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Inclusive hunting: examining Faroese whaling using the theory of socio-cultural viability

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Abstract

Whaling is a globally controversial topic, and Faroese drive-style whaling, *grindadráp*, is no exception. A complex common-pool resource (CPR) institution, viewable from multiple moral, social, economic and political viewpoints, *grindadráp* is a challenge to assess. Responding to calls to utilise more relationship-centred and multi-perspectival approaches to studying CPRs, this article examines *grindadráp* utilising the *theory of socio-cultural viability*, which asserts diverse understandings of the world can be classified within a fourfold typology and that 'successful' institutions draw on all four *social solidarities* in dealing with challenges that arise. The analysis reveals how throughout *grindadráp*'s history its place in Faroese society has been maintained through the enforcement of a largely egalitarian conceptualisation. However, in meeting various challenges around the distribution of meat, sustainability and killing methods, the institution has accepted solutions utilising alternative conceptualisations. It is this adaptability which has allowed *grindadráp* to remain a popular part of Faroese society, even as dependence on pilot whale meat has declined. The issue of toxins in pilot whale meat is found to be arguably the greatest threat to *grindadráp*, undermining the egalitarian foundations of the practice, the response to which is something that Faroese society is currently in the process of negotiation.

Keywords: Cultural theory, Plural rationality, Whaling, Faroe Islands, Sustainability, Subsistence

Introduction

Faroese pilot whaling, *grindadráp*, is a spectacular event. Small boats drive pods of long-finned pilot whales (*Globicephala melas*) (which may number in hundreds) to the shoreline to be killed by hand by shore-based whalers, turning the sea red. It is an unusual sight in a modern Nordic nation: people abandon their daily tasks, rushing to the shore and leaping into the water fully clothed to participate. Killed whales are then hauled onto the shoreline to await butchery; meat is then distributed among participants and within the local community. An opportunistic and ad hoc hunt, dependent on the arrival of whales at convenient times and the availability of local people wishing to participate, it presents a formidable challenge to carry out and then to distribute the sudden glut of meat (Wylie 1993). Since the nineteenth century, *grindadráp* has been used by both Faroese and outsiders to define and designate Faroese identity (Nauerby 1996; Joensen 2009). Commentators often recorded witnessing it, noting the ferocity of

the drive participants, the well-organised nature of the hunt and the discipline of those involved. Despite the apparent chaos, with people shouting, flukes thrashing and animals dying, *grindadráp* combines 'elements of traditional, community-based oversight and top-down, colonial exhibitions of power ... controls that are intended to keep the event as traditional, efficient, humane and sustainable as possible'¹ (Fielding et al. 2015: 38). This order is maintained through participant adherence to community values and traditions and through government decree, outlined in the 'Pilot Whaling Regulations' (*Kunngerð um Grind*).

Grindadráp may be understood in relation to several themes in academic accounts of Faroese society and culture. The first is precariousness: historic and contemporary accounts describe the uncertainty of life in the North Atlantic and on the periphery of the Kingdom of Denmark (Cannady 2014; Gaffin 1996; Wylie 1987). A second theme is historical equality within society enforced by geographic and cultural isolation, an equality that increased when the development of fisheries in the nineteenth century transformed the Faroe Islands (Dugmore et al. 2013; Gaffin 1996; Wylie 1987). Modern Faroese society is said to manifest 'special individualism and egalitarianism' (Gaini 2013: 59). These two themes are embodied in a series of subsistence practices, such as fishing, fowling, and whaling, which provide a certain amount of free food for a clear majority of Faroese households (Hagstova Føroya 2014). *Grindadráp* is thus one of a group of communal subsistence practices that remain salient even as the threat of starvation has subsided.

Several Faroese subsistence practices are based on 'common-pool resources' - valued resource systems where resources are finite (or 'rivalrous') but are sufficiently large to render exclusion of other users problematic. Thus, it is argued, common pool resources (CPR) are at risk of over-use (Ostrom 1990). The 'successful,' 'sustainable' management of such resources has been a matter of considerable academic discussion. In recent times, there have been calls for relationship-centred approaches to understanding such environmental institutions, greater examination of communication between actors and for broader notions of rational behaviour (Neves-Graça 2004; Nightingale 2011; Peterson 2014; Peterson and Isenhour 2014). *Grindadráp* is even more controversial; several animal rights organisations have campaigned against the practice, disputing its sustainability (Kerins 2010: 29–39). Faroese pro-whaling advocates contest this, asserting that the institution has proved robust and efficient in conserving pilot whales, despite continued hunting. Assessing the validity of these claims presents a challenge to the researcher – how can the capabilities and effectiveness of an institution with complex moral, political and economic dimensions be understood and evaluated? This article seeks to steer a path clear of judging the morality of *grindadráp*, using the *theory of socio-cultural viability* (cultural theory for short) as a relationship-centred, yet still pragmatic tool to examine Faroese practice and assess the ability and adaptability of the institution in the face of challenges past and present.

Cultural theory is a theory of 'constrained relativism,' which allows exploration and examination of the interactions between different 'social solidarities' with different epistemological perspectives (Verweij et al. 2011a; Stoker 2004; Thompson et al. 2006). Within cultural theory, actors' worldviews and social relations are integral parts of a dynamic context. Social institutions that enable noisy, respectful and argumentative interaction between these different perspectives are *clumsier* than *elegant* institutions within which one framing dominates (see below). Cultural theorists argue that clumsier

institutions are better equipped to deal with challenges to the greater satisfaction of a plurality of actors. The central research question is thus: how do different perspectives interact within the practice of *grindadráp* and to what effect? To illustrate this we examine academic literature on *grindadráp* in combination with fieldwork data. The article is structured as follows: the first two sections introduce cultural theory and the methodology. *Grindadráp* is then described in detail and then discussed utilising the language of cultural theory. Attention is paid to the level of clumsiness (see below) manifested within *grindadráp* within several discussions around the institution itself.

Theory

The theory of socio-cultural viability – ‘cultural theory’ (also known as ‘neo-Durkheimian theory’ [6 and Mars 2008: xv]) refers to a body of work begun by anthropologist Mary Douglas and then later developed and operationalised by other writers². Its starting point is that people in any given situation form social relations and that these can be classified within a fourfold typology. According to cultural theory, these four forms of *social solidarity* – *egalitarianism*, *hierarchy*, *individualism* and *fatalism* – are present at every single level of social organisation (Verweij et al. 2011b: 5). Furthermore, each solidarity is underpinned by particular perspectives on ‘nature’, ‘humanity’, time, material and political distribution of capital within society and the role of management (see Table 1). Consequently, beliefs and values are ‘tied to distinctive patterns of social relations (the solidarities) and to the distinctive ways of behaving that those beliefs and values justify’ (Thompson et al. 2006: 325). Thus, in every situation, there will be four narratives generated, each with its own logic and truth which cannot be reduced to that of the other solidarities (Thompson 2003: 5108). This may sound deterministic (i.e. people’s views and behaviour are ‘fixed’ by their social relations); however cultural theory is not to be taken as a theory of personality types and the solidarities should not be essentialised (Tansey and Rayner 2009). Rather, this is not a static picture. People move between different solidarities as circumstances change, sometimes as the result of their own actions (Verweij et al. 2011a: 8). The four solidarities never exist in isolation, there will always be several dynamically present in any given situation (Tansey and O’Riordan 1999). Cultural theory thus conceives of a dynamic social landscape with circumstances affecting the nature and form of social relations, affecting people’s worldviews which in turn affect actions that continue to change the world. The narrative each solidarity generates is irreducible to and contradictory of

Table 1 Cultural theory’s social solidarities (adapted from Thompson 2003)

	<i>Individualism</i>	<i>Egalitarianism</i>	<i>Hierarchy</i>	<i>Fatalism</i>
<i>Nature</i>	Benign and will ‘bounce back’	Intricately connected and fragile	Controllable	Capricious
<i>Humanity</i>	Self-seeking and atomistic	Essentially caring and sharing	Malleable: deeply flawed but redeemable	Fickle and untrustworthy
<i>Distribution</i>	It is fair that those who put most in get most out	Equality of result is key	Distribution should be by need (based on rank or station)	Fairness is impossible
<i>Management</i>	Management institutions should work ‘with the grain of the market’	Voluntary management based on simplicity and the precautionary principle	Management by experts and regulation	Management is pointless. Rely on short-term coping tactics

those other solidarities (Thompson 2013: 427). However, rather than one of the solidarities simply being 'correct', each solidarity will generate important knowledge of a situation. Thus each solidarity 'distils certain elements of experience and wisdom missed by the others' (Thompson 2003: 5108). See Schwartz (1991: 765) for a pithy summary of the interdependence of cultural theory's solidarities.

Cultural theorists argue that institutional failures to deal with disputes are often rooted in simplistic understandings of reality; policy makers tend to favour *elegant* solutions, which exclude the knowledge of one or more of the solidarities (Verweij et al. 2011b). Cultural theorists argue that the *uncomfortable knowledge* that other solidarities bring need to be incorporated into disputed situations. This will allow for the discovery of *clumsy* solutions, which harness the productive potential of interactions between the four solidarity types (Thompson 2008: 207–208). What are required are 'noisy and argumentative institutional arrangements' within which all four solidarities are represented and crucially, respected and responded to (Thompson 2008: 205). Institutions that better incorporate the different solidarities are desirable because each social solidarity is an 'expression of the way in which a significant portion of the populace feels we should live with one another and with nature, it is [therefore] important that all be taken some sort of account of in the policy process' (Thompson 2003: 5108). Institutions that can generate clumsy solutions from each of the four social solidarities are sometimes termed *messy institutions* (Ney and Verweij 2015). Cultural theory argues that creative, longer-lasting and mutually acceptable resolutions to disputes are more likely to be found when all solidarities are involved. 'A clumsy solution ... is not a compromise; still less a consensus' but the situation is preferable to all four voices than if one of them had been able to achieve elegant dominance (Thompson 2013: 429).

By using the principles of cultural theory it is possible to analyse the clumsiness of institutions like *grindadráp*, i.e. the extent to which the voices of different social solidarities are incorporated³. At one extreme – 'closed hegemony' – one voice drowns out all others. This contrasts with clumsy situations where all social solidarities have access to and are responsive to one another (Thompson 2008: 213). *Grindadráp* has been identified as containing all the requirements for a successful long-term CPR institution (Kerins 2010, cf. Ostrom 1990); this article will assess how clumsy it is. In doing so, reference is made to on-going discussions about *grindadráp* in the Faroe Islands. Since cultural theory can be used to make predictions; the future prospects of *grindadráp* are also discussed (Thompson 2013: 427).

Methodology

Analysis in terms of cultural theory requires the examination of *grindadráp* from multiple perspectives and disciplines utilising a rich variety of data (cf. Verweij et al. 2011a). This research thus takes the form of a case study examining the Faroese institution of *grindadráp* past, present and future, drawing on insights taken from a number of academic fields. Primary data are drawn from 3 months fieldwork in the Faroe Islands during the summer of 2014. The data examined consist of 17 semi-structured interviews with individuals involved with *grindadráp*. These included scientists, veterinarians and medical staff involved in research on pilot whales and pilot whale meat (seven respondents, some of whom also participate in *grindadráp*), senior members of the Pilot Whalers

Association (two), whalers (two), civil servants (two), police (one) and Faroese individuals publicly opposed to *grindadráp* (three). The central research questions for these interviews explored the flows of scientific knowledge utilised in monitoring and managing *grindadráp* and on-going changes within the institution of *grindadráp*. This information was supplemented by observations of the marine mammal scientists and Faroese responses to an on-going anti-whaling campaign, *Operation Grindstop 2014*. These data were supplemented by extensive prior fieldwork in the Faroe Islands, including 20 semi-structured interviews, 6 months of participant observation and informal conversations, and the observation of several *grindadráp*, including the processes of driving, slaughtering and meat distribution. The data were coded in NVivo qualitative data analysis software, working abductively, based on cultural theory's categories. These collated data, combined with other contemporary investigations of *grindadráp*, notably Joensen (2009) and Kerins (2010), allow a subtler analysis of contemporary changes to *grindadráp*.

A contextual factor to be remembered when examining the 2014 data is the on-going presence of activists from Sea Shepherd Conservation Society (the campaign mentioned previously). Whilst, on the one hand, their presence was beneficial, ensuring that *grindadráp* was a regular topic of conversation, it did, however, mean that much discussion was *about* Sea Shepherd rather than relating purely to whaling. The effect of conservation campaigns upon the clumsiness is discussed in a later section; however, caution must be exercised over taking Faroese views on *grindadráp* during the campaign as typical.

Finally, *grindadráp* is intertwined with the rest of Faroese society and at times it is difficult to demarcate it as a single institution. For example the English word 'whaler' is inadequate as a classifier of participants. Numerous people are involved in each drive who never perform the act of killing: people help haul the whales onto shore, stand guard by the carcasses, assist in measuring the catch or collect scientific data. Furthermore, pilot whale meat and blubber is readily exchanged for produce of other subsistence activities (see above). Indeed, inhabiting a small country, Faroese are intertwined in a web of social relations that renders drawing boundaries between roles and institutions problematic (Gaini 2013). Nevertheless, any analysis requires the researcher to make a demarcation. In this article '*grindadráp*' is identified as the practices of the drive itself, including the killing, division of the catch and the flows of scientific data that extrude from it. 'Institutions' in cultural theory terms are 'any non-randomness in behaviour (or ... the beliefs and values that are used to justify that behaviour)' (Thompson 2008: 51). Discerning this inevitably diffuse ordering is the researcher's task, and the reader should remain aware of the researcher's directing presence in creating order from this particular 'methods assemblage' (Law 2004). Previous accounts of *grindadráp* have tended to focus most heavily on processes of driving and killing itself, ignoring some of the modern scientific practices that form an important part of the contemporary institution. *Grindadráp*, moreover has changed throughout history but, in the interests of space and due to the absence of 'thick' descriptions of practices prior to the late eighteenth century, this analysis is confined to 'modern' *grindadráp* following nineteenth century reforms. As a theory of dynamic context, cultural theory is well suited for looking at institutional change; thus, within this paper, special analytical focus is given to moments of change within *grindadráp*.

Introducing *grindadráp*

A *grindadráp* is initiated upon the sighting of a pod of pilot whales by observers either on land or at sea⁴. This information is conveyed to the local *sýslumaður* (sheriff) who, on inspecting the situation, in consultation with *grindaformenn* (whaling foremen), decides if the pod is to be driven and which bay it shall be directed to, taking into account prevailing weather and sea conditions. This information is conveyed along a chain, known as *grindaboð*. Nowadays this is largely by telephone, but historically it was a series of beacons and runners bearing the message between villages. Its purpose is to ensure all have a chance to participate (Joensen 2009).

Once the decision to kill the whales has been made, a flotilla of small boats under the direction of a *grindaformann* begins to drive the whales to the designated bay, where another group of participants have hidden themselves. According to interviewees, the driving is done slowly, to avoid panicking the whales, until the decision is made that it is time to beach them. Historically, the beaching was accomplished by a boat-based whaler using a spear to stab one of the whales in the tail, causing it to rush forward, toward the beach, in the hopes that the rest of the pod would follow. This strategy exploited the social nature of pilot whales, which are known to remain together in pods even when some individuals are in danger. Now, because the spear is forbidden, boat captains must organise the drive so that the pod stays grouped tightly together until they near the beach. At that point, the boat captains increase the speed of the drive, causing the whales to swim faster and to strand closer to the beach. Some whalers report that this adaptation is not as effective as the old method and that the shore-based whalers must now wade further out to sea to meet whales that have stranded in deeper water. Whales that do strand upon the beach are swiftly slain, while those that strand further out have a hook (*blástrarkrókur*) inserted in their blowhole and are hauled in on ropes by those on the shoreline. Killing has historically been carried out using a knife (*grindaknívur*) to slice through the spinal column. From 2015 onwards, however, killing must be performed using 'spinal-lances' (*mønustingarar*) – approximately 75 cm long spikes, with an enlarged, bladed tip (Ministry of Fisheries 2013). These are used to slice through the whales' spinal columns, ensuring unconsciousness and death within seconds. Knives and other, older equipment such as a whale spear (*hvalvákn*) may still be used, but only with the permission of the *sýslumaður*. The dead whales are then hauled fully ashore to the assessment area and guards are appointed to watch over the catch (Joensen 2009). The average size of pod beached is 140 (Bloch 2007: 9). By contrast, the largest pod ever recorded, in 1940, comprised 1,200 pilot whales (Bloch 2007: 54). Occasionally, white-sided (*Lagenorhynchus acutus*), bottlenose (*Tursiops truncatus*) and Risso's (*Grampus griseus*) dolphins are driven using similar methods, although driving the latter is illegal and carcasses are confiscated by the law.

Science

At most drives, before the catch is divided, different groups of scientists work, taking samples from the catch. One group, from the Faroese Natural History Museum (*Náttúrugripasavnið*), records biometric information from several of the whales: length, sex, *skinn* (see below) and blubber thickness, as well as taking certain samples such as

pilot whale ovaries or testes, liver, kidneys, meat, blubber and (occasionally) lower jaws and teeth. By contrast, the second group of scientists, from the Faroese Environment Agency (*Umhvørvisstovan*), take a smaller range of samples (e.g. kidney, meat and blubber) from a larger number of whales.

These sampling practices feed into different streams of research. The work of the researchers from the museum contributes to on-going research into pilot whale biology. Fairly open-ended in focus, one of the researchers asserted that their 'work is to gather as much biological information as possible about marine mammals'. As such, these researchers have, at other times, participated in international sighting surveys, contributing to population estimates for pilot whales in the North Atlantic. This scientific work is an on-going project funded by the Faroese Ministry of Fisheries, which is in part reactive to requests for information from the Faroese Government and the North Atlantic Marine Mammal Commission (NAMMCO), a regional management organisation, formed of members from the Faroe Islands, Greenland, Iceland and Norway. NAMMCO provides a regional forum for discussion of issues and evaluation of science around marine mammals. Respondents asserted that information from *grindadráp* feeds into scientific models on pilot whale reproduction, pod composition, diet, family relationships and population health (e.g. Monteiro et al. 2015).

The second group of scientists utilises samples taken from pilot whales as indicators of the levels of pollution in the marine environment. As one respondent described, the growing research in the Faroes into the effects of mercury and other environmental contaminants upon humans (transmitted via whale meat and blubber) led to a desire to build up a clearer picture of the wider environment. They have a twofold focus: the exposure of contaminants to humans and to the pilot whales themselves. This research is structured by several international bodies. As one example, work produced by this group feeds into the Arctic Monitoring and Assessment Programme (AMAP) of the Arctic Council, a regional body for political discussions on Arctic issues. AMAP provides scientific knowledge, assessment and policy advice in monitoring the changing arctic environment with respect to pollution and climate change issues (AMAP 2015).

In sum, each *grindadráp* is also a site of a series of scientific practices, one focusing on marine mammal biology and the other on environmental pollution, which feed, through various information changes, into knowledge of pilot whales and the marine environment. The nature of these practices as an integral part of the *grindadráp* institution is partly illustrated by one of our respondents describing asking for and being granted a share of the catch as a participant. Alongside this scientific information is the report to the Faroese Ministry of Fisheries that the *sýslumaður* writes after each drive listing the number of whales, the division of meat and any other relevant information. That information then forms a part of discussions within Faroese society regarding *grindadráp*. Scientists share their findings with *grindadráp* participants at community meetings and the meetings of the Pilot Whalers Association.

Division of the catch

While scientists work away, the catch is assessed. Each whale is measured according to a logarithmic scale which determines the *skinn* value of each whale. A *skinn* of pilot whale meat and blubber usually weighs around 75 kg (Joensen 2009: 126). This task is

carried out by designated ‘measurement men’ (*metingarmenn*). Once the *skinn* value of the total catch has been determined, it is the *sýslumaður*’s role to decide how much meat and blubber each participant will receive and whether meat will be distributed within the wider community. There is local variation in the distribution of meat but there are a number of fixed deductions, notably the person who first saw the pilot whales is entitled to the ‘finder’s whale’ (Joensen 2009: 137). The bulk of the catch is divided into two categories: firstly, in many places, the major portion is designated the ‘killers’ share’ (*drápspartur*) – ‘those who take part in the drive receive their share in accordance with very specific rules’ (Joensen 2009: 146). The rest of the catch may then be allocated to the ‘home share’ (*heimapartur*) – it is distributed to those who are registered within the local whaling district (see below). The *sýslumaður* in practice retains considerable flexibility in how the catch is divided and indeed this decision may be contested, but ultimately the decision of the *sýslumaður* is final and must be accepted, for it is rarely, if ever, revised.

Once people have been informed of their allocation butchery begins. Recipients of the home-share have been previously divided into ‘boats’ (*bátar*) of roughly 50 adults. These units elect foremen who keep the sheriff updated on the number of people within the ‘boat’ (Joensen 2009). A collective decision will then be made on how to divide the whale. For the killers’ share, more ad-hoc groups are formed, usually by grouping participants who come from the same village or district (*grindardistrikt*). One respondent described how a group of people allocated one whale took turns to make cuts of the meat, which were placed in as many piles as there were butchers. Who got which pile in the group was then decided by quick lottery. Another respondent described an ad-hoc group of *grindadráp* participants dividing themselves further into two sub-groups. One sub-group performed the butchery of meat and blubber on one side of their whale, then the whale was turned over and the second sub-group took the meat and blubber from that side.

Regulation and the roles of the participants

Contemporary *grindadráp* is regulated through ‘community devotion to the relevant cultural mores and traditions, but also subject to the regulatory limitations imposed by government and government-sanctioned authority’ (Fielding et al. 2015: 38). This is best understood on two levels, that of the drives themselves and the wider institutional structures that encompass them.

As noted earlier, participation in *grindadráp* is voluntary, with the exception of the *sýslumaður* (the only individual who is paid with money to participate) – although it should be said that it is against the law to fail to report a sighting of pilot whales (Ministry of Fisheries 2013: §5). Ultimately it is the *sýslumaður*, a police officer and thus an employee and representative of the Danish state, who is in charge at a *grindadráp*. The *grindaformenn* assist and advise the *sýslumaður*. The local community of each whaling bay elects four *grindaformenn*, whose choice may be rejected by the *sýslumaður* (Ministry of Fisheries 2013: §3). During the drives the *sýslumaður* and *grindaformenn* support one another in ensuring the slaughter’s smooth running with the *sýslumaður* ashore and some *grindaformenn* aboard boats (Fielding et al. 2015: 42). Individual ‘whalers’ also form a part of the regulation of the hunt: their obedience to

both the rules and the authorities is vital. There are times when participants doubt the competence of those tasked with controlling *grindadráp* and this can lead to them acting as they see fit. Similarly, while there are statutory punishments for breaching the rules of pilot whaling, these are seldom imposed (Joensen 2009: 104). As such, self-enforcement plays an important role - several whalers interviewed asserted other participants would remonstrate with those behaving in a reckless, dangerous or incompetent manner (for example being unable to swiftly dispatch a whale).

The Faroe Islands are divided into six whaling districts, each with multiple demarcated whaling bays within the pilot whaling regulations (Ministry of Fisheries 2013: §13,§42). The district's inhabitants may register on the local pilot whale roll to be eligible for a part of the 'home-share'. In the capital, Torshavn, where there are too many people to receive a share each drive, there is a waiting list (Joensen 2009). While people may have a local whaling bay it is sometimes practical, thanks to a good transport system, for people to become involved with drives away from their 'home' bay or district. Indeed, several respondents stated they would try to get involved in any *grindadráp* that took place within a reasonable distance. The pilot whaling regulations also stipulate how whales are to be killed and are periodically updated to reflect improvements to technology and changing public attitudes to animals (Kerins 2010: 139, Ministry of Fisheries 2013: §15-18).

Finally the existence of an organisation, the Pilot Whalers Association (*Grindamannafelagið*) (PWA), should be noted. The PWA functions to inform about *grindadráp* nationally and internationally but also as a further forum to discuss pilot whaling issues. Thus changes to killing methods (below) were discussed at PWA meetings.

Equipment

The tools employed in *grindadráp* are outlined in the Pilot Whaling Regulations. Historically, whalers largely utilised whatever was to hand, with the consequence that at times specialist tools were rare or poorly maintained, particularly if there had not been a drive in the local area for a long time (Joensen 2009: 67-9). The original nineteenth century pilot whaling regulations directly responded to calls to ensure that the capacity to carry out *grindadráp* efficiently should be maintained (Joensen 2009). In contemporary *grindadráp* participants utilise their own equipment such as knives and boats. However, with the law stating that from the first of May 2015 participants must use the spinal lance and blowhole hook in preference to other methods (Ministry of Fisheries 2013), the Faroese Ministry of Fisheries and local authorities have jointly purchased a large number of spinal lances for use by participants. Despite this, respondents reported that there is still a desire among participants to own their own spinal lances. The areas where whales are driven and later butchered are managed largely by local authorities who are responsible for cleaning up afterwards (Joensen 2009: 139). These local authorities are also required by law to have group insurance to cover any damages caused during drives. Management can even extend to physically altering beaches to make them more suitable for driving (Fielding 2013a: 94-5).

Analysis: *grindadráp* as an egalitarianism-hierarchy hybrid

As the above description shows, *grindadráp* incorporates a combination of 'bottom-up' and 'top-down' mechanisms in its organisation and practice. Local community

members participate in meetings to nominate *grindaformenn* and to discuss changes to legislation. They may also participate in the PWA, either at meetings or taking on some elected role. Participants also affect *grindadráp* through their respect for and cooperation with the designated sources of authority: whilst sanctions do exist they are seldom enforced (Joensen 2009: 104). In cultural theory terms, it is apparent that different aspects of the hunt embody the narratives of the different social solidarities. In this section, an argument is made that modern *grindadráp* embodies a combination of egalitarian and hierarchical perspectives (with some small-ish measure of individualism). The discussion then moves to several areas of prominent discussion and change within *grindadráp*. This allows the clumsiness of practice to be assessed with cultural theory.

The hunting of pilot whales has deep roots in the Faroe Islands and is likely coterminous with Norse settlement in the Faroes (Thorsteinsson 1986). Community subsistence pilot whale drives likely date from the medieval era, and distribution systems are attested from the seventeenth century (Wylie and Margolin 1981; Sanderson 1992; Joensen 2009). However, the modern institution of *grindadráp* can be said to date from the early nineteenth century. This was a time of great change within the whole Faroe Islands, with political and technological innovations transforming the economy from a two-tier system of wool export and domestic subsistence to one based largely on exploitation of the sea (Wylie 1987). Faroese understandings of the ocean were transformed as pilot whaling, like fishing, 'began to be seen as a potential form of organised production rather than just a fortuitous and uncontrollable godsend' (Sanderson 1992: 5). In cultural theory terms, new possibilities meant that nature was no longer viewed in fatalistic terms, as capricious and unfathomable. However, unlike Faroese fishing, pilot whaling remained a subsistence practice, with its commercial potential limited (Wylie 1993).

Grindadráp in the early nineteenth century is depicted as a dwindling practice, a dearth of whales in the late eighteenth century led to declines in preparedness (with equipment being reutilised elsewhere) and in the institutions that regulated labour and the sharing of the catch. It was apparently an unruly affair; accounts from the time record frequent conflicts over the pilot whale catch, with the spoils going to the strong or wealthy (Wylie and Margolin 1981; Joensen 2009). This was the source of much criticism by several commentators who called for the institution of laws to ensure communities were always prepared for *grindadráp* and to guarantee more equitable methods for sharing the catch (Joensen 2009: 136). The institution that emerged in response can be understood as largely embodying an egalitarian perspective: humanity is conceived of as essentially caring and sharing and wealth should be distributed evenly within the community. Referring specifically to the *grindadráp* this is clear in the institution of rules guaranteeing the community significant portions of meat and blubber. This egalitarian emphasis only grew stronger following the first pilot whaling regulations in 1832 – subsequent reforms reduced the shares of pilot whale meat and blubber for landowners, eventually being removed in 1934 (Joensen 2009: 133). Egalitarian mechanisms for decision-making (such as local community meetings and traditional codes of behaviour) were likewise reinforced by being incorporated into legislation.

However, the egalitarian nature of *grindadráp* is supported by a range of hierarchical institutional mechanisms, which are most prominent at national and international levels. The pilot whaling regulations place each drive under the authority of a state

official (the *sýslumaður*) and the egalitarian behaviour of participants before, during and after hunts has been formally codified. This has situated *grindadráp* firmly within the purview of the Faroese authorities, which reserves the power to decide if a proposed drive will go ahead and to punish those who deviate from the prescribed code of behaviour. Pilot whaling is understood within the wider structure of resource management: marine resources within Faroese territory are Faroese property, which, according to the 1994 Commercial Fishery Act, should be conserved and exploited in a 'sustainable and rational way, both in biological and economic terms' (Mortensen 2006: 17). Thus, at a national level, egalitarianism gives way to a more hierarchical conceptualisation of *grindadráp*, the concerns of which drive much of the scientific research mentioned above.

In sum, the degeneration of the institution of *grindadráp* in the late eighteenth century provoked conflict within Faroese society, with disputes between individuals emerging over the distribution of catches. The solution was found through a combination of local initiatives (e.g. through community meetings) and top-down regulation to craft the basic structure of modern *grindadráp*. This combination of hierarchical and egalitarian principles arguably has ensured the continuation of pilot whaling as a subsistence practice. As such, rather than exploiting the resource on the basis of an individualistic view of nature as benign and able to bounce back (as was the case for commercial whaling during much of the twentieth century [Singleton 2016a]), pilot whales were to be exploited collectively and (increasingly) as something that could be accounted for through science-based management.

Distributing the catch

Changes to Faroese society since World War II have placed pressure on the egalitarian-hierarchical *grindadráp*. One such challenge has been urbanisation; the number of people within a whaling district entitled to a share of meat and blubber may now render the individual share worthless. This is important because, as several respondents explained, the primary consideration, for many people, when deciding to be involved in a whale drive is whether they have any pilot whale meat and blubber at home. The solution that has gained widest currency is the innovation of the 'killers' share' (see above). The killers' share was first proposed at a community meeting in Sørvágur in 1972, where it was 'maintained that it was unreasonable that people who expended time, fuel and boats did not receive more of a share than everyone else in the community' (Joensen 2009: 144). The local *sýslumaður* began to implement the new distribution method, which then spread to other areas, eventually being codified within the pilot regulations in 1986 (Joensen 2009: 146)⁵.

This change can be seen as acknowledgement that a purely egalitarian distribution of meat and blubber has become difficult as communities have become bigger. Furthermore, as the Faroese economy has diversified people's involvement in subsistence practices has become increasingly variable and a matter of personal choice. In cultural theory terms, the innovation of the killers' share adheres to an individualistic logic: it is right that those who put most in get the most out, and it is the role of institutions to ensure that this can be done fairly. Modern pilot whaling regulations reward participants for their actions, but prevent *grindadráp* becoming commercial and continue to

allow for the meat to be distributed along egalitarian lines when appropriate. A reasonably clumsy solution thus seems to have been found: although the killers' share is reportedly unpopular among some (Fielding et al. 2015: 44), egalitarian and hierarchical actors have generally accepted individualist participants' rights to be rewarded for their involvement, without which the whole institution of *grindadráp* may be threatened. At the same time the fundamental egalitarianism-hierarchical character of *grindadráp* as an exclusively subsistence activity is unchanged, with the market excluded.

Killing practice

Since the 1980s pilot whale killing methods have developed considerably. This has been partly driven by external pressure: the world at large became more aware of *grindadráp* and as a consequence several animal rights organisations launched campaigns protesting against its cruelty (Kerins 2010). These criticisms echoed discussions on-going in Faroese society. Several respondents asserted that there had been pressure and a consequent process to update animal welfare legislation more generally. Respondents also stated that there was a period of reflection regarding the *grindadráp* and several changes occurred: the use of the spear without *sýslumaður* permission was prohibited and various research projects into killing technology were initiated, leading to the recently instituted spinal lance and the certification scheme that is required for users.

According to those involved in its development, the spinal lance was originally an idea brought forward by a whaler, who suggested the use of a short-handled spear to slice through the whales' spinal cords. This suggestion was then taken on board by a veterinarian, who had been active in *grindadráp* and involved in drafting updated Faroese animal welfare legislation. With the support of the Faroese Ministry of Fisheries, the veterinarian proceeded to develop the tool, testing several prototypes at drives. This testing was witnessed by participants and respondents asserted that the efficacy of the final spinal lance was plain for all to see and accepted across the board, despite initial reservations by some. The design of the spinal lance was also critically discussed within NAMMCO, which subsequently published guidelines for its use (NAMMCO Committee on Hunting Methods 2014).

As of the first of May 2015 the spinal lance is the only legal tool for the act of killing pilot whales in *grindadráp*. In addition, from that date all those who kill whales during *grindadráp* must have attended a course of at least 2 h, for which they will receive a certificate (Ministry of Fisheries 2013). Course content had not been finalised at the time of research and some respondents were unsure of its purpose. However, it was clear that those behind the measure and within the PWA felt that most objections had been dealt with. They stressed that all retained the right to participate in *grindadráp* and receive their share of pilot whale meat; it is just that in order to kill efficiently one requires specific knowledge. Proponents of the certificate framed it as a natural development of practice, asserting that in modern societies killing is always regulated. To those respondents, the certification scheme was a way to avoid poor pilot whaling practice; indeed many respondents provided examples of whales being killed inappropriately and of *grindadráp* that have gone wrong, taking many hours. One respondent suggested such events lead to soul-searching within the Faroese community and among whalers (cf. Olafsson 1990).

In contrast to the spinal lance, the certification scheme was viewed more ambivalently among respondents. Potentially, it can be seen as a significant change to *grindadráp* – one respondent stated that an old whaler he knew had pronounced it as ‘the beginning of the end’. Alternatively, those involved in instituting the changes were confident that they had persuaded the bulk of participants of the value of the innovation. They pointed out that this change only affects a minority of participants, as killing is only carried out by a small, regular group. Likewise the light nature of the scheme was stressed. The initial certification schemes were apparently very well attended with several hundred people reportedly attending in Torshavn and Vágur (Mikkelsen pers. comm. 2015). Respondents who actively oppose *grindadráp* were likewise positive about the new scheme, one asserting that the completely open nature of participation, and the concomitant quality of killing were things that they had long been highlighting as problematic. The same respondent felt that the certification scheme was a healthy move by the authorities.

The changes to killing practice can be understood as a response to concerns over the cruelty of whale drives. This is largely an egalitarian concern: nature is brittle and human interactions with it tend to be harmful. Egalitarian actors are concerned with equalising differences, and this may include distinctions in treatment between animals and humans. This is in contrast to the individualistic approach to animal welfare before the reforms, i.e. human actions are essentially harmless. The solution in this case has come out of a combination of individualistic, hierarchical and egalitarian approaches: individuals have innovated and then had their ideas taken further by those with specialist expertise, notably a veterinarian. These innovations are then formalised within the various hierarchical structures of *grindadráp* that have now been accepted by the body of pilot whalers.

Overall, one can consider the institution of the spinal lance as a largely clumsy solution to the issue of the cruelty of *grindadráp*. From an egalitarian perspective, *grindadráp* has become more caring since the 1980s, with killing times reduced, although some remain unhappy, feeling that whale killing is inevitably cruel. From a hierarchical perspective *grindadráp* is further under ‘proper’ control. One might expect some individualistic actors to be dissatisfied at this meddling in their cherished right to collect food from nature; however they have also benefitted. One of the upshots of improved killing methods mentioned by several respondents was that the quality of the meat has improved, with less problems of sand getting into carcasses.

The status of the certification scheme is more ambiguous; it was clear that several respondents held reservations about the possibility of the egalitarian nature of *grindadráp* being undermined. However, at present, it seems that those concerns have been mollified, judging by the early cooperation with the scheme. At present, two different egalitarian concerns are clashing: the need to ensure that participation in and the sharing of the proceeds of *grindadráp* remains a general right, and the need to minimise cruelty. Time will tell whether the certification scheme represents a response that is too hierarchical for *grindadráp* participants or Faroese society at large.

‘Sustainability’

International animal rights activists have periodically questioned the sustainability of *grindadráp* (Kerins 2010). By contrast, there is little discussion within the Faroe Islands,

with scientific estimates of population sizes seldom challenged in public discourse. Only one Faroese respondent doubted the figures during fieldwork, suggesting they were perhaps overestimates but reiterating that *grindadráp* remained sustainable. Faroese arguments regarding sustainability are based on two sources of data. Firstly, periodic sighting surveys across the North Atlantic have been performed since 1987 (the most recent pilot whale population estimate is 128,093, for the Iceland/Faroese area [NAMMCO 2012⁶]). This is then combined with the extensive catch records to allow estimates to be made regarding the proportion of the pilot whale population that is taken through *grindadráp* per year. This figure⁷, less than 1%, is the basis for Faroese arguments that their practices are sustainable (Bloch 2007:56).

The research that this conclusion was based upon was initiated in 1986-88, when a large scientific team carried out a major study on pilot whales, including sampling almost every whale that was caught (Donovan et al. 1993). The current research is the direct successor of this programme. The purpose of this on-going research, which is discussed and validated within NAMMCO, is to continually monitor the effects of *grindadráp*; one of the museum scientists involved stated that if any decline in population occurred they would be the first to know and highlight it.

Discussions around sustainability within the Faroes are dominated by hierarchical understandings of the environment. In the absence of any evidence of a decline neither egalitarian nor individualist actors' voices are raised against the official view of the situation. As one respondent pointed out, there was an awareness from the 1980s onwards that if the Faroese wanted to continue whaling then they needed to have systems in place to demonstrate that it was not harming the overall population. This has meant that there is little discussion within Faroese society about the sustainability of *grindadráp*. It will be interesting to see what changes occur within Faroese whaling debates if hierarchical science begins to show evidence of decline; the latest sighting survey took place in summer 2015 and results are not yet available. At present, the only conservation measures are restrictions on where and how hunts take place, which also ensure higher success (Fielding 2013a: 88). In the current situation, representatives of other solidarities are happy with hierarchical measures to ensure sustainability, although for different reasons: individualists retain the right to hunt without further restrictions and their assumption of resource abundance is unchallenged. Egalitarian actors are then satisfied that the hunt is sufficiently controlled.

Suitability of pilot whale meat for food

A final prominent discussion around *grindadráp* relates to the suitability of pilot whale meat for human consumption. Since the late 1970s, a growing body of evidence has emerged regarding the concentrations of environmental toxins such as mercury and persistent organic pollutants that collect within the flesh and blubber of pilot whales (Dam and Bloch 2000). The build-up of pollutants and the risk of transfer to the human population has been described as the challenge most likely to lead to the cessation of *grindadráp* (Fielding 2010). This collected evidence has led to dietary recommendations being periodically issued, culminating in a 2008 bulletin from Chief Physician Pál Weihe and Chief Medical Officer Høgni Debes Joensen, which recommends that pilot whale meat be discontinued from human consumption (Weihe and

Joensen 2008, English translation in Joensen 2009: 283–288). However, at present, the Faroese Food and Veterinary Authority differs, suggesting adults could eat at most one meal of pilot whale meat and blubber per month (Heilsufrøðiliga starvsstovan 2011). This has represented a considerable change in official guidance about pilot whale meat, which in times past was recommended as part of a healthy diet (Fielding 2010: 434). The effects of these changing guidelines are still unclear: *grindadráp* and pilot whale meat remain salient symbols of Faroese culture; one study suggesting only limited changes in behaviour occurred as a result of the 2008 recommendations (Fielding 2010; Fielding 2013b) and a 2014 survey suggested that 77% of respondents still felt that it was right to continue driving whales (Gallup Føroyar 2014). Conversely, one of the medical workers behind the new recommendations stated he believed his guidelines will lead to the eventual cessation of *grindadráp* and that he is observing declines in whale meat consumption among his patients.

Among respondents discussing the status of pilot whale meat, it is possible to discern the concerns of cultural theory's social solidarities. Several stated that their opposition to *grindadráp* was at least partially rooted in concerns over the safety of pilot whale meat⁸. These consisted of a senior medical doctor and several environmental activists. These respondents articulated an egalitarian narrative: the potential risks to public health are too great for *grindadráp* to continue. One respondent argued that the scale of risk and the anomalous position of pilot whale meat and blubber outside of public health control systems were not fully appreciated by the Faroese population at large. This same respondent argued that, at the very least, mechanisms (such as catch limits) are needed to ensure that the amount of meat produced did not exceed the amount that could be safely consumed. These respondents argued that conflicting information about pilot whale meat was inhibiting a decisive collective conversation on pilot whale meat and the implications for public health. As one respondent succinctly put it:

Because we also have doctors ... saying, "well there is some good stuff in it". And on the one hand, our government, we have two people in the Faroes, one scientist, and one doctor saying, "you shouldn't eat this". Our ... other food authorities are saying, "well not really, because you can eat it once a month". The rest of our government is saying "here's some free food"

Other respondents held contrasting views: several people we spoke to argued that modern food is often polluted, one even suggesting that the much-studied status of pilot whale meat meant it was better to perhaps go with 'the devil one knows'. This was a manifestation of a fatalistic perspective of the situation – one can't ever completely control what one consumes. Individualistic views also appeared, but infrequently; at one public debate a man asserted that pollutants will decline in the coming decades, so the problem will be reduced, representing a view of nature as able to 'bounce back' (Workman 2014). Criticisms were also made of the dietary recommendations: some suggested that the criteria were overly weighted towards precaution. There are also periodic arguments suggesting that the recommendations fail to take into account the benefits of pilot whale meat as a food source, for individuals and society at large. Similarly, several respondents expressed frustration at the way the dietary regulations had been outlined: they felt it wasn't for research physicians to unilaterally issue

statements. In most cases, these respondents were in some way embedded within the Faroese whaling establishment and they advocated a hierarchical approach to the issue of toxins in pilot whale meat. In this conception, relevant scientists should produce information and authorities should issue guidance looking at the issue from various perspectives. This view is perhaps epitomised by the English language information provided by the Faroese government: information about toxins sits beside statements about the positive benefits of eating pilot whale meat (Føroya Landsstýri 2015).

Over the past 20 years there have been on-going discussions about toxins within pilot whale meat. However, it is difficult to assess the levels of clumsiness. At present, hierarchical and egalitarian voices are articulating differing perspectives publicly, while both individualistic and fatalistic views are manifest within the population at large. Several respondents argued that in the years prior to this study a space had begun to open up for Faroese people to oppose *grindadráp* and as part of this the suitability of pilot whale meat for human consumption was being reflected upon. These respondents, however, stated that this space had closed recently and attributed this to the presence of animal rights activists from abroad campaigning against *grindadráp*. They argued that one of the consequences of these actions, was to simplify the debate into one about whether one was Faroese or not (see Singleton 2016b for a discussion of a 2014 campaign). In cultural theory terms, these respondents were suggesting that the discussion around *grindadráp* was becoming more elegant – simplistic, single-perspective views predominating in highly emotive campaigns. Whether this will affect long-term discussions of toxins in pilot whale meat is another matter. The view expressed by one egalitarian respondent, about the desirability of catch limits perhaps suggests that dialogue remains possible within the Faroese community and that a clumsy solution may still be reachable in dealing with the issue of poisoned pilot whales.

Conclusion

Grindadráp has proven an adaptable and long-lasting institution throughout the course of its history, successfully changing and thus maintaining its prominence within Faroese culture. 'New situations and changes in society and public opinion generate new practices, which are eventually adopted as provisions in the whaling regulations' (Joensen 2009: 147). In examining these adaptations, it is possible to discern all the voices articulating cultural theory's different social solidarities and in several cases (for example regarding killing methods) clumsy solutions have been found. *Grindadráp* as an institution largely embodies a combination of egalitarian and hierarchical understandings of the world. However, as the development of the spinal lance and killers' share illustrate, it is possible for individualistic approaches to gain acceptance. *Grindadráp* can thus be considered a *messy institution* (Ney and Verweij 2015). Whilst it is hard to demonstrate decisively a relationship between clumsiness and sustainability, cultural theory does suggest that those involved with *grindadráp* can react to any decline in pilot whale numbers⁹.

Historically, equality was a noted feature of early Faroese society and the absence of dominance by one group has been suggested to have encouraged clumsy responses to problems (Dugmore et al. 2013). Over the past 30 years, *grindadráp* has become increasingly institutionalised (cf. Nauerby 1996: 165), partly to balance the preoccupations of actors from different social solidarities. By bringing together communities at the drives, and through the subsequent exchanges of meat, it is one of the ways in

which social relations that define the 'Faroese community' are enacted and maintained (Kerins 2010: 111, cf. Nightingale 2011: 166). As a messy institution, *grindadráp's* longevity and stability can be partially explained by participants' ability to identify clumsy solutions.

However, implicit to cultural theory is an understanding that the world continues to change and that clumsiness must be actively maintained. In this sense, the issue of toxins in pilot whale meat is perhaps the greatest current challenge to the ability of *grindadráp* to adapt. The egalitarian basis of *grindadráp* is an important plank in its continued place in Faroese society (Wylie 1993; Kerins 2010). In essence, it is a communal way of providing free food and nutrition. This egalitarian concern is currently seriously challenged by the toxicity of pilot whale meat, with opponents of *grindadráp* pointing out that hunts for inedible food have little purpose. Faroese society is currently working out how to resolve this issue, as it is complicated by aggressive criticism from abroad. With modern living offering new possibilities for social life, domestically and internationally, continued efforts will need to be made to maintain the messy status of *grindadráp* and to keep the clumsy solutions coming.

Beyond the Faroes, this article has highlighted the importance of clumsiness to environmental institutions. *Grindadráp* has maintained its prominence within Faroese society because it draws from different social solidarities. In attempting to design robust institutions for environmental governance and management, policy makers need to be aware of multiple ways of understanding the world and to be careful not to essentialise actors in particular ways (Nightingale 2011). Many policy approaches have been criticised for assuming that all actors are self-centred; individualists unwilling to cooperate to maintain communal goods (cf. Ostrom 1990; Peterson 2014). Cultural theory proposes a different, but still pragmatic, approach: highlighting the importance of social relations in shaping worldviews in dynamic situations. Rationality everywhere is plural and contingent and finding the right path forward requires clumsy steps.

Endnotes

¹The Faroe Islands form a semi- autonomous region within the Kingdom of Denmark. The Faroese maintain sovereignty over most domestic issues, while Denmark represents them internationally.

²See 6 and Mars (2008) for a review of the history of cultural theory and discussion of criticisms.

³Two points should be made here. Firstly, the nature of the fatalistic solidarity means it is seldom represented in any given situation. However, events can push upholders of other solidarities into fatalism. Indeed, if a problem is too complex to be solvable, with no clumsy solution apparent, then the perspective of the fatalistic solidarity may be borne out (Verweij et al. 2011b). Secondly, in some accounts of cultural theory there is a fifth solidarity, 'the autonomous' solidarity, whose members are largely detached from the wider society (e.g. hermits). As is common in cultural theory analyses, for simplicity's sake this extra solidarity has been omitted (cf. Thompson 2008).

⁴Generally the pod needs to be relatively near land; pilot whalers state that whales driven for longer distances become 'stubborn' and difficult (Kerins 2010: 125).

⁵This innovation was not universally accepted; on the islands of Suðuroy and Sandoy, meat and blubber are still divided according to local practice, with no killer's share.

⁶Buckland et al. (1993) produced an overall pilot whale population estimate of 778,000 for a much larger area of the North Atlantic. No subsequent survey has covered as large an area.

⁷The number of whales caught is highly variable: in 2013, 1,104 pilot whales were killed; in 2014, 48 (Hagstova Føroya 2015). On average, under 900 whales are killed annually (Fielding 2013b).

⁸This was echoed by a 2014 survey, which found that 62% of those who stated they opposed grindadráp did so partly because of the effect of toxins on the young (Gallup Føroyar 2014).

⁹Although if the cause of decline is elsewhere, the impact of Faroese actions may be limited.

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BS conducted fieldwork, transcribed interviews, completed data analysis, and was lead writer for this article. RF also contributed data and text. Both authors have read and approved the final manuscript.

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