

An exploratory case study of Policy Entrepreneurship in water management: Save Cork City and the Cork flood policy controversy.

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Abstract

There is consensus that the field of water management is experiencing a period of transitional change, driven by climate change, aging infrastructure and evolving demands of water users. It has been noted that in the face of such pressure to change, water management institutions can often act in a conservative, change resistant manner despite the necessity to change and innovate.

The subject of how to manage transition is an emerging topic of inquiry for policy studies researchers. Particular attention has been paid to the role of Policy Entrepreneurs, distinguished by the innovation and drive that characterises their attempts to see their policy goal realised.

The thesis seeks to gain understanding of policy entrepreneurs and their behaviors by case study of an Irish policy entrepreneurial group "Save Cork City". and assesses their actions in challenging proposed flood defences in Cork City, with their own alternative plan

This study is informed by a theoretical framework derived from relevant literature, and a qualitative methodological approach to research, which consisted of document analysis and qualitative interviews of stakeholders. Research was conducted and the findings analysed to determine the efficacy of noteworthy tactics and behavior. This gave insight into an organisation highly effective at Frame definition, frame contest and problem framing, but of one struggled to build networks and institutional connections that would help translate this advantage into policy change

Keywords:

Transition management
Water transition
Policy enterprise
Framing
Water management
Flood defense
Policy controversy

Table of Contents

● Introduction	
○ Background	5
○ Research Objectives	5
○ Case Background	6
○ Theoretical Outline.	6
○ Significance of Study	7
○ Delimitations of Study	8
○ Thesis Composition	8
● Theoretical Framework	
○ Transition Theory	10
○ Transitions in Water Management	14
○ Discourse, Frames and Controversy	17
○ Institutions and Change	19
○ Institutional Entrepreneurs	23
● Methodology	
○ Philosophical Foundations	27
○ Methodological Approach	27
○ Data Collection	28
○ Document Analysis	29
● Data and Findings	
○ Problem Definition: OPW Plan	32
○ New Ideas: The Tidal barrier proposal	35
○ Networking: Professional credibility	37
○ Coalition building: Love the Lee	37
○ Framing contests: Cost	38
○ Leading by example: Design Competition	40
○ Venue Shopping	41
● Discussion	45
● Conclusion	49
● Reflection	51
● Bibliography	54
● Appendix	64

List of figures

-Fig 1 Multi Stage concept of transitions (Geels and Kemp, 2000)	11
-Fig 2 Multilevel concept of transition(Geels and Kemp, 2000)	11
-Fig 3 Adapted multi-stage concept model that includes suboptimal outcomes produced by a lack of sufficient favourable conditions to achieve a new transitioned equilibrium. (van der Brugge and Rothmans 2007)	12
-Fig 4 Brown et. al (2020) Water transition framework	15
- Fig 5 Diagram articulating the differences in single and double loop learning processes (Willems et al 2018)	22
-Fig6 . 2017 provisional sketches and cross sections of food defenses, which proved controversial.	33

Glossary of Terms

SCC - Save Cork City group

OPW - The Office of Public Works

LEEF - The Lee Environmental and Economic Forum

LLFRS - The Lower Lee Flood Relief Scheme

An exploratory case study of Policy Entrepreneurship in water management: Save Cork City and the Cork flood policy controversy.

1. Introduction

1.1 Background

There is broad agreement among experts that the field of water management is experiencing a period of transition (Huitema and Meirjenik 2010, Brown and Farrelly 2009, Wong et. al 2020). This transition is driven by a number of prevailing factors such as the onset of climate change, aging infrastructure, new demands on water infrastructure and the persistent complexity and uncertainty inherent in the provision of such infrastructure. These concerns mean there is pressure on systems, and the institutions that manage them to adapt to present and future realities. Similarly, it has been noted that in the face of such challenges these institutions are often ill equipped to display the level of adaptability needed to respond effectively (Saleth and Dinar 2005), instead being predisposed towards conservative policy behavior that maintains status quo and changes only incrementally.

In such instances it has often been left to exogenous factors to produce the more radical change necessary for such a transition. The role of change agents, and in particular the class of change agents known as policy entrepreneurs feature prominently in literature. While many policy actors engage in the process of policy making, a process that is inherently political, complex and combative (Petridou and Mintrom 2009), many are content to operate within the rules and norms of a dominant policy frame. Policy entrepreneurs distinguish themselves by the innovation of their tactics, working explicitly to undermine status quo arrangements and create a window of opportunity in which to rapidly advance their policy proposals (Huitema and Meijerink 2010, Mintrom and Luetjens, 2017)

1.2 Research objectives

This thesis attempts to understand the role of policy entrepreneurs in policy conflicts. As such this is a case study of policy entrepreneurship as demonstrated by the Save Cork City

opposition group. We approach this study in the context of transitional pressure coming to bear on Irish water management systems and the potential for the Cork flood debate to act as a focusing event for such forces.

With this line of enquiry established, we hope to answer the following research questions:

- To what extent does the Save Cork City (SCC) opposition action group align with archetypal characteristics and behavior of policy entrepreneurs.
- How do these actions and behaviors manifest and to what degree can they be identified as effective in the context of the debate over flood defense in Cork City..
- How, if at all does the SCC campaign fit into a water transition narrative

1.3 Case background

With a population of approximately 200,000 Cork is the Republic of Ireland's second largest city. It sits at the mouth of the River Lee, which opens onto Cork Harbour, one of Europe's largest inlets.

Due to this location and its hydrology, the city is prone to both alluvial and tidal flooding. Cork has experienced persistent, frequent and often severe flood disruption, throughout the city's history (DeBruin et. al 2016). One such severe flooding event in 2011 saw the city heavily flooded for in excess of a week, causing severe disruption and approximately €250m of damages; This event served as a focusing event for flood defence policy attention. In its aftermath a new flood plan for the city, the Lower Lee Flood Relief Scheme (LLFRS) was announced by the Office of Public Works (OPW), the primary flood defense agency of the Irish state. This controversial €140m flood plan focused mainly on embankments, pumping stations defense walls and demountable structures. Critics of this plan perceived an overly engineered, drainage focused approach, and a strategy that seemed insufficient given changing hydrological projections, and concerns about climate change. Further to this, the plan would entail the replacement of much of the city's historic quay wall and maritime heritage.

In response Save Cork City (SCC) action group was formed in opposition to the proposed plans. This group would dispute the suitability of the OPW's plan on a number of fronts, and proceed to develop their own counter-plan focusing on a tidal barrier, reduced channelisation and greater water attenuation,, which they contend would offer more adaptive capacity to climate change while largely sparing the city's quay walls. This group would go on to frustrate and delay the progress of the OPW's flood plan for several years, while promoting their own alternative plan through a variety of tactics and methods. Under contest from the SCC the OPW's plans continue to slowly progress towards ratification with little scope for amicable resolution.

1.4 Theoretical outline

The theoretical framework for this thesis is primarily based on the body of theory relating to fundamental change or “Transitions” in socio-technical systems. The body of theoretical work on transitions is substantial; Its origins lie in Biology and demography, used to describe the process of change of a system moving from one point of stability to another. It has since been adapted to and widely adopted by social studies and policy studies in particular.

The social component of these transitions are often animated by the promotion and contest of particular policy visions or “frames” which often promote new innovative practices that have the potential to disrupt the status quo. Policy entrepreneurs are a class of change agents who also attempts to disrupt status quo arrangements to promote their policy aims, and this is often done through the promotion of frames, known as framing.

Several frameworks of the change process accommodate such a strategy. Of particular note is the concept of “punctuated equilibrium”. The punctuated equilibrium model of policy change. This framework, outlined by Baumgartner and Jones (2012) is a model that accounts for both long periods of status quo equilibrium and periods of rapid radical change.

Further components are investigated: The role of Institutions who are often the target of such change and their tendency towards the maintenance of the status quo; the role of policy entrepreneurs as change agents and disruptors of such arrangements. Finally, theory is contextualised by understanding transition in the context of the complex field of water management. This framework is fully articulated in Section 2 of this thesis.

1.5 Significance of study

The understanding of transitional change and in particular how to understand and manage this change is a relatively new field of academic enquiry. It is noted by Rotmans et al. (2001) that while a growing body of theory exists, the process side of transition management management has yet to develop a satisfactory knowledge base, and the social and institutional component of how transition unfolds in the real world is as yet little understood. To remedy this state of affairs, they advocate for the conduct of in-depth research into the dynamic behaviors of actors involved in transition. This thesis aims to investigate such actors, and in doing so it is hoped that it in some small way contributes to this effort.

As previously mentioned, macro trends indicate the field of water management globally is in a period of transition. While the details and degree vary from context to context, the main causes

of these crises: uncertainty; new emerging needs and demands of water; aging infrastructure and the everpresent spectre of climate change are ubiquitous and applicable to Ireland and Cork as they are to any other water management context. To confirm this, a 2018 report (Guerreiro et al) on the impact of climate change on a range of cities cited Cork as being one of the most potentially vulnerable. High impact predictions under this study indicate that the city could experience up to 115% more flooding, more impacted than any of the cities other 571 assessed. The potential liability of Cork to such impacts emphasises the need for considered, appropriate and timely water policy to create contingency for future uncertainty. A heightened understanding of the socio-political context in which such policy is created can only be of benefit.

Finally, flood relief for Cork City represents the largest such project in the history of the Irish state by a considerable margin, and the stakes are remarkably high. This policy controversy has occurred in a climate of heightened scrutiny and critique of the OPW, the primary flood defense agency for the Irish state. Other recent flood schemes undertaken by the OPW have been highly contentious and deeply unpopular with local communities, and brought the question of competence to the national stage. As such, it seems likely that the reputation of this institution is highly invested in the provision of Cork flood relief. For SCC, the perceived “senseless” destruction of their communities' very maritime identity is considered at stake. Whether SCC are successful in their policy enterprise or the OPW prevail in their plan, the outcome is likely to have a defining impact on future flood policy in Ireland.

1.6 Delimitations of study

While this is a policy study, there is a material component at the heart of the dispute which is under study. Both the OPW and SCC have produced detailed policy visions backed and vetted by accredited expert knowledge. To assess these plans in a meaningful way would require training and experience in hydrology and civil engineering and architecture, It is beyond the scope of this thesis to in any meaningful way assess the technical merit of one proposed policy solution over another. It is assumed that both proposals are broadly feasible.

Rather this thesis approaches the dispute from the perspective of a “policy controversy” defined as a “dispute immune to resolution by an appeal to facts” (Schon and Rein 1995) . Both sides are entrenched in their policy positions, claim factual authority for their proposal and dispute the veracity of the other. While certain policy-analytic approaches could assert that there is an objective best policy solution in this case, this thesis draws on a frame analysis approach which presumes that disparate actors in this policy dispute have divergent, even contradictory interpretations of what the problem is in this case and what a successful policy outcome would look like.

1.7 Thesis Composition

The remainder of this thesis is comprised of 5 further parts, organised sequentially on the basis of the study scope as follows:

- Chapter 2 establishes a theoretical framework for policy change in the water management sphere, reviewing current knowledge. The purpose is to develop key theory into an analytical framework that then can be operationalised in research.
- Chapter 3 presents the thesis' research design, based on specific ontological and epistemological stances towards the research questions at hand. In this chapter, methodological decisions are discussed, as well as case selection and the process of data collection, analysis and interpretation.
- Chapter 4 reviews the data accumulated on the case and attempts to analyse it using the theoretical framework developed in chapter 2.
- Chapter 5 Offers discussion of the results and draws conclusions
- Chapter 6 concludes this thesis summarising the outcomes of the preceding chapters and draws general conclusions on the possibility for fundamental change and the trajectories of such change. Comment is offered.

2. Theoretical Framework

2.1 Transition Theory

2.1.1 The transition concept

The study of the process of transition is the subject of considerable and wide ranging academic research. Its concept originates in demography used to explain a population either contracting or expanding through a period of change before arriving at a new stable state. This concept would be adapted to economics as a way of conceptualising the movement of an economy from one type of system to another ie: the move of a closed command economy to a market based one across various stages, along with the accompanying change in political and social institutions to accommodate such a shift (Rotmans and Kemp 2003). Since then it has become a popular framework for understanding continuity and change within socio-technical systems or subsystems of society. Transitions are understood to be macroscopic events, occurring at the level of "organisation fields" (Loorbach and Rotmans 2005). Examples being those of energy supply, housing, mobility, or as is relevant in this case, that of water management.

A societal transition can be defined as a long-term, continuous process of change during which a society or a subsystem of society fundamentally changes. Such subsystems are inclined towards stability as they are controlled by actors who share an interest in the status quo. (Huiteima et al 2009). Transitions then are transformations resulting from destabilized or unsustainable status quo arrangements known as 'regimes' giving way to emerging 'niches,' until finally a new equilibrium is found (Loorbach et al. 2016). The potential causes of these destabilisations are diverse, they may occur from exogenous forces such as societal or environmental shifts, or from endogenous innovation, depending upon the context (Frantzeskaki and Loorbach 2010). When they occur, transitions are radical in their scope of change but they are typically slow, long term generational developments measured in decades or more (ibid). Though breakthroughs may themselves come quickly, they are the product of this long incubation from which new socio-technical regimes emerge.

2.1.2 Models of transition

As Loorbach has written (Loorbach and Rotmans 2016), societal systems and subsystems are complex highly contingent entities, and at this scale, change can consist of several interconnected changes that take place in different spheres eg: technology, society, institutions. This interconnectedness leads to complex interactions in which changes in one element reinforces change in the other. This is referred to as co-evolution and is important for modelling the conditions where such smaller changes reciprocate towards wider transition.

The models of multi stage and multi change transition are commonly used to illustrate this position. The multi stage concept draws upon complexity theory and theories of complex adaptive systems, which envisions the process of transitional change as a series of network interactions within such a system. The multistage concept visualises transition as passage through four distinct phases.

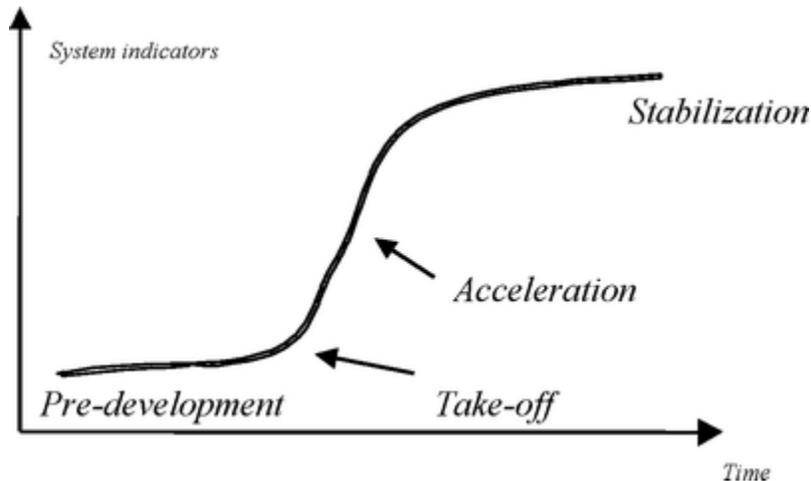


Fig 1 Multi Stage concept of transitions (Geels and Kemp, 2000)

This begins with the initial pre-development phase of dynamic equilibrium where the status quo has not visibly changed. It is then followed by a takeoff phase where the system begins to shift and react to change force, which in turn is followed by a period of acceleration where rapid change occurs within the dominant system through an accumulation of socio-technical, cultural or otherwise institutional changes that interact and reinforce each other. The final stage is that of the stabilization phase where the speed of change tapers off and a new dynamic equilibrium is reached.

Further adding to the conception of how transition occurs is the framework of the multi level approach. As is illustrated in figure 2.1 It is composed of three interacting layers: Macro, Meso and Micro. The Macro level or landscape consists of long-term trends that influence the other levels, for instance the global economy or climate change.. The Meso level represents the dominant pattern of actors, artefacts and structures in the socio-technical system, those of the “regime”. Regime dynamics are very much dominated by strong internal relations and relatively weak external relations. Its internal dynamics are deeply embedded in social interactions and are consequently difficult to change (van der Brugge et al 2005) .Below them is the Micro level which consists of individuals and organisations. At the microlevel there are so called ‘niches’, these are individuals or organisations, but also alternative technologies and local practices that deviate from the status quo and manifest themselves as forces for innovation within the system (ibid)

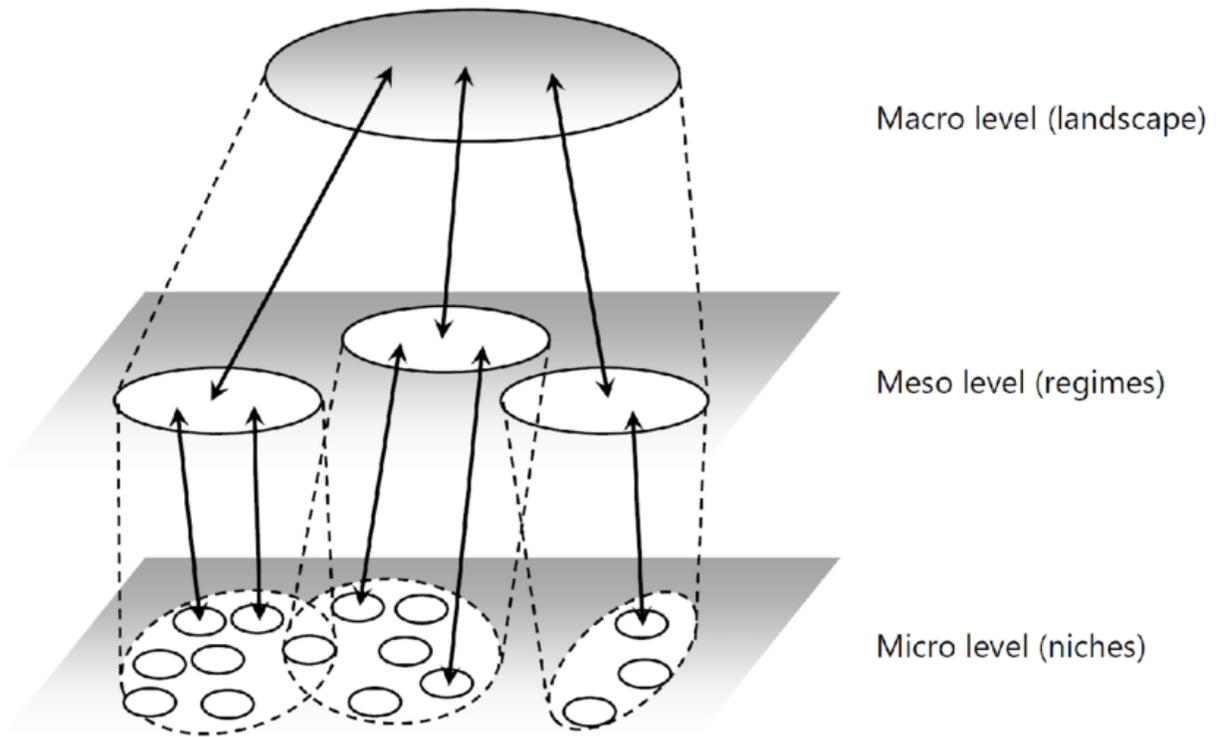


Fig 2.2 Multilevel concept of transition(Geels and Kemp, 2000).

This niche provides the force for transitional change and can “break through” when conditions are favourable, however transitional change is not guaranteed. Favourable conditions in both the Macro, Meso and Micro levels need to be aligned to unlock the change potential of systems. When these conditions are not fully met, the change force present may not be enough to overcome the inertia of the regime system (ibid.)

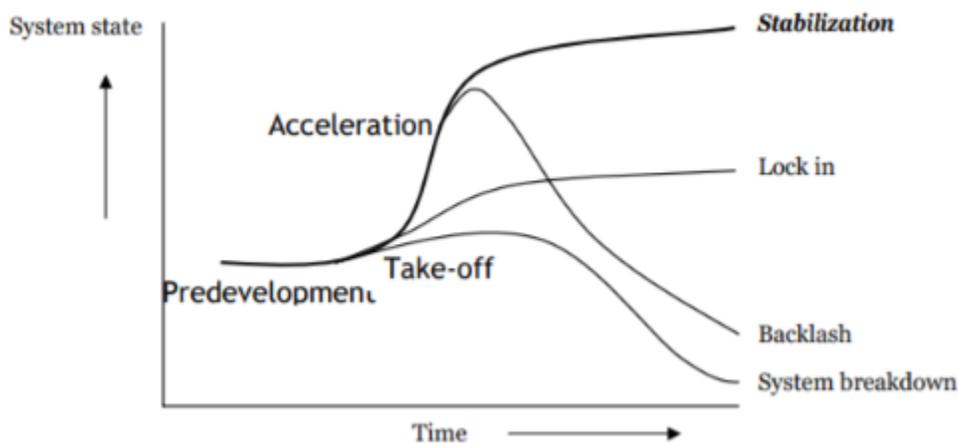


Fig 3 Adapted multi-stage concept model that includes suboptimal outcomes produced by a lack of sufficient favourable conditions to achieve a new transitioned equilibrium. (van der Brugge and Rothmans 2007)

Potential network states arising from this include a “Lock in” state where the current regime arrangements persist largely unaltered or only slightly altered. Other outcomes include a “Backlash” , the failure to establish a new status quo leading to equilibristic decay, or the collapse of system arrangements altogether. and highlights the extreme contingency of transition in such complex systems.

2.1.3 Transition Management

When translated to real world policy context the production of such sub-optimal system outcomes can contribute to the persistence and severity of policy problems in the long term. (Rotmans et al., 2000). As Van Der Brugge et al. (2005) note, many transitions that have occurred in society have not automatically translated into a positive societal impact, indeed many have resulted in a net negative. Rather than treat transition solely as an uncontrollable phenomenon, the transition management framework recognises transition as a normative goal and a necessary prerequisite for the sustainable development of a system. Transition management then is a “proactive anticipatory approach that aims to guide the multi actor processes involved transition in a given vector, known as a transition objective”(Van der Brugge and Rotmans 2007)

Such objectives are not detailed prescriptive end points. Rather they aim to create the frictionless conditions necessary for system innovation, and nudge these processes in a general direction to occur while still preserving stability and promoting the improvement of existing systems.

The framework centers long-term generational thinking as a framework for shaping short-term policy, informed by diverse multi actor discourse it embraces the co-evolutionary dynamic by emphasising a learning philosophy, both through “learning-by-doing” and “doing-by-learning”. (Rotmans 2001). While technically incrementalist in its outlook, transition management can be said to be proactive in co opting and integrating transitional forces that might otherwise impact on the regime in terms of external niche pressure.

2.2 Transitions in water management

2.2.1 Water as a complex persistent problem

The question of water management is an example of what Van der Brugge et al (2005) has called a “persistent” problem. A persistent problem can be seen as an elaboration of Rittel and Webbers “wicked problem” concept (Crowley and Head, 2017). While both concepts describe new types of societal problems that are characterized by significant complexity, uncertainty, a

lack of structure, governance issues and high stakes for a diversity of stakeholders involved,; a persistent problem is characterized by the criticality of societal structures and institutions in which such problems are deeply rooted.

On every count, the problem of water meets this criteria. The many functions of water (drinking water, sewage, storm drainage), combined with the many typologies of water to be managed (groundwater, surface water and drinking water) creates a situation where a diversity of stakeholders are highly dependent on water provision. The inherent multifunctionality of water services means that “There is no such thing as the single water problem, because the different forms of water manifest themselves in different issues“(Van der Brugge et al. 2005) . This multifariousness and the distinctiveness of each individual water context makes uniform solutions highly difficult to achieve.

Further complicating matters is the long term nature of water services planning, complications such as inherent uncertainty about future needs, water supply security and quality, unpredictable maintenance profiles for infrastructure and the inevitability of complications brought on by climate change. As Restemeyer et al (2017) notes water managers find themselves in a predicament, confronted by the certainty of climate crisis but only as yet vague information on what form this will take

2.2.2 The Hydrosocial Contract

The demand to respond to climate change represents only the latest challenge faced by water management. As Wong (2020) notes, the history of urban water management over the past 200 years has been defined by an interplay between the social-political drivers for improved services and the technical responses to these forces. These demands have been conceptualized as a Hydro Social contract, defined by Staddon et al (2016) as ” the unwritten contract that exists between the water consuming public and the government and that acts as a mandate by which the government ultimately takes on and executes this responsibility” . These progressively evolving hydrosocial contracts have acted as the basis for institutional development in the water management field. Historically, these contracts have centered on fundamental water services such as provision, access to clean drinking water, sewage systems and drainage systems which have been successfully provided in developed cities but new demands of water systems present new challenges to be met.

2.2.3 A framework for water transition

Brown et al (2009) presents a useful framework for understanding this historical process as a series of water transitions, describing it as an elaborating succession of hydrosocial contracts driven by evolving demands.

This framework initially describes the largely achieved development states such as that of the “Water Supply City” and “Sewered City” where the provision of running water, and sewage were the primary function of water systems. Evolving from these basic provisions, further states describe the current frontier of water services provision. This is represented in this model by states such as “Drained City”. The drained city describes a water paradigm dating from the 1960s that was characterised by water management perspectives dominated by conventional engineering based solutions to stormwater management such as channelisation and conveyance. Under this paradigm, urban surface water’s primary function was the removal of stormwater from the urban area, essentially treating stormwater as a nuisance to be removed from the urban area as quickly as possible (Morison et. al 2010).

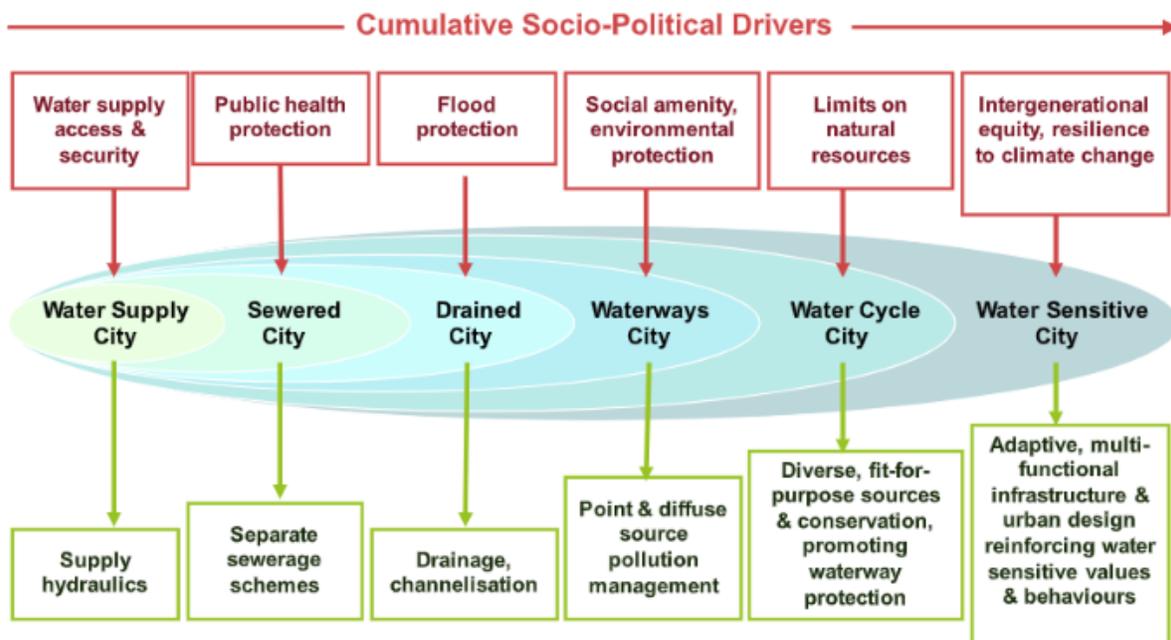


Fig 4 Brown et. als (2020) Water transition framework

In contemporary water policy environments, this paradigm is giving way to new perspectives summarised in the framework by the “Waterways City” state. This state is distinguished by a departure from the concept of wastewater entirely, and its rehabilitation and re-evaluation as part of a total water water cycle (Brown and Farrelly, 2009) . It also emphasises respect for waterways and valuation and realisation of the environmental, ecological and amenity functions that they can potentially provide.

Beyond the Waterways City are the “Water Systems City” and the “Water Sensitive City” paradigms which emphasise sustainability and adaptability and resilience, the elements considered necessary for water systems to respond to the challenges of the future. These paradigms remain aspirational, but their presence and implied future necessity remains a factor in infrastructure decisions being undertaken today.

Integrated urban water management practice is a key pillar of such a change . While Integrated urban water management has many facets, in terms of governance, it calls for water institutions to move from linear traditional management approaches towards more adaptive coordinated and participatory practices so as 'organise cross sectoral cooperation between multiple actors to promote the adoption of innovative technologies and manage systems, and institutional arrangements which can meet multiple objectives'.(Neimczynowicz, 1999.) Such developments are considered a prerequisite for water transitions

2.2.4 Renewal as transitional opportunity

Willems (2018) identifies the importance of infrastructure renewal as moments of opportunity for water managers to engage with these new water demands. Many mature water systems are increasingly faced with decaying infrastructure approaching the end of its life cycle. Due to the huge cost and political capital often involved, infrastructure renewal represents rare strategic choices of generational significance. These choices demand responses which go beyond a simple remedial approach. Instead they should be perceived as ideal junctions at which to increase functionality and service, anticipate current and future demands and more generally incorporate resilience and increase adaptive capacity to ameliorate the uncertainties of needs in the long term.

However, as is noted by Willems et. al (2018), despite often rhetorical agreement, the direction and form of how infrastructure renewal takes place is often contested. Contrasting objectives and perspectives often impede the embrace of infrastructure renewal as opportunity.

The technical operational perspective that is historically typical of water management institutions is often incompatible with the new demands of integrated and sustainable urban water management. As Brown and Farrelly (2009) reiterate, the barriers to such a change are often not technical, but grounded in socio-institutional factors. These barriers will be discussed further in section 2.4.

2.3 Discourse, frames and controversy

2.3.1 Frames

As discussed in 2.1 in the multi-level approach to transition, impetus for transitional change is generated through the intercourse of the Meso (institutional) level and the Micro (niche) level. The niche level being where innovation occurs. While this can mean technical innovation, it can just as easily involve socio-cultural innovation. the innovators and entrepreneurs of the

micro-level provide new perspectives and framing which impacts and informs the Meso level institutional regime.

The concept of frames has an established history in public policy studies. It is an important analytic tool which has been used to investigate how different policy actors can come to radically different positions on the same issue (Hulst and Yannow 2016). Frames are defined by Donald Schön and Martin Rein(1994.) as "structures of belief, perception, and appreciation which underlie policy positions. In response to complex problems actors create and use narratives to understand them. These narratives are constructed from selective interpretation of a given situation, emphasising some aspects, de-emphasising others to fit a given narrative. The basis of the context in which a situation is understood and from which narrative is formed is derived from metaphor. Such "generative metaphor" imports the frames or perspectives of one domain to another, often unknowingly or subliminally (ibid).

Critical frame analysis is a useful lens for understanding social policy in these terms. Frame analysis is a concept originated in the work of Erving Goffman, who saw reality as a "schema for interpretation" , one where framing refers to the actors' interpretations of reality in actual situations (Goffman, 1974 in Snow and Benford 2000). In frame analysis one assumes the existence of multiple interpretations of a given issue. Frame analysis seeks to explore the implicit and explicit understandings involved.

Identification and classification of various frames is inherently interpretive and resists definition. Proving or disproving the existence of a frame is not possible, as framing beliefs are usually not explicitly recognized; instead they are generally tacit beliefs and assumptions, and may well operate underneath surface level positions. Adding to the subjectivity of frames is the issue of reflexivity. The viewpoint of those investigating a frame are themselves influenced by their own frame position, making objective analysis that much more elusive. Frames once established can be often deeply entrenched, becoming static and resistant to review or critique. "once having found a way of looking at (and therefore dealing with) a situation which was at first novel and puzzling, our impulse to stick with it is overwhelmingly powerful" (Schön, 1983)

2.3.2 Framing, contests and controversies

Related to but distinct from the concept of frames is framing. Framing can be understood as the process through which actors attempt to develop and promote a given vision or position that represents their own interests. With regards to policy, Benford and Snow (2009) have described framing as "an active procedural phenomenon that implies agency and contention at the level of reality construction... Thereby, the political process can be characterized as a contest between different frames regarding the right to interpret an issue or social problem"

Framing then can be understood as the process through which actors attempt to develop and promote a given vision or position that represents their own interests while frame contests are disputes where disparate frames competing for primacy are understood to be frame contests. Such contests to define both the nature of problems and the desired outcomes go on to inform policy (Dekker 2016).

The framing process has been broken down into three core tasks by Benford and Snow (1988) These are: diagnostic framing, prognostic framing and motivational framing. Diagnostic refers to the defining of problems, the categorisation and order of perceived contributing factors and the attribution of responsibility. Prognostic Framing however focuses on solutions to problems once defined, they can identify tactics, strategies and objectives and in doing so specify “what should be done”. Thirdly is the task of motivational framing , Benford and Snow note that mere agreement about the cause and solution of an issue does not automatically produce corrective action. Motivational framing is the process of mobilizing action from consensus through use of motive.

Frames are in a large part responsible for shaping policy definition, discourse and debate, although they are not explicitly acknowledged for doing so. The notion of “bounded rationality” assumes that despite pretensions towards rationality, policy makers deal with limited information on complex policy issues, and cognitive limitations in processing this information. In these conditions, actors "engage in disproportionate information processing, attend selectively to information dependent on whether it complies with a preferred frame"(Dekker 2017). In policy debates, both sides of a given dispute can often claim factual authority, but have competing interpretations of the facts due to differing frames, derived from having differing roles, interests, perspectives, and access to information. (schon 1983).

This is the basis of what Schon and Rein(1994) consider a policy controversy, which they define as a situation which is “highly resistant to resolution by appeal to evidence, research, or reasoned arguments” .In such situations, disagreement often becomes intractable between the contending parties.

The importance of this dynamic for defining policy disputes is significant. Schon and Rein articulated this, asserting that "by focusing our attention on different facts and by interpreting the same facts in different ways, we have a remarkable ability, when we are embroiled in a controversy, to dismiss the evidence adduced by our antagonists."¹(Huitema et. al 2011). This search for narrative legitimacy is a key characteristic of stakeholder politics in modern governance arrangements(Flyvberg 1998 in Huitema et. al 2011) .

¹ Page 5

2.4 Institutions and Change

2.4.1 Behavior of water institutions

institutions are social organisations that are designed to produce consistency. They define and regulate political, economic and social exchanges in human life and, in doing so, enhance efficiency, diminish uncertainty and eliminate, or at least moderate, disruptions that detract from optimal desired outcomes. Institutions, in other words, reproduce stasis through what Huntington described as 'stable, valued, recurring patterns of behavior' (Huntington, 1968)

As previously discussed the question of water management is one characterised by complexity and uncertainty. In such a context water operators likely cannot completely understand the conditions in which they operate, yet the high stakes involved offer little room for error (Clark 2002 in Huitema and Meijerink 2009). The widely acknowledged response to such uncertainty is the cultivation of adaptability and change capacity within institutions responsible for water management, yet because of the stakes of this uncertainty, they are especially disruption averse. Several factors impede the development of such change capacity. Brown and Farrelly(2009) in reference to barriers facing water operators ability to transition to sustainable urban water management concluded that these barriers were "predominantly institutionally embedded, systemic, relating to inter-organisational capacity and external rules and incentives, and are socio-institutional rather than technical" .

The implication here is that often technological capability is present but not matched with patterns of adoption and usage by institutions in the water sphere. The coevolutionary development of such elements in tandem is a key characteristic of transition, and its absence is a major inhibitor of system change. The origins of such patterns can be seen in the responses of these organisations to change pressure. Water institutions are observed to favour system improvements and synergies which focus on efficiency improvements to existing systems over social innovations, ie: new ways of thinking which promote alternative designs, technologies and uses of infrastructure systems (Frantzeskaki and Loorbach 2010). In summary, incremental change is favoured and promoted over radical shifts.

2.4.2 Historical institutionalism, Path dependency and Lock in syndrome

A key factor in the understanding of how sub-optimal decisions are made is the concept of “path dependency”. Path dependency presumes that social processes do not evolve in an unconditioned way, but are recursive and self-referential (Sydow et. al 2005). It posits that former decisions have an impact upon those that follow, and that these decisions will induce further movement in that same direction. Path dependency assumes that initially decisions are open to revision, but from a certain point in time onwards, decisions taken increasingly restrain present and future choices. As a result, decisions that have been taken in the past may increasingly amount to an imperative for the future course of action (Sydow et. al 2005). This phenomenon is articulated succinctly by Levi (2008, in Pierson 2000) noting that “once started down a track, the cost of reversal is very high. There will be other choice points but the entrenchment of certain institutional arrangements obstruct an easy reversal of initial or earlier choices.”.

The concept of “increasing returns” explains the positive feedback process behind such decisions. In an increasing returns process, the probability of further steps along a given path increases with each move down the path. The cost of diverting to an alternative increases, and this makes previously feasible alternative paths less attractive compared to relative benefits of the current path chosen. These patterns are self reinforcing and magnify over time. (Pierson 2000).

When other alternatives cease to be feasible, a lock in occurs. In the context of water management, “lock in” can express itself through situations where sub-optimal arrangements persist because they have materialised in infrastructure already constructed and in use. The large degree of sunk costs involved in water infrastructure provision make replacement or even moderate alteration challenging to achieve in a policy environment. It ensures that the policies that underpin them enjoy a significant incumbent advantage once physically committed to. This can be reflected in political arrangements within a water institution where the costs in terms of investment, learning, coordination and anticipation of adopting innovation is high relative to maintenance of sub-optimal systems. This can manifest at every scale of an institution, from executive policy down to the motives of embedded individual water managers, who may be locked by a vested self-interest in professional stability relative to taking risks on innovation or simply a “desire to be left in peace to work within the policy paradigm or equilibrium” (Huitema and Meijeirink 2009).

These patterns and processes are institutionalised and codified over time, The potential for institutional reform is constrained by existing institutional inertia to favour incumbent policies and practices. This explains why so often, existing institutional policies are usually modified and not replaced despite their less than optimal nature, and institutional inertia is generated.

2.4.3 Institutional learning

In the field of water management, this has taken the shape of an enduring selection preference for engineering based flood control measures, despite the increasing incompatibility with emerging needs and demands of water systems. Water management institutions, like any other organisation, are bound by the environments in which they operate, and naturally these contexts will change over time. To ensure continued relevance and legitimacy, such institutions must work to align themselves with these environments, interpreting and reinterpreting these changing contexts and taking corrective action to ensure they are aligned (Willems et al. 2018). As Van Der Brink outlines (Boin et al. 2001) some water institutions are capable of proactively pursuing an adaptive change agenda. Using an example of the Dutch Rijkswaterstaat and its organisational history, she outlines how the organisation can respond to waves of exogenous pressure, successfully re-framing themselves to align with new conditions.

This can otherwise be described as institutional learning, and it is an important process for institutions to maintain relevance and to adapt to their changing contextual environment. Drawing on organisational theory, Williams(2018) identifies two modes of such learning. The first is that of single-loop learning, whereby the outcomes of frame informed actions are examined with a mind towards optimisation. This mode of learning is iterative and remedial, modifying existing values and practices of an institution in a “fine tune” fashion, but does not represent a fundamental change of position.

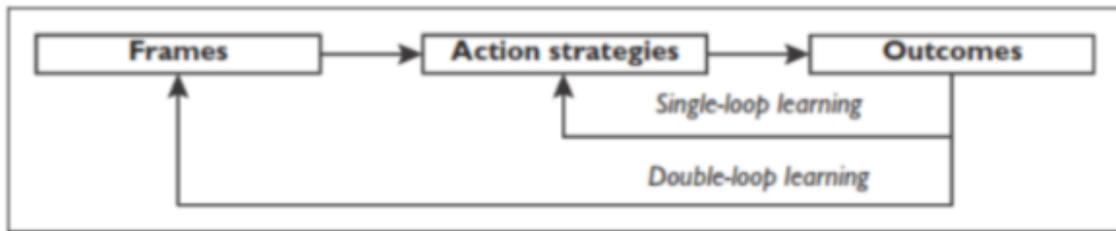


Fig 5 Diagram articulating the differences in single and double loop learning processes (Willeims et al 2018)

This stands in contrast to that of double-loop learning, which involves a re-examination of an institution's framing, which can in turn lead to fundamental changes in an institution's outlook, practices and actions and has more capacity to contribute towards transitional movements. Successful organisations engage in both single and double loop learning. As Willeims et al (2018) notes however, such institutions are not naturally prone to examination of their frames, despite the strategic benefits of such reflection. In practice the disruption caused to normal operations by frame reflection is a powerful disincentive to engaging in double-loop learning, though Willeims also asserts that ultimately the ability to learn and engage in frame reflection and to accommodate change is contingent on the adaptive capacity present in a given organisation.

Such a learning event can occur both within frames, occurring endogenously within an institution, or across frames, being imported exogenously from one frame to another. This is explored further in 2.5

2.4.4 Causes for institutional resistance

Institutional design of decision making structures within organizations such as water institutions is a key driver of change resistance . In many situations the bureaucratic structure of decision making is effectively diluted, often interwoven and overlapping with other institutions in a way that constrains any movement towards radical action . In the case of water management, such dispersion of executive power is only exacerbated by contemporary multi stakeholder and multi partner focused models of governance.

The political character of decision making processes within institutions is also something to be considered. In his conceptualisation of the policy process Lindblom (in Sabatier et. all, 2007) rejected the idea that those responsible for decisions within institutions conduct rational comprehensive assessments of options when making policy choices, rather they are often made in a reactive fashion. This is attributable to often diverging views within an institution, making consensus difficult to achieve. The political posturing and risk-avoidance political strategies of such individuals within organisations can result in watered down or otherwise compromised policies, which tends towards incrementalism. For water management institutions, this can be a way of dealing with complex issues. By avoiding enacting in radical change, they hope to mitigate the potential backlash associated with a misstep. Bounded rationality in an institutional setting is also posited as a contributing factor by Lindblom proposing that “attention spans are limited in governments just as they are in people” and produce inconsistent patterns of policy attention, which can result in attention deficits on certain policy issues (Sabatier et al 2007). Baumgartner and Jones (1993) posit that the existence of policy monopolies within institutions have a role to play. Their monopolistic position means they have vested interest in the promotion of positive images of current policy settings and deflect calls for change.

2.5 Institutional entrepreneurs

2.5.1 Policy and Institutional Entrepreneurs.

As discussed in 2.4, water institutions are often conservative, path dependent entities that resist radical change. In such instances change instead comes from an exogenous force. This may take the form of societal or contextual shifts or exogenous shock events, but can also be the direct product of the agency of change agents. While many types of change agent are possible, of particular relevance to the concept of transition and this thesis is the class of change agent known as social entrepreneurs. Social entrepreneurs are identified by “their commitment to a policy solution, the multi-dimensional strategies they use to promote that solution, and a suite of attributes and skills underpinning their actions.” (Petridou and Mintrom 2009), and by “their willingness, as in the case of a business entrepreneur, to invest their resources - time, energy, reputation and sometimes money - in the hope of a future policy return” (Kingdon.1984 in Hutiema et al 2011).

Entrepreneurs are characterized by the energy and innovation by which they seek to achieve their aims. This stands in contrast to other classes of actors and organizations which also seek to effect policy change, but are comfortable working within the boundaries of the status quo. Policy entrepreneurs distinguish themselves through their willingness to engage in tactics and actions that disrupt established status quo arrangements, as the scope of their desired change is often more than these conventions can accommodate (Mintrom and Vergari 1996).

Policy entrepreneurs can be organisations or individuals, but are always embedded in social networks which they use towards their own ends. Their motivations can often be idiosyncratic and diverse, but are coherent in their policy change vision. They can exist within power

structures, or at a distance from them. A closely related yet separate concept is that of Institutional entrepreneurs. Institutional entrepreneurs as originally defined are “Actors with sufficient resources who identify possibilities for creating and transforming institutions” (DiMaggio, 1988 in Battalina 2009). Unlike Policy entrepreneurs who seek a distinct policy goal from an institution, Institutional entrepreneurs are embedded within institutional arrangements. They seek to initiate divergent changes within that institution, breaking the status quo with the aim of possibly transforming the institution or contributing to the creation of a new one. By the very nature of the task, institutional entrepreneurs are embedded within the structure of their institution, though the limits of their agency within that structure are a matter of academic debate. (Battalina 2009)

2.5.2 Frameworks of policy process and change.

Within the theory of policy change, several institutional frameworks exist for understanding the mechanics of how change comes or does not come to pass. The first of note is Institutionalism. The institutionalist framework emphasises the role that structures of institutions have in the process of change. For change to occur under this framework, a change agent must conform to the often complex and particular rules of a given institutional context, both formal official rules, but also conform to norms and cultural values that unofficially govern the workings of an institution.

For Policy entrepreneurs, operating in such systems is a balancing act. Such entrepreneurs must have a working knowledge of a given context so as to effectively navigate prevailing rules and norms, but the intimacy that is a prerequisite of achieving this knowledge presents a danger of losing critical perspective, motivation or otherwise having their policy mission compromised. In light of this (Mintrom 2009) concludes that effective policy entrepreneurial bodies are composed of both insiders and outsiders, or when network connections can be used to interpret and mediate complex institutional barriers. (Mintrom & Vergari, 1998)

The multiple-streams framework put forward by John Kingdon (1984 as referenced in Sabatier 2007), which identifies three separate streams of policy formation: the problem, policy stream and political streams. These streams are often siloed from each other, and have limited interactions. Policy entrepreneurs in this context work in multiple streams to create windows of opportunity when they effectively align these streams together, indicating the importance of maintaining a diverse presence in a range of venues and spheres. Venue shopping behavior exhibited by policy entrepreneurs aligns closely with this framework. Mintrom (2009) draws attention to the asymmetries and differences between these three streams, noting that while policy and problem streams are effective at generating policy ideas, it is the elected representatives of the policy stream who ultimately sets the agenda for policy attention. This asymmetry is where entrepreneurs work, to bridge gaps under this framework.

The advocacy coalition framework is one closely related to policy enterprise, however there are notable differences between them. Like the networks of policy entrepreneurs, advocacy coalitions consist of actors who share a specific belief system i.e., a set of basic values, causal assumptions, and problem perceptions and who show a nontrivial degree of coordinated activity over time”(Sabatier, 1988 in Petridou and Mintrom, 2020). However in strategy an advocacy coalition seeks to influence the maintenance and evolution of a policy through institutionally accepted parameters, this stands in contrast to policy entrepreneurs who are opportunistic, and seek rather to capitalise on moments of punctuated equilibrium (Mintrom and Vigari 1996)

Finally the framework of punctuated equilibrium is the one most closely associated with policy entrepreneurial activity. The punctuated equilibrium concept was developed by Baumgartner and Jones and conceived of the policy process as one that is typically stable and produces only incremental change, but is subject to occasional large scale periods of crisis where periods of rapid and dramatic change are possible. This mechanic is common to the model of systems change found in socio-technical transitions discussed in section 2.1, in a similar fashion a new equilibrium will eventually be found and a period of stasis will resume. In such a framework, the role of the policy entrepreneur is that of an opportunity they must wait for, or if possible, create such moments of punctuated equilibrium, and exploit that instability to make rapid policy gains.

2.5.3 Strategies of water entrepreneurs

Several generic strategies have been identified by researchers as characteristic to Social Entrepreneurs. These have been listed by (Huitema and Meirjinik ,2009) as: developing new ideas; building coalitions; managing networks; leading by example and finally recognizing and exploiting windows of opportunity.

First among them is the development of ideas, or an alternative policy vision with which to contend. This can be essentially understood as a framing exercise, and involves all three of the three framing tasks as outlined in 2.3.

Policy entrepreneurship is a distinctly social exercise, and in this, the development and cultivation of a networks is a key task. Such networks represent an effective way to leverage the knowledge, skills and efforts of others towards a desired goal. Building connections with other networks allows for access to their information and knowledge and engagement with cross jurisdictional networks is noted by Petridou and Mintrom (2009) as being effective for amassing evidence relevant both for problem framing and definition and solutions. Networking also occurs within the jurisdiction required, and engagement and cultivation of rapport with points of contact within networks who are responsible for the policy is a key tactic for reducing opposition and setting favourable discursive conditions for change adoption (Mintrom & Vergari, 1998). The development of coalitions of advocacy of a policy goal is important too with Mintrom (2009) noting the importance of developing new coalitions or enlisting existing ones to demonstrate and if necessary mobilise support.

Leading by example refers to the process of engaging with others to establish demonstrations or pilot projects or otherwise illustrate their vision. Working to scale up such examples to the broader context is a common tactic in asserting the validity and legitimacy of their policy vision.

Finally and critically, Policy entrepreneurs need to recognize and exploit windows of opportunity in the discourse. Often understood as “periods of contingency during which the usual constraints on action are lifted or eased” (Mahoney and Thelen, 2010) such a description aptly matches the punctuated moment of punctuated Equilibrium theory, whereas under multiple streams theory such a window is the product of linking solutions to problems and by efforts to get resulting policy packages accepted by decision-makers, thus bringing about a convergence of the problem, policy and political streams.

The concept of venue shopping and venue manipulation is key to this strategy. These describe how effective change agents are selective in choosing the arenas in which to apply pressure and effect policy changes. 'Policy venues' are defined as institutional sites where the portrayal of problems and solutions takes place (Baumgartner and Jones 1993). They are locations where policies originate, obtain support, and are adopted as binding decisions. Such venues are diverse and subject to their own variables and conditions. Identifying which venues are the most favourable and under what conditions is a significant element of successful policy entrepreneurs. Effective entrepreneurs are likely to be active in several venues, encountering resistance in one avenue while making advances in others.

3 Methodology

3.1 Philosophical foundation

A research design is shaped by two fundamental considerations: An ontological stance regarding the very nature of reality and an epistemological stance concerning the relationship between researcher and reality (Carson et al. 2001)

This thesis' research design subscribes to a constructivist stance. Constructivism is characterized by the premise of a social construction of reality and knowledge. It is a stance that bears relation to Interpretivism, however this paradigm "recognizes the importance of the subjective human creation of meaning, but doesn't reject outright some notion of objectivity. Pluralism, not relativism, is stressed with focus on the circular dynamic tension of subject and object" (Miller & Crabtree, 1999 in Baxter and Jack 2008)

This constructivist ontological and epistemological stance is reflected in the research purpose, the techniques that are employed for data collection and analysis and the researcher's role during these processes. Constructivist research eschews rigid frameworks such as experiments and instead employs more flexible and personal research structures, this approach is often characterised by the close collaboration between the researcher and the participant, which enables participants to tell their views of reality and this enables the researcher to better understand the participants' actions. Research design informed by this stance allows for the possibility of new and unforeseen perceptions of reality to emerge. This can in turn influence the original research focus and other aspects of its design (Hudson & Ozanne 1988).

3.2 Methodological approach

The research methodology chosen for this study is that of a qualitative case study. Yin(2018) defines the case study as "An empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident". When deciding on whether to proceed with such an approach, reference was again made to Yin (2018). Yin lists a basic set of criteria for when to employ a case study approach, these he identified as: when the focus of the study is to answer "how" and "why" questions; when the behaviour of those involved in the study cannot be manipulated; when the desire is to cover contextual conditions that are believed relevant to the phenomenon under study; and finally when the boundaries are not clear between the phenomenon and context. In each instance it was felt the case matched this criteria.

A qualitative case study approach offers several advantages. Firstly, the case study format is best suited to applied problems that need to be studied in context. Phenomena under study cannot be separated from context, however in the case of SCC the context is a particularly important element of the study that needs to be captured appropriately. The detailed holistic accounts produced by such case studies not only help to explore or describe the data in real-life

environments, but also help to explain the complexities of real life situations which may not be captured through other methods such as experimental or survey research.

Flyvbjerg (2006) in his advocacy for the use of case studies in social science opined that “The advantage of the case study is that it can “close in” on real life situations and test views directly in relation to phenomena as they unfold in practice”. That the “proximity of the case study to real life situations and its multiple wealth of details” makes it ideal for the creation of highly rich in depth information. This speaks to another of the format’s strength, namely its ability to uncover unanticipated or undiscovered information compared to other methods, this makes it well suited for creation of hypotheses (Baxter and Jacks 2002)

The flexibility and adaptability afforded by this approach was also a key factor in its selection. Qualitative research is inherently iterative, with Maxwell (2008) noting that qualitative research design is recursive and circular not sequential and linear. As a novice researcher, this method was beneficial. This adaptability proved valuable as the study progressed and evolved conceptually, which entailed several revisions and re-orientations of the direction of this thesis even at relatively late stages of its drafting. This confirmed Maxwell's (2008) observation that "The activities of collecting and analyzing data, developing and modifying theory, elaborating or refocusing the research questions, and identifying and addressing validity threats are usually all going on more or less simultaneously, each influencing all of the others."

Nevertheless, he identifies that the case study format has often been perceived as a weak methodology, listing five main perceptions about the shortcomings and limitations of the format. They focus primarily on the problem of “generalisability”. This critique can be summarised as the information produced by case studies is context dependent knowledge and thus has no scope to be applied to wider populations ,limiting its ability to build theory. This misconception has been refuted by Flyvberg who notes that there “does not and probably cannot exist predictive theory in social science. Social science has not succeeded in producing general, context-independent theory and, thus, has in the final instance nothing else to offer than concrete, context-dependent knowledge. Such knowledge then, is not only unattainable but detracts attention from the purpose, value and insight to the local, particular and practical that is a strength of a case study”.

3.3 Data Collection

Yin (2009) asserts that typically a case study benefits from having multiple sources of evidence, which ensure that the study is as robust as possible. In a case study, it is important to cross validate sources of data, also known as triangulation, as a means to ensure comprehensive corroborated results . Yin (2018) asserts that triangulation is crucial to performing a case study reliably. Bowen (2009) states that corroboration of findings across data sets can control and reduce the impact of potential biases that can exist in a single study and cites Patton (1990) when he says that “, triangulation helps the researcher guard against the

accusation that a study's findings are simply an artifact of a single method, a single source, or a single investigator's bias"

For this research project document analysis was identified at an early point as a primary data collection method, but informed by this opinion, it was elected to further conduct interviews to provide a corroborating data point for learning interpreted from this approach.

3.4. Document Analysis

3.4.1 Document Analysis

Document analysis has been defined as a "systematic procedure for reviewing or evaluating documents, which can be used to provide context, generate questions, supplement other types of research data, track change over time and corroborate other sources" (Bowen, 2009). As a research method, document analysis is particularly suited to qualitative case studies where the objective is to produce rich descriptions or analysis of a single phenomenon, as is a popular method of research in policy studies.(ibid)

Data collection via this method focused primarily on newspaper reports, letters to the editor, opinion pieces, TV and Radio appearances, policy documents and press releases released by actors in the discourse. Social media profiles were also considered. The use of such non-technical literature is recognised as a valid source of empirical data (Bowen 2009). The selection represents an understanding of such documents as "social facts", that are consumed, shared, utilised in socially organised ways (Atkinson and Coffey 1997 in Darglish et. al 2020).

In discourses, entities manipulate the nature and content of knowledge, and the proffering of some information and the omission of others can be understood as reflections of power relations (Bryman and Burgess 1994 in Darglish et al 2020). This is similar to the process of framing or reframing in a policy context. Analysis of documents using this lens was deemed appropriate for capturing data related to processes under study in this case.

To give this component as much methodological rigour as possible, the READ approach was applied to this component. The READ approach to document analysis is a simple systematic procedure for collecting documents and gaining information from them in the context of policy studies at any level. The steps consist of: (1) ready your materials, (2) extract data, (3) analyse data and (4) distill your findings (Darglish et al 2020)

Document collection, review and analysis provided a significant element of the data collection design for this thesis and served many functions. Firstly, it provided detailed contextual data on the research case. Through document analysis it was possible to develop a more comprehensive and complete historical narrative of the policy controversy to date, plugging significant knowledge gaps and correcting some previously held assumptions regarding actions and actors within this discourse.

Secondly it provided material for thematic analysis of the case. Thematic analysis is a form of pattern recognition within the data, with emerging themes becoming the categories for analysis (Fereday & Muir-Cochrane, 2006 in Bowen 2009) . Thematic analysis provides a qualitative, detailed, and nuanced account of data, in contrast to content analysis which relies on a description approach to data in both its coding and in its interpretation of quantitative counts of the codes (Morgan, 1993 in Vaismorad et. al. 2013). Data coding, and the identification of themes was the functional process of this thematic analysis. Both codes and themes developed would go on to form the basis of analysis and inform the discussion guide used for the following interview component.

3.4.2 Interviews

The second component of the data collection took the form of qualitative single interviews.

The qualitative interview is “a research strategy to gather information about a participant’s experiences, views and beliefs about a participant’s experience concerning a specific research question or phenomenon of interest “(Lambert and Loiseau 2007 in Coughlan et. al, 2009). Interviews are a ubiquitous data collection tool in qualitative research; they are used in many research settings in a wide variety of styles and configurations, though the single interview format is arguably the primary form. They are noted for their ability to capture experiences, belief and motivations (Tod 2006 in Ryan et. al, 2009) This was considered desirable considering the complex nature of the case under study.

A semi-structured format was chosen for these interviews. The semi-structured interviews format is valued for its open-ended nature which allows for definition of the subject under investigation but also provides opportunities for both interviewer and interviewee to discuss topics in more depth, with the potential for follow-up and investigation of relevant information strands that may arise (Ryan et. al 2009) This is a disadvantage of structured format interviews, which risk reflecting the agenda of the interviewer and can present a barrier to unscheduled learning.

In this thesis the interview component was supplementary to the document analysis component, and while space was provided for new introduction of ideas and details, its main purpose was to corroborate and clarify findings from the document review. The interviews allowed for triangulation of information and increased the credibility of study findings. Qualitative interviews allow for detailed personal testimony on the subject being studied that enable readers to make decisions about transferability of study results (Merriam, 2002 in Ryan 2009).

A strategy of purposeful sampling and selection (Maxwell 2008) was employed in the design of the interview component. In practice, this meant that the deliberate selection of appropriate candidates was of primary importance. The bounded nature of this case made identification of potential candidates a simple task. Candidates sought were typical executive members of the

SCCgroup, with a high-level perspective of both the debate and their organisation. Three such candidates were identified and approached, two of which were willing to participate. This sample is small by many metrics of qualitative research but was considered adequate due to the singular nature of the object of analysis and the small target population of such candidates.

An interview guide was drafted with a selection of topics informed by findings from the document analysis. Care was taken to frame questions in a way that was not leading but also offered constructive structure to the interviewee, prompting them to give their opinions in a freeform manner. Asides and diversions from these topics were welcomed and encouraged and this flexibility bore fruit in several insights that were unprompted and unexpected by the interviewer, which would contribute to the thesis's findings. .

Analysis of interviews followed. A deductive approach was taken to this analysis, coming to the data with some preconceived themes derived from the document analysis but also attention was taken to identify or code new elements introduced to the study during the interview process.

Due to geographical distance and issues related to the Covid-19 pandemic, interviews were conducted via Whatsapp call and Zoom video conference. Interviews were recorded with the consent of participants, and their contents transcribed using Otranscribe software.. These transcripts can be found in Appendix B

3.4.3 Interview participants

Interviewee 1: John Hegarty is the principal officer of SCC and its official spokesperson. He is an Architect and Managing Director of Fourem, an architectural firm based in Cork. An interview was conducted on the 27th of July 2021 via Whatsapp..

Interviewee 2: Micheal McCarthy is a senior member of SCC. In addition he is a founding member of the Lee Environmental and Economic Forum, a technical group that has been publicly critical of the OPW's plans and estimates. He is a practicing quantity surveyor and the Managing Director of MMC Quantity Surveying, a consultancy group based in Cork. Interview was conducted on the 3rd of August via Zoom.

3.4.3 Role of the researcher

In this study role the researcher is significantly shaped by the qualitative, interpretive character of the methodology employed. It represents a significant subjective factor throughout the data collection and analysis process. In such a process the researcher assumes the role of the "analysis instrument" (Yin, 2011) , with a central role in the interpretation of data by means of the theoretical framework. This subjectivity is an unavoidable element that must be factored and accounted for.

4. Data and findings

This chapter presents the analysis of collected interview data, which constitutes the final result of the working steps presented in the methodology. The objective is to discuss findings regarding this thesis' research questions as well as closely related aspects.

Collected data from both documents and interviews were synthesized and a thematic approach was employed in the development of the analysis. Thematic analysis constitutes the “process of categorizing qualitative textual data into clusters of similar entities or conceptual categories to identify consistent patterns and relationships between variables or themes” (Julien 2008)

A number of thematic and conceptual categories were developed based on deductions made from theory outlined in the theoretical framework; these served as a lens through which events and behaviors have been grouped and processed.

Due to the interpretative and explorative research design at the basis of this analysis, findings are limited to the specific context of SCC and debate regarding flood defence. Generally, findings should be considered as points of departure for future research, potentially exploring similar research questions in different settings or testing individual aspects by further investigation. Discussion of the overall findings is contained in chapter 6.

4.1 Problem definition: OPW plan

Diagnostic or Problem framing is one of the most essential activities undertaken by policy entrepreneurs. Through successful definition of what constitutes a problem, a policy actor gains significant control over the form a solution will take. The ultimate shape or form of a defined problem can determine which individuals and groups will pay attention to them, and through considered problem definition, they can improve their chances of building winning coalitions if they portray problems in new ways.

The “problematization” of the OPW's flood scheme in the eyes of the public was and remains a central strategy of the SCC Campaign. Rather than let the LLFRS define itself as a solution to the flooding issue, the SCC would effectively reframe the plan as a separate problem in and of itself. This was achieved by many methods but first among them was seizing the initiative and aggressively promoting their policy vision to this court of public opinion. The OPW, especially in the earlier periods the SCC's campaigns were slow to respond to the more agile and proactive

SCC. This is likely a reflection of the OPW never having encountered such sustained and systematic scrutiny before the LLFRS and being initially ill equipped to deal with it.

An early framing skirmish illustrates this dynamic; in 2017 a large quantity of documentary material was released by the OPW during the consultation phases of the LLFRS's plan development. These were for the most part technical documents, uncurated and unvetted, and contained within them were several engineering cross-sections of proposed flood defenses. These diagrams indicated flood defenses that would in many cases drastically cut the city off from its watercourse through a configuration of berms, embankments and concrete flood walls. Many of these diagrams outlined defenses for beloved areas for the city, such as the Lee Fields and Fitzgerald's Park, green amenity areas that would need to be seriously impacted to accommodate them. SCC were quick to publish and promote these images for their own ends.

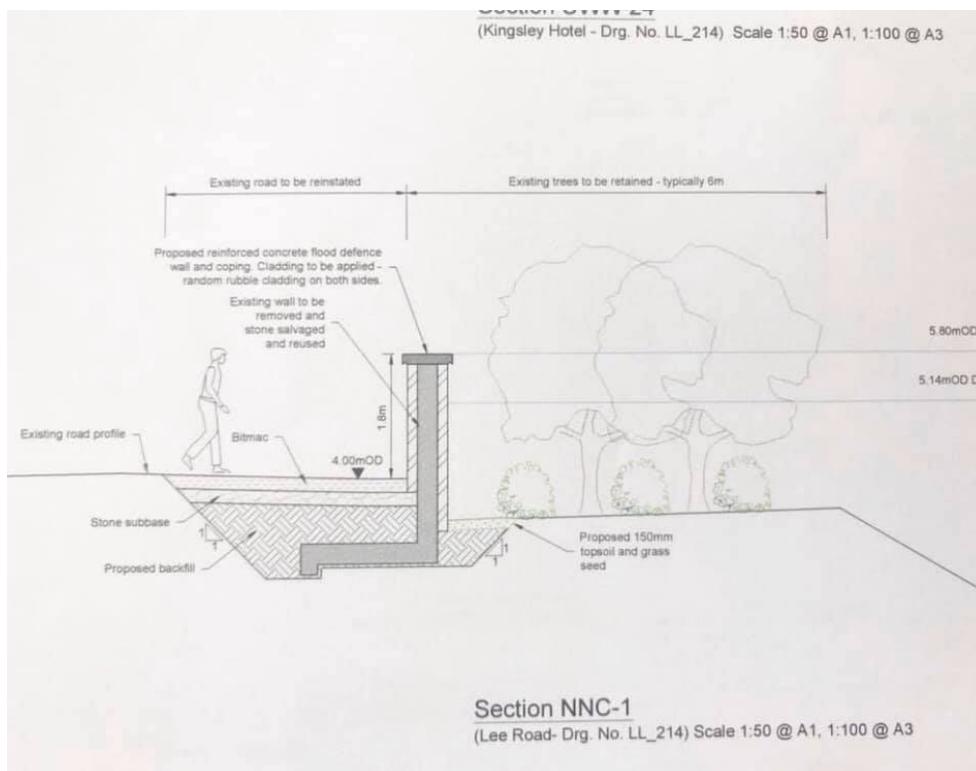


Fig 6 2017 provisional sketches and cross sections of food defenses, which proved controversial.

The OPW quickly clarified that these documents were merely speculative and were later at pains to instead promote professional artist renditions of radically moderated versions of the defenses in these same areas. This indicates the entrepreneurial flair SCC has displayed in hijacking the framing of their opponent's plan, which SCC refer to as a "drainage scheme" or alternately a "walls scheme". This stands in contrast to the language employed by the OPW plan, which focuses on flood defense and flood relief orientated terminology. While acknowledging the pejorative, according to interviewee 1 this had its roots in historical fact, noting: "It's a drainage scheme, in fact it was originally labelled in the city hall as the Lower Lee

Cork City Drainage Scheme. The name was changed because in PR terms, "drainage scheme" doesn't sound good, but that's what it is`. This distinction is the subject of much repetition in SCC media appearances and in their own content. Other components were identified and selectively used to problem frame, notable an assertion that the OPW plan would contain 15km of new walls through the city. When this assertion was put to the OPW commissioner John Sydenham in a 2019 interview, he bluntly stated *"The claim that the scheme involves 15km of walls is totally untrue. It is fiction.... There will be no high walls anywhere along the city quays. None"*. Despite this denial, the SCC for their part stand by their interpretation of the OPW plans. The "15km of walls" claim remains a prominent feature of most SCC critiques.

The recent history of the OPW is a key component in this problematization discourse. Recent flood relief schemes in the nearby towns of Bandon, Skibbereen and Fermoy have been the cause of multiple highly publicized controversies. Mintrom and Norman (2009) discuss the value of importing ideas across jurisdictional boundaries, in this instance however cross jurisdictional context provided evidential material that spoke to prevailing attitudes to water management within the OPW.

In Skibbereen, a new €37m OPW flood works had a dramatic negative impact on the public realm, transforming the Caol river from a meandering village watercourse into a concrete lined drainage channel, despite these works, Skibbereen promptly flooded within two years of its completion (Roche 2020), whereas in Fermoy, a flood pump belonging to a new €37m scheme failed to activate on its use, leading to flooding in the town. Perhaps most controversial is the case of Bandon, OPW works saw the gravel river bed of the River Bandon, a spawning ground and home for numerous species, dredged and replaced. Furthermore, the historic weir on the river was partially removed and remodelled using highly unpopular concrete walls with contemporary cladding that has increased the speed of water flow significantly. These works featured a redesigned fish pass for local Salmon to migrate upriver. Very quickly after completion this pass degraded significantly and ceased to function, preventing migrations and causing ecological devastation downriver.

The implication for Cork in the opinion of interviewee 2 was apparent: *"So what the OPW is doing here is an experiment that's likely to fail. The level of complexity in the engineering involved, the moving parts involved, the requirement for maintenance, each component is a stress point each time a flood occurs. It's a system that's almost guaranteed to fail, as happened to these smaller more supposedly manageable schemes"*

This conclusion would form a powerful diagnostic frame that cast the OPW itself, its practices and institutional culture, as a problem alongside their plans. The embrace of this framing has seen direct reference to the OPW and a drainage centric culture as a common theme of SCC communications. Alarming imagery from other OPW schemes, often in a before and after format are used to illustrate the supposed potential perils of the proposed OPW flood plan approach if applied to Cork. This theme, combined with previously mentioned critiques of the LLFRS paints an unfettered image of a dysfunctional organization engaging in archaic and outdated water

management practices. This characterisation aligns closely with Brown's water transition framework, with the OPW's approach mirroring that of "Drained City" and SCC advocating for the embrace of a "Waterways City" paradigm. While this is a tidy analogy, this pointed critique can be easily and perhaps correctly interpreted as adversarial by SCC. The wisdom of this tone and its consequences are further discussed in Chapter 5

4.2 New Ideas: The Tidal barrier proposal

Huitema et al. (2011) lists development of new ideas as an integral component of water entrepreneurial strategies. Such ideas represent alternatives to existing policy and elevate the actions of water entrepreneurs from that of blunt complaint to that of policy enterprise.

If nothing else, the SCC can not be accused of being short on such ideas. A central component of their campaign has been conception, development of and promotion of an alternative plan for Cork flood defense. This proposal is extensively described by the SCC in a 56 page solution document titled "Potential Cork" which outlines a three point plan. Firstly, it calls for the construction of a tidal barrier at one of several points in Cork Harbour. Such a barrier, it is argued, in conjunction with the slowing of the river Lee, increased water attenuation, wetland development, land drainage coupled with optimised dam management it would present a comprehensive solution to Cork flooding, both coastal and alluvial. Lastly, it calls for the repair and restoration of Cork City's historic quayside. This tidal barrier represented a novel and attractive idea for Cork, and the relative simplicity of the concept lended itself well to promotion and marketing, especially compared with less glamorous OPW proposals.

Environmental concerns motivate this proposal to a significant degree, much of SCC's promotion of their plan revolves around sustainability and adaptive capacity in the face of climate change. In many respects the tidal proposal represents the very model of forward thinking sustainable water management planning. Renderings of the proposed barrier envision multifunctional design, with a greened parkway across its breath, and increased scope for water amenity being represented. The reversal of channelisation and the emphasis on slowing water and increased attenuation is indicative of an overall more sustainable, more holistic approach to the water system. Interviewee 2 noted that *"an approach that speeds up water in an area, which then causes more flooding in another area, which then requires a flood relief scheme in an area, caused by what they've already done. They don't look at a river in terms of a whole-catchment. They need a whole-catchment approach."* These ideas are evocative of Brown's water transition model (Brown et. al 2009), specifically the transition from a drained city paradigm to that of a waterways city paradigm.

The other main point of the tidal barrier proposal is its capacity to spare the historic center of Cork much of the destruction that would be involved in the renewal of its quay walls under the OPW scheme. This regard for the historic core of the city is not presented simply sentimentally. Much of the SCC's argument focuses on the quayside as an undeveloped asset, the potential of

which, if unlocked, could act as a catalyst for renewal. Interviewee 1 offered the following: *“We have a lot of support from people who are in business in the city center who are very supportive of us because they would like to see the city center be more like Amsterdam or Copenhagen, rather than a very modern industrialised place without an identity”*.

Throughout interviews and review of documentation, it was evident that other towns and cities and their relationship with the water provided a large amount of inspiration and reference for SCC. The use of successful examples from different jurisdictions were used essentially as proof of concept to legitimize the feasibility of their plans, but also through comparison to redefine the boundaries of what was considered possible for Cork's relationship with the water.

4.3 Networking: Professional credibility

As noted by (Mintrom and Vergari, 1998) successful policy entrepreneurs make use of their personal and professional networks in pursuit of their aims. The importance of professional networks here is of note. SCC as an organisation was originally composed solely of concerned but unaffiliated spatial professionals. Interviewee A notes *“Initially we were a group of architects and engineers, and we got bigger as the public became more aware of the campaign”*. This distinguishes SCC from many other similar groups made up of lay citizens that can have difficulty navigating the bureaucratic and administrative language of reports, presentations, models and memoranda that is common to planning and policy discourse. This sectoral literacy has afforded SCC a heightened air of competence and authority in their discourse with the OPW. Policy and design documents produced by SCC are often of a professional standard equal to or greater than those produced by the OPW (SCC 2017). The commissioning of professional accredited reports from such reputable sources such as TU-Delft in the Netherlands in response to OPW claims has been highly effective. Professional networks can be attributed to the enlistment of high profile authority figures such as Erik Kraaij, Deputy Director of the of the Dutch National Flood Protection Programme, the Hoogwaterbeschermingsprogramma, and the respected Professor Phillip O Kane, former head of the Department of Civil Engineering at University College Cork. These connections were used to great effect. Mr Kraaij would endorse the SCC proposal at a highly promoted public 2018 meeting (2018 Irish times) and Professor O'Kane would advocate on behalf of the SCC plan both publicly (RTE 2020) and at the 2020 Irish National Hydrology Conference, at which he presented a research paper detailing the feasibility of the SCC plane (Kane, 2020).

Where typically the OPW would have undisputed possession of the technical rational narrative, SCC has leveraged its professional knowledge base to contest this space and the framing put forward in this regard. This has done much to convince the public, or at least muddy the water enough that the OPW have effectively lost control of the public narrative. It is worth noting that this sense of credential equivalency between OPW and SCC is largely an impression, much of SCCs water management stances are a product of autodidacticism. Interviewee A notes *“I suppose at this stage we didn't know all the technicalities of drainage schemes or flood schemes or walls versus water storage and attenuation, but we soon learned very fast”*. Terse

responses from OPW representatives often object to this equivalency. One such comment in response to a newspaper article positive toward SCC (Martin 2021) expressed the somewhat reasonable frustration that *“The article infers that, while the work of a small group of opponents to the scheme is “professional and forensic”, the work of the multi-disciplinary experts, who have worked on the project for more than 14 years, is not.”*. Nevertheless this image of credibility has been a particular advantage for SCC.

4.4 Coalition building: Love the Lee

The cultivation of support is an obvious activity characteristic of policy entrepreneurs, but an important one as stated by (Mintrom 2019). The size of a coalition can be crucial for demonstrating the degree of support enjoyed by a proposal for policy, as it demonstrates the breadth and diversity of that support.

SCC was engaged in the process of coalition building from an early juncture. launching the “Love the Lee” campaign in 2017. While not an advocacy coalition in the strictest sense Save Cork City nevertheless displays similar qualities in its structure and relations with SCC. As Mintrom and Vegari(1996) note, the bond that holds an advocacy coalition together is a shared belief rather than a core policy matter. This dynamic perfectly applies to the relationship between SCC and Love the Lee. Love the Lee essentially operates as a loose support network of people concerned about the future of the Lee under proposed OPW plans, motivated more by a conservational affection for the river Lee than a policy position. This perception of a river under threat, it must be noted, is almost entirely the product of SCC framing efforts, and while Love the Lee supporters may be undecided or even uninformed about the tidal barrier proposal, their implicit acceptance of the problematisation of the OPW plan confirms SCC’s success in this regard.

Love the Lee serves many functions for SCC, as a publicity campaign it is successful as an instrument of motivational framing. The social media campaign heavily featured personal testimony from Cork citizens relating to the threats to the river and the importance of the river to the identity and heritage of the city. The enlistment of local celebrities and citizens of note , and their endorsement using the same format has also featured. Special media events which are promoted virally such as the recent “Bach on the Lee” performance, lean heavily on emotive imagery and are light on technical policy, while events such as a planned waterborne “picnic” emphasise the relationship of the city to the water and the potential therein.

Promotional merchandise, in the form of t-shirts, badges and bags represent a revenue stream but also highly effective advertising for the group. The proliferation of this merchandise provides a constant reminder of the flood debate issue during daily life on the streets of Cork, and demonstrates the level of support for SCC in a passive fashion without the need to expend social capital on mobilisation. Similarly posters and signage are commonly encountered in the shop windows of local businesses in the city center. Such establishments represent a key

constituency of support for SCC, and demonstrates the appeal of SCC's proposals, even among the more serious minded business community.

In the variety of approaches to coalition building, SCC displayed the vigor and innovation typical of policy entrepreneurship. Interviewee 1 noted this, stating *"I suppose we do have one advantage, we have the disadvantage of not being politically hooked in but an advantage is that we're mostly creative people with creative ideas about how to approach things and we've had a lot of great inspiration on how to keep this campaign competitive"*

4.5 Framing contests: Cost

The issue of cost has been a key framing battleground in the dispute between the OPW and SCC. This has consisted of a largely hypothetical back and forth over presumed cost of both the OPW and SCC plans. This discourse is indicative of a framing contest between these two actors, with the aim for both being the definition of the boundaries of legitimacy and feasibility and ultimately "value for money".

This frame contest has its origins in an initial costing report for the tidal barrier proposal commissioned by SCC. This report by the English engineering firm HR Wallingford (2017) performed a provisional cost analysis of the tidal barrier plan which came to an initial costing of €180m. This figure would become an ongoing point of contention. In response the OPW undertook their own estimation, stating in a newspaper interview that *"Our figures are based on the Lee Catchment Flood Risk Assessment and Management study, which estimated the cost of a tidal barrier at €450 million and more recently our consulting engineers, Arup, have put the cost of a tidal barrier at €1 billion"* (Roche 2017). These figures would form a significant pillar of the OPW's ongoing defense of their own plan, with these figures featuring prominently in both media reports and their own documentation.

In response, the SCC engaged with the Department of Hydraulic Engineering at Delft University of Technology in the Netherlands to produce a review of the OPW's costing estimates. This review, conducted by Jonkman & Molenaar (2018) contested the OPW's estimation, asserting that the OPW had massively overstated the cost, and instead estimated the cost of the tidal barrier proposal to be under €200m. This report noted the tidal plan as "an interesting and attractive option which warrants further investigation". This report and its contents was used to great effect to counter the OPW dispersions.

This conflict of frames would be further compounded by the later intervention of The Lee Environmental and Economic Forum (LEEF), a separate yet allied group to SCC. It purports to be a research group committed to "independent, professional and accurate research into flood defences for towns and cities in the Lee valley". In a reversal of the OPW's framing, they in fact claimed the OPW had underestimated the costs of the Walls Scheme by at least €143m. Approaching the budgeting documents forensically, they identified several line items budgeted

that were either inaccurate or misleading. A notable and widely discussed example included budgeting for pumping chambers, estimated at €75,000 each. This was considered a gross underestimation, in light of OPW's own estimates for a similar chamber in Clonakilty at €504,000 as recently as 2016. LEEF offered their estimate as €335,000 per pumping station. Further issue was taken with projected maintenance costs outlined, the OPW's estimate of 1% was deemed to be highly unrealistic when factors such as cost of storing, installing and uninstalling the demountable systems, upkeep of the pumping stations and non return valves, and ancillary costs such as parts and power were considered (LEEF 2021).

Further to this they also reviewed the OPW's own estimation of the SCC's tidal barrier proposal in a similarly forensic fashion. Several items of note were deemed superfluous extras, such as two navigable flood gates (for context, the City of Rotterdam the most active port in Europe has only one), unnecessary motorway tidal gates, and excessive sluice gates all added to the supposed cost. The forum's counter assessment for a simpler more functional tidal barrier design at Little Island would actually cost between €200 and €300m. In response to this, Interviewee 2 noted *"From 2014 to 2018, these tidal barrier cost estimates in separate reports massively shot up. This is taxpayers' money ...I'd like to be sure of the maths."* The LEEF organization presented these findings through a series of online lectures and more importantly in a series of articles in major local and national newspapers. In response the OPW would impugn the impartiality of this organisation. In a remarkable opinion piece by the OPW's principal flood officer in the Evening Echo on the 4th of February, it was alleged that many of the members of the LEE Forum were in fact members of SCC, and accused them of "parroting" the opinions of SCC (Martin, 2021). This was refuted by the Forum in a following statement, but this acrimonious discourse is indicative of a level of animus present in these proceedings. This contentious series of events is highly evocative of the process of Diagnostic framing. Rassmussen succinctly summarized that this is a process " through which existing institutions are sought to be delegitimized, and is a prerequisite for justifying an introduction of alternatives to existing institutional arrangements through a prognosticL frame. Prognostic framing presents alternatives superior to the existing institutions (Rassmussen et al 2017) .

4.6 Leading by example: Design Competition

Mintrom (2019) notes that a key activity of policy entrepreneurs is "leading by example". The Morrison's Island International Design Competition was a clear and highly effective example of just such an activity. This competition was run by SCC in 2017. Its purpose was to serve as a design research platform for potential alternatives to plans proposed for this key area of the city riverside by the LLFRS.

In this competition registered architects, landscape architects and engineers were invited to participate in a design research competition to propose innovative and considered solutions for the renewal of Cork city's quayside landscape. The design brief had a focus on integrated design solutions, with an emphasis placed on engagement with other professional disciplines, artists or art organisations, local community groups and citizens as part of their design process. The competition stated that it was hoped that submissions to the competition would ultimately contribute towards the city's future strategy for the quays.

The competition was a serious professional undertaking. The competition's prize of €10,000 was a not inconsiderable sum for an organisation on the scale of SCC. This prize was funded by citizen donations and contributions solicited from local allied businesses. The competition itself was officiated by the Cork Architectural Association with the support of the National Sculpture Factory and the Architectural Association of Ireland, which added further legitimacy to this event. The competition attracted several submissions from national and international architects with a winner announced in November 17th 2017.

In many respects the design competition was highly successful. It created significant interest in the plan among the Cork public. The competition was given generous coverage in the media, particularly in the Cork based national newspaper the Cork Examiner, which ran a week long series showcasing designs from the competition. The physical plans were put on public display in the gallery on Grand Parade Street, proximate to the quays in question where members of the public could view them. The competition overall appeared highly successful in generating debate, as Interviewee 2 recounts *"the design competition was probably our high watermark, we had incredible interest from the local public and the designs received were of a exceptional calibre, having them in the city meant people could come in and set eyes on them themselves just steps from the river and really visualise what we were talking about, it got people thinking about the river and what it was and what it could be in a way that wasn't there before, where it was just taken for granted...but we were really surprised at how much City Hall dug their head in the sand on it despite the media buzz that was ongoing for weeks, they just didn't care, not interested."* As this alludes to, despite the many successes of the competition, it critically failed to receive any traction with the OPW. Both the OPW and the Local Government pointedly ignored the competition and the submissions it produced. Mintrom (2009) says that the work of leading by doing is important for demonstrating the workability of a proposal, which can reduce the perception of risk among decision makers. In this instance despite their best efforts, SCC failed to make any inroads with this critical actor. One potential reason for this is its lack of network connection with the OPW, while the plans on their own seemed to have many merits, without some process of introduction, it appears that this was considered by OPW as a foreign and unwanted intrusion on the discourse, and was discounted as such. In relation to this, Interviewee 1 offered the following: *"We have been told that there are people within with differing opinions and would be sympathetic, yes, but it's not clear because of course people don't want to speak out against their employer. That's such a factor."*

² <https://www.irishexaminer.com/business/arid-20462696.html>

The competition project can be considered a clear success in terms of generating publicity, interest and support for their policy vision in other corners of the debate, but ultimately despite this interest the effect of the design competition seemed short lived. Its results now feature rarely as the discourse has moved on to other venues and arenas. Interview 1 noted that: *“What we’ve realised is... It’s very hard to influence the civil service, because those that are working within the service can keep moving forward independently of whatever influence might come from the grassroots, from abroad and it makes no difference to their situation or status. So they keep going regardless and that can be a difficult thing to understand when you’re trying to make a case”*

4.7 Venue Shopping

Corresponding to patterns of behavior common to policy entrepreneurs, SCC have attempted to advance their policy vision in a number of different arenas. Interviewee 1 acknowledges that: *“In candour, some of it is our naivety. Initially, very initially, we thought we could talk to the councillors and things would change, talk to the executive of the city and that things would change. It was a crash course in how things get done in this field. We’re just moving from one thing to the other”*. From this it can be inferred that there was no formal strategy of engaging debate on a number of fronts, rather it was the result of engagement with traditional policy avenues ending with frustration which prompted SCC to take their case further afield. SCC has engaged with the traditional planning process, submitting objections to plans at both council level and later with An Bord Pleanála, the planning appeals body of the Irish State. These appeals were denied, which prompted SCC to pursue further avenues

One such venue is that of parliamentary politics. The group made a presentation to the Joint Oireachtas Committee on Culture, Heritage and the Gaeltacht, a government subcommittee with oversight on this matter in late 2017. However this presentation was not well received by the Government majority committee panel (Roche 2017³). The multilevel model of transition indicates that meso level institutions, of which one may count the Government a part of, maintains deeply embedded social relations within its own institutional firmament, in which the OPW, being essentially a subsidiary of the Government could reasonably be counted.

In the face of such government solidarity, pressure has also been applied to individual local politicians, many of whom initially offered support. One such local Cork politician was Micheal Martin, who was the leader of the main opposition Fianna Fail party. In

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<https://www.irishtimes.com/news/ireland/irish-news/campaigners-to-present-cork-harbour-barrier-plan-to-d%C3%A1il-committee-1.3260381>

2019 a change in the composition of government resulted in local politician Micheal Martin becoming the Taoiseach or prime minister of Ireland. Martin had originally expressed support for the tidal barrier plan when the leader of the opposition, as recently as 2017 (Linnane 2017) . Since his elevation to the position of Taoiseach, he has modified this view to now advocate for the LLFRS scheme, while recommending revisiting the Tidal Barrier proposal at a later date. On the issue of local political support, Interviewer 1 was pessimistic, stating *"We occasionally have the support of local politicians but really only when it suits them"*, going on to elaborate that *"Career politicians don't want to tackle difficult problems, they want easy wins. In many ways... i mean you have the minister for the OPW had people running from that ministry, nobody wanted it because it's such a complex problem, we understand that it's a complex problem and the issues that we are raising are multifaceted but this is a major turnoff for politicians who just don't want be within a hundred miles of something like this "*. This assertion notably aligns with the conceptualization of water management as a wicked, persistent problem for managers, but also the assessment offered of the reluctance of local politicians to commit meaningfully to the campaign could be interpreted itself as an expression of path dependent behavior, particularly that of the positive reinforcement dynamic. While support for SCC had little to no transaction cost for a politician out of power, once installed as Taoiseach, at the very heart of the dominant regime, this arithmetic was substantially changed to the detriment of SCC.

Outside of the national political arena, the SCC has made complaints to the European Commission regarding Flood defenses in Cork. The contents of this complaint are notable in being distinctly different from the typical arguments put forward in other venues, Rather, they are tailored to this particular venue, stating the plans had *"failed to live up to obligations that are required by EU law in relation to habitat protection, floods and water management, public information and consultation, and environmental considerations and assessments."*. Interviewee 1 was vocal on this topic: *"Fundamentally the EU has made a complaint to the Irish government about this, saying that there is no overriding body to implement the water framework directive it has signed up to about the protection of our waters and our water quality in broad terms. There's been no response to that, so it really falls to us to even demand that we follow through on the policies adopted and signed up to by this country.....The idea that, under the Aarhus convention that people locally should be designing their own cities and towns, and have great influence in that, that isn't happening. What's happening is one scheme is being designed, given to the people in an exhibition, they are told they can have their say, they do have their say and nothing changes. It's take it or leave it."* This critique of Ireland's adherence to transposed EU law seems to carry significant merit. However, in a similar pattern to its national political maneuverings, ultimately this commission

complaint generated no support. This inability to build deep and substantive connections with the political class will be discussed further in chapter 5.

Section 5 Discussion

From the analysis of data several conclusions were developed that warrant further discussion, these have been organised into the following points:

5.1 Winning the PR war

Firstly it must be acknowledged that in many individual respects SCC has been highly successful. As an exercise in framing the dominance of the SCC narrative appears near total. No polling data exists to give a quantified account of the opinions of Cork citizens, but a walk through the city Center of Cork will confirm a large and committed constituency of support manifested in posters, murals t-shirts and buttons. SCC is remarkable in having crafted a emotive popular narrative out of a subject as unglamorous water infrastructure renewal, It has done this intelligently, leveraging sentimental attachment for the river Lee and its environs, flattering the city with a novel, ambitious and attractive flood plan, but undoubtedly through a highly organised and effective critique of the OPWs proposals.

It seems more than apparent that the OPW had not anticipated this level of public scrutiny , given its history to date had been significantly smaller schemes in smaller towns and villages where a critical mass of opposition was less likely to develop. Similarly the OPW has struggled significantly to compete in this arena. Interactions and responses on OPW social media channels rarely break single digits, what comments there are are for the most part negative. The OPW enjoys reasonably uncritical support from establishment media venues, but a recent unprecedented wave of OPW public controversies unrelated to the Cork are hard to ignore or discount

5.2 Failure to build the right networks

While it can claim with some justification to have popular support, SCC has seemingly neglected or failed to develop networks of support in the wider civil society (Mintrom 2009) states plainly that policy entrepreneurs are defined by their ability to create alliances across institutional and organisational boundaries.

SCC has made use of network connections to commission Hydrological and Geological studies, Quantity surveyors reports and Cost estimate reviews from associated technical professionals,

but this is an area SCC were already performing strongly in. What is absent is connections to compensate for deficiencies in other areas namely , political and bureaucratic.

Politically, the SCC has enjoyed support from many local elected representatives at one point or another, but such support has been to date shallow and rhetorical. While SCC enjoys popular support in the city, there seems to have been no real attempt to convert this popularity into political backing .Given its topicality, it is notable that the issue of the floods scheme did not appear to be a factor in Local government elections for Cork held in 2019. The passivity of SCC in this regard seems curious , given its vigor in other discourses and given the importance of legislators in agenda setting for policy.

Nowhere is this more apparent than in the case of Micheal Martin. Initially one would be forgiven for believing that fate had dealt SCC by the elevation of Micheal Martin to the position of Taoiseach. The veteran elected representative was a lifelong Cork resident experienced in local retail politics. He had nominally endorsed the SCC plan as recently in 2017, his election had the potential to be a catalyst for significant change. Huitema et. al (2011) recognizes the importance of traditional political events such as government changes in water transitions. Many of the conditions then for breakthrough were present, yet ultimately Micheal Martin would backtrack on support for SCC.

In the search for answers ,simple path dependency seems quite likely. The risks inherent in personally supporting an unorthodox plan was greater than the risks of reproducing the status quo arrangements, especially given the tenuous coalition nature of that government. It is unknown what, if anything SCC could have done to further incentivize Micheal Martin, but nevertheless one feels this was a significant missed opportunity, for SCC and indicative of its failure to build deeper political ties.

5.3 Working with an institution

A similar critique can be formulated with regards their interactions with the OPW According to an institutionalist framework of change. Actors such as policy entrepreneurs must be able to understand the workings of a given context without becoming so embedded in it that

it threatens their critical perspective and their motivation to achieve their policy aims. . The importance of institutional literacy here is emphasised, and entrepreneurs should have access through them either via networks, or by being composed of teams made of both “outsiders” and “insiders” (Brandl 1998, in Mintrom and Norman 2009)

What is curious in this case is that upon first glance, the SCC looked like insiders. The SCC is heavily composed of spatial professionals and at its founding was entirely so. Individuals coming from this background one would assume would have some common ground social/cultural/education/professional etc. with OPW Engineers. and officers, and would be better placed perceive and absorb the norms and rules of the OPWs world, their “logic of appropriateness”

Clearly this has not occurred , if fact a distinct distance is noted in the tone and language used by participant interviewees when discussing the OPW. During the interviews conducted Interviewee A, himself an architect, repeatedly referred to the OPW as “civil servants” and as “part of the civil service”.While this is technically true, it seems to give no appreciation for the possibility of professional and cultural affinity, instead the rather the OPW are otherised in such language.

5.5 The consequences of adversarialism

This distance, alienation and lack of understanding would unfortunately in an adversarial often hostile tone that would marr this policy debate and have potentially serious implications

Huitema et. al. (2011) notes that in “case studies show that policy entrepreneurs engaged in a framing contest over the causality of such disasters and the desirability of specific policy options. Interestingly, they almost never framed disasters as lapses of leadership by responsible authorities. This may be explained partly by the dependence of the policy entrepreneurs on the responsible authorities to achieve change.”

This same cannot be said of SCC in this instance Through its dominant framing of the political narrative regarding the flood debate with the OPW as an institution becoming enmeshed and inseparable from its own plans. In truth it seems the fundamental differences in approaches to flood management between OPW and SCC made it almost inevitable that critique and diagnosis would stray into blame assignation. The entrenchment of positions over the years has essentially left little or no common ground between these two groups.

The reasons for this state of affairs are not lost on SCC. Interviewee 1 explained: *we've now understood that what we've done without really intending is to threaten what is currency in the civil service, which is the competency of the people who come up with schemes and deliver them and so on. By questioning things rather than people saying "oh well this is*

constructive criticism and we may have got it wrong" which they can't say politically they just get their backs to the wall and feel threatened."

It is hard not to sympathize with SCCs predicament. . While by no means conclusive, the impression taken of the OPW from this research is that of a highly problematic organisation, practicing a questionable style of heavily engineered, drainage focused flood management, that at least on casual inspection seems to be out of kilter with the new integrated, sustainable and adaptable flood management paradigms that should be the normative goal of a forward facing water management institution. The SCC's critique of the OPW, while dogged, has on the whole seemed reasonable. Perhaps it was at some point possible that this could have resolved itself constructively , with the OPW absorbing SCC perspectives as constructive criticism and using it as a catalyst of institutional realignment and double loop learning, but this outcome now seems unlikely.

5.6 Strategic mistakes

As this thesis has outlined, many characteristics, behaviors and qualities attributed to policy entrepreneurs by the literature. One however that has not yet been discussed is strategic thinking. Mintrom (2009) notes that "When people think strategically, they choose a particular goal and then determine the set of actions they will need to take and the resources they will require to pursue that goal" It seems apparent that SCC, perhaps naively thought that a good plan and popular support from the people would be sufficient. So far at least that has not been sufficient. This is realised by interviewee 1 when he surmised the following : *"Were focusing on public opinion at this stage but it isn't even assured that if every voter in the country agreed with us and was willing to write a letter on our behalf or on their own behalf really that it would have any impact, that the civil service would change their minds, their insulation from public opinion and public scrutiny really does seem to run that deep"*.

Such an outcome is regrettable, but perhaps also predictable. While SCC has been very successful in gathering public support, but as a strategy on its own it seems simplistic. Shortfalls in the utility of public support could have potentially been compensated for with a wider network of allies and partners, but either through misfortune or negligence these have not been developed. Without adequate support from adequate networks, reliable political intercession, or the institutional language necessary to mend relationships, SCC appear to have argued themselves into a corner.

6 Conclusion

The aim of this thesis was to gain an understanding of the nature of the SCC opposition group as a policy entrepreneur. In this regard the study proved more productive than had initially been hoped. Initial impressions indicated that this group represented an outstanding model of what a policy entrepreneur should be, however the question remained, if this was the case why had they not yet achieved their aims? While no definitive answer can be given, several theories developed from research which it is posited may account for this discrepancy, namely an unfortunate failure to develop strong relations and support networks within the governmental institutional realm, specifically inside the OPW itself and within the ranks of Government. Without these connections, the OPW has remained an outside player, and that has critically impacted its ability to develop change.

Much of policy entrepreneur theory relates to the question of the role of agency versus structure in policy formation.. As a policy agent it seems fair to say that SCC have and continue to be a highly organised and dynamic organization, but to date ultimately have failed to make any significant impact on policy. These two points seem to imply that despite their importance, there are limits to agency in structural systems. This is a prominent theme in academic literature on policy entrepreneurs, and a frontier of research. Mintrom and Norman(2009) suggest that case studies can generate important insights and help to build cumulative knowledge on this theme. While the exact position of the boundary between agency and structure is contextual and hard to pinpoint, indications are that SCC have nevertheless encountered it. Despite the enterprise and flair of the group, it appears simply that the conditions for transitional change within the system are not yet present, and that no moment of punctuated equilibrium is on the horizon.

There may still be time, the loss of a recent legal challenge taken against a preliminary component of the OPW plan in the Irish High Court is likely to be appealed to the Supreme Court. A win in this last court of appeal would represent a dramatic reversal of fortunes and might be enough of a shock to disrupt the status quo. In the face of increasing odds, the SCC continue to persist in their objections, hoping for such a moment of opportunity to arrive, but seemingly with an attitude that feels somewhere between grim determination and fatalism. One interviewee bleakly reflected that "*The shame would be if the walls had to be built to prove to people how devastating they would be*".

Looking at the longer generational term, that on which transitions occur, things seem similarly uncertain. It is entirely likely that the outcome of such an important project in Irish water management, may inform in some way an eventual transition. A victory for the SCC would be a dramatic result, and could act as a catalyst for change in the field of Irish water. Similarly a validation of the OPWs plans, unexpectedly hard fought and hard won could result in a retrenchment of the status quo. Even some outcome between these two extremes would just

as naturally have some form of consequences and effects in a complex system such as water, great or small, regardless of its shape. Whichever outcome is realised, it shall inform in a dialectical sense the transition that must eventually arrive.

7 Reflection

7.1 Reflection on study

A basic principle of case studies, stated by Yin(2018) is that case study must be bounded. Unfortunately this simple concept was not as fully absorbed until late into the drafting of this thesis. This oversight unfortunately resulted in much time and effort spent attempting to control for a complex, sprawling, panoramic study with seemingly multiple objects of analysis that continued to grow far beyond even the most optimistic estimates of manageability. On reflection any future study would be undertaken with this in mind.

One mistake identified in the production of this thesis was some deficiency in the collection of data, specifically regarding interviews. Despite initially being envisioned as a secondary component to document analysis, the interviews ultimately went on to provide an unexpected wealth of deep detail which brought significant texture and context to what would otherwise be a dry and uninteresting study. This unexpected benefit however was curtailed by poor choices regarding sample size. As a qualitative study, selection of appropriate candidates was prioritised over sample size, but to a degree that in hindsight was limiting. This sample size was also constrained by the relatively small active membership of SCC. Provisional interview requests were sent relatively early but were not followed through with until a very late stage of writing, by which time unexpected commitments prevented one identified candidate from participating. Reschedules or replacements could not be arranged. A broader sample of candidates interviewed at an earlier junction would provide redundancy and increase the chance of unexpected discovery in the research process in any future study.

As a novice researcher, easily the most daunting element of this thesis was the methodology. Despite a simple premise, gaining an understanding of the elements, terms and conventions involved was a long and anxious process, and the product of much dedicated study that while acknowledging its importance and necessity was deeply unwelcome at the time. I am thankful to academics in the field of nursing, midwifery and business studies in particular for relatively simple, practical definitions and explanations when they eluded me in the journals of policy studies and social science. It is felt with this new understanding of the basics of methodology, that any future study could be undertaken with more confidence.

7.2 Potential for future study

With regards the actions of Save Cork City themselves, this has been a snapshot in time. Their campaign continues on a number of fronts, this organisation and its context may change considerably before this policy dispute reaches its conclusion. This appears to be fertile ground for a more longitudinal case study. Such case studies are effective for capturing variables over an extended period of time which would be ideal for a case such as this.

Another significant research opportunity presents itself in the form of the OPW. Much has been written about this organisation in this thesis. As previously mentioned, the plan and institution are effectively enmeshed, and the institution therefore must be a critical element in the resolution of this policy. While a number of conclusions have been drawn regarding the OPW, its institutional conditions and its practices, much of this has been formed from its reflection in the comment and the experiences of the SCC in contesting with this organisation. Early prospective outlines of this thesis envisioned interview contributions from both SCC and OPW. Preliminary enquiries made to official LLFRS channels were not productive. Points of contact were identified to be employed by Arup, the OPW's contractor in this scheme. They stated any interview requests would need to be referred to the OPW, and seemed on the whole reluctant to discuss this politically charged issue with a stranger. If these barriers to research could be overcome and insightful research conducted with members of the OPW on such a sensitive topic, institutional analysis of the OPW, its motives and its actions during this policy dispute would provide fertile ground for further academic study.

While only passingly referenced in this thesis for reasons of scope. The hydrological environment of Cork city and its implications on water management remains a question that has yet to be definitively answered. As previously mentioned, Cork is prone to both alluvial flooding and coastal flooding. Floods have at times been the product of one or the other, often both. In the broadest sense, the OPW plan focuses on food defenses aimed at alluvial flood scenarios, the SCC tidal barrier obviously emphasises coastal defense. The division of and degree to which one type of flooding is responsible versus the other in a number of scenarios is a highly complex matter, and one probably not done service by either side in the flood debate. Also questions regarding the potential for improved floodplain management up-river and particularly management of upriver dams at Inniscarra, seem to have on the whole been afforded less attention in the debate over Cork flooding than perhaps they should have been. A small number of hydrological and engineering papers on the subject of Corks hydrology were found. Their contents are far beyond the comprehension of this researcher, but their existence is welcomed, and further contributions could only be of use.

A final and perhaps most critical avenue of study is an independent review of both the OPWs and SCCs flood plans. Several years of contest and controversy has seriously damaged the legitimacy of either plan, so intractable is this controversy and how entrenched positions have become. It seems that a genuine, comprehensive independent assessment and review could

provide confidence to this project, and act or contribute towards a definitive and final decision that would be accepted by the public and by the policy actors involved.

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Appendix A

INT: So firstly do you have any questions yourself about what we're doing or?

No not at all, you're doing research you can just do what you like

INT Well as you know we've already discussed the gist of the thesis , the idea of policy entrepreneurs and how that relates to the cork flood debate

and I suppose we are policy entrepreneurs? that sounds very good

Well policy entrepreneurs are defined mainly their tactics and i think maybe in this conversation we could see if we could identify if there's any similarities

Sure I mean we can do that

INT Firstly, would you like to introduce yourself?

Im john Hegarty I'm an architect involved in conservation in cork , and i've been involved with SCC for five years

INTAre you a founding member? How did SCC come about?

Well yes there are about 10 founding members and we sorta got together when we first saw the initial exhibition in the city hall which had you know quite graphic images of what was proposed, and i suppose at this stage we didn't know all the technicalities of drainage schemes or flood schemes or walls versus water storage and attenuation, but we soon learned very fast. Our first concern was on the historic city and the effect this would have on the historic city which was already at the time , not doing well, economically or socially really and we felt the impact of this would really be the a death knell for the city center in terms of it as a resource for the city and you know not making the best of a great asset you that defines the identity of the city and the identity of people in the city and has done for generations you know

So even now there's a lot of the city center you feel is just a route for cars and things like that when really it was a very important maritime trading city for the country and for the region, of

European significance really. That is reflected in the architecture and the engineering , the landscaping, the riverscape landscape and we don't make any of use of it economically or socially, we almost turn our backs on it really , and really the OPW scheme would mean that that would never be possible again , without spending untold millions if not billions on reversing what had been done so that's really why i became so important

INT: Ok, that brings up a couple of points. Could you talk very briefly about the composition of SCC, and what sort of network it is built for. You yourself are a spatial professional, is that typical of a lot of members of SCC or is it composed more of lay people?

Well it might be a mix really. Initially we were a group of architects and engineers, and as we got bigger and the public became more aware of the campaign. and got a lot of support there. We have a lot of support from people who are in business in the city center who are very supportive of us because they would like to see the city center be more like Amsterdam or Copenhagen, rather than a very modern industrialised place without an identity. We have a lot of creativity and support from artists and creators in the city. We occasionally have the support of local politicians but really only when it suits them *laughs* So it's fairly widespread . The funny thing about human nature is that people will form into camps, so if people feel part of a group that is for us or against us, it's hard to move them from that camp so there are people oppose what we're saying and it's very difficult to change their mind because they are set in stone and there are plenty of people who don't really know what's happening, they know we exist, that we want to save something, but not necessarily more beyond that. We work very hard to get our message across to these people in particular because it's such a global message as much as a specific message, and to get that out there. I mean we really want people to make their own decision but we want them to have the truth in order to make that opinion. We're quite diverse really.

Ok! so secondly, back to motives. Would it be fair to say based on what you've said that the initial reason for the foundation of SCC was out of a consideration and a desire to protect the maritime heritage of Cork?

Yes and that identity through the structures of the city, but also to protect what is an asset, an economic asset and an asset for social wellbeing

That has featured heavily in a lot of the public material produced by SCC, in interviews and opinion pieces , the contributions to the discourse that SCC has made, but there's also a second theme running through it and that's very much I suppose one of , against flooding and climate change and the like. I'm curious, to which degree the group is motivated by a concern to about heritage and to what degree is it informed by perceived deficiencies in the OPWs plan as a response to flooding

That's difficult because different people in SCC have different views and different input on different aspects. Early on we were very concerned with what the food walls that the OPW would propose, the effect they would have on the historic environment of the city ,and the potential to create an amenity of the historic environment and all that , but also as we got into

the nitty of the design for this scheme we found a number of flaws, what we thought were flaws anyway. We had climatologists and hydrologists looking at that , and they concluded that the OPW scheme wasn't really climate change ready at all , and that it could never do enough without almost constant extension and expansion of the walls that were proposed further within the city and causing further damage , and also that it would be leaving out so much of the city that would be left unprotected....it's very difficult to put any sort of figure on that....how we felt about the city and what it needed has grown every day and continues to go . We see the fact that sea level is rising and that there will be a great difficulty in cork in that, the rain which is increasing in duration and severity in cork and upriver throughout the country , it's far less predictable now and will continue to be in the future.... These things are things that have to be looked at fundamentally for the city and for the outskirts of the city also, a short term solution which really is developed on technology that's been abandoned all over the world which is basically building kilometers of flood walls ,which actually become more dangerous because the fundamental principle of building flood walls is you build them as short as possible because ultimately that reduces the possibility of failure. Winding them all through the streets of cork and on around the outskirts of cork for 15 kilometers is going to fail. You're saying to people that you're going to have to live behind flood walls, that the water level in the river will be higher than the ground floor of your house, and it will probably breach in the future. It's a dangerous scenario , thoroughly unsustainable.

Then we learned more about the speeding up the water in the river , which so so alarming because all other countries, they seem to be slowing down their water. Then you see how whole scheme affects wildlife, nature, and habits, the water quality and...it just goes on. In all honesty, we couldn't really find a good thing to say about it. Though if you wanted me to say something positive i could probably have a think and try

Maybe for the next thesis

(laughter)

It's ...in a broad sense it's all environmental protection. The protection of existing assets, the protection of the environment for people and their relationship with water but also the protection of their environment from flooding and from the elements and from climate change. The human environment, all of that. It's all environmental protection, affecting our future existence in Cork and in the planet....because if we dont across the board adopt policies that are going to protect us from climate change and habitat loss, our own habitat were going to have a problem. So it's our belief that nearly every aspect of this scheme or any other scheme should have to be so rigorously tested as to make it proofed against all these factors, In a manner that simply hasn't been followed in this case. I mean this is such a potentially damaging funnelling fast flowing water from the hillsides out into the sea through cities is a very dangerous approach. It's a drainage scheme, in fact it was originally labelled in the city hall as a the lower lee cork city drainage scheme. The name was changed because in PR terms, "drainage scheme" doesn't sound good, but that's what it is.

Ok that brings us onto another theme that we wanted to discuss. Difference is the outlook and vision between yourselves and the OPW. Firstly how would you characterise the relations between the OPW and SCC.

Oh I feel the office of public works is quite aggressive towards us, and the OPW has been questioned so much so publically and lost face through this process, which is regrettable and wasn't our initial intention but just developed that way that yeah they're holding on with white knuckles to their idea of building walls and searching for supporters, whether they exist or not or wethers there's only a few or not, they are searching hard for supporters so that they can make what they are doing legitimate

...what's really happened is that I think that they aren't used at all to be being questioned and being questioned is such a widespread manner. Once it became clear early on that we weren't going to be able to cooperate , we thought that all of that pressure in questioning would make them change what they are doing . What we've realised is.....that.... it's very hard to influence the civil service, because those that are working within the service can keep moving forward independently or whatever influence might come from the grassroots, from abroad and it makes no difference to their situation or status. So they keep going regardless and that can be a difficult thing to understand when you're trying to make a case .

Okay with regards to the OPW. Were discussing SCC and you've corrected me already that its not a monolithic block that there's a diversity of motive inside it, are there a variety of opinions within OPW , have you found any points of contact who are sympathetic to SCC, have you been able to make any beachheads or connections over say the last five years

We've had connections with the OPW, basically looking for information from them which they've provided to us which they've provided to us in a fairly friendly and collegiate manner . We have been told that there are people with differing opinions, yes , but it's not clear because of course people don't want to speak out against their employer. That's such a factor. Turkeys don't vote for christmas I suppose

You've got the heritage department, the state architect and you know there are other departments that would be highly supportive but of course it's difficult for them to speak out they have to project a show of force, they cant speak out against their own government

Turkeys don't vote for christmas I suppose

Well yeah I mean the city hall executive the civil service part of city hall have been very supportive of OPW , but what they are supportive of is the process which they exist within which is a government and local authority, civil service process. Something like the the walls plan is given to or imposed upon the civil service here in cork and they are told to integrate this into their policy, so in a way policy is coming from the top down and it isn't considerate or being

created by people locally. They have have your say days, and all these kind of things, they're all a sham. Nothing about this scheme is local , nothing about this scheme has changed because of what public opinion has said. Superficial things have changed ,window dressing but the scheme itself, which is what people fundamentally objected to, nothing has changed. The idea that , under the Aarhus convention that people locally should be designing their own cities and towns , and have great influence in that, that isn't happening. What's happening is one scheme is being designed, given to the people in an exhibition, they are told they can have their say, they do have their say and nothing changes. Its take it or leave it.

So youre saying its very hard to penetrate the bureaucracy

Well there's great support for each other within the civil service and the service in cork city and county have taken on board the ideas of the civil service in the OPW and they want to implement them and also the service in the local authority in cork goes and reports to Dublin on how they are getting on all the time and how they are implementing things and they don't like going back up to dublin and haven't achieved anything or this is in court or whatever so it's very difficult for them

We never understood you see at the beginning we naively thought that the betterment and the good of the city was what drove everybody but that isn't the case , people are driven by careers they are driven by a groupthink , they are driven by what their what those who are superior to them in the organisation tell them to do so some people are quite subservient i their behavior , and there isn't really a kind of open conversation where people are thinking "what's best" , that isn't how it works

<pause>

Save Cork city has been pretty innovative and creative in the tactics it's employed, it does a wide array of very diverse things from contesting in the planning process to PR orientated stuff and beyond, how did this come about. I suppose we do have one advantage , we have the disadvantage of not being politically hooked in but an advantage is that were mostly creative people with creative ideas about how to approach things and we've had a lot of great inspiration on how to keep this campaign competitive when were up against quite a lot , this sort of multi headed dragon of the civil service that will hardly change its mind . Our own creativity and the way we can present things is an advantage

<dog barks>

A couple of things stand out. Obviously the OPW has been active the bandon relief scheme and Skiberren and such and a lot of people have come to a very negative decision on those schemes

Bandon and skibbereen (and fermoy)

Well i mean observing Bandon and Skibbereen and Fermoy and the failures and the nature of what was presented to people in terms of imagery, you know "this is what you're gonna get" compared to what was actually build on the group, which was drastically different, I suppose they've been highly useful examples to give people in cork a context, and context they can relate to . I think they've been useful because I think generally people have been misled about the impact the walls would have on Cork city, and are still being misled. The shame would be if the walls had to be built to prove to people how devastating they would be.... yeah bandon skibbereen , clonakilty fermoy mallow, they've all been examples of what not to do really, examples weve been trying to show to people . We need to look at how are rivers are being fed, how water is being fed into our rivers and we need to look at schemes that don't necessarily harm people down stream of them because of course when you wall places off and contain water , its gotta go somewhere, and it goes to the next town or village down from where you do that and all these kinda bad practices that really are really disregarded in other countries are still going on in ireland. Fundamentally the EU has made a complaint to the Irish government about this , saying that there is no overriding body to implement the water framework directive it has signed up to about the protection of our waters and our water quality in broad terms. There's been no response to that, so it really falls to us to even demand that we follow through on the policies adopted and signed up to by this country.

The guys who are the drainage engineers in the OPW have caused a lot of the problems over the years by analyzing all of our meandering rivers and draining the land. They're the reason fast moving water flows through these towns because thats their experience and thats the point of view their coming from . We talk a lot about climate change being responsible, but there's so much what we've just done incorrectly ourselves, in modelling the landscape that has caused these problems. The fact that we've done this ,we should admit to it and try to repair the damage rather than blaming, which happens in spin doctor world all the time , "external factors" that seem to indicate that nobodies actually responsible , it's all just happening. Someone is responsible.

<pause>

At a basic level our approach was examining what the OPW was saying. For example "oh you couldn't have a tidal barrier because it cost too much" and we found from highly

republic sources that that wasn't true , or you know....I feel a lot of statements were made I suppose in haste when they saw us criticising the scheme initially they made a lot of statements. We just had to go through those statements and examine whether they were true or not. It seems complacent but on their part you got the feeling they genuinely were not expecting this" Even regards funding were now at a point in the group where were talking to a Climate change infrastructure finance fund companies in london that have financed similar projects in the past such as roads and bridges etc, and they are now looking at climate change infrastructure, and they're looking now seriously at how to get a tidal barrier project in cork would be funded so...and they would provide the funding, so you know keep on getting these kind of "the dog ate my homework" excuses from the OPW , when really the solutions are really quite simple. You can get the finance on the world markets to build a barrier, the costs are basically in the same category as what's proposed by the OPW plan, it isn't that expensive to build it and that it is a very practical item , it doesn't harm navigation or anything silly like that. On one hand you get the city hall saying "oh a tidal barrier would harm navigation ,but on the other hand they are planning on building a bridge down to the marina that would block all ships, boats and everything getting into the city. You really can't trust what's being said, and certainly at this stage we just don't trust what's being said. When we look into it, we find that many things being said are just untrue. That's just very alarming to us , but it also strengthens us , strengthens our commitment because we see there really is a problem in the system and we feel that we have the solution.

A lot of what your saying here revolves around the OPW as an organisation, would you consider policy change ie: a change in policy on the flood defenses possible without a fundamental change in the OPW.

Well the problem with flood defenses in ireland is that they there's no organisation set up in Ireland to look at flood defences in a holistic sense. Somebody decided to try and deal with flooding in the country by deeming that the drainage department of the OPW which had gone down to practically no employees and had no expertise , that they would be the group that deals with flood defenses, but water is a very complex thing . That was you know was not a good decision and that we really needed to look at this from the fundamentals, and of course at the heart of this is the attempt to adjust existing legislation to work with the directives that we have to adopt from the EU. Somebody tried to adapt the arterial drainage act to allow us to comply with EU directives, which is just impossible. It's absolutely archaic legislation and its in now way democratic in any way. So we have , there are a lot of problems in the systemWho would build the tidal barrier, what authority would do it , climate change infrastructure throughout the country who would do it . Does the department of the marine have authority when you get to a marine location and so there are many problems. The EU have said clearly an overriding body to deal with this and nobody

in the Irish government is listening to this or trying to work it out. The election of the OPW as some standin for a body is ridiculous and its towns and cities that are paying for the result.

What i think we need are just single minded great politicians or civil service officers to deal with these kind of issues, to make the space for this sort of thinking to nurture and to use the creative thinking that's required and that's rare ,it just doesn't seem to be happening. Career politicians don't tackle difficult problems, they want easy wins. In many ways... i mean you have the minister for the opw had people running from that ministry, nobody wanted it because it's such a complex problem, we understand that it's a complex problem and the issues that were raising are multifaceted but this is a major turnoff for politicians who just dont want be within a hundred miles of something like this There's dereliction and heritage protection combined with the economics, amenity and wellbeing business interests , insurance and property values protection of the people from flooding protection of the city from rising sea levels. So many complex issues all in the one problem , and of course the arterial drainage act in its arterial nature cant deal with this, neither can the drainage dept of the OPW , probably the one department out of the whoever could have been chosen to be singularly not right for dealing with a problem like this. The more creative in the opw , are keeping their mouths closed on this but would have an opinion on what is need, and for us what is needed isn more creative thinking, you have to imagine....you can't just crunch the numbers if the infrastructure is going to create can potentially have a hugely negative effect aspects of the society it serves. I thinks that's what happening. A balanced view of what's needed just isn't being created.

The creative minds that are needed for this just don't exist in the OPW and the interests of the private sector that the drainage dept are bringing in , are not the interests that should be of the public sector. That's natural, that's not even criticism that's natural, when you bring in the private sector to design things for a public authority, the private sector has to be managed so that the public authority gets the best out of it , but if that authority cant even establish what the right questions are to ask , and that is the case well thenthe whole systems fall apart. Very difficult for single politicians or even organisations to tackle an issue like this.

<break>

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<break>

So would you like to comment on the use of multiple venue

In candour some of it is our naivety. Initially, very initially we thought we could talk to the councillors and things would change, talk to the executive of the city and that things would change. It was a crash course in how things get done in this field. We're just moving from one thing group another, we eventually spoke to national politicians and we felt like things

might change butwhat we found was very little happened. people would support you very close to the election but after not much would happen. You get the odd dedicated politician who will try and do something for you but they're really up against it. So we had to move really to different ways of approaching the issue. Were of course in contact with other groups, were always attempting to learn and we think how else to get our message across. Were focusing on public opinion at this stage but it isnt even assured that if every voter in the country agreed with us and was willing to write a letter on our behalf or on their behalf really that it would have any impact, that the civil service would change their minds, their insulation from public opinion and public scrutiny really does seem to run that deep. Theres so many things that just go ahead go ahead, go ahead. They are just totally on a road and nobody can turn back because to turn back somebody has to say we were wrong ,and that seems to be very difficult for people to do. Were happy to say as an outside element that we were wrong about many things and even things that i've done but for some reason theres a culture within the civil services where nobody is in a position to be able to stand and say "oh i got htat wrong" thats a huge problem as well. The system once it gets going its very hard to get the breaks on"

To hang onto an idea that I think, I think they know is wrong. So now its become political and its about bloody mindedness, they know there are severe issues with their plan but theyre still spending a lot of money making people believe that everythings right and that they believe that its right. Its very circular whats going on, very entrenched. Certainly its upsetting for a lot of people in SCC to look at this and to say that this is how we do thinks and this is how people are governed in the republic, the emotional tollll has been significant

Well you have to keep a cool head , you can't take it so fully on board that it starts to affect your health but I know , and this is the absolute truth of it that it has affected the health of some people within SCC. The absolute powerlessness of it , the fact that the city just came in and said "yes OPW and do what you like" about ten years ago, as it has just dragged on for people. Its also by the way been hugely negative for investment in the city centre, nobody wants to invest in such an uncertain climate , and the city and the OPW wont even recognise the impact of this very idea on the wellbeing of people and on the economy. I mean look at the way care is conducted in this country look at all the scandals ion our culture and in our country that people are becoming aware of that have happened of the years. And then we have thousands and thousands of people in the center of cork being told were going to take your city center to pieces. If you wanted to be like amsterdam, you can forget about it were not interested.

Int: Well certainly the tone of alot of the communications is quite notable, a lot of adversarial language. Do you think there was a way to have worked more collaboratively with SCC?

I suppose youre aware of the comments made by the minister? the blood on the hands?

Int: I was yes

Yes that was the minister, which is remarkable , really crazy that he can say something like that in public office , a minister should be doing should putting the hand of friendship out to the people, to concerned citizens which is what we are. The fact that the minister is attacking us is but Even when Cork flooded last winter, the minister was blaming SCC but there wasnt sandbag put out for people, there were no pumps put out on the street and it looks for all purposes that the city was left to flood. And the minister down the next day having his photograph taken within twelve hours of the even or less, and it just....seems outrageous, highly corrupt, and yet.... I know that the minister would defend what he says and his action but i think...it is what it is. And the fact the Judge made comment against the standard of conduct is a good thing..against that kind of behavior if you look at the flood defenses that the minister is sanctioning theyre all highly dangerous, but its not something that we would be putting out in the media because thats alarmist, why would we be saying this were not trying to argue that the minister is killing people but the insinuation from a government minister is very worrying

What do you think SCC has dont to provoke this sort of reaction

Oh nothing weve, we were extremely surprised by this , shocked. When we first went we went to raise our concerns and talk to the OPW thinking that we would have a professional adult conversation about what was going on. We definitely are surprised by this , but at the same time , weve now come to understand that what weve done without really intending is threaten what is currency in the civil service which is the competency of the people who come up with schemes and deliver them and so on. By questions things rather than people saying "oh well this is constructive criticism and we may have got it wrong" which they cant say politically they just get their backs to the wall and feel threatened. Thats a part of how these organisations are managed, if you give these people task management and you say you have to have this done by the end of the week and you have to have it done as that and that will reflect how you will progress in the organisation with everythinf driven in that way, well people are going to get their backs against the wall, theyre not going to see things as constructive criticism the designed and managed is creating very poor quality decisions for our entire country because its you know the process is being driven by this kind of management system that isnt working.

Its actually the root of the aggression towards us, i mean were just citizens saying look "we want to defend our homes" "we want something better" "we dont to have our lives and our investments degraded" to people who dont seem like they want to listen to one word we have to say its quite extraordinary.

Considering whats in front of you, how do you see any change occuring?

Well you can..one of the things thats happening at the moment is.... well... if just one thing could change or give way we feel we could start to look at this in a more holistic balance way and we could start to employ a creative for examining this thing. In other cities they are connecting people with the water, the river courses , their water heritage their increasing value of thier build environment through this vastly throught this methods. Thats only happening because there are open creative thinkers behind those decisions both thinkers who create those solutions and then take them to management, and management , they often dont know one way or another, they have to take advice from their officers, but as we currently dont have creative officers that can influence decisions, i mean it is a drainage department in the OPW is one thing but even within the city council at the moment so because its not there , the management have no decisions to put forward, management are only promoting decisions that are coming from the top down, theres no local democracy, no creative thinking that we can say is going to revolutionse what Cork is or could be. Its just being sleptwalked into this plan, Our dream of cork being amsterdam or copenhagen is very far off because of a lack of creatively is fairly total.

What youre describing almost sounds like a tipping point in the structure of decision making is this the strategy of the OPW

Well at one point I would have agreed with you but in the current day i feel that there cant be a tipping point while they people who are in the civil service now continue to be there and what you might happen, is that if you can get an exceptional person within the structures , who can see the sense in a different way of communicating with people or implimenting policy, thats when things change. A change of government might change this, a change of the senior executive in the city council . Certainly in the past weve had very enlightened city managers in the past who have changed policy for the city in a hugely beneficial way, it basically comes down to circumstance , you might get a person in government who is a ware that this is wrong and do something about it when its right for them or something like that...but i dont think theres a tipping point for changing the design of the civil service, thats a very big job. I dont know if thats going to happen for Cork.

Int Is there anything different that you could have done in your opinion to bring this about

Oh look there have been mistakes absolutely ,but honestly I think anyone would say we've tried to engage with this process in a dedicated way, in a fair way and in a creative way. Really were just a little surprised and disappointed by how little weve been offered in return.

Are there maybe any strategies you would have performed differently? Or choices? Plenty , but only to save us from waste our time. Im exceptionally proud of the work weve done so far, and we'll continue to do despite the setbacks this month, were going to go on.