Shelter

Sustainable Historic Environments hoListic reconstruction through Technological Enhancement & community-based Resilience

Extract of D6.3 Adaptive Governance Schemes Mapping

Dordrecht Organigraphs

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Authors:

Louis J. Durrant & Jacques Teller

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Glossary

Acronym	Full name
AG	Adaptive Governance
AGSF	Adaptive Governance Scheme Framework
CA	Consortium Agreement
CCA	Climate Change Adaptation
CH	Cultural Heritage
CHM	Cultural Heritage Management
D	Deliverable
DoA	Direction of Action
DRR	Disaster Risk Reduction
DRM	Disaster Risk Management
DoA	Description of Action
EC	European Commission
ICCOMS	The International Council on Monuments and Sites
ICCROM	The International Centre for the Study of the Preservation and Restoration of Cultural Property
IUCN	The International Union for Conservation of Nature
IoG	Institute of Governance
SFDRR	The Sendai Framework for Disaster Risk Reduction
T	Task
OL	Open Lab
OLC	Open Lab Co-ordinator
UN	United Nations
UNESCO	The United Nations Educational, Scientific and Cultural Organization
WHS	World Heritage Sites
WHO	World Health Organisation
WP	Work Package

1   Executive summary

Across academia, policy and practice, the perceptions and understanding of cultural heritage (CH) are changing as experts seek to manage CH more sustainably to better withstand the effects of climate change. Naturally, this has led to a mushrooming of contemporary research and practical work exploring the role of CH as a critical aspect of resilience and sustainability. One research topic within this broader paradigm shift is the integration of CH into disaster risk management (DRM) governance. Both academic and international organizations such as the United Nations Educational, Scientific and Cultural Organization (UNESCO), International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) and International Council on Monuments and Sites (ICOMOS) emphasize the importance of this theoretical integration through a lattice of interacting articles, reports, papers, frameworks, and guidelines. However, one key document championed at aiding in the practical integration of CH into Disaster risk reduction (DRR) and DRM is The Sendai Framework for Disaster Risk Reduction (SFDRR) (UN, 2015).

The SFDRR forms a critical global policy framework that aims to reduce disaster risk and losses in lives, livelihoods, and health. As well as the economic, physical, social, cultural, and environmental assets of persons, businesses, communities, and countries (UN, 2015). The SFDRR is comprised of seven targets and four priorities to prevent new and reduce existing disaster risks. Importantly within the context of this deliverable is Priority 2 of the SFDRR. Priority 2 is entitled '*Strengthening disaster risk governance to manage disaster risk'.* At its core, Priority 2 emphasizes the importance of governance in effectively and efficiently managing disaster risk. As a result, practitioners and policymakers engaging with the SFDRR are encouraged to consider contemporary DRM governance and its role in DRR. As well as proactively facilitate the integration of CH stakeholders into pre-existing DRM strategies and associated governance structures.

However, to date, the integration of CH into DRM is in its infancy. The concept of CH is inherently complex, with highly subjective and unique societal values. Making it difficult to quantify those values accurately and effectively bring all necessary stakeholders together. Furthermore, the interactions between CH stakeholders and decision-making processes are often implicit and reactive. The implicit nature of these decisions can make it challenging to develop clarity around CH governance. Highlighting this challenge within the broader paradigm shift and growing international importance pinpoints a timely and critical research opportunity. In which, there is a need for an academically robust and practical approach that can 'map' DRM governance structures within CH sites. It is within this research opportunity that this work is focused. In short, this deliverable outlines in detail supporting literature, an innovative research approach and all raw data collected in the adaption and subsequent implementation of a semi-empirical research approach to map the DRM governance structures across the five SHELTER Open Labs (OLs). Each of the SHELTER OLs included individuals from public and private organisations that have a common interest in improving the management of CH into the broader governance. However, after preliminary discussions with the coordinators of these Open labs (OLC) in December 2019, it became clear that mapping the governance within the SHELTER

OLs required a more comprehensive approach. Furthermore, very few (if any) empirical studies explicitly attempt to map governance structures across academic literature within the context of DRM and CH.

As a result, the work within T6.3 went beyond mapping DRM governance for the OL and attempted to establish an innovative and collaborative methodological approach that could be replicated by other experts outside of the SHELTER Project. The innovative methodological approach had to be carefully designed, thoroughly researched, and justified to ensure that it fulfilled the requirements of the SHELTER Project and, just as importantly, provided the OLs with a platform and tool to continue exploring their DRM governance in the long term. Despite the limited amount of academic literature attempting to map DRM governance, one valuable exception was found in the European Commission-funded project entitled "Benchmarking Regional Health Management II (Ben RHM II)". In which Tiliouine *et al*. (2018) developed a toolkit designed to help experts map governance structures around medicine distribution in the context of human health and well-being using a technique called The Organigraph technique. This toolkit formed an essential inspiration and resource for adapting the Organigraph technique within the SHELTER Project.

Building upon the toolkit provided by Tiliouine *et al*. (2018), the research team at ULIEGE believed that the value of Organigraphs went beyond its ability to map governance structures. Using a semi-empirical qualitative research approach, the Organigraphs provided the basis for enhanced stakeholder engagement and collaboration, individual and group social learning, proactive self-diagnostics by local experts, and cross-national, cross-scale and cross-issue peer learning. With this in mind, an iterative four Phase methodology was created to explore, co-produce, and fine tune detailed OL specific Organigraphs within the SHELTER OLs. This report is structured around these four phases and can be briefly outlined as follows.

First, Phase 1 created a robust conceptual framework underpinning the methodological approach by exploring the relevant literature around the concept of governance. Phase 2 focused on drafting the OLs Organigraphs by consolidating the pre-existing material with each OL and involving key stakeholder groups. The draft Organigraphs created within Phase 2 were co-produced through, focused developmental meetings and iterative feedback. Phase 2 also led to the refinement of the standardized key that outlines the common 'building blocks' used in developing the Organigraphs. Phase 3 aimed to fine-tune and validate the Organigraphs through 12 collaborative stakeholder workshops. In which 94 stakeholders across the five OL were invited to critique and validate their OLs Organigraph. Finally, Phase 4 aimed to encourage peer learning between the OLs using the finetuned Organigraphs to share knowledge and expertise. This was achieved through a digital interactive workshop in collaboration with WP7. This Phase encouraged the OLCs to present their Organigraph to other experts and use the SHELTER project as a platform to illicit cross-national discussions.

Notably, because of the iterative and co-productive nature of the four Phases, a myriad of raw data was collected in various methods and platforms. These inputs contained

valuable insights into how the OLCs, and stakeholders perceived their DRM governance. This report attempts to capture this huge amount of raw data and presented it alongside the fine-tuned Organigraphs. The outputs developed through the semi-empirical approach covers a wide range of topics, including the strengths, weaknesses, opportunities, and threats of current DRM governance within CH sites across the SHELTER OLs. Practically, this deliverable provides practitioners with five detailed contemporary examples of DRM governance within CH sites. As well as a series of tailored recommendations to help enhance the resilience of these sites to the effects of climate change. However, this research had a great deal of value beyond the SHELTER Project. Throughout the research, there were several significant findings with implications beyond the SHELTER Project.

First, from a practical perspective, the Organigraph technique provided a platform to develop an innovative and collaborative tool to present the key stakeholders, responsibilities, and interactions within the DRM governance. Furthermore, the Organigraphs provided the stakeholders with a unique opportunity to perceive their position in the context of the broader DRM governance strategy. With the ability to identify the essential functions and responsibilities of both themselves and other stakeholders within the DRM response. Building upon this, the Organigraphs provided an accessible platform for self-reflection, facilitating discussions between different stakeholders (including CH stakeholders) to identify strengths, weaknesses, opportunities, and threats in their DRM before the event of a disaster. This provides an opportunity for proactive decision-making encouraging DRM experts to identify weakness in their DRM governance in the preparedness stage of the DRM cycle. In part shifting the DRM governance from 'reactive' to 'proactive' by encouraging experts to critique their own DRM governance and improve their preparedness for disasters. However, the current version of the Organigraph technique also had limitations that couldn't be fully addressed in the scope of Work Package 6 (WP6) and would require further research and development. For instance, the stakeholders pinpointed a negative correlation between the complexity of the Organigraphs and their accessibility. Essentially stating that the more detailed the Organigraphs become, the less they can be understood and used in practice. The stakeholders also lamented that the Organigraphs in their current form could oversimplify the complexity of the DRM governance structures, which can be more nuanced than those defined in a 'fixed' DRM governance map. Interestingly, the stakeholders also appeared to overlook the role of the Organigraphs as a tool for self-reflection and instead considered their contents more literally, as explicit guidelines for what they should do in the event of a disaster. Furthermore, one individual stated that the contents of the Organigraphs is what happens in theory and not necessarily an accurate representation of what happens in practice—opening a much broader debate about effective DRM governance and our ability to map it.

Second, from a theoretical perspective, the semi-empirical transdisciplinary research approach was integral to the development, refinement, and subsequent publication of the Organigraphs. The four Phases of the approach provided an academically robust foundation for adapting the Organigraph technique to DRM governance. Also, the approach facilitated greater degrees of social learning amongst the stakeholders and

Open Lab Co-Ordinator's (OLCs) in each SHELTER OL. In which the experts requested to continue using the Organigraphs in their own decision making and ongoing work. The process of co-producing the Organigraphs allowed them to reflect on their governance and create their solutions with minimal intervention from the facilitators enhancing the probability of the solutions being effective.

Furthermore, upon deeper reflection of the five fine-tuned Organigraphs, several interesting findings were observed and are worthy of greater discussion in the context of the broader academic debate. First, despite the apparent differences between the five SHELTER OLs, the Organigraphs shared a great degree of similarity, especially regarding the position of different stakeholders and the types of relationships linking them, hinting at the fact that there are methods of best or established practice in DRM governance, regardless of context.

Also, stakeholders in the OL reinforced the pivotal role local stakeholders play at ALL phases of DRM. However, the DRM governance at the local spatial scale remains implicit, unclear, and often outside of the pre-existing legal frameworks. In response, the Organigraph provides a tool at the disposal of experts to begin mapping these implicit relationships and better integrate these stakeholders into the explicit DRM strategy. Furthermore, all the Organigraphs developed within the SHELTER Project demonstrated a clear pertinence towards a hierarchical governance structure. In which, critical decisions, policy, plans, resources, and solutions are developed and implemented at the national (or most relevant highest spatial scale) and then filtered down towards smaller spatial scales. On the one hand, the pertinence towards hierarchical governance structures is understandable. The consequences of a disaster event on CH can be irreparable and require precise coordinated management which must be conducted by an overarching entity. However, on the other hand, broader academic literature reiterates the critical role of local communities in shaping and implementing such DRR and response and highlighting that what we should see in the Organigraphs is a series of feedback loops between the national, regional and local spatial scales. Still, for the most part, this was not the case and based on the findings of T6.3 the establishment of such mechanisms is still a challenging and difficult issue for DRM governance in CH sites.

In part, this work highlights the persistent disconnection of stakeholders at different spatial scales and the challenges practitioners face when integrating local community groups into DRM governance. Building upon the above observations, the local communities are often perceived as stakeholders to be saved rather than resources that can be mobilized into action and guide more effective DRM responses. Importantly, in reaction to this observation through the development of the Organigraphs, the OLCs, research team, and stakeholders attempted to pinpoint specific topics of improvement within each OL which have been framed as adaptive governance proposals. These adaptive governance proposals included missing connections or stakeholders, challenging ingrained behaviors, overcoming siloed working, highlighting implicit relationships and connections, and adapting new policies and plans to facilitate the inclusion of missing stakeholders. Furthermore, as a collective of experts in T6.3 we attempted to take this one step further. We attempted to draw connections between the

tools being developed in the SHELTER project to foster more adaptive governance approaches and increase the likelihood of their long-term uptake.

In short, this deliverable consolidates all the work that went into the development, adaptation, and execution of the Organigraph technique to mapping DRM governance for five case studies. It highlights the value of the Organigraph technique in providing an innovative, collaborative, and attractive technique for mapping DRM governance structures. With the capacity of enhancing the implementation of the priorities of the SFDRR by giving practitioners a tool to develop clarity around DRM. When accompanied with a multi-phase semi-empirical research approach, it can provide a platform for self-critique, social learning and cross-issue, national and scale discussions. Ultimately leading to improved preparedness to disaster through greater clarity and the identification of weakness and bottle necks before a disaster event. Resulting in great resilience and more effective DRR response.

This report provides a precedent for using the Organigraph technique to map DRM governance structures within CH sites. And finally, it highlights the value of further research into the Organigraph technique as a tool for enhancing the resilience of CH internationally.

2   The refined Organigraphs for each SHELTER OL

The Organigraphs co-produced within T6.3 were too large and too complex to be included in this A4 document. The final versions, separated into distinct spatial scales, have been provided at the end of the document within Appendix.

2.1 Identify aspects of each OL DRM governance to strengthen and propose potential areas to enhance adaptive governance across the OL.

It essential to reflect upon the various outcomes, discussion points, comments and conversations that arose across the four Phases of the semi-empirical approach. This was done to develop a series of adaptive governance proposals that draw both on the outcomes of the Organigraphs and draw upon the wealth of raw data collected throughout the entire semi-empirical approach. The following section outlines the specific adaptive governance proposals for each of the five OL within the SHELTER Project. For ease of reading the key salient messages in each proposal is highlighted with bold text.

2.1.1 Dordrecht

Like the other OL within the SHELTER Project, the OLC and stakeholders within the Dordrecht OL had never mapped DRM governance before. As a result, the Organigraphs provide an interesting activity to stimulate discussions around the DRM governance within the OL. The OLC was very quickly able to develop a robust Organigraph with a high degree of clarity which captured the key elements of the DRM governance structure. It was made clear by the experts who participated in the semi-empirical approach that the added value of T6.3 was not in the Organigraph itself but in the strengths, weaknesses, opportunities, and threats that were highlighted during the discussion across the experimental phases. These discussion points consolidated from across the four experimental phases have been briefly encapsulated below. They have been used to guide the development and research around adaptive governance proposals outlined in the following section.

- The isle of Dordrecht has a comprehensive Multiphases DRM strategy which consists of three distinct phases. This multi-phase strategy is unique amongst the SHELTER OL and central to all phases of the DRM cycle.
- Currently, there are tensions between stakeholders across different spatial scales and distinct challenges around the roles and responsibilities of different stakeholder groups in response to flooding events.
- The maintenance of the Flood defenses in the form of the Dykes at the local spatial scale is the responsibility of the national government. But the local solutions are predominately the responsibility of the local stakeholders.
- Through many generations, the local communities have developed a wealth of knowledge, expertise, and experience to deal with flooding events.
- There are several self-organizing community groups within the Dordrecht OL. They may be an opportunity to use them to enhance cross-scale collaborations.

- The Dykes are an essential feature of the flood defenses within the Dordrecht OL. However, unfortunately, the local community rely heavily on the effectiveness of these Dyke and are unaware of the potential severity of the flood risk.
- CH stakeholders do not have the capacity, resources, or time to accurately capture the CH value of the whole OL and require assistance in categorising CH sites and values.
- The value of the CH sites extends beyond the building themselves and includes elements inside of the buildings which are hard to value.
- The suitability of finding to adequately cover the cost of restoration and repairs of heritage sites was considered insufficient.

2.1.1.1 *Identify the current self-organizing networks and use them as platforms to bring together interdisciplinary thinking, planning, and working experts.*

One of the critical aspects of enhancing DRM governance within the Dordrecht OL revolves around **enhancing collaboration between different disciplinary entities**. Historically, past research has highlighted those institutions responsible for the DRM strategies within Dordrecht have been described as 'Siloed' by past municipality led progress reports see HFA Report (2014) with minimal room for experimentation and minimal sources of funding. The Organigraph also seemed to highlight that there continues to be a disconnection between different institutions involved in DRM. for example, the OLC explicitly stated that CH is not currently well embedded in reliance thinking within the OL. Furthermore, the stakeholder group 'climate adaption colleagues' did not appear explicitly linked to overarching policy or different stakeholders at the regional spatial scale. On the one hand, the disconnection of CH colleagues from broader resilience thinking is expected, given that the integration of CH into wider DRM is still in its infancy.

In response to the observed Siloed working past EU Interreg IVB project, 'MARE' in 2014 established two platforms for stakeholders to engage with flood risk management and participate in more collaborative learning in direct collaboration with the Municipality Dordrecht. These platforms were called MARE Learning and Action Alliance (MARE LAA) and the EU Interreg IVB project CAMINO (Climate Adaptation Mainstreaming through Innovation). MARE LAA focused on the cross-disciplinary interactions of regional stakeholders to facilitate learning and innovation around DRR solutions. And attempted to facilitate the interactions of local/regional companies interested in joining the implementation of the Multi-Level Safety strategy.

Despite the apparent value in these two platforms and their capacity, it enhances the DRM governance within Dordrecht through increased collaboration between different regional entities. They were not featured as explicit mechanisms in this version of the Organigraph but added by the research after experimental Phase 3 as two 'unspecified tools' (see figure 35). This was done despite the high clarity in the Dordrecht DRM strategy and the detail in the Organigraph. DRM response appeared to be predominately hierarchical with limited governance mechanisms such as forums, committees,

workshops, expert groups, and commissions. Different stakeholders come together regularly to collaborate across the disciplinary lens and through different spatial scales.
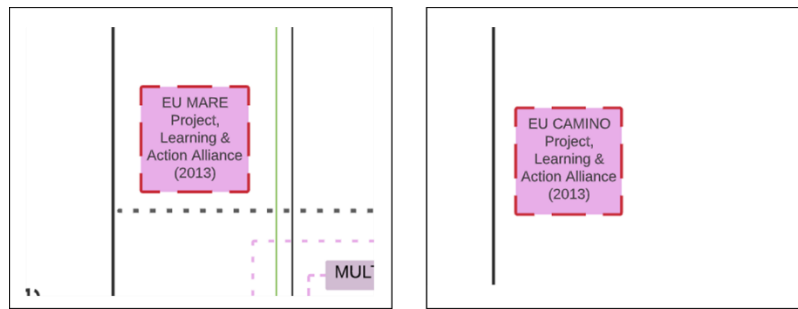

Figure 1 – Two Learning and platforms developed in 2014 by the EU

Notably, an independent review of the available literature could not identify any reference to these platforms, and the available URL links were no longer active. **As a result, this first proposal focuses on the exploration, critique and possible establishment of transdisciplinary governance mechanisms which bring together experts from different disciplinary lenses (CH, DRR, DRM and CCA). These platforms facilitate transdisciplinary working, which is then used to influence the DRM across different spatial scales.**

Preliminarily, the development of the Organigraphs did begin to draw out the existence of some of these governance mechanisms. For example, 'The network of CH experts', EU CAMINO Project, Learning & Action Alliance (2013), 'Self Organing Networks', and 'Voluntary communication group' but the role networks and communications into the broader DRM governance structure and the stakeholders involved was not clear. The exception of the MARE LAA platform enables collective active learning between public and private parties. Primarily through the following stakeholder groups; 'Municipality of Dordrecht', 'Water Board Hollandse Delta', 'Safety Region Zuid-Holland Zuid', 'Ministry of Transport', 'Public Works and Water Management', 'Rijkswaterstaat (together with Deltares)', 'UNESCO-IHE' and 'Dura Vermee'.

Finally, it is essential to draw upon the supporting literature review, conceptual framework, and the previously published community interaction rulebook within this proposal. When attempting to develop community interaction and collaborations between different organisations, it is better to focus on self-organising networks and utilise pre-existing governance mechanisms rather than establish something new and innovative.

2.1.1.2   Enhance the awareness and engagement at the local spatial scale
The Dordrecht OL has a high concentration of local stakeholders. This was expressed within the co-production of the Organigraph in which an array of different stakeholder groups, tools and governance mechanisms were highlighted as necessary to the DRM governance structure. These local stakeholders within Dordrecht have lived with the risk of flooding for generations; it is a part of their social memory. Their experiences have led to comprehensive behaviours and adopted measures to mitigate the risk of flooding. An outcome of the Organigraph discussion is supported by broader academic literature see; (Esteban, 2019). However, despite the recognized value of the local stakeholders

in DRM, one topic of discussion that continued to arise during the co-production of the Organigraphs was the apparent disconnection between local stakeholders and the limited awareness of the local community group of the severity of the Flooding risk.

For example, The OLC emphasises the potential complacency of some local stakeholders who felt that "the Dykes would protect them". Also, a small piece of research conducted by Herwig (2017) provides some empirical evidence to support these findings suggest that over 70% of residents overestimated and underestimated flooding events, and 85% estimated whether the flooding would be too high or too low. Unlike the Galicia and Seferhisar OL, the experts at Dordrecht already have a clear idea of the critical stakeholders at the local spatial scale. They even already have established a line of communication with local stakeholder groups. **Therefore, the challenge lies in enhancing the local community awareness, knowledge, and perceptions of flood risk within the Dordrecht OL.**

Notably, one potential solution is already being developed within the SHELTER project that may aid in this, called the IMMERSIRE Tool. The IMMERSITE tool is being developed specifically within the Dordrecht OL. It is designed to reinforce citizens' involvement and education in urban planning tasks, including 3D technologies and virtual visits, facilitating the dialogue with Dordrecht's community regarding city planning and the adaptation of its CH. However, we believe in keeping the overarching aim of T6.3 and the challenges associated with the uptake of such tools by local communities (McIntosh *et al.,* 2011; Nkoana *et al*., 2018). It is essential for this proposal to explore the more implicit mechanisms of community awareness and engagement that could be used in the Dordrecht OL.

Building upon this, Torani *et al*. (2019). Highlights the potential of disaster education as a functional, operational, and cost-effective tool for risk management and states that no mechanism is statistically better than another at educating local communities in aspects of Disaster risk. Potential methods for DRR are wide and varied. Still, the IFRC (2011) provides a detailed guide on executing four potential structures, including campaigns, participatory learning, informal education, and formal school-based education interventions. Alternatively (or in conjunction with), social media is an increasingly exciting and preventive mechanism for sharing information on disaster risk and collective data on disaster events.

2.1.1.3 *Exploring the governance tensions identified in Dordrecht in greater detail and, if possible, highlighting some potential solutions.*

Interestingly the topic of governance at the local spatial scale within DRM in Dordrecht has already been an aspect of academic research. According to Gersonius and Van Buuren (2016) research article, implementing a resilience strategy to flooding requires tailor-made governance arrangements. In particular, Gersonius and Van Buuren 2016 p.28 state that;

> *"Next to increased decentralized responsibilities, the general public also has to take a greater role and responsibility in emergency management. The authorities can facilitate this role by providing the inhabitants with clear and*

specific information about possible flood events and how to act in an emergency. Such communication is key to act in the case of emergency."

The outcome from the Organigraphs seemingly appears to build upon these observations from Gersonius and Van Buuren (2016). In which it was pinpointed that there are governance tensions between different stakeholder groups across different spatial scales. In particular, between stakeholders at the local spatial scale and the regional/national spatial in matters of DRR and CCA, stakeholders question the fairness of the responsibility and accountability surrounding the implementation of DRM tools and strategies.

This has seemingly resulted in a type of 'stalemate' in which stakeholders across different spatial scales cannot accept the responsibility or accountability of the different DRM tools. This conflict in governance stifles the successful implementation of practical DRM tools and strategies regardless of effective communication between different stakeholders. It limits the resilience of the DRM governance within Dordrecht. **In response, this proposal attempts to outline a potential model or approach that could provide the basis for a potential solution to break the stalemate and stimulate negotiations between different stakeholders to identify each stakeholder group's level of responsibility and accountability that deems fair.** To achieve this, we propose using an approach that encourages different stakeholders with a vested interest in a particular cultural heritage building or site to come together and negotiate the level of responsibility and accountability they believe fair. Figure 36 below
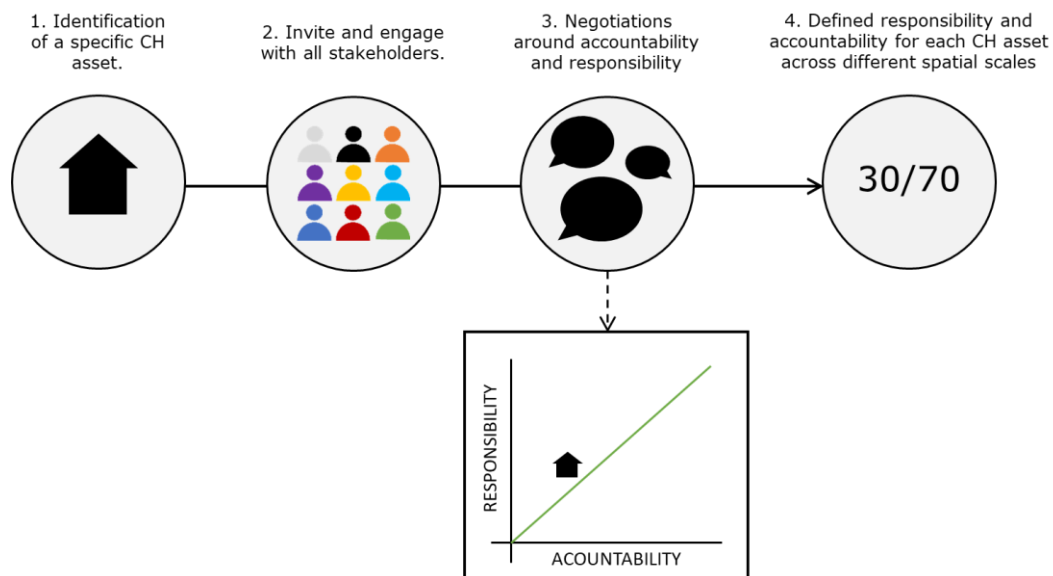

Figure 2 - The basis for a proposed approach that could facilitate the negotiation between stakeholders and define a fair level of accountability and responsibility for each CH building.

When coupled with proposal 1 enhancing self-organizing networks and proposal 2 enchanting stakeholder engagement, this proposal has the potential to provide a

mechanism by which experts can negotiate the level of accountability and risk in which they feel is fair

2.1.1.4   Enhance the integration of CH stakeholders at all spatial scales

Similar to the Organigraphs developed in the other SHELTER OL and consistent with the broad academic literature, the concept of CH is not yet considered a part of the resilience thinking within the Ilse Dordrecht. As a result, one of the key proposals to enhance the **adaptive governance within the Dordrecht OL focuses on identifying and enhancing the integration of CH stakeholders into the DRM strategy**. Before moving into the detail of this proposal, it is important to highlight that CH stakeholders were pinpointed in the Organigraph produced within Dordrecht OL to some extent. However, the role was often disconnected, unproportionate and unclear. There has been some active progress in integrating CH stakeholders into the wider DRM governance at the national spatial scale. According to work produced by the SHELTER Project sister Project Arch (ARCH 2021). The Ilse of Dordrecht was championed as a case study for good practices in building heritage resilience. The Delta Plan on Spatial Adaptation (Delta plan Ruimtelijkeadaptatie), launched in 2018, neglected historical information. However, to account for this, the Cultural Heritage Agency of the Netherlands (RCE) provides support to municipal governments through the integration of GIS and capacity building through training. Providing an essential role in linking the abundance of raw data and digital tools available within Dordrecht to disconnected stakeholders. Furthermore, through the experiment phases, the OLC explicitly highlighted the Ministry of Education, Culture & Science and their connection to their National Delta plan and their role in providing funding for heritage protection and restoration in the form of National monument restoration fund (Figure 36).
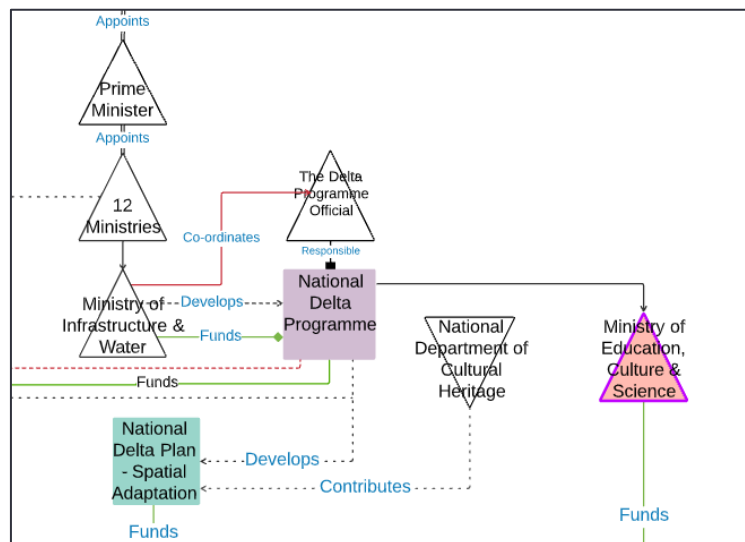

Figure 3 – The current role of the Ministry of Education, Culture and Science in the Organigraphs

2.1.1.5   Providing the local heritage owners with the capacity to categorise CH values.

As the Organigraph began to take shape, another interesting topic of discussion and critical challenges pinpointed by the stakeholders within the Dordrecht OL revolved around the **challenges the CH experts face in cataloguing the array of +800 CH Buildings**. According to stakeholders encapsulated in the Organigraph as 'CH Colleagues' (experts within the Dordrecht Municipality), they expressed concerns that they did not have the resources to accurately record all CH sites within a suitable timeframe. Furthermore, the same stakeholders also claimed that the value of the CH building often extends beyond their exterior, and the interiors of the buildings also have a distinct cultural heritage value. However, cataloguing the interiors of these builds is a challenging task mainly because they are occupied or privately owned. This issue was highlighted in the Organigraph using the red-colored connector 'measures' (see figure 37).
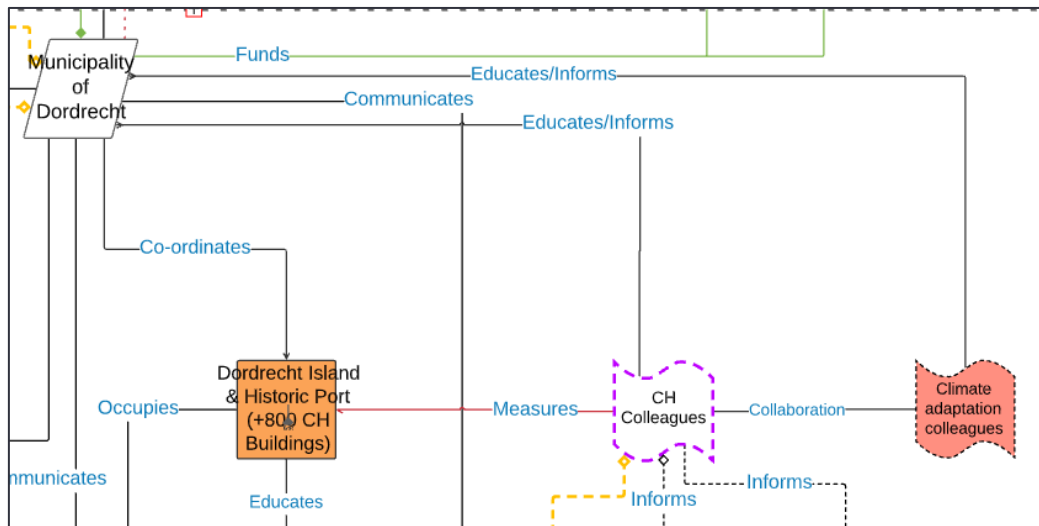

Figure 4 – The unclear connections between the CH colleague's stakeholder groups and the +800 CH Buildings as identified within the Organigraph

To develop a robust and effective DRM strategy, it is essential that the CH colleagues accurately catalogue the CH sites. As a result, it was deemed essential to look at these issues in greater detail and explore potential proposals to assist CH colleagues in effectively cataloguing the exteriors and interiors of the CH sites. The OLC provided one potential solution during the experimental phases and is worthy of further discussion within this proposal. The use of the Local Residence & Owners, the Local Residence Renting CH Dwelling and the Private Building Owners to catalogue the CH assets they occupy and/or own. Not only would this allow CH colleagues to quickly gather information on the CH sites within Dordrecht, but it could potentially provide a platform for information exchange and local community mobilization. Therefore, the question is how this can be achieved and what kind of resources the CH stakeholders need to provide the local community. On the one hand, the CH colleagues could develop a straightforward

process for experts to catalogue the CH site they occupy. Either through an online form or mail service.

Alternatively, the CH colleagues can collect and catalogue data on the exteriors and interior of CH buildings through more indirect data collection. Such as in the development and application of digital tools. One recent example of a digital tool being used to preserve the value of CH and encourage local community members to share their stories and recognize the qualitative value of the heritage was established in the Greek town of Hermoupolis (see Europa Nostra, 2020 p.28). In which city experts integrated a participatory tool into their pre-existing online platform, residents were asked to upload their personal stories of the city with photos. While addressing some basic questions about the area and why it is so important to them. While the overarching goal of this tool was not in the cataloguing of CH sites but in enhancing stakeholder engagement and awareness. The tool produced an array of qualitative raw data that can aid in cataloguing the CH and the potential to develop and increase understanding of local heritage value right down to the building scale.

Similarly, across academic literature, many experts highlighted the value of social media as a mechanism for exploring CH sites' valuation (Ginzarly, 2016). In fact, WP5 within the SHELTER Project is attempting the 'Chatbot tool' is actively attempting to facilitate fast response times and real-time information on an evolving disaster.

3   Appendices

The refined Versions of All OL Organigraphs as printable PDF Documents split by 'Layers' According to the OL specifications (Phase 4)

The Following Appendix includes all fine-tuned Organigraphs after the completion of the semi-empirical research approach.

Dordrecht OL

DRM Organigraph - Dordrecht