

**FROM A CLASH OF SOCIAL ORDERS TO A LOSS OF DECIDABILITY IN
META-ORGANIZATIONS TACKLING GRAND CHALLENGES: THE CASE
OF JAPAN LEAVING THE INTERNATIONAL WHALING COMMISSION¹**

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Abstract

Meta-organizations are crucial devices to tackle grand challenges. Yet, by bringing together different organizations, with potentially diverging views on these grand challenges, meta-organizations need to cope with the emergence of contradictory underlying social orders. Do contradictory orders affect meta-organizations' ability to govern grand challenges and if so, how? This article investigates these essential questions by focusing on the evolution and intermeshing of social orders within international governance meta-organizations. Focusing on the International Whaling Commission and the grand challenge of whale conservation, we show how over time incompatible social orders between the meta-organization and its members emerge, evolve and clash. As our study shows, this clash of social orders ultimately removes the 'decidability' of certain social orders at the meta-organizational level. We define decidability as the possibility for actors to reach collective decisions about changing an existing social order that falls under a collective's mandate. We argue that maintaining decidability is a key condition for grand challenges' governance success while the emergence of 'non-decidability' of controversial social orders can lead to substantial failure. We contribute to both the emerging literature on grand challenges and organization theory.

Keywords

- Social order,
- meta-organization,
- grand challenges,
- governance,
- marine ecosystem,
- decidability

INTRODUCTION

Grand challenges denominate fundamental problems of modern society – e.g., climate change, aging societies, exploitative labor, biodiversity loss – which can be understood as “specific critical barrier(s) that, if removed, would help solve an important societal problem” (George et al., 2016, p. 1881). We suggest that to better understand these fundamental problems, we can relate these to one of sociology’s most fundamental research objects, i.e., the problem of social order (Abercrombie et al. 2006; Hechter & Horne 2003). The notion of social order refers to the general “ordering” of the world, which can be broadly defined as relatively stable social structures or temporarily fixed meanings – such as values, norms, rules, hierarchies, rituals, or acquaintances – that lend the world a degree of expectability (Johnson 2000; Morgner 2014). Grand challenges affect existing social orders, are often produced, reproduced and reinforced by these, and can be tackled only through the changing of social orders so that these contribute to solving the problem at hand. At the same time, social orders provide the basic context in which grand challenges unfold and solutions for these challenges can be developed.

We draw on Ahrne and Brunsson (2011) and their distinction between two fundamental forms of social order, i.e., purposefully constructed social order that is created through decisions, and self-emergent social order that is non-decided. Social orders constantly intermesh, particularly in the context of organizations. Organizations are social systems that couple and shape a multiplicity of social orders (Laamanen et al., 2020). Many organizations moreover tend to organize in so-called meta-organizations, i.e., organizations that have other organizations as their members (Ahrne & Brunsson, 2008). Hence, through meta-organizations, organizations and social orders are “layered” since these integrate (on a meta-level) not only multiple forms of social order but also multiple organizational levels of social order as well (Grothe-Hammer et al., forthcoming). Meta-

organizations provide a space for their member organizations to make decisions collectively on social orders such as rules, regulations, or monitoring programs that serve as structures for their members (Ahrne et al., 2016). Hence, these meta-organizations serve as global governance devices that produce certain social orders through collective decisions, often intertwined with certain contradictory, emergent – in particular institutional – social orders stemming from their members.

Recent literature has emphasized the crucial role international meta-organizations play when it comes to tackling global societal challenges (Berkowitz et al., 2020). Examples such as the United Nations Environment Programme or the European Women’s Lobby have been quite successful in tackling the ozone hole or promoting women’s rights (Andersen & Sarma, 2012; Karlberg & Jacobsson, 2015). Yet, we still understand relatively little about how the embeddedness of social orders affects meta-organizations and their ability to tackle grand challenges.

This article investigates how different kinds and levels of social order are handled in international meta-organizations dealing with grand challenges. Specifically, we are interested in how different social orders interfere with each other in the process of meta-organizing, and which problems can occur that might prevent a meta-organization from effectively tackling a grand challenge. To do so we take a look at the International Whaling Commission (IWC), which is an international governance device dedicated to sustainably managing whaling and conserving whales on a global scale. Whales play an important part in the functioning of marine ecosystems. Unsustainable whaling practices have been proven to trigger ecosystems’ collapse (Springer et al., 2003), and can thus have broader impact on humans (Pörtner et al., 2019). In the context of increased pressures on marine resources, ocean acidification, warming and pollution, and more generally climate urgency, marine ecosystems’ conservation constitutes a grand

challenge, in which sustainable whale population management plays a key role (Estes, 2016).

In the past decades, the IWC has been crucial in successfully tackling this global challenge of whale management. Since 1982 when the IWC decided to pause commercial whaling, some whale populations have recovered significantly. However, in 2018, Japan, one of the major pro-whaling nations, left the IWC to resume commercial whaling in its territorial waters. Therefore, the multi-national management of whale conservation and sustainable whaling practices suffered a major setback. While Japan is still bound to international law and regulations, it is now reopening and managing commercial whaling autonomously (Kojima, 2019). Japan's exit from IWC membership has disrupted the internal IWC order as well as global orders. This withdrawal significantly undermines international governance efforts to tackle such a global societal challenge and poses global threats to marine ecosystems. Through a better understanding of the organizational challenges that the IWC faced in globally governing sustainable whaling and whale conservation, we can gain important insights into what factors might be relevant in successfully governing grand challenges on a global scale.

By engaging with theories of social order and specifically putting on a meta-organizational lens, we show how, in the IWC's case, different types of social orders on the different organizational levels at play evolve and interact over time. Our article illustrates how over time incompatible social orders between the meta-organization and its member organizations as well as among those member organizations ended up clashing. This clash of orders led to abrupt, decided changes of meta-organizational orders that ultimately rendered some crucial orders unchangeable. Social orders that had remained decidable for decades were abruptly rendered non-decidable and instead locked permanently as they were.

We contribute to the literatures on both grand challenges and the sociology of organization by conceptualizing decidability and non-decidability as properties of existing social orders. In the context of a meta-organization, decidability, hence, means the possibility of concretely reaching collective decisions about changing an existing social order that falls under the collective's mandate. Non-decidability, on the other hand, describes the absence of the possibility to reach collective decisions about changing a social order that falls under the meta-organizational mandate. We argue that meta-organizational decidability is necessary to ensure the continuity of collective action in governance-mandated meta-organizations. Decidability enables members' implementation and compliance with meta-organizational rules even if there is no consensus about them. Non-decidability, however, may force members to exit and may lead to meta-organizational failure to govern grand challenges.

THEORETICAL FRAMING

In this section, we want to relate the problem of social order in the context of meta-organizations with the fundamental grand challenges of modern society. To motivate our research question, we present three basic assumptions: first, that social orders can be either emergent or decided, second, that social orders are embedded in organizations and meta-organizations, and third, that grand challenges both require social orders to be solved and raise specific issues.

Decided and non-decided social orders

The question of what social order is and how it comes about has virtually always been an integral part of sociological research (Abercrombie et al. 2006; Hechter & Horne 2003; Turner, 2013). A widely-accepted assertion is that it is possible to distinguish between two fundamentally different forms of social order, i.e., some kind of spontaneously and

unintentionally formed order on the one hand and some kind of consciously constructed order on the other (Hechter 2018, p. 24; von Hayek 1991; Williamson 1991; Luhmann 2020; Elster 1989). Ahrne and Brunsson (2011) recently added to this theory tradition by proposing a similar binary typology of social orders, i.e., the distinction between “decided order” and “emergent order”. In particular, Ahrne and Brunsson assert that it is possible to ground the distinction between the two forms of social order in the question of decisions. According to them, the consciously constructed form of social order is always one that is created through decisions (decided order), while the other form of social order is one that is basically not decided, i.e., when it emerges on its own or when it is taken for granted as a behavioral premise (emergent order).

One of Ahrne and Brunsson’s main contributions to sociological theory has been not only to outline and describe these two fundamentally different forms of social order, but moreover to offer a novel and innovative meta-theoretical foundation for the classic binary distinction. Moreover, Ahrne and Brunsson’s conceptualization of social order implies that social order is processual in nature – i.e., social structure is produced and reproduced in social operations. Social order as such exists only in the process. Social orders enable and facilitate certain activities while these very activities produce, reproduce, and change these orders in the process.

Emergent orders emerge either spontaneously – e.g., in unplanned face-to-face interactions (Goffman 1967) – or develop slowly over time, thereby becoming taken for granted and constantly reproduced without being questioned – e.g., traditions, beliefs, taken-for-granted status orders. The latter variant of emergent orders can thus be called “institutional orders” (Czarniawska, 2009), since they are accepted as premises for behavior without having their validity questioned (Jepperson, 1991). Institutional orders can emerge from spontaneous orders as well as from originally decided orders. Something

that developed spontaneously in an instant (e.g., a nickname) might become taken for granted over time; and what once was decided (e.g., a new product) might also become so taken for granted that it is not a possibility anymore to redecide it.

Decided orders can be characterized as explicit, specific, potentially abrupt, accountability-producing, and inherently provocative. Decided orders represent those decisions that become accepted by others as behavioral expectations for at least some time. They often take the form of rules, goals, hierarchies, memberships, monitoring instruments, and sanctioning mechanisms (Ahrne & Brunsson, 2011). Decisions about such orders can be made in an instant and can become quite specific. However, a decision always implies the selection of a course of action among several alternatives. Decisions therefore by nature require that one must justify the selection of one alternative over another (Brunsson & Brunsson, 2017).

Decisions and decided orders are paradoxical: upon being made, a decision discloses discarded options (Luhmann, 2018). Hence, one peculiarity of decided social orders is that in their making they are always accompanied by the simultaneous creation of disorder (see Vásquez et al., 2016). Deciding on certain elements of social order always fixes and opens up meaning at the same time, for a decision selects one option while making other options visible as well (Grothe-Hammer & Schoeneborn, 2019). As a result, decisions and decided order run the inherent risk of remaining mere “attempts” (Ahrne & Brunsson 2011, p. 8). So how do decided orders become accepted as premises for behavior in the first place? One general answer to this question is: through organizations.

Organizations are social systems consisting of distinctive processes of action or communication processes (Luhmann 2018; 2020). Organizations can be seen as nexuses of social orders. Many different kinds of social orders come together in an organization. On the one hand, they serve as premises for the organizational processes while, on the

other hand, they are being produced, reproduced, maintained, changed, or discarded in these processes as well. Thus, all kinds of social order are being coupled within organizations and via organizations and their processes (Laamanen et al. 2020). For instance, decided orders build on institutionalized orders and facilitate spontaneous orders that in turn might facilitate new decisions on decided orders, which might become institutionalized over time, and so on.

Organizations are faced with the challenge to cope with this myriad of social orders through their decisions. Through decisions, organizations can couple or change certain orders or create new (decided) ones. Think of the example of a university course. The course is a combination of decided orders (combining certain decisions about place and time, the teacher, the admitted students, the course theme) that builds on institutionalized orders (e.g., the general understanding of what a course is, or the taken-for-grantedness of having chairs in a room with a board). Based on this combination of orders, other spontaneous orders emerge (e.g., certain interaction orders and statuses, running gags, etc.), and so on. Organizations can make decisions on some social orders that affect which social orders are coupled in which way. However, organizations cannot decide everything and they cannot prevent non-decided orders from appearing or make them disappear. In some cases, organizations can also lose their ability to decide on certain forms of social order at all, i.e., when social orders become overly fixed to one meaning (Grothe-Hammer & Schoeneborn, 2019).

Meta-organizations as complex nexuses of embedded social orders

The complexity of intermeshing orders increases even more in cases in which organizations organize each other in a meta-organization. In such cases, another layer of social orders is put on top of the already existing social orders. Most importantly, meta-organizations bring in a layer of “meta-organizational decided orders”, which we define

as those decisions that are collectively acknowledged as activity premises by member organizations and which concern and guide the activities on the meta-level.

Meta-organizations are organizations in which members are themselves organizations. As organizations, members maintain their own identities, agendas, resources, or organizational values (Ahrne & Brunsson, 2008). By nature, meta-organizations may therefore constitute multi-referential organizations, that bring together non-convergent or even contradictory references and logics (Apelt et al., 2017). In addition to and resulting from these two central parameters - i.e., being an organization and having organizations as members - meta-organizations present other features that may distinguish them from organizations that have individuals as members, thus requiring a different theoretical apparatus (Ahrne et al., 2016; Berkowitz & Bor, 2018).

Meta-organizations are more often than not partial organizations, i.e. they lack one or more decided orders that are otherwise typical of organizations such as hierarchy or central sanctioning power (Ahrne et al., 2016; Berkowitz et al., 2020). They also create a forum among members, consisting in an inter-organizational space in-between, where decision-making is possible (Berkowitz, 2018; Berkowitz et al., 2020). Because they gather potentially competing organizations, meta-organizations also facilitate coopetition among members (Berkowitz, 2018; Berkowitz et al., 2020).

Meta-organizations constitute a peculiar decided order because through them, members internalize their organized and institutional environment (competitors, stakeholders, governments) (Ahrne & Brunsson, 2008; Valente & Oliver, 2018). Yet at the same time, members still maintain their proper decided, organizational boundaries, their specific internal coordination mechanisms, their social norms that may vary from one organization to the next and may even conflict with one another.

Meta-organizing collective action raises very specific issues in terms of joint decision-making capabilities, accountability, and the maintenance of internal social order. These issues are even more salient in governance-mandated meta-organizations dedicated to grand challenges, because grand challenges themselves raise obstacles – such as changing social norms – to collective decision making.

Grand challenges and their implications for meta-organization

Grand challenges such as climate change, aging societies, or gender discrimination are always at least partly a result of existing social orders – and perhaps even the manifestation of these. As such, they can be tackled only by changing existing orders effectively. Simultaneously, social orders provide the basic context in which grand challenges unfold and solutions for these challenges can be developed. Yet grand challenges are themselves conceived differently by different stakeholders. These conflicting views and values may therefore affect how knowledge and solutions for the transition are developed (Caniglia et al., 2021).

Because of their complexity and interdependencies, grand challenges are unlikely to be solved through traditional forms of organization (Arciniegas Pradilla et al., 2021; Doh et al., 2018; Ferraro et al., 2015; George et al., 2016; Kaufmann & Danner-Schröder, forthcoming). Recent works have emphasized the multiple contributions of meta-organizations as one innovative mode of organization to tackle grand challenges and sustainability issues (Berkowitz, 2018; Berkowitz et al., 2020; Carmagnac & Carbone, 2019; Chaudhury et al., 2016). Indeed, meta-organizations like the International Whaling Commission, the World Meteorological Organization, the United Nations Environment Programme, or the European Women’s Lobby, have been crucial in tackling such diverse challenges as the ozone hole, environmental pollution, species extinction, and gender inequality. Tackling social and environmental problems seems to have become an

objective of certain meta-organizations only in the second half of the 20th century (Berkowitz & Dumez, 2015). These meta-organizations enable member-organizations to develop joint solutions, self-regulation or capacity building for sustainability (Berkowitz et al., 2017; Chaudhury et al., 2016; Karlberg & Jacobsson, 2015).

Multi-stakeholder meta-organizations are particularly well positioned to address grand challenges because they allow member organizations to draw directly on diverse expertise and reflect diverse interests and complementary perspectives (Berkowitz et al., 2020; Berkowitz & Souchaud, 2019; Carmagnac & Carbone, 2019). These multi-stakeholder meta-organizations gather players from different spheres of society, e.g., public administrations, nongovernmental organizations, economic players, and scientific institutions. Yet from that perspective, meta-organizing for grand challenges also poses complex organizational problems, such as geopolitical roadblocks, disagreement on priorities, or free rider issues (Berkowitz et al., 2020).

Grand challenges will be conceived differently by different stakeholders but require collective action at different levels if problems are to be solved. If meta-organizations in particular are needed to govern grand challenges but at the same time the underlying social orders have different views on these, how do meta-organizations cope with the emergence of contradictory social orders and how does that affect their ability to meet grand challenges? Few works have examined closely how governance-mandated meta-organizations cope with contradictory social orders among their members, how different social orders may interfere with each other in the process of meta-organizing, and how this might prevent a meta-organization from effectively tackling a grand challenge.

METHODOLOGY

Our objective is to investigate the creation and maintenance of social orders in meta-organizations, and more specifically how meta-organizations cope with the development

of contradictory social orders. We focus on this issue in the context of grand challenges governance. Given the nature of this pervasive phenomenon, an in-depth single case study aimed at theory building appears to be the most appropriate methodology (Eisenhardt, 1989; Yin, 2012). In-depth single case studies can be fruitfully used to analyze how organizations contribute to the mitigation and solution of grand challenges (Arciniegas Pradilla et al., 2021; Karlberg & Jacobsson, 2015). In addition, focusing on a single case study enables us to investigate this complex phenomenon from different viewpoints without having to choose beforehand which types of data to collect (Eisenhardt, 1989; Yin, 2012).

Case selection

To address our research question, we chose to focus on the International Whaling Commission (IWC) and the issue of whaling, which has environmental, social, political, and economic implications, as it provides an exemplar of social order challenges. This case is particularly appropriate for two reasons. First, whales play a crucial role in the functioning of marine ecosystems, and unsustainable whaling practices can potentially trigger a collapse of these ecosystems (Springer et al., 2003). Recent research also demonstrates that whales contribute significantly to climate change mitigation (Chami et al., 2019). Second, the IWC is a long-standing meta-organization that has successfully contributed to whales' population recovery but had recently faced significant organizational challenges, culminating in Japan's exit, thus undermining global governance efforts.

The IWC is a meta-organization with 88 nation states as members and seeks to address one specific grand challenge, the overexploitation of whales. The protection of whales is crucial for ecosystem-level marine conservation and sustainable management and therefore for humans (Springer et al., 2003).

Founded in 1946, the historical goal of IWC has been, until recently, the sustainable global management of whaling stocks based on scientific evidence. In other words, the collective goal was initially to facilitate the exploitation of whale stocks. Over the past years, however, and as we will discuss in the analysis, the collective goal has implicitly changed both to whale conservation, preventing the exploitation of whales at all, in seeking answers to environmental issues (overexploitation and the effects of whaling on ecosystems) and to social change towards the protection of whales.

Any country can become a member of the IWC and there is no membership requirement apart from formally agreeing to the 1946 convention (IWC, 1946). Members have a status of “Contracting Government” and delegate a “Commissioner” who represents them (IWC, 2018). Members pay a fee to the IWC (IWC, 2018). In addition, scientists participate in the Scientific Committee to provide scientific evidence for global management. They meet annually and produce an annual report (Vernazzani et al., 2017). While direct members are states, this meta-organization can be characterized as a multi-stakeholder due to the participation of both scientific institutions and government representatives from diverse countries (Gillespie, 2001).

Data collection and analysis

Data collection

This article relies on a qualitative, in-depth analysis of the evolution of social orders in the IWC. To conduct this analysis, we seek to identify when collective decisions can be made, what they are about, when they can no longer be made, and under which conditions.

We collected primary and secondary data to triangulate our results (Eisenhardt, 1989; Gibbert et al., 2008). We first collected primary data drawing on different types of decision archives available on the IWC website: minutes of meetings, formal decisions,

scientific reports, press releases, and other documents that allow one to observe the decision-making process at the meta-organizational level (see Table 1). Different bodies in the IWC are taking decisions or informing them, from the ‘Commission’ to the ‘Scientific Committee’, and we collected documents from these different bodies. These documents are ideal to review historical decisions, especially in a historical perspective like ours, where it would prove difficult to reconstitute the evolution of decisions and the constitution of social orders based on the memory of individual participants. Besides, individual participants are regularly renewed and would therefore lack a holistic comprehension of the case. In addition, the meta-organizational nature of the case raises specific methodological issues that cannot be solved by interviews with individuals (Berkowitz & Dumez, 2016).

We also collected existing and peer reviewed analyses of the IWC, which is a well investigated meta-organization (as synthesized in table 1), allowing us to enrich our analysis and to triangulate our sources. In total, we collected 35 IWC archives, one International court of justice report of judgement, 12 existing analyses of IWC, for a cumulative number of 2,420 pages. The richness and diversity of documents were sufficient per se to facilitate a rich reconstitution of our case, without needing additional information through interviews.

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Data analysis

Our analytical strategy aimed to identify and frame the emergence and evolution of social order(s) in the meta-organization. To do so, we made an inventory of key decisions over time and identified to which specific form of social order they belonged. We first selected decisions that are connected to the official goals of the meta-organization, with the

assumption that growing votes in favor of a decision against the existing goals hinted at the emergence or reinforcement of a new social order. For that purpose, we listed the number of votes in favor of each key decision. We then sought potential “tipping points”, i.e., the point when the order seemed to tilt from one type to another.

To analyze, structure, and present our findings, we developed a historical narrative of the case, i.e., a “construction of a detailed story from the raw data” (Langley, 1999, p. 695). This narrative is the first main output of our analysis: it enables us to understand ourselves and then to show the reader the dynamics of the meta-organization’s decided order, while at the same time revealing and breaking down the complexity of the case (Lincoln & Guba, 1985).

To build this narrative, we read the collected material about the IWC individually, separately, and repeatedly. We met several times to discuss the different milestones in the IWC history, the key decisions and tipping points of the social orders in the meta-organization. We also discussed our analysis of the key events and of the different orders emerging from the material and how to interpret them. An early key event was Japan’s exit from the organization in 2018. Starting from there, we moved back in history and sought to understand what had led to this exit and how it related to various forms of social order within the meta-organization.

Constructing the narrative also served as a “data organization device” that then guided our more conceptual analysis (Langley, 1999). Based on the narrative, the next step was to unpack 1) the initial social order in the meta-organization, 2) the emergence of an institutional order within the meta-organization that contradicts the social order, 3) the clash of orders within the meta-organization that leads to 4) the creation of “non-

decidability” and the exit of Japan. The next section starts with the narrative and then follows these three points.

FINDINGS

Our article seeks to draw a picture of the different social orders within the IWC and how these orders were created and related in the organizational processes over time. To do so, we make a crucial distinction between decided and institutional social order within the IWC. Our findings are organized in three parts. First, we present the historical narrative of the case by describing the IWC’s history where decisions on whaling are concerned, with some key elements of context. Then we analyze the dynamics of the creation and evolution of social orders in the meta-organization. Finally, we unpack the notions of decidability and non-decidability of social orders.

IWC history: pro vs anti-whaling nations and the evolution of the IWC’s decisions on whaling

Looking back at the meta-organization’s decisional history, i.e., the key decisions taken by the meta-organization, the IWC was established in 1946 for the purpose of the “proper conservation of whale stocks” and the “development of the whaling industry” (IWC, 1946, p. 1). It holds annual meetings as well as some special sessions for working groups. Table 2 synthesizes the key dates that are then analyzed in the remainder of this section.

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Putting whaling on hold until further notice in the 80s

In the period 1973-1981, many whale species were identified as endangered species (*Convention on International Trade in Endangered Species of Wild Fauna and Flora*, 1973). At the time, the IWC was repeatedly criticized for unsustainable whaling management. Non-Whaling and even Anti-whaling nations joined the meta-organization

and started to gain a majority. The United States of America in particular, historically a pro whaling country, became one of its strongest opponents.

In 1982, the IWC approved the first “Moratorium” on commercial whaling with full effect from 1986. It set commercial catch limits to zero to allow whale species to recover:

“Notwithstanding the other provisions of paragraph 10, catch limits for the killing for commercial purposes of whales from all stocks for the 1986 coastal and the 1985/86 pelagic seasons and thereafter shall be zero. This provision will be kept under review, based upon the best scientific advice, and by 1990 at the latest the Commission will undertake a comprehensive assessment of the effects of this decision on whale stocks and consider modification of this provision and the establishment of other catch limits.” (International Convention for the Regulation of Whaling, 1946, Schedule, 2018 paragraph 10 (e) page 5)

The decision is not consensual, as 25 countries voted in favor, seven against (Brazil, Iceland, Japan, Norway, Peru, South Korea, Soviet Union), and five abstained (Chile, China, Philippines, South Africa, Switzerland). While different factors came into play, the moratorium left open the possibility that catch limits might be increased in the future:

“There were a number of factors involved in this decision. These included difficulties in agreeing what catch limits to set due to scientific uncertainties in the information needed to apply the management procedure then in place, and differing attitudes to the acceptability of whaling. The wording of the moratorium decision implied that with improved scientific knowledge in the future, it might be possible to set catch limits other than zero for certain stocks.”(The Revised Management Scheme, 2020)

Japan, Norway, the Soviet Union, and Peru filed a formal complaint, arguing that the moratorium was not based on scientific evidence delivered by the Scientific Committee of the IWC – beyond the sole identification of endangered species. Forced through international political pressure by the United States of America, Japan soon withdrew its complaint and later began scientific whaling, which remained an authorized form of whaling. The successful implementation of the moratorium was due mostly to the United States, which threatened to sanction countries engaged in illegal whaling, especially by cutting down fish importations. Simultaneously, non-governmental organizations (NGOs) such as the World Wildlife Fund (WWF) contributed to raising awareness about the impact of commercial whaling in society. They did so by developing a strategy of ‘totemization’ of whales, beyond any scientific rationale about whaling (Kalland, 1993). After the 1970s, whales “turned into totems, thus dichotomizing mankind into “good guys” (protectors of whales) and “bad guys” (whalers) (Kalland, 1993, p. 124), so that “Not killing whales’ became the *default* option” for the anti-whaling nations (Bailey 2008, p. 299). In other words, NGOs highlight a symbolic value of whales and the necessity of stopping whaling. Further, NGOs also play an active role in increasing the membership composition towards anti-whaling nations (Mulvaney, 1996).

Failed attempts at re-organizing whaling internationally in the 90s

In 1994, the IWC adopted the Revised Management Procedure (RMP) to calculate sustainable catch limits while developing an inspection & observation scheme (Revised Management Scheme, or RMS for short). A working group for the RMS was established to develop a monitoring system and to ensure that total catch limits are respected. But the negotiations appeared to be extremely difficult. Over the next few years, several new working groups were created to work on different problematic areas, such as catch verification and compliance. However, in 2007 the RMS development reached an

impasse due to political disagreements regarding the question whether whaling can be sustainable at all. Over the previous two decades several issues had been introduced as possibly relevant in this respect, such as environmental and climate change during the 50th annual meeting of the IWC in 1998, as well as chemical pollution, ozone depletion, and marine noise (Burns, 2000, p. 336).

Parallely, Japan continued to develop a legal program of scientific whaling. A caveat is in order here. The IWC has allowed two types of whaling: aboriginal and scientific. Indigenous people can conduct aboriginal whaling for cultural reasons. Aboriginal whaling is strictly monitored to ensure the sustainability of as well as a minimal respect for animal welfare (Reeves, 2002). Scientific whaling is authorized for research purposes at the discretion of the member countries. However, there were growing doubts concerning Japan's use of the program for research purposes.. In 2010, two anti-whaling countries that are members of the IWC, Australia and New Zealand, accused Japan of breaching its obligations vis-à-vis the IWC. In 2014, the International Court of Justice ordered Japan to stop its program in the Antarctic Ocean (*Case concerning Whaling in the Antarctic (Australia v. Japan: New Zealand Intervening)*, 2014; Gogarty & Lawrence, 2017). Japan resumed the program in 2016, albeit with a drastic reduction of catches.

Recent developments at the IWC: From whaling management to whale conservation.

Since 2018, certain whale species have recovered and are no longer considered endangered. This is acknowledged by the Scientific Committee of the IWC² for Minke Whales and Bryde's Whales³ as well as for parts of the Humpback Whales population:

² It is noteworthy that the Scientific Committee had acknowledged this in general since the early 1990s but only to a very limited degree. In 1993, the Chairman of the IWC Scientific Committee even resigned in protest against the IWC's refusal to resume commercial whaling (Bailey 2008).

³ <https://iwc.int/status>

“In central and western areas [Humpback Whales] have recovered to perhaps pre-exploitation levels and number over 12,000 animals. Less is known of the abundance in eastern regions but almost 5,000 animals are estimated in the Norwegian and Barents Seas. They have been increasing off West Greenland...They are vulnerable to entanglement.” (Intersessional Report of the International Whaling Commission, 2018, p. 15)

As a consequence, in Florianopolis, Brazil, at the 2018 IWC summit, Japan initiated a proposal to create a new committee for setting whaling quotas to make catch limits decidable again. The objective was to make commercial whaling possible again. The proposal was rejected (with 41 against the proposal, 27 pro). At the same summit, the IWC decided to change its main goals, with 40 votes in favor and 27 against. The new goals are the recovery of all whale populations to pre-industrial whaling levels and the implementation of non-lethal management of whale species:

“NOW THEREFORE THE COMMISSION:

AGREES that the role of the International Whaling Commission in the 21st Century includes inter alia its responsibility to ensure the recovery of cetacean populations to their pre-industrial levels, and in this context REAFFIRMS the importance in maintaining the moratorium on commercial whaling;

ACKNOWLEDGES the existence of an abundance of contemporary non-lethal cetacean research methods and therefore AGREES that the use of lethal research methods is unnecessary;” (IWC/67/13.Rev1, 2018, p. 2)

By changing IWC goals to pre-industrial levels, the key function of the meta-organization changes from whaling management to whale conservation and protection. At this point, Japan decided to leave the IWC. The pro-whaling nation then announced that it would

resume commercial whaling. This exit highlights a governance failure as the IWC has lost any influence on whaling in Japanese waters. It now needs to achieve sustainable management and whale conservation without Japan, a key player and major contributor to the organization since its creation.

Dynamics of social orders within the meta-organization

Definition of the decided social order in the meta-organization

From this history, we identify the following key decisions circumscribing the meta-organizational decided social order:

- The IWC has a standing decision that catch limits can be set to other than zero, which is also still implied in the 1982/86 moratorium.
- The IWC has accepted a management tool for calculating catch limits other than zero (the aforementioned RMP).
- The IWC scientific committee has decided that certain whale species are no longer endangered.
- The IWC has historical (before 2018) overarching goals of management of whaling and development of the whaling industry.
- Only the RMS has been blocked for more than a decade. It is decided that an impasse has been reached.
- Setting the objective of the IWC in 2018 to restore whales to pre-industrial levels mechanically denies the possibility of resuming commercial whaling.

Against the backdrop of these existing meta-organizational social orders, it becomes increasingly obvious for the involved actors that zero catch limits for certain whale species are becoming hard to justify in the internal and scientific logic of the meta-organization. The IWC has explicit goals to support the whaling industry, an implemented

management tool for calculating catch limits, an evidence-based assessment that certain species are not endangered anymore, and in general is responsible for *managing* whaling – not simply forbidding it.

Hence, in the logic of the meta-organizational decided orders, there is good reason to argue for setting catch limits to other than zero again. Explicitly referring to this meta-organizational decision history, Japan finally made a fresh attempt to make catch limits re-decidable to values other than zero. By creating a new internal committee responsible for deciding on catch limits, it wanted to make catch limits manageable again. However, the proposal was rejected by the majority of the members, and the IWC stuck to the decision to leave all catch limits at zero. Moreover, the majority of the other members then pushed forward the setting of a new major goal of whale recovery to their pre-industrial levels. This brings us to the role of the member organizations, specifically of those member organizations that have repeatedly blocked all attempts by pro-whaling members to set catch limits to other than zero. In the following section, we will specifically look at the institutional orders which are effective for the anti-whaling members and guide their actions and decisions within the IWC.

Emergence of an institutional order of anti-whaling members

The original moratorium decision in 1982 was grounded in extensive and concrete scientific justifications of whale overexploitation. At that stage, the scientific evidence took priority over commercial and economic interests which had been more present at the time of the creation of the IWC. Whaling catch limits were set to zero because all species for which the IWC was responsible were endangered and hence their potential extinction posed a severe threat to the stability of oceanic ecosystems.

The new decision to change the IWC's goals to restore all whale populations to pre-industrial levels has not been justified in a science-based way as was the case with the arguments advanced in the 1986 moratorium. On the political level, a variety of reasons have been brought up and introduced in the meta-organization over the decades. However, these consist mainly of rather abstract value-laden references such as environmental change. Accordingly, the anti-whaling members refer only to such abstract values but offer no concrete reasons for this new goal. It seems that the anti-whaling members that voted for this resolution did not see the need to justify this decision within the meta-organization or to the public. This lack of justification hints at an institutional order in the form of implicit norms relevant for the pro-whaling members that contrast with the explicit norm buttressing actual decisions.

Institutional orders are those that are taken for granted. They are assumed to be right without questioning that they are. This seems to be the case with the conviction that whaling is per se a bad thing, which is prevalent in anti-whaling countries. While in these countries there was a debate in the 1970s that featured several arguments against commercial whaling (e.g., cruel catch methods, whales' high intelligence), nowadays whaling is seen as "simply inhumane" (Normile, 2019, p. 110). For anti-whaling nations, there should be no whaling whatsoever (Bailey, 2008; Kalland, 1993), and hence, in principle no decidability on whaling catch limits. In the context of such an unquestioned implicit norm that rejects any kind of whaling, the whole idea of making collective decisions about catch limits or sustainable thresholds becomes unthinkable, since catch limits should all and always be set to zero.

The 2018 decision to change the overall goals of the IWC can be considered an act of enshrining the institutionalized "not killing whales"-norm in the IWC statutes. As outlined above, a decision implies alternatives among which one may choose, and hence,

decisions require the actualization of more or less rational reasons to justify the selection of one alternative over another. The absence of any justification for the decided goal change indicates that, for the anti-whaling nations, there is no alternative to this change. The decision of the IWC to set a goal for the restoration of all whale populations to pre-industrial levels can be understood as the logical fulfillment of an underlying institutional order on the level of anti-whaling member nations.

This is in sharp contrast to the pro-whaling members of the IWC, especially Japan, Iceland, and Norway, which seek to legitimate their whaling through traditions – and hence also refer to a deeply institutionalized social order relevant for their nations. They indeed defend their right to commercial whaling to perpetuate a cultural heritage, which clearly relates to the continuation of an institutional order rather than a decided one. Even if the consumption of whale meat has decreased substantially in these countries in the past decades, there is still no general disapproval of whaling as unethical, probably due to their history of whaling (cf. Bailey 2008). On this basis, pro-whaling nations advocate the principle that commercial whaling is not something that should per se be prohibited.

The clash of social orders in the meta-organization

As long as all concerned whale species were listed as endangered based on scientific evidence, the institutionalized order of the anti-whaling member organizations (i.e., whaling is to be rejected) was in line with the decided order of the meta-organization (i.e., zero catch limits). However, with the de-endangering of certain species, the institutional anti-whaling order of many members increasingly clashes with the decided orders of the IWC. To certain members, the zero catch limits increasingly appear unjustified in the evidence-based meta-organizational logic buttressed by an explicit scientific norm. To the anti-whaling nations, whaling seems by nature unacceptable, which has become a shared implicit norm, beyond the issues of climate change and depletion of stocks

themselves. Figure 1 synthesizes the evolution of institutional and decided orders in the meta-organization.

---INSERT FIGURE 1 HERE---

In 2018, this clash of contradictory orders finally triggered two significant attempts to change existing social orders within the IWC. First, Japan suggested that a committee be tasked with determining catch limits. Second, the anti-whaling nations conversely offered to define new goals of whale conservation. Both attempts can be interpreted as a result of the clash of social orders at the level of the meta-organization and between levels of the meta-organization and its members. Thereby, on the one hand, Japan's proposal aimed at building on the existing internal meta-organizational logic of decided orders. On the other hand, the anti-whaling proposal aimed at changing fundamental aspects of the meta-organizational order profoundly in order to ensure congruence with their existing institutional orders at the member level. Finally, the latter proposal was accepted, which induced Japan to leave the IWC.

The significance of “decidability” and “non-decidability” in the meta-organization

Setting new goals for the meta-organization from sustainable whaling to whale conservation ultimately rendered whaling “non-decidable” since there could no longer be any collective decision about new catch limits. Before 2018, IWC decision-making processes seemed to make raising catch limits possible, at least in principle, even though members always reached a roadblock. Before setting new goals, Japan had never been in favor of the IWC moratorium, and yet it submitted to this decision for decades. In contrast, for instance, to Iceland that simply ignored the moratorium, Japan accepted it and changed its whaling activities mostly in accordance with IWC regulations (which

included the possibility of Scientific Whaling). Japan always wanted to change the commercial catch limits again to other than zero and for decades tried on multiple occasions to achieve that. These attempts have always been rejected. And yet, Japan remained in the IWC and accepted the moratorium.

We argue that this can be partly explained by the fact that although the catch limits have remained at zero since 1986, they still appeared to be “decidable”. The decidability of whaling can be understood as a major condition for Japan to remain in the meta-organization. For instance, as already mentioned, in 1994 the IWC adopted the Revised Management Procedure (RMP) to calculate sustainable catch limits. Moreover, contrary to common belief, whaling has never been prohibited by the IWC. Internally, the IWC simply decided to set catch limits to zero to allow whale species to recover from endangerment. This is the reason why the moratorium is indeed called a “moratorium” and not a “ban” or something similar.

However, the 2018 change of goals, which have become specifically anti-whaling as such, effectively put a new decided order (new goals) on top of the old decided order (zero catch limits) and thereby have cemented the latter and rendered it non-decidable. In other words, the once decided order of zero catch limits has been “locked” in place by the new goals, which make the catch limits virtually unchangeable. In practice, commercial whaling can be considered banned without a chance of redeciding this ban because if anyone would want to change the catch limits, they would from now on have to first challenge and change the new collective goals. Only through a collective decision to change these new goals, could the catch limits become decidable again. Hence, Japan can no longer assume the possibility of making a new decision on the catch limits since there is no decidability any longer. The consequence is that, for Japan, the newly non-decidable order has no legitimacy anymore since this order has no institutionalized grounds.

DISCUSSION

Our work contributes to the debate about essential questions of how social order is achieved and maintained (Ahrne & Brunsson, 2011; Luhmann, 2020; Turner, 2013). It also connects with recent debates about the intertwining and compatibility of social orders (Laamanen et al., 2020). Our article provides a better understanding of how the layering of social orders in meta-organizations may affect their functioning and ultimately their ability to tackle grand challenges. We combine sociological theories of organization and business studies' perspectives on grand challenges with the fundamental social theory of social order.

Our study shows how (1) different kinds of social orders may clash in a meta-organization, how (2) certain meta-organizational decisions may render existing decided orders virtually unchangeable in future decisions, and how (3) such a radical transformation may affect membership inclusion.

Regarding the first point we illustrate how the decided orders on the meta-organizational level are highly contradictory to institutionalized orders of parts of the member organizations. With the decision on the moratorium, pro-whaling members' institutionalized order of approving commercial whaling stands in direct opposition to the decided order of the moratorium. Nevertheless, over decades, pro-whaling countries have continued to participate in the IWC and especially, even Japan voluntarily accepts the moratorium as a binding premise for her national policies. However, over time, other meta-organizational decided orders – i.e., especially the scientific outputs of the IWC that question the legitimacy of the zero catch limits – are increasingly at odds with the anti-whaling members' institutional orders of “not killing whales”. This ultimately leads these member organizations to change the meta-organizational orders to match these to their own institutional orders. This comes at the cost of permanently cementing these orders in

significant contradiction to pro-whaling members' institutional orders, leading to Japan finally leaving the IWC. We derive from this insight the following proposition:

Proposition 1: In a meta-organization that features joint decision-making, meta-organizational decided orders can be accepted by member organizations for long periods even if the members feature fundamentally contradictory institutional orders, as long as the meta-organizational orders remain in principle changeable by decision, i.e., decidable.

In that regard, we define decidability as a parameter of social orders, describing the possibility of successfully reaching collective decisions about an object that belongs to the collective's mandate, at the meta-organizational level. In other words, by decidability, we do not mean that a meta-organization needs to constantly achieve consensus about something, but only that a decision can be in principle made by the collective about certain issues within the parameter of its mandate.

Correspondingly, non-decidability describes the inability of a meta-organization to reach collective decisions about its own mandate. In the case of the IWC, recovering pre-industrial levels of whale stocks means concretely that commercial whaling can no longer be the object of meta-organizational decisions. So, as we have also seen, meta-organizational orders might also be changed in cases in which they contradict member organizations' institutional orders while some member organizations hold a majority.

Proposition 2: If a majority of member organizations see a "clash" between their institutional orders and the meta-organizational decided orders, they might abruptly change the meta-organizational orders through majority decisions to match the institutional orders.

As we have seen, this abrupt change of the meta-organizational order can take rather extreme forms. In our case the majority of anti-whaling members introduced the new overarching goal to restore all cetacean populations to pre-industrial levels, which provided an entirely new rationale for the existing moratorium on commercial whaling. We argue that this new goal factually “locked” the decided order of zero catch limits in place. In more formalized terms, order A (the rule that all whaling quotas are set to zero) is fixed permanently in place and can from now on only be changed if the new order B (the new organizational goal of restoring whale populations to pre-industrial levels) is changed beforehand – hence, only by removing the obstacle that “locks” order A. Hence, we derive our next proposition:

Proposition 3: In a meta-organization that features joint decision making, a certain decidable social order A can be made non-decidable by changing or creating another decided order B as a premise for A that no longer allows a decision on A.

We argue that maintaining decidability can be an organizational condition of governance success. Here, we understand governance success not only as concrete outcomes, e.g., restored whale stocks, but also as retaining members in the meta-organization and implementing and following collectively decided rules at the meta-organizational level. When there is no shared consensus among members but the meta-organization maintains decidability about an issue, members can voice their dissent but they may remain loyal to the meta-organizational decided order, in Hirschman’s (1970) terms. In these cases, the acceptance of decided orders is maintained through inclusive decision-making, even if the decision outcome might not be what the participating actors desired (March, 1994, pp. 167–168).

Non-decidability, however, may lead to dissident members’ exits, because these members now do not have even a remote possibility any longer of adjusting the meta-organizational

order to their own institutional order. For them, the contradiction between orders suddenly becomes permanent and indefinitely insoluble. From a membership composition perspective, homogenization of members can be achieved by creating non-decidability, which leads to either the exit of misaligned members or the conversion of the remaining members.

Therefore, we argue that the abrupt emergence of the non-decidability of meta-organizational social orders can have a negative impact on membership, and ultimately on governance success:

Proposition 4: The non-decidability of a meta-organizational decided order that strongly contradicts the institutional orders of a member organization, may motivate a member organization to leave the meta-organization, because of the factual impossibility of eventually resolving the contradiction.

Our work complements recent works in communication and political science literature that have analyzed drivers of Japan's withdrawal from an economic or international relations perspective (Holm, 2019; Kojima, 2019; Yuya, 2019). These media analyses and some political science literature offer valuable insights into some factors which probably have contributed to Japan's withdrawal and the IWC's recent governance failure. However, to the best of our knowledge, no work has focused on the significance of social orders in these matters. By investigating whether and how meta-organizations might cope with the emergence of contradictory social orders, we argue that the sudden establishment of non-decidability, may constitute a key challenge for governance success and membership loyalty.

In that same line, these results finally complement recent works on grand challenges (Arciniegas Pradilla et al., 2021; Eisenhardt et al., 2016; Ferraro et al., 2015; George et

al., 2016; Kaufmann & Danner-Schröder, forthcoming) by highlighting the relevance, importance and difficulties of maintaining decided social orders for governance. In that perspective, we more specifically contribute to the meta-organizational literature. Recent works have emphasized the value of meta-organizations as an innovative mode of organization to collectively tackle grand challenges at a meta level (Berkowitz, 2018; Chaudhury et al., 2016). In particular, the literature has highlighted the significance of multi-stakeholder membership to jointly design solutions, i.e., by gathering members with different or even contradictory views that, however, bring the diverse expertise needed to address the complexity of grand challenges (Berkowitz et al., 2020; Carmagnac & Carbone, 2019). This, however, complexifies not only decision-making but also the creation and maintenance of social orders. Little work had examined the effects of the ‘layering’ of organization in meta-organizations closely (Grothe-Hammer et al., forthcoming), especially on the collective’s ability to govern grand challenges. Layering organization implies both multiple decision processes and multiple social orders that may interfere with each other. We contribute to this issue by showing the significance of decidability of social order as a boundary condition for meta-organizational governance of grand challenges. While contradictory, institutional, and decided social orders may coexist, their layering would not prevent governance as long as the premise for collective action remains decidable.

Here the main limit of our findings lies in the specificities of the single case study of an international meta-organization, with countries and scientific representatives as members. We believe our results can apply to other settings, such as meta-organizations with even more diversified membership, or on the contrary homogeneous meta-organizations, tackling other types of grand challenges, and at different levels of action, whether local, regional, national, or international. However, our assumptions need further testing in

these various settings, which provide many new research perspectives. Future research could fruitfully investigate whether and how decidability is easier to maintain depending on the degree of membership's cohesiveness, or of the specificity of the challenge (Berkowitz et al., 2017). One major effect of non-decidability was membership exit. It could prove interesting to further investigate whether the locking of a social order can be solved or bypassed through other means, for instance by drawing on other elements of organizationality, relative to decision-making, actorhood, or identity construction at the level of the meta-organization (Grothe-Hammer et al., forthcoming).

REFERENCES

- Ahrne, G., & Brunsson, N. (2008). *Meta-organizations*. Edward Elgar Publishing.
- Ahrne, G., & Brunsson, N. (2011). Organization outside organizations: The significance of partial organization. *Organization*, 18(1), 83–104.
- Ahrne, G., Brunsson, N., & Seidl, D. (2016). Resurrecting organization by going beyond organizations. *European Management Journal*, 34(2), 93–101.
- Andersen, S. O., & Sarma, K. M. (2012). *Protecting the ozone layer: The United Nations history*. Earthscan.
- Apelt, M., Besio, C., Corsi, G., von Groddeck, V., Grothe-Hammer, M., & Tacke, V. (2017). Resurrecting organization without renouncing society: A response to Ahrne, Brunsson and Seidl. *European Management Journal*, 35(1), 8–14.
- Arciniegas Pradilla, C., Bento da Silva, J., & Reinecke, J. (2021). Wicked problems and new ways of organising: How Fe y Alegria confronted changing manifestations of poverty. In Gümüşay, A.A., Marti, E., Trittin-Ulbrich, H. & Wickert, C. (eds.), *Organizing for Societal Grand Challenges. Research in the Sociology of Organizations*.

- Bailey, J. L. (2008). Arrested Development: The Fight to End Commercial Whaling as a Case of Failed Norm Change. *European Journal of International Relations*, 14(2), 289–318. <https://doi.org/10.1177/1354066108089244>
- Berkowitz, H. (2018). Meta-organizing firms' capabilities for sustainable innovation: A conceptual framework. *Journal of Cleaner Production*, 175, 420–430.
- Berkowitz, H., & Bor, S. (2018). Why Meta-Organizations Matter: A Response to Lawton et al. and Spillman. *Journal of Management Inquiry*, 27(2), 204–211.
- Berkowitz, H., Bucheli, M., & Dumez, H. (2017). Collective CSR strategy and the role of meta-organizations: A case study of the oil and gas industry. *Journal of Business Ethics*, 143(4), 753–769.
- Berkowitz, H., Crowder, L. B., & Brooks, C. M. (2020). Organizational perspectives on sustainable ocean governance: A multi-stakeholder, meta-organization model of collective action. *Marine Policy*, 118, 104026. <https://doi.org/10.1016/j.marpol.2020.104026>
- Berkowitz, H., & Dumez, H. (2015). La dynamique des dispositifs d'action collective entre firmes: Le cas des méta-organisations dans le secteur pétrolier. *L'Année Sociologique*, 65(2), 333–356.
- Berkowitz, H., & Dumez, H. (2016). The Concept of Meta-Organization: Issues for Management Studies. *European Management Review*, 13(2), 149–156.
- Berkowitz, H., & Souchaud, A. (2019). (Self-)regulation in the sharing economy: Governing through partial meta-organizing. *Journal of Business Ethics*, 159(4), 961–976.
- Brunsson, K., & Brunsson, N. (2017). *Decisions – The complexities of individual and organizational decision-making*. Edward Elgar Publishing.

- Burns, W. C. G. (2000). From the Harpoon to the Heat: Climate Change and the International Whaling Commission in the 21st Century. *Georgetown International Environmental Law Review*, 13(2), 335–360.
- Caniglia, G., Luederitz, C., von Wirth, T., Fazey, I., Martín-López, B., Hondrila, K., König, A., von Wehrden, H., Schöpke, N. A., Laubichler, M. D., & Lang, D. J. (2021). A pluralistic and integrated approach to action-oriented knowledge for sustainability. *Nature Sustainability*, 4(2), 93–100.
<https://doi.org/10.1038/s41893-020-00616-z>
- Carmagnac, L., & Carbone, V. (2019). Making supply networks more sustainable ‘together’: The role of meta-organisations. *Supply Chain Forum: An International Journal*, 20(1), 56–67.
- Case concerning Whaling in the Antarctic (Australia v. Japan: New Zealand Intervening), Judgment, ICJ Reports 2014, 226 (2014).
- Chami, R., Cosimano, T., Fullenkamp, C., & Oztosun, S. (2019). A strategy to protect whales can limit greenhouse gases and global warming. *Finance & Development, IMF*, 34–38.
- Chaudhury, A. S., Ventresca, M. J., Thornton, T. F., Helfgott, A., Sova, C., Baral, P., Rasheed, T., & Ligthart, J. (2016). Emerging meta-organisations and adaptation to global climate change: Evidence from implementing adaptation in Nepal, Pakistan and Ghana. *Global Environmental Change*, 38, 243–257.
- Convention on International Trade in Endangered Species of Wild Fauna and Flora*. (1973). <https://www.cites.org/sites/default/files/eng/disc/CITES-Convention-EN.pdf>

- Doh, J., Tashman, P., & Benischke, M. (2018). Adapting to grand environmental challenges through collective entrepreneurship. *Academy of Management Perspectives*.
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532–550.
- Eisenhardt, K. M., Graebner, M. E., & Sonenshein, S. (2016). Grand Challenges and Inductive Methods: Rigor without Rigor Mortis. *Academy of Management Journal*, 59(4), 1113–1123.
- Estes, J. A. (2016). *Serendipity: An Ecologist's Quest to Understand Nature*. University of California Press.
- Ferraro, F., Etzion, D., & Gehman, J. (2015). Tackling Grand Challenges Pragmatically: Robust Action Revisited. *Organization Studies*, 36(3), 363–390.
- George, G., Howard-Grenville, J., Joshi, A., & Tihanyi, L. (2016). Understanding and Tackling Societal Grand Challenges through Management Research. *Academy of Management Journal*, 59(6), 1880–1895. <https://doi.org/10.5465/amj.2016.4007>
- Gibbert, M., Ruigrok, W., & Wicki, B. (2008). What passes as a rigorous case study? *Strategic Management Journal*, 29(13), 1465–1474.
- Gillespie, A. (2001). Transparency in International Environmental Law: A Case Study of the International Whaling Commission. *Georgetown International Environmental Law Review*, 14, 333–348.
- Gogarty, B., & Lawrence, P. (2017). The ICJ Whaling Case: Missed Opportunity to Advance the Rule of Law in Resolving Science-Related Disputes in Global Commons? *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2980597>
- Grothe-Hammer, Berkowitz, H., & Berthod, O. (2021). Decisional Organization Theory: Towards an Integrated Framework of Organization. *Research*

Handbook on the Sociology of Organizations (Edward Elgar Publishing),
Forthcoming/In press.

Grothe-Hammer, M., & Schoeneborn, D. (2019). The Queen Bee Outlives Her Own Children: A Luhmannian Perspective on Project-Based Organizations (PBOs). In C. Vásquez & T. Kuhn (Eds.), *Dis/organization as Communication: Exploring the Disordering, Disruptive and Chaotic Properties of Communication* (pp. 60–79). Routledge.

Heazle, M. (2004). Scientific uncertainty and the International Whaling Commission: An alternative perspective on the use of science in policy making. *Marine Policy*, 28(5), 361–374. <https://doi.org/10.1016/j.marpol.2003.10.001>

Hirschman, A. O. (1970). *Exit, voice, and loyalty: Responses to decline in firms, organizations, and states* (Vol. 25). Harvard university press.

Holm, F. (2019). Japan's Whaling Policy: The Reasons for Leaving the International Whaling Commission. In D. Chiavacci & I. Wieczorek (Eds.), *Japan 2019: Politik, Wirtschaft, Gesellschaft* (pp. 126–151). Iudicium.

International Convention for the Regulation of Whaling, 1946, Schedule. (2018). As amended by the Commission at the 67th Meeting Florianópolis, Brazil, September.

Intersessional Report of the International Whaling Commission. (2018).

https://archive.iwc.int/pages/view.php?search=populations&k=&modal=&display=list&order_by=title&offset=0&per_page=240&archive=&sort=DESC&restypes=1%2C2%2C3%2C4&recentdaylimit=&foredit=&ref=6977

IWC. (1946). *The International Convention for the Regulation of Whaling*.
<https://archive.iwc.int/pages/view.php?ref=3607&k=>

IWC. (2018). *Rules of Procedure and Financial Regulation*.

<https://archive.iwc.int/pages/view.php?ref=3605&k=>

IWC/67/13.Rev1. (2018). *Draft Resolution: The Florianópolis Declaration on the Role of the International Whaling Commission in the Conservation and Management of Whales in the 21st century*.

Jepperson, R. (1991). Institutions, institutional effects, and institutionalization. In W. W. Powell & P. J. DiMaggio (Eds.), *The New Institutionalism in Organizational Theory* (pp. 143–163). University of Chicago Press.

Kalland, A. (1993). Management by totemization: Whale symbolism and the anti-whaling campaign. *Arctic*, 124–133.

Karlberg, E., & Jacobsson, K. (2015). A Meta-organizational Perspective on the Europeanization of Civil Society: The Case of the Swedish Women’s Lobby. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 26(4), 1438–1459. <https://doi.org/10.1007/s11266-014-9463-0>

Kaufmann, L. J., & Danner-Schröder, A. (Forthcoming). Addressing Grand Challenges Through Different Forms of Organising: A Literature Review. In Gümüşay, A.A., Marti, E., Trittin-Ulbrich, H. & Wickert, C. (eds.), *Organizing for Societal Grand Challenges. Research in the Sociology of Organizations*.

Kojima, C. (2019). Japan: Japan’s Decision to Withdraw from the International Convention for the Regulation of Whaling. *Asia-Pacific Journal of Ocean Law and Policy*, 4(1), 93–96. <https://doi.org/10.1163/24519391-00401007>

Laamanen, M., Moser, C., Bor, S., & den Hond, F. (2020). A partial organization approach to the dynamics of social order in social movement organizing. *Current Sociology*, 68(4), 520–545. <https://doi.org/10.1177/0011392120907643>

- Langley, A. (1999). Strategies for Theorizing from Process Data. *The Academy of Management Review*, 24(4), 691–710. <https://doi.org/10.2307/259349>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. SAGE Publications.
- Luhmann, N. (2018). *Organization and decision*. Cambridge University Press.
- Luhmann, N. (2020). Organization, Membership, and the Formalization of Behavioural Expectations. *Systems Research and Behavioral Science*, 37(3), 425–449.
- March, J. G. (1994). *Primer on decision making: How decisions happen*. Simon and Schuster.
- Mulvaney, K. (1996). The International Whaling Commission and the Role of Non-Governmental Organizations. *Geo. Int'l Env'tl. L. Rev.*, 9, 347.
- Normile, D. (2019). Japan's exit from whaling group may benefit whales. *Science*, 363, 110–111.
- Pörtner, H.-O., Roberts, D. C., Masson-Delmotte, V., Zhai, P., Tignor, M., Poloczanska, E., Mintenbeck, K., Nicolai, M., Okem, A., Petzold, J., Rama, B., & Weyer, N. (2019). *IPCC Special Report on the Ocean and Cryosphere in a Changing Climate*.
- Punt, A. E., & Donovan, G. P. (2007). Developing management procedures that are robust to uncertainty: Lessons from the International Whaling Commission. *ICES Journal of Marine Science*, 64(4), 603–612. <https://doi.org/10.1093/icesjms/fsm035>
- Reeves, R. R. (2002). The origins and character of 'aboriginal subsistence' whaling: A global review. *Mammal Review*, 32(2), 71–106.
- Springer, A. M., Estes, J. A., Van Vliet, G. B., Williams, T. M., Doak, D. F., Danner, E. M., Forney, K. A., & Pfister, B. (2003). Sequential megafaunal collapse in the

North Pacific Ocean: An ongoing legacy of industrial whaling? *Proceedings of the National Academy of Sciences*, 100(21), 12223–12228.

The Revised Management Scheme. (2020). <https://iwc.int/the-revised-management-scheme>

Turner, J. H. (2013). *Theoretical sociology: 1830 to the present*. SAGE Publications.

Valente, M., & Oliver, C. (2018). Meta-Organization Formation and Sustainability in Sub-Saharan Africa. *Organization Science*, 29(4), 547–571.

Vásquez, C., Schoeneborn, D., & Sergi, V. (2016). Summoning the spirits:

Organizational texts and the (dis) ordering properties of communication. *Human Relations*, 69(3), 629–659.

Vernazzani, B. G., Burkhardt-Holm, P., Cabrera, E., Iñíguez, M., Luna, F., Parsons, E.

C. M., Ritter, F., Rodríguez-Fonseca, J., Sironi, M., & Stachowitsch, M. (2017).

Management and conservation at the International Whaling Commission: A dichotomy sandwiched within a shifting baseline. *Marine Policy*, 83, 164–171.

Yin, R. K. (2012). *Applications of case study research*. Sage.

Yuya, S. (2019). Why Japan withdrew from the IWC. *NHK World-Japan*.

TABLES

Table 1: Types of sources

Types of documents	Reference	Description
Commission Meeting Reports	https://archive.iwc.int/?c=29604	Reports of IWC Commission Meetings
Commission Meeting Papers	https://archive.iwc.int/pages/themes.php?theme1=01+-+The+Commission&theme2=Commission+Meeting+Papers	Archives of the Commission Meeting Documents since 2011
Commission Resolutions	https://archive.iwc.int/?c=72	List of IWC Resolutions adopted since 1976
Commission Workshops	https://archive.iwc.int/pages/themes.php?theme1=01+-+The+Commission&theme2=Special+%26+Other+Meetings	Archives of Adhoc Commission workshops
Scientific Committee Meeting Papers	https://archive.iwc.int/pages/themes.php?theme1=03+-+IWC+Scientific+Committee&theme2=Scientific+Committee+Meeting+Papers	Scientific Committee Meeting Documents since 2012
Scientific Committee Reports	https://archive.iwc.int/pages/search.php?search=!collection73&bc_from=themes	Archives of Scientific Committee meeting reports since 1971
Scientific Committee Workshops	https://archive.iwc.int/pages/themes.php?theme1=03+-+IWC+Scientific+Committee&theme2=Scientific+Committee+Workshops	Archives of adhoc scientific committees workshops
Media Resources	https://archive.iwc.int/pages/themes.php?theme1=11+-+Media+Resources	IWC newsletter, press releases and other documents
Justice case	<i>(Case concerning Whaling in the Antarctic (Australia v. Japan: New Zealand Intervening), 2014)</i>	Justice case about Japan scientific whaling program
Case study	(Gogarty & Lawrence, 2017)	Justice decision analysis (Japan Scientific Whaling)
Case studies	(Kojima, 2019; Normile, 2019)	Analysis of 2018 Japan exit
Case studies	(Heazle, 2004)	Analysis of the use of scientific uncertainty in IWC
Case studies	(Burns, 2000; Gillespie, 2001; Punt & Donovan, 2007; Reeves, 2002; Vernazzani et al., 2017)	Case studies of the IWC functioning
Case studies	(Bailey, 2008; Kalland, 1993; Mulvaney, 1996)	Case studies about the roles of NGOs in raising social awareness about whaling and in affecting the IWC membership

Table 2: IWC key social order’s history timeline

Date	Description
1946	IWC established for the “conservation of whale stocks” and “development of the whaling industry”.
~1975-	Many whale species are identified as endangered.
1981	IWC is repeatedly criticized for unsustainable whaling management. Non- and Anti-whaling nations become members and gain a majority.
1982	“Moratorium” on commercial whaling, i.e., setting commercial catch limits to zero to allow whale species to recover. Decision is not consensual (25 pro / 7 against / 5 abstention votes)
1994	The Revised Management Procedure (RMP) for calculating sustainable catch limits is adopted – with the condition of the development of an inspection & observation scheme (RMS)
2007	RMS debate reaches impasse
2018	Publication of an IWC scientific report showing that some species have recovered. Japan proposes a new committee for setting whaling quotas to make catch limits decidable again. Proposal is rejected (41 against / 27 pro votes). Change of main goals is decided. New goal is the recovery of all whale populations to pre-industrial whaling levels (40 pro / 27 against votes). Japan exits the IWC and resumes whaling.

FIGURE

Figure 2: evolution of orders in the meta-organization

