is the Dam Removal Europe broader network, within which the key contacts are inserted. This might be explained by the need to access critical information from those key contacts as well as to disseminate updates throughout the entire network. As discovered in the interviews,

[1] The Open Rivers Programme offers grants to “support projects that lead to the removal of small dams and the restoration of river flow and biodiversity” (Open Rivers Programme, n.d.).

the network manager interacts with the individuals and organisations integrating the broader network at least once a month.

By analysing the questionnaire responses, it was found that the alter with the second highest frequency of interaction is represented by other external organisations, followed by the interactions with private and public sources of funding.

In turn, the lowest frequency of interaction is seen regarding the media and public sources of funding. The assumption that interaction with the media is low is based on the fact that the coalition does not send out many press releases (information provided by the network manager). Nevertheless, as observed during archival research, the low level of interaction is not translated into poor media presence, as the coalition is frequently mentioned in news articles.

Regarding the contact established with political actors and decision-makers, there is no data on the frequency of interaction. However, during the interviews, it was mentioned that the DRE coalition is in contact with WWF EPO, the European Policy Office from WWF. Moreover, one of the respondents pointed out that one of the main advantages and outcomes of networking was when the coalition and supporters of the movement acted together "to push joint agendas at a higher level, with European Union mostly, or with national governments" (Respondent 5), which presumes a contact with such institutions.

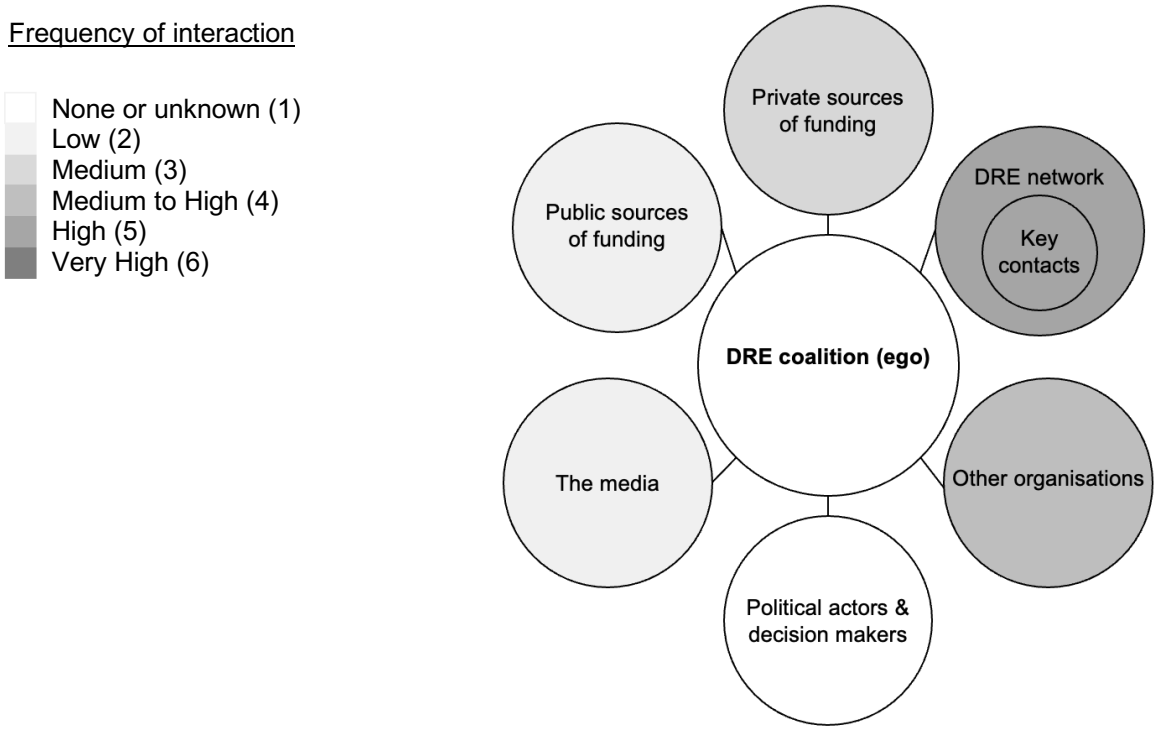

Fig. 2: Sociogram of ties between the ego and the alters.

4.4. Connecting the dots: Managerial networking behaviour and Resource munificence within Dam Removal Europe

Looking at all the indicators and potential explanations of the findings obtained, a final analysis of all data sources reveals that employing a high networking behaviour generally pays off when it comes to accessing resources in the external environment. However, the same is not true when referring to financial resources specifically.

It was found that a high frequency of interaction with organisations outside the coalition allows access to a high level of resources from those actors. Following the same logic, a medium frequency of interaction with private sources of funding results in a medium level of financial resources. However, it was discovered that low levels of interaction with public sources of funding have no negative impact on the financial resources coming from this type of actor. Although resources coming from this source were not rated significantly high, with an average score of 3,8, this figure was almost double the perceived level of interaction (average = 2), showing that the intensity of networking behaviour was insignificant to the level of resources.

Recalling the initial theoretical proposition, “The higher the networking behaviour, the higher the financial resource munificence within the coalition”, it was not confirmed or disconfirmed, as part of the findings support it while other results disprove it.

Looking merely at the results from the questionnaire, it was revealed that the average value of all indicators measuring perceived managerial networking behaviour[2] was 4,4 points, which can be considered a high score. In contrast, the average value for resource munificence[3] was only 3,1, which reflects a medium level of perceived financial resource munificence. This discrepancy leads to the conclusion that there is not a direct causal link between managerial networking behaviour and financial resource munificence in regard to the case of the Dam Removal Europe coalition.

Even though the focus of this investigation was on financial resource munificence, the data collection process allowed the researcher to extend the analysis to other types of resources and networking outcomes arising from the coalition’s networking efforts. It was found that

[2] Networking behaviour, Networking sideward, Networking outward, Interaction with external actors and organisations, Interaction with private donors, Interaction with public funds and grants.

[3] Availability of resources, Accessibility of needed resources, Abundance of financial resources, Resource growth (financial resources), Resources from external organisations, Resources from private donors, Resources from public funds and grants, Resources from WWF, Resources from ERN, Resources from The Rivers Trust, Resources from Rewilding Europe, Resources from TNC, Resources from Wetlands International, Resources from WFMF.

networking sideward is the direction of networking behaviour that contributes the most to knowledge sharing. This direction of managerial networking, together with networking outward, was also found to result in increased political support, media presence and outreach regarding the dam removal movement.

Analysing networking outward alone, it was observed that the outcomes of this employing behaviour were mostly related to the development of further networking contacts, in the sense of reaching out to the right people to scale up dam removal across Europe. Moreover, it was inferred that networking outward resulted in the expansion of dam removal operations in the field and led to the creation of new funding opportunities in favour of free-flowing rivers.

In conclusion, while part of the findings supports the presumed causal link, an overall analysis cannot fully provide confirmation for the initial proposition.

V. CONCLUSION

5.1. Summary of the findings

This study examined the relationship between managerial networking behaviour and financial resource munificence within the Dam Removal Europe (DRE) coalition, intending to understand how the first influenced the latter answering the research question: *How does managerial networking behaviour influence financial resource munificence within the Dam Removal Europe coalition?*

Following an ego network perspective, the data analysed was collected entirely from the ego (Everett & Borgatti, 2005), represented by the DRE coalition. This implied that all information regarding the ego, its alters, and the relationships between them were obtained from questioning the partner organisations that were available to participate in the research.

Although Torenvlied et al. (2013) conceptualised managerial networking as an externally oriented behaviour, this research also considered the "internal" context in which networking occurs. Referring to it as networking sideward, this "internal" networking encompassed the interactions between the partner organisations belonging to the coalition. In turn, networking outward comprised all the interactions between the ego and the external environment, in other words, the alters.

As predicted by theory, it was found that managerial networking behaviour influenced the overall resource munificence in the case under study. This relationship was expected as organisations, especially non-profits, depend on interactions with their external environment to secure the attributes needed for survival and growth (Johansen & LeRoux, 2013; Pfeffer & Salancik, 2003). Likewise, the ties between the ego and alters represent conduits for the first to access resources held by the latter (Borgatti & Foster, 2003).

Even so, although a high level of networking behaviour was found to result in more facilitated access to several resources in the external environment, from information to key stakeholders, this relationship is more linear when referring solely to financial resources.

Comparing the contrasting values of abundance and growth of financial resources and connecting these indicators to Castrogiovanni's (1991) dimensions of munificence, it was possible to conclude that while the growth dimension is perceived as high, the capacity or abundance of resources is low.

Moreover, contradicting the theoretical proposition, a surprising result showed that low levels of networking with public funds and grants had no significant impact on the level of financial

resources coming from this alter. On the contrary, the funds arising from this source were perceived to be almost double the level of perceived interaction.

A final analysis compared the aggregated scores of the two main variables and dismissed a proportional causal relationship between them, as managerial networking behaviour achieved a score of 4,4 while resource munificence barely surpassed 3 points. For this reason, it was concluded that intense managerial networking behaviour does not necessarily result in higher financial resource munificence.

However, as the research approach chosen to conduct this case study was primarily qualitative, several findings beyond the focus of the theoretical proposition came to the surface.

Emphasising the multidimensional character of managerial networking (Torenvlied et al., 2013), it was observed that different frequencies of contacts with different alters generated different types of resources. While networking outward through frequently interacting with the key contacts that are part of the broad network tended to generate higher access to critical information, a low level of interaction with public funding sources still obtained a medium level of financial resources for the coalition. Furthermore, it was found that the internal ties of the ego, corresponding to networking sideward, contributed the most to knowledge sharing among the coalition.

Both directions of managerial networking behaviour were discovered to highly contribute to increased political support, mainstreaming the coalition's mission, an outreach of a wider audience of supporters, and amplifying media presence.

These outcomes align with Pfeffer and Salancik's (2003) list of networking benefits, mainly those referring to information acquisition and exchange and the development of the commitment and engagement of stakeholders in the coalition's activities.

When looking at Galaskiewicz's arenas of inter-organisational relations, it was found that Dam Removal Europe mainly operates in the legitimacy and political advocacy arena. The coalition's inter-organisational relations were observed to help mobilise other organisations and actors to leverage the decision-makers to pass legislation favouring their mission (Galaskiewicz, 1985). By mainstreaming its values, DRE guarantees legitimacy and increases supporters (Galaskiewicz, 1985).

As indicated by the findings, networking outward is perceived to result in a more effective push of joint policy agendas and the expansion of dam removal operations in Europe. Additionally, it is believed to have led to the creation of more funding opportunities to support the movement.

In conclusion, managerial networking behaviour cannot be claimed as a fundamental influential factor of financial resource munificence. Nonetheless, clear benefits derive from such behaviour, and extended types of resources are tapped through varied networking efforts.

5.2. Limitations

While this investigation provided insightful information on managerial networking behaviour and its outcomes regarding resource munificence, it was not without challenges.

The main limitations were found during the data collection procedure. Firstly, a more robust investigation would require the inquiry of all constituents of the ego. However, not all partners were available to participate in the questionnaires or the interviews, which led to an incomplete sample.

Secondly, although objective information was gathered via archival research, the two primary sources of information were based on the respondents' perceptions, whose answers may have suffered from a certain degree of desirability bias. As Gibson (2014) pointed out, although more convenient, there may be more effective methods to study networking behaviour than self-reported measures (Gibson et al., 2014, p. 152), but that would require an extensive period of observation of the research subjects operating in their organisational environment.

The timeframe and resources within which the production of this thesis occurred were relatively scarce, which ultimately undermined the development of a more extensive investigation. Nonetheless, this study still held considerable scientific and practical pertinence and generated relevant results.

In particular, this thesis examined a specific set of actors within the non-profit nature restoration field, providing complementary data to the already extensive research on managerial networking behaviour that has been mainly carried out in the public sector.

In the future, it would be interesting to further analyse how managerial networking behaviour contributes to resource munificence comparing organisations operating in low and high munificent environments.

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APPENDIX

Appendix 1: Questionnaire to the Manager

MODULE A – DEMOGRAPHICS

VARIABLE	**QUESTION**
Name	What is your name?
Gender	What is your gender?
Age	What is your age?
Organisation	What organisation of the Dam Removal Europe network do you belong to?
Job Title	What is your job title/position?
Tenure	For how long have you worked in your current position?

MODULE B – MANAGERIAL NETWORKING BEHAVIOUR

Answers were provided by selecting an option based on a six-point scale from Completely Disagree to Completely Agree.

VARIABLE	QUESTION
Networking behaviour (Agranoff & McGuire, 1999, p. 28)	I make continuous efforts to tap the skills, knowledge and resources of others into the DRE network.
Networking behaviour (Yukl, 2012)	I pursue cooperative relations with individuals and organisations who can provide resources and assistance.
Networking sideward (van den Bekerom et al., 2016, p. 644)	I maintain favourable relationships with peers and partner organisations (that formally belong to the DRE network).
Networking outward (O'Toole et al., 2005, p. 53; Torenvlied et al., 2013, p. 252)	I maintain favourable relationships with outsiders (individuals and organisations that don't formally belong to the DRE network).
Interaction with WWF NL	How frequently do you interact with WWF (World Wide Fund for Nature)?
Interaction with ERN	How frequently do you interact with ERN (European Rivers Network)?

Interaction with The Rivers Trust	How frequently do you interact with Rewilding Europe?
Interaction with Rewilding Europe	How frequently do you interact with The Nature Conservancy?
Interaction with TNC	How frequently do you interact with Wetlands International?
Interaction with The Rivers Trust	How frequently do you interact with The Rivers Trust?
Interaction with alter A	How frequently do you interact with other organisations outside the DRE network?
Interaction with alter B	How frequently do you interact with potential private donors?
Interaction with alter C	How frequently do you interact with potential public donors?

MODULE C – RESOURCE MUNIFICENCE

Answers were provided by selecting an option based on a six-point scale from Completely Disagree to Completely Agree.

VARIABLE	QUESTION
Networking outward (in relation to resources)	Interacting with external actors and organisations to tap resources that exist in the environment is essential for the DRE's survival.
Availability of resources (Pfeffer & Salancik, 2003)	Needed resources are available in the environment of the DRE network.
Accessibility of resources (Pfeffer & Salancik, 2003)	Needed resources are easily accessible to the DRE network.
Abundance of financial resources (Castrogiovanni, 1991)	DRE has enough financial resources to carry on its activities.
Resource growth (Castrogiovanni, 1991)	The available financial resources within the DRE network have increased over the years.
Resources from private donations.	A significant part of DRE's financial resources come from private donations.

Resources from public funds.	A significant part of DRE's financial resources come from public funds.
Resources from WWF NL	A significant part of the financial resources come from WWF (World Wide Fund for Nature).
Resources from ERN	A significant part of the financial resources come from ERN (European Rivers Network).
Resources from The Rivers Trust	A significant part of the financial resources come from The Rivers Trust.
Resources from Rewilding Europe	A significant part of the financial resources come from Rewilding Europe.
Resources from TNC	A significant part of the financial resources come from The Nature Conservancy.
Resources from Wetlands International	A significant part of the financial resources come from Wetlands International.
Resources from WFMF	A significant part of the financial resources come from WFMF (World Fish Migration Foundation).
Resources from orgs. outside the network	A significant part of the financial resources come from organisations outside the DRE network.

Appendix 2: Questionnaire to the Partner Organisations*

***Except for WFMF as the manager belongs to this organisation**

MODULE A – DEMOGRAPHICS

VARIABLE	QUESTION
Name	What is your name?
Gender	What is your gender?
Age	What is your age?
Organisation	What organisation of the Dam Removal Europe network do you belong to?
Job Title	What is your job title/position?
Tenure	For how long have you worked in your current position?

MODULE B – PERCEPTIONS OF NETWORKING BEHAVIOUR WITHIN THE DRE NETWORK

Aside from the first question, which was an open answer, answers were provided by selecting an option based on a six-point scale from Completely Disagree to Completely Agree.

VARIABLE	QUESTION
Networking responsibility	Within the scope of Dam Removal Europe, who do you consider to be responsible for networking (establishing and maintaining relationships)?
Networking behaviour (Agranoff & McGuire, 1999, p. 28)	Dam Removal Europe makes continuous efforts to tap the skills, knowledge and resources of others into the DRE network.
Networking behaviour (Yukl, 2012)	Dam Removal Europe pursues cooperative relations with individuals and organisations who can provide resources and assistance.
Networking sideward (van den Bekerom et al., 2016, p. 644)	Dam Removal Europe maintains favourable relationships with peers and partner organisations (that formally belong to the network).
Networking outward (O'Toole et al., 2005,	Dam Removal Europe maintains favourable relationships with outsiders (individuals and organisations that don't formally belong to the network).

p. 53; Torenvlied et al., 2013, p. 252)	
Interaction with actors outside the network	How frequently does Dam Removal Europe interact with other organisations outside the DRE network?
Interaction with private donors	How frequently does Dam Removal Europe interact with potential private donors?
Interaction with public donors	How frequently does Dam Removal Europe interact with potential public donors?

MODULE C – RESOURCE MUNIFICENCE

Answers were provided by selecting an option based on a six-point scale from Completely Disagree to Completely Agree.

VARIABLE	QUESTION
Networking outward (in relation to resources)	Interacting with external actors and organisations to tap resources that exist in the environment is essential for the DRE's survival.
Availability of resources (Pfeffer & Salancik, 2003)	Needed resources are available in the environment of the DRE network.
Accessibility of resources (Pfeffer & Salancik, 2003)	Needed resources are easily accessible to the DRE network.
Abundance of financial resources (Castrogiovanni, 1991)	DRE has enough financial resources to carry on its activities.
Resource growth (Castrogiovanni, 1991)	The available financial resources within the DRE network have increased over the years.
Resources from private donations.	A significant part of DRE's financial resources come from private donations.
Resources from public funds.	A significant part of DRE's financial resources come from public funds.
Resources from WWF NL	A significant part of the financial resources come from WWF (World Wide Fund for Nature).

Resources from ERN	A significant part of the financial resources come from ERN (European Rivers Network).
Resources from The Rivers Trust	A significant part of the financial resources come from The Rivers Trust.
Resources from Rewilding Europe	A significant part of the financial resources come from Rewilding Europe.
Resources from TNC	A significant part of the financial resources come from The Nature Conservancy.
Resources from Wetlands International	A significant part of the financial resources come from Wetlands International.
Resources from WFMF	A significant part of the financial resources come from WFMF (World Fish Migration Foundation).
Resources from orgs. outside the network	A significant part of the financial resources come from organisations outside the DRE network.

Appendix 3: Script - Interview with the Network Manager

1. Can you tell me a little bit about the Dam Removal Network? And who is part of the network) officially and unofficially.

Managerial networking behaviour

2. How many contacts do you have and interact with within the DRE network scope?
3. Do you tend to invest more time and effort in some contacts than others? Why?
4. How would you characterize your role as the manager of the network? I.e. what are your main tasks?
5. When it comes to networking, what kind of specific behaviours or activities do you make the most use of?
6. What goals/objectives underly the networking efforts within the coalition? (Why do you network?)
7. What outcomes usually arise from DRE's networking efforts? Are these outcomes in line with the expectations of the network?

Resource Munificence

8. How do you perceive the external environment in which DRE operates in terms of resource munificence?
9. How does the coalition guarantee enough resources, mainly financial, to keep its projects going?
10. In terms of financial resources, do you feel like the network is in a position that can guarantee sustained growth? Which factors are contributing to this?
11. If any, what type of resources are provided by DRE's networking efforts?
12. Do you have anything else to add that might be relevant to this study and wasn't covered in the previous questions?

Appendix 4: Script - Interview with Partner Organisations

Managerial networking behaviour

1. How would you characterize the networking behaviour within DRE?
2. When it comes to networking, what kind of specific behaviours or activities does DRE make use of? Do you consider those to be successful?
3. What goals/objectives underly the networking efforts within the coalition?
4. What outcomes usually arise from DRE's networking efforts? Are these outcomes in line with the expectations of the network?

Resource Munificence

5. How do you perceive the external environment in which DRE operates in terms of resource munificence?
6. How does the coalition guarantee enough resources, mainly financial, to keep its projects going?
7. In terms of financial resources, do you feel like the network is in a position that can guarantee sustained growth? Which factors are contributing to this?
8. If any, what type of resources are provided by DRE's networking efforts?
9. Do you have anything else to add that might be relevant to this study and wasn't covered in the previous questions?

Appendix 5: Table Displaying Questionnaires' Responses

RESPONDENT	*Networking behaviour*	*Networking sideward*	*Networking outward*	*Interaction external actors/orgs.*	*Interaction private donors*	*Interaction public funds/grants*
R1	5,5	5	6	4	2	1
R2	4	4	4	5	4	2
R3	5,5	4	5,5	4	3	2
R4	5	5	5,5	4	3	3
*R5**	6	6	6			
AVERAGE	**5,2**	**4,8**	**5,4**	**4,25**	**3**	**2**
MAXIMUM	**6**	**6**	**6**	**5**	**4**	**3**
MININUM	**4**	**4**	**4**	**4**	**2**	**1**

MANAGERIAL NETWORKING - MERGED VALUES ***4,43***

RESPONDENT	*Availability of resources*	*Accessibility of needed resources*	*Abundance of financial resources*	*Resource growth (financial resources)*	*Resources from external organisations*	*Resources from private donors*	*Resources from public funds/grants*
R1	5	4	2	3	5	3	4
R2	4	3	3	4	4	1	3
R3	5	2	2	3	5	5	3
R4	5	4	2	5	5	4	5
*R5**	6	4	3	5		3	4
AVERAGE	**5**	**3,4**	**2,4**	**4**	**4,75**	**3,2**	**3,8**
MAXIMUM	**6**	**4**	**3**	**5**	**5**	**5**	**5**
MININUM	**4**	**2**	**2**	**3**	**4**	**1**	**3**

RESPONDENT	*Resources from WWF*	*Resources from ERN*	*Resources from The Rivers Trust*	*Resources from Rewilding Europe*	*Resources from TNC*	*Resources from Wetlands International*	*Resources from WFMF*
R1	5	1	1	1	5	4	6
R2	2	1	1	1	2	1	2
R3	4	2	2	2	2	2	3
R4	4	1	1	1	4	4	4
*R5**							
AVERAGE	**3,75**	**1,25**	**1,25**	**1,25**	**3,25**	**2,75**	**3,75**
MAXIMUM	**5**	**2**	**2**	**2**	**5**	**4**	**6**
MININUM	**2**	**1**	**1**	**1**	**2**	**1**	**2**

RESOURCE MUNIFICENCE - MERGED VALUES	***3,13***

*Respondent 5's answers regarding the interaction with external sources of resources were not counted as well as those regarding “Resources from external organisations” and resources from within the coalition (referring to resources coming from each partner organisation). The researcher dismissed those answers on request by the respondent as, during the interview, the respondent affirmed not knowing about the specificities of fundraising within the coalition and scored all the questions on the questionnaire with “Completely Agree” simply because there was no “I don’t know” option. In this sense, the answers given by Respondent 5 to those specific questions did not reflect their true perception.

Appendix 6: Table Displaying Data Triangulation (all data sources)

MANAGERIAL NETWORKING			
SOURCES OF DATA COLLECTION	**Networking behaviour**	**Networking sideward**	**Networking outward**
Statements from the interviews	"[networking] it's been mostly driven by Herman and Pao basically." (R5) "[networking] is also the responsibility of each of the individual member organisations [of the coalition]." (R2) "[networking behaviour] differs from partner to partner; The Rivers Trust, in the UK, is more nationally oriented; European Rivers Network, in France, is also more nationally oriented. WWF, as a network itself, has all the offices which, although being their own entities, are connected on a joint strategy." (R2)	"If you look at who is sort of driving the network at the moment, it's WFMF. They call for meetings and so on." (R3) "It's a great coalition for knowledge sharing and having a joint strategy." (R3) "We have these monthly meetings" (R2) "Mostly through email and have regular communication. I think it's once a month that we have a call." (R5)	"[WWF EPO] is 30 or 40 people working on European environmental policies in which freshwater is one of the topics. We make sure that the policy person is well connected to the results coming from the Dam Removal Europe coalition so that she can take that information on board when speaking to EU commission or members of the Parliament." (R2)
Main findings from questionnaires	DRE's networking behaviour was considered high, with an average of 5,2 points. The coalition is perceived to be stronger at networking outward, with external organisations and actors (5,4) than at networking "internally", or sideward (4,8). In terms of whom the partner organisations think should be responsible for networking the answers were the following: "Each organisation but WFMF currently most prominent role in bringing us together" (R2); "All cofounders of DRE" (R3); "Pao Fernandez Garrido, WFMF" (the network manager) (R4); "Herman Wanningen, WFMF" (one of the founders of the coalition) (R5).		

MANAGERIAL NETWORKING			
SOURCES OF DATA COLLECTION	**Interaction external actors/orgs**	**Interaction private donors**	**Interaction public funds/grants**
Statements from the interviews	"I do contact them [the DRE network composed of 4,700 people] usually a minimum of once a month. That's with emails with information for them i.e. "Hey,	"Well, with donors, I don't know a lot. I don't know about the inner workings of WFMF as a network secretariat." (R5)	"We have seven partners now but it doesn't mean that we are on every single proposal together. Some proposals make

	are you interested in this course?", "That removal's happening!", "Oh, we are going to stream this dam removal happening in Norway live". I send that to the whole network at least one email per month. Maximum two emails per month." (R1) "The key contacts are people who directly work on dam removal (…) those are really the people whom we get, thanks to them, updates, and feedback. These are River basin authorities, NGOs, practitioners, and ministries of environment. [The contact is made via] direct mailing and zoom interviews." (R1)	"DRE has pretty much survived because of the funding of Postcode Lottery and funding that Herman has gotten through public organisations like Dutch water agencies (…) Herman networks with other organisations and then he gets 20,000 here, 40,000 there." (R1)	sense that it's just three partners or two partners, it varies a lot." (R5) "We do our own fundraising, each of us. Sometimes we do joint fundraising for specific funding streams that become available. So, it's varied. I can tell you about our case. Every time that we find a donor that has a freshwater type of focus, we move and put the dam removal agenda forward and fundraise for that. And I think every partner does that. So, every single partner that is part of the coalition has freshwater conservation objectives, and it is within that scope that we fundraise." (R5)
Main findings from questionnaires	Although networking outward received a good score (5,4), the coalition's perceptions of the frequency of interaction with external organisations, among which private donors and public funds, were relatively low. Despite the interaction with external actors and organisations being rated with an average of 4,25, the interaction with private and public sources of funding received 3 and 2 points, respectively.		

RESOURCE MUNIFICENCE			
SOURCES OF DATA COLLECTION	**Availability of resources (in the external environment)**	**Accessibility of needed resources**	**Abundance of financial resources**
Statements from the interviews	**Financial resources:** "There are financial resources, but they are really, really difficult to get." (R1) "Financially, there are funds out there (…) but the funds available are quite limited. So, you need to actually fundraise and put a lot of effort in it." (R2)	**Financial resources:** "There are financial resources, but they are really, really difficult to get. Why? Because we are thousands of NGOs applying for the same grants, asking to the same donors. It's many organisations fighting and applying for the same financial resources." (R1)	"[The coalition] is not stable. I mean it is stable in a short term. We have budget until 12 more months, until December of 2023. After that, we don't have the budget." (R1) "There's no joint financial accounting or anything like that (…) As a secretariat, WFMF is okay for now, for the coming two

	“There are thousands and thousands of dams across Europe that need to be removed. So, if you look at the amount of funding available for that, no, it's not enough. It's ridiculously low. (...) Getting the buy-in from people takes time and resources. So no, for that there are no resources.” (R5) **Information:** “In order to inspire other people to remove dams, you also need data, of course. And that is one of the things that's currently lacking a bit. We all know that by removing dams fish can swim up, restore natural flow, and so on. But where's the proof? We need more proof actually to show this and to tell a story with more confidence.” (R2) “Enough material to talk about, yes, there is a lot out there and that we need still to discover.” (R1) **Human resources:** “When it comes to human resources, that's not easy either, especially in countries where people are used to building dams because they think that's good (…) You need dedicated people on the ground to remove those dams or to get the process started.” (R2) “Is there enough money to network and to raise the movement and create a profile	**Information:** “Enough material to talk about, yes, there is a lot out there and that we need still to discover. But we cannot do it because we have a language barrier. We don't have the needed staff to investigate (…) So there is a bunch of information out there, but we don't have the resources to access it.” (R1)	years, I think. And then individually I would think the other partners are okay, but I don't really know.” (R5) “There was a lot of money in the beginning from WWF and then from other ones (…) now, I don't know really because I'm not doing it [fundraising].” (R3) “[The coalition] is not financially sustainable how it is (…) In order to make sure that all the members can continue to contribute, we must have a kind of common budget” (R3) “We actually are limited in what we can do because there are so many things expected from us (…) It started to become difficult for us to do it with our normal staff. So, we cannot really give so much as if we had the financial resources to do that.” (R3) “I don't think so yet [that the coalition is in a position that can guarantee sustained growth]. I think you need more for that and you need to diversify the different sources of income (…) It's a continuous fundraising effort (…) it's not guaranteed nor sustainable yet.” (R2)

	for Dam Removal and outreach and all that? There is a bit more money for that, for sure, because it's also cheaper. But it's still not enough." (R5)		
Main findings from questionnaires	Availability of resources was considered high, with a score of 5 points, in contrast with accessibility, which was rated at 3,4 points. In general, all respondents of the questionnaire considered there was a considerable amount of resources in the external environment, with the lowest score being 4.	In contrast with availability of resources, when it comes to the accessibility to those resources, the respondents gave varied answers, ranging from a minimum of 2 to a maximum of 4 points. The average was 3,4 points.	The abundance of financial resources was rated considerably low, with an average score of 2,4. There was not a significant variation in the answers given by the respondents, which ranged between 2 and 3 points.
Main findings from archival research		**Access to information:** "Our final count of removed barriers is certainly an underestimation. We haven't included data from at least a few organisations/countries, due to several reasons, including the complexities in tracing barrier removals (…), lack of relative inventories, unsuccessful attempts to contact the appropriate people in public authorities, and limited data collection timeframe." (Dam Removal Europe Report 2021, p. 4)	

RESOURCE MUNIFICENCE			
SOURCES OF DATA COLLECTION	**Resource growth (financial resources)**	**Financial resources from external organisations**	**Financial resources from private donors**
Statements from the interviews	"[The coalition] is not stable. I mean it is stable in a short term. We have budget until 12 more months until December of	"DRE has pretty much has survived because of the funding of Postcode Lottery and funding that Herman has	"After three years, we were done with the WWF Netherlands' grant and, thanks to

	2023. After that, we don't have the budget.” (R1) “I don't think so yet [that the network is in a position that can guarantee sustained growth]. I think you need more for that and you need to diversify the different sources of income (…) It's a continuous fundraising effort (…) it's not guaranteed nor sustainable yet.” (R2)	gotten through public organisations like Dutch water agencies (…) Herman networks with other organisations. And then he gets 20,000 here, 40,000 there.” (R1)	the Postcode Lottery, we were able to survive and not close the project.” (R1)
Main findings from questionnaires	Although abundance of financial resources scored 2,4 points, when it comes to the perceptions of resource growth, this variable was classified with an average of 4 points.	Networking outward was given an average score of 5,4. Consistently, the frequency of interactions with external actors and organisations ranked an average of 4,25. Following the same trend, resources arising from this source were perceived high, with an average answer of 4,75.	Although the interaction with private donors was given a score of 3. The resources coming from this source were considered slightly higher than the level of interaction, being attributed an average response of 3,2.
Main findings from archival research	2016: income = 39.545; result = 7.283 2017: income = 70.212; result = 0 2018: income = 185.000; result = -10.683 2019: income = 191.715; result = 40.652 2020: income = 181.989; result = 8.948 2021: income = 178.377; result = 15.628 (information provided by the financial manager of WFMF)		

RESOURCE MUNIFICENCE		
SOURCES OF DATA COLLECTION	**Financial resources from public funds/grants**	**Financial resources from within the coalition**
Statements from the interviews		"WWF has financed WFMF for a long time to undertake the activities [within the Dam Removal Europe movement]. Basically, to give them a key role in mobilizing the network" (R2) "The financial engine is Herman. It's his efforts to try to get funding to make these activities. The coalition at this point has been helpful in disseminating and sharing things, but that's all." (R1) "Some of them [partner organisations] are collecting funds for the work i.e. WFMF." (R3) "Not every partner has the same capacity to raise funds. These are very different organisations. Two global organisations, TNC and WWF, and Wetlands International as well. These are global in reach, and they have a gigantic fundraising machine. And then you have organisations like Rewilding Europe and WFMF which are relatively small compared with those giants. I think everybody feels responsible for doing it [fundraising], but the results are not the same. And there should not be an expectation that results are the same." (R5)
Main findings from questionnaires	Although the interaction with public donors, funds and grants was given a score of 2. The average response minding the resources coming from this source reached almost double the figure, with 3,8.	Financial resources coming from within the coalition scored an average of 2,5. Most resources were perceived to be coming WFMF and WWF, which both scored 3,75. Right next to it, TNC scored an average of 3,25. The lowest scores were attributed to ERN, The Rivers Trust, and Rewilding Europe.

Main findings from archival research		"The group does not have its own bank account. All finances associated with the group's activities will be managed by the individual group members as agreed by the committee." (Memorandum of Association of Dam Removal Europe).

New variables that emerged from the analysis of the interviews

Variables	Statements from the interviews
Fundraising responsibility	"World Fish Migration Foundation, which has one of the main roles inside of our network, they have the role to raise money." (R3) "ERN and other organisations, for instance, they don't call for money for the dam removal movement itself (…) That should be done by the World Fish Migration Foundation." (R3)
Networking goals	**1) Knowledge sharing:** "When we get into the network, our goal was (…) to share our experience." (R3) "If you go into a network, then [the goal] is to bring competencies into the alliance or group, but also that you can profit from the others." (R3) **2) Getting access to critical information:** "What is behind the effort of the networking is to try to collect what are all the actions happening in dam removal at the European level and sometimes even outside Europe (…) our ultimate goal is to be the organisation with absolutely all the information, cases, knowledge, and actions happening on dam removal." (R1) **3) Increasing the number of partners in the coalition:** "What we do expect at one point is that the number of organisations will grow." (R2) **4) Increasing support for the movement and shed a light on it:** "It's mostly about building a movement for the removal of dams across Europe. It's to get individuals, get organisations, get governments, motivated to remove dams and connect rivers across the continent." (R5) "WFMF has a distinct role, because they really want to help grow the movement of dam removal. So communicate a lot about it, bring the people together." (R2) "We want to publicize that [dam removals taking place across Europe] (…) To highlight and help these little actions (…) to put them in the spotlight." (R1)

Networking outcomes	**1) Knowledge sharing:** “Knowledge sharing, not just in terms of how to do things, but coming up with lessons learned. If somebody wants to remove a dam, you have lessons from other people that have removed dams and so you can learn from that.” (R5) **2) Access to critical information:** “The key contacts are people who directly work on dam removal (…) those are really the people whom we get, thanks to them, updates, and feedback.” (R1) **3) Tangible impact on dam removal operations:** “If you look at the number of dams that have been removed since dam removal Europe started, and you compare it maybe with the number that was there before dam removal started, I think you can have an assessment of the impact of the network.” (R5) **4) Increased outreach and media attention:** “When something is put out, the ability of the network to really project the message across their communication networks is really, really powerful. So the reach is much bigger because we do it together at the same time and in a coordinated fashion” (R5) “Some of the key things is that you see dam removal spoken about in the media far, far more” (R5) **5) Increased presence of dam removal in policy documents as and tangible political action:** “Another advantage that I see in the network is when we come together to push joint agendas at a higher level, with European Union mostly, or with national governments. That requires not the action of one, but the action of many together. If you're speaking with a monster, you need to be a monster as well in terms of size, otherwise, they won't hear you. So yeah, that unity and voice and message is very important.” (R5) “You see policy documents embedded with the removal of dams’ objectives, which is something that wasn't there before. You have very clear objectives when it comes to freshwater connectivity at the European level. So I think that there's having an impact.” (R5) **6) Further networking (in the sense of reaching “the right people”):** “But I think more importantly, the networking in terms of contacts and the knowledge about who can do what where. That is very important because dam removal is still on the fringes of the conservation work.” (R5) **7) Development of new funding opportunities:** “I think, probably without Dam Removal Europe, this Open Rivers program would not have been there. This network does create the opening for philanthropists to step in and create these funds. So, if there was no Dam Removal Europe, this fund would not have been there. So that’s happening and probably if you keep on telling the stories, talking to the right people, hopefully they will

	also be dedicated to subsidy programs from the European Commission where we can apply to. The network creates these opportunities for sure.” (R2)