New cod war of words: 'cod is God' versus 'sod the cod' - two opposed discourses on the North Sea Cod Recovery Programme

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Abstract

New insights into the North Sea Cod Recovery Programme (CRP), initiated in 2003 by the European Commission to reverse the long-term decline in cod stocks, are presented using discourse analysis. The main conservation measures taken under the CRP have been to reduce catch limits drastically and to increase control over vessels' fishing activities. There has been considerable controversy over the programme from its inception, with protagonists broadly divided into two discourses: (1) 'cod is god' – in which cod has assumed the status of the defining test of the European Union's (EU) resolve to manage fish stocks sustainably in EU waters; and (2) 'sod the cod' – in which cod is regarded as one of a number of target commercial fish species, with no special status. Drawing on Frank Fischer's distinction between hegemonic and challenging discourses, we analyse the conflict between them at three levels: empirical; conceptual; and political. We consider moves to reconcile the two discourses in a policy consensus on a revised CRP, which suggest that the challenging discourse (sod-the-cod) has had some success in modifying the impact of the hegemonic discourse (cod-is-god).

Keywords: cod; cod recovery programme; ecosystem-based approach; fisheries management; discourse analysis

1. Introduction

The North Sea Cod Recovery Programme (CRP) was introduced in January 2004 in response to the severe decline of North Sea cod (*Gadus morhua*) from a peak of 250,000 tonnes of spawning stock biomass (SSB – the mature component of the stock) in the early 1970s, to 39,000 tonnes in 2002, considerable less than 70,000 tonnes, below which scientists judge the stock to be at high risk of collapse (Horwood *et al.*, 2006, p. 961; IP, 2003, p. 2). The programme aimed to restore the SSB of cod stocks in the North Sea, Skagerrak and Eastern Channel to 150,000 tonnes for two successive years, at which point it would be judged as being out of recovery (IP, 2003, p. 2). The stakes were high: the EU Fisheries Commissioner, Dr Joe Borg, described the recovery of cod stocks as "a fundamental problem" (Fishing News 15/12/06, p. 3). The environmental non-governmental organisation [ENGO], Greenpeace, said that "The plight of the North Sea is stunningly simple. If fishing for cod is allowed to continue, cod will be wiped out" (Fishing News 12/10/07, p. 9).

Under the CRP, cod quotas were cut and days-at-sea restrictions were imposed to limit fishing effort and cod mortality (CEC, 2003; IP 2003, pp. 3-4). Restrictions varied according to mesh size, but were applied to all demersal North Sea fleets, not just those actively targeting whitefish (ICES, 2007a). Monitoring measures, such as special reporting restrictions, an obligation to land catches above a certain quantity in designated ports, and the use of the satellite Vessel Monitoring System (VMS), accompanied the programme to improve compliance. Furthermore, a 32 million Euro fund was allocated to decommission vessels and provide funding for socio-economic measures. However, the CRP did not implement ICES (International Council for the Exploration of the Sea) scientists' recommendation of complete closure of the cod fisheries in the North Sea.¹

¹ ICES recommended closure in 2003, and a zero catch every year (ICES, 2003; ICES, 2004; ICES, 2005a; ICES, 2006; ICES, 2007a) until October 2007, when it recommended "constraining catches in 2008 to less than 50% of the 2006 catches" (ICES, 2007b). This was because the stock was so far

The verdict on the CRP has been mixed. At the European scale, in 2007, the Commission expressed disappointment that the CRP had only reduced cod mortality by 15% instead of the expected 50%. This was because the decrease in fishing effort was only 6.7 % (CEC, 2007, pp. 9, 12). Scientists from the Commission's advisory body, the Scientific, Technical and Economic Committee for Fisheries (STECF), reported that the reduction in fishing effort by the big mesh fisheries had been largely undermined by the increase in effort that had occurred in the small mesh fisheries for whiting [Merlangius merlangus], Nephrops, and beam trawling (Fishing News 6/4/07, p 7). The Commission announced that it would evaluate and review the CRP during 2007, and propose a revised recovery plan in 2008 (CS, 2007, pp. 7-9). At the national scale, the CRP has caused more controversy in UK fisheries politics than any other issue since the furore over the days-at-sea scheme introduced in 1992 (Gray, 1998, pp. 7). Indeed, "The recovery plan has eclipsed the wider debate over the reformed CFP [Common Fisheries Policy]" (RSE, 2004, para. 7.19). The reason why passions have been so inflamed is that the socio-economic impact of the CRP on the whitefish sector has been very severe, and fishers have questioned the CFP's empirical rationale, its conceptual coherence, and its political strategy.

In this analysis of the CRP, we identify two main discourses: 'cod is god' and 'sod the cod'. The codis-god discourse embodies the views held by those who defend the CRP, and puts the blame for the cod decline mainly on over-fishing. The sod-the-cod discourse embodies the views of those who oppose the CRP, and puts the blame for the cod decline mainly on environmental factors, principally climate change. Behind this difference of opinion over the causes of the cod decline (empirical disputation), however, lie differences of opinion over the nature of the ecosystem (conceptual disputation), and the wider strategies that drive the two discourses (political disputation). With regard to the conceptual disputation, the cod-is-god discourse conceives the marine ecosystem in terms of a set of dynamic processes which, if left undisturbed by human intervention, would reverberate within a standard range of behavioural configurations. Human interventions should not be allowed to shift the ecosystem outside this standard range of natural variability, because that could irrevocably degrade it. By contrast, the sod-the-cod discourse conceives the ecosystem in terms of a more radically evolving process, with no standard range of variability, but a capacity to adapt to continuous environmental changes. Accordingly, when a part is rapidly declining, that means that the ecosystem is undergoing a process of evolutionary re-configuration, and does not need to be rescued from the danger of degradation. So, while both discourses acknowledge the change in cod abundance, the cod-is-god discourse interprets it as potentially a negative spiral of degradation, whereas the sod-the-cod discourse interprets it as part of a directionless natural process. With regard to the political disputation, the codis-god discourse is viewed as a strategy by the European Commission to reinforce its control over Member State fishing fleets; whereas the sod-the-cod discourse is viewed as a strategy to undermine the CFP's top-down system of fisheries governance.

In section 2 of this paper, we set out the theoretical framework of discourse analysis drawn from Frank Fischer which informs our approach to the issue. In sections 3 and 4, we explain the empirical, conceptual, and political bases of each of the two discourses. In section 5, we discuss recent attempts to build a policy consensus out of the two discourses, and in section 6, we conclude that although the cod-is-god discourse remains dominant, the moves towards a policy consensus show that its hegemony has been partially eroded by the sod-the-cod discourse.

2. Theoretical framework – discourse analysis

Discourse analysis is increasingly being used in the literature on fisheries management. For instance, Alan (Chris) Finlayson (1994), Gisli Palsson (1998), Peter Bailey (2000), Petter Holm (2003), Kare Nielsen (2003), Doug Wilson (2005) and Delaney *et al.* (2007) have all employed it in their writings. Moreover, Nielsen (2003) and Delaney *et al.* (2007) have examined the North Sea cod issue itself from discursive perspectives, though Nielsen's aim was to explore the epistemology of the cod crisis, and Delaney *et al.*'s aim was to determine how far public discourses on the issue have influenced cod policy. By contrast, our paper focuses on the conflict between two major cod-related discourses.

below its safe SSB level of 70,000 tonnes that only a zero catch mortality would restore it to that level "in the fastest possible time" (Horwood *et al*, 2006, p. 963). In practice, a zero catch would have meant the closure of all demersal fishing to avoid cod by-catch (CS, 2007, p. 1).

Our purpose in employing discourse analysis is threefold. First, it is to show that the cod-is-god and sod-the-cod viewpoints are grounded or embedded in wider sets of assumptions and preconceptions deeply held by their respective adherents. Second, it is to show that what is at issue is less the *fact* of cod decline than its *meaning* - including its extent, cause, implications and remedy – and the meaning to us of the decline of cod depends on prior understandings or discourses which serve as lenses through which we get our bearings on the subject. Third, discourse analysis reveals the political conflict at the heart of the debate over cod.

A discourse is a shared understanding of the world, cast in language which helps people who hold it to make sense of information by putting it into a clear narrative (Dryzek, 1997, pp. 8). In other words, discourses are stories or accounts which give meaning to 'facts' that would otherwise remain random data. For discourse analysts, so-called 'scientific truths' are meanings given to data which meet the criteria established by scientific discourses (Fischer, 2003, pp. 128-129). Discourses also reflect and reinforce power relationships: "discourses always take place within a configuration of power" (Fischer, 2003, p. 236). Indeed, politics is all about conflict between competing discourses (Fischer, 2003, p. 46; 65). Typically, there will be a conflict between a hegemonic discourse and a challenging discourse. A hegemonic discourse is the currently-dominant discourse, which is "embedded in the existing institutions"; is often scientifically expert-based; and maintains the power of social control exercised by those in authority (Fischer, 2003, p. 45). A challenging discourse offers an opposed interpretation to the prevailing scientific discourse, but the hegemonic discourse dominates, perhaps because it has a better argument, or a stronger social power base (Fischer, 2003, p. 128).

We mainly follow Frank Fischer's interpretation of discourse analysis as our theoretical framework in examining the bi-polar cod recovery discursive conflict. In applying this approach, we view the cod-isgod discourse as the hegemonic discourse embedded in the institutional structure of the Common Fisheries Policy (CRP); and we view the sod-the-cod discourse as the challenging discourse, exemplified in the alternative perspective held by many fishers and some scientists. These are two antagonistic discourses which have arisen because of differences of opinion on empirical and conceptual issues – differences which have sometimes hardened into a power struggle. This is not to imply that individual actors on either side are control freaks: rather that, at an institutional level, the empirical and conceptual conflict between the actors inevitably fuels tension between two opposed sets of social forces.

The sources of the data we have used to identify the two discourses include official documents from the European Commission, ICES [International Council for the Exploration of the Sea], NSRAC [North Sea Regional Advisory Council], MWWRAC [North Western Waters Regional Advisory Council], and RSE [Royal Society of Edinburgh]; documents from UK fishers' representative organisations, such as NFFO [National Federation of Fishermen's Organisations] and SWFPA [Scottish White Fish Producer's Association]; peer-reviewed scientific papers; published books on discourse analysis and fisheries management; and newspaper editorials, articles, and reports of comments made by fishers and administrators. We have not evaluated the scientific validity of these materials, because our purpose as discourse analysts is not to judge them, but to use them to throw light on their understanding of the cod decline debate.

3. The 'Cod-is-God' Discourse

The 'cod-is-god' tag is used by those opposed to the 'cod-is-god' discourse:

"...in the name of trying to restore cod stocks to unattainable levels, fishermen have to stagger on year after year under an increasingly unsupportable burden of restrictions. At most risk this year are the prawn fisheries, which the EU Commission shows every sign of wanting to restrict as part of its 'Cod is God' campaign" (Fishing News editorial, 21/10/05, p. 2).

"It's plain for all to see that 'cod is still God' to Joe and his cronies across in Brussels" (Skipper Alex Flett, Fishing News, 28/10/05, p. 7).

"...by taking legally caught North Sea cod off their shelves, ASDA is simply adding to the vast range of insulting and punitive measures that have been dumped on the Scottish fishing industry in pursuit of the 'COD IS GOD' mantra" (Struan Stephenson (MEP) Fishing News, 15/9/06, p. 14).

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The discourse itself incorporates a robust defence of the measures that have been taken so far under the 172 CRP, a policy which has become symbolic for the Commission. Ernesto Penas Lado of the 173 Commission is reported to have stated that "the management of certain fisheries resources -174 particularly cod – is becoming a flag issue that represents the issue of the success or failure of the 175 fisheries management policy" (NSRAC, 2007a, p. 2).² Cod-is-god discoursers also include ENGOs 176 who argue (like ICES) that the CRP should ban cod fishing altogether. For instance, WWF Scotland 177 claimed that by approving a 2006 TAC for North Sea cod of 23,205 tonnes, EU fisheries ministers had 178 "effectively written off cod in the North Sea...ensuring that this iconic British species has virtually no 179 180

chance of survival or recovery" (Fishing News, 6/1/06, p. 6). The cod-is-god discourse has three dimensions: empirical, conceptual, and political.

3.1 Empirical dimension

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The empirical dimension can be seen in ICES's analysis of the fact of, the cause of, and the way it proposes to reverse, the decline of cod stocks in the North Sea: landings fell from a peak of 354,000 tonnes in 1972 to 50,000 tonnes in 2001 (Bannister, 2004, p. 317); ICES saw over-fishing as the principal cause behind this documented decline (ICES, 2007a); and severe cuts in fishing effort were proposed to reverse it (ICES, 2007b).

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ICES did not consider climate change to be the main cause of the decline in North Sea cod stocks, explaining that although there had been "a northerly shift in the mean latitudinal distribution of the stock", this was likely to be due to the "disproportionately high rates of fishing mortality" in the southern North Sea (ICES, 2007a, para. 6.4.2). Other scientists also rejected the climate change theory (CODYSSEY, 2007; Neat & Righton, 2007, p. 796; RSE, 2004, Executive Summary para. 25; Cook et al., 1997, p. 521). Even if climate change is affecting North Sea cod, this was not seen by scientists as a reason for defeatedly giving up on trying to save it: on the contrary, it means that the stock must be managed even more carefully (CS, 2007, p. 9). As Chris Frid (pers comm.) said, we may not be able to control the climate, but we can control fishing effort. Thus, for the cod-is-god discourse, the reason why the CRP is failing is because the cut in fishing effort on cod has not been severe enough. Cod could recover, if fishing mortality were sharply reduced (Horwood, et al., 2006).

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3.2 Conceptual dimension

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The conceptual dimension of the cod-is-god discourse exists in ICES' interpretation of the ecosystembased approach [EBA] to fisheries management. The CRP could be interpreted as an application of the single species-based approach (SSBA) to fisheries management which still characterises much of the practice of the Common Fisheries Policy (CFP) (Beddington, et al., 2007, p. 1713). Typically, the SSBA requires drastic action to protect any commercially valuable species which is diminishing in spawning biomass. However, the CRP can also be interpreted as an application of the EBA, which the reformed CFP has embraced in theoretical terms. This switch from SSBA to EBA reflects a global rejection of the monistic policy of attempting to manage particular species in isolation from the whole marine environment, and an insistence on a holistic policy of viewing the health of each species in the context of the health of the rest of the ecosystem.

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However, there is more than one conceptualisation of the EBA, and ICES' conceptualisation is based on the capacity of the marine ecosystem to avoid undue perturbation: "ICES acknowledges the need to manage fisheries in a manner which ensures ecosystems are sustainable, in the sense that no species becomes extinct" (ICES, 2005b, p. 2). On this view, the ecosystem is a complex of dynamic processes which work naturally to reduce the level of disturbance within it. If humans exploit a fish stock to extinction, they may put those anti-perturbation forces under such threat that they fatally damage the ecosystem. Worm (2006), in a press release for a high profile paper on the role of marine biodiversity,

² Note, however, that even within the European Commission itself there are elements of both discourses. Ernesto Penas Lado is reported to have pointed out that while, on the one hand, "the European Community has a few iconic stocks, such as cod and bluefin tuna [Thunnus maaccoyli] which are regarded as on the brink of collapse, and that DG Environment have identified these as a 'flag issue'...on the other, there is a preference within DG Fisheries for all stocks to be treated the same" (NSRAC, 2007a, p. 2).

stated that "In losing species, we lose the productivity and stability of entire ecosystems". Holling also used the term 'stability' to characterise this self-correcting concept of the EBA (though he seemed to interpret 'stability' much more narrowly than does ICES, as a single point of equilibrium): "stability...represents the ability of a system to return to an equilibrium state after a temporary disturbance; the more rapidly it returns and the less it fluctuates, the more stable it would be" (Holling, 1973, p. 14).

Applying this conceptualisation to the North Sea, there is an assumption that the task of fisheries management is to limit the extent of disturbance to the dynamic processes, in order to ensure that the system remains within the standard range of natural variability. This means taking measures to bring the cod spawning biomass back to its level of previous years. If such measures are not taken, the fear is that recruitment failure will lead to a collapse of the cod stock (Cook, *et al.*, 1997) and a process of fishing down the food chain, in which top quality predators such as cod are sequentially exploited, leaving only 'rubbish' species such as dogfish [*Scylliorhinus*] or even jellyfish [Syphozoa] (though this nightmare scenario has not been predicted by ICES). Such a change could be irreversible, due to a 'regime shift' in the ecosystem (Collie *et al.*, 2004). As Borg put it, we must hold the line on cod, or else risk the collapse of other stocks too (Fishing News, 4/5/07, p. 3).

3.3 Political dimension

The political dimension of the cod-is-god discourse has two elements – tactical and strategic. The tactical element consisted in the recognition that a complete ban on all cod fishing is not practicable. For example, the Commission admitted that, while biologically, the "optimal" way to recover cod stocks would be to close all fisheries likely to catch cod, such a policy was politically unfeasible (CEC, 2001, pp. 4-5).

The strategic element is bound up with the high profile given to cod by the Commission. Indeed, the CRP elevated the issue to the heart of EU fisheries politics: "The cod has been taken hostage, so to speak, in a political setting...North Sea cod has assumed centre stage in a political debate" (Schwach *et al.*, 2007, p. 802). Unsurprisingly, sod-the-cod discoursers saw a political motive for this elevation – the Commission's desire to reinforce its control over EU Member States' fishing fleets: for example, an editorial in Fishing News has suggested that the Commission's aim was "a politically inspired project to eradicate what remains of the larger vessels in the UK whitefish fleet" (14/9/07, p. 2).

4. The 'Sod-the-Cod' Discourse

The sod-the-cod tag is used in a similar fashion to the cod-is-god tag - by those actors, such as government ministers, scientists and environmentalists, opposed to its discourse:

[I am not prepared to contemplate] what some people have called a 'sod the cod' policy. (Ben Bradshaw, then UK Fisheries Minister, Fishing News, 16/12/05, p. 7)

We need not consider abandoning the cod – in some quarters termed the 'sod-the-cod' scenario.

(Horwood et al., 2006, p. 964)

The message from Brussels is now clear – cod is being written off as a priority stock worth conserving. With each successive year of tinkering with the problem, this perception of 'sod the cod' is gaining currency.

(Dr Euan Dunn, Royal Society for the Protection of Birds (RSPB), Fishing News, 5/1/07, p. 4)

The sod-the-cod discourse incorporates an attack on the CRP, launched primarily by the fishing industry, supported by some scientists. The rationale behind this discourse is that cod recovery measures should not undermine the legitimate right of fishers to catch other species that are more abundant, such as haddock [Melanogrammus aeglefinus] and whiting. Nor should it undermine the operations of non-whitefish fisheries which only catch cod as bycatch, such as flatfish and Nephrops. On this view, the CRP is perceived as being "politically driven by fear of a repeat of the Canadian experience and a 'not on my watch' mentality...and a 'we have to be seen to be doing something' syndrome" (Barrie Deas [NFFO Chief Executive] CS, 2007, p. 22). The CRP is also seen as a reflection of cod's "emblematic status" (Fred Normandale [NFFO Chairman], Fishing News, 5/1/07, p.

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3), with "the European Commission…hell bent on pursuing a policy of saving cod at all costs…It insists on continuing to implement a plan to rebuild cod stocks that has patently failed, despite being in force for some five years and destroying two thirds of the Scottish white fish fleet in the process" (Roddy McColl, [Secretary, Fishermen's Association Ltd (FAL)), Fishing News, 29/9/06, p. 6). An editorial in Fishing News (8/6/07, p. 2) alluded to the "ICES/Brussels juggernaut as it rolls remorselessly towards its Holy Grail of 'saving the cod'…This is a system that has a life and momentum all of its own". Another editorial (27/10/06, p. 2) was headed "Cod rules again". Like the cod-is-god discourse, sod-the-cod has three dimensions – empirical, conceptual, and political.

4.1 Empirical dimension

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The empirical dimension of the sod-the-cod discourse is, again, based on the fact of, the cause of, and the proposed remedy for, the cod decline. With regard to the fact, sod-the-cod discoursers claim that there is scientific proof that the decline in cod has been exaggerated, and that there are areas in the North Sea where cod is thriving. For example, a Fisheries Science Partnership (FSP) survey found evidence of healthy juvenile stocks (Fishing News, 6/4/07, p. 14). The experiential knowledge of fishers reinforced these findings: "In 17 years at sea, this is the best fishing I have experienced" (codfishing skipper, Fishing News, 4/5/07, p. 3); "fishermen in the northern North Sea cannot avoid catching cod because it is so abundant...All a reduced TAC will achieve when fishermen find it difficult not to catch cod will be even more discards – something the Commission is trying to reduce" (editorial, Fishing News, 8/6/07, p. 2).

With regard to cause, even if there has been a serious decline in North Sea cod, the sod-the-cod discourse rejects the claim by the cod-is-god discourse that that decline was due to over-fishing. They argue that cuts in the Scottish whitefish fleet of 65% between 2000 and 2003 (The Scotsman, 16/10/07) have reduced the cod catch to an insignificant level, yet still it is claimed by ICES that the stock was not recovering. Instead, the sod-the-cod discoursers blame environmental factors for the cod decline. Among these factors, the impact of predators such as seals and other fish was often mentioned, but the main environmental factor accounting for cod decline was climate change. Warmer waters, sod-thecod discoursers claimed, were driving the cod further north, because their food sources (including plankton) and their spawning and juvenile survival success, depended on cooler temperatures. For instance, the UK-government sponsored Marine Climate Change Impacts Partnership reported that during the past 40 years, colder water plankton, which cod depend on for food, have shifted 600 miles north as the seas surrounding the UK have warmed up (Fishing News, 15/12/06, p. 2). Similarly, a report in 2005 from the Alfred Wagner Institute for Polar and Marine Research in Bremerhaven based on readings taken at the Biological Institute on Heligoland since 1962, revealed that an increase of 1.1% in the water temperature of the North Sea over the past 40 years had seen a sharp reduction in the cod population (Fishing News, 11/2/05, p. 2; cf Brander & Drinkwater, 2005; Drinkwater, 2002; Planque et al., 2003).

4.2 Conceptual dimension

The conceptual dimension of the sod-the-cod discourse consists in the understanding of the EBA to fisheries management held by the fishing industry along with some ecologists and social scientists. This conceptualisation of the EBA is based on the notion of adaptability. Adaptability entails conceiving the ecosystem less in terms of a standard range of natural variability which should be maintained, than as a process of continuous adaptation to changing environmental factors which human intervention can only influence, not control. Walker et al. (2004) see it as changing "the focus from seeking desirable states...to resilience analysis...adaptive resource management and adaptive governance." For Holling, a natural eco-system can be very unstable (fluctuating widely in its stock levels) and yet be very resilient - persisting in some configuration or other (1973, p. 17): "resilience...is a measure of the persistence of systems and of their ability to absorb change and disturbance and still maintain the same relationships between populations" (1973, p. 14); "Fish populations wax and wane as a natural condition", and "species can completely disappear and then reappear" (1973, p. 1-2). Smith (1990, p. 5) explains the adaptability conceptualisation in terms of chaos theory – a view of the marine ecosystem as "continually susceptible to disequilibrium rather than in a linear mode where entropic systems are in constant search for equilibrium". According to this adaptability conceptualisation of the EBA, no particular species is critical to the health of the ecosystem as a whole: "the extinction of rare species (or even some common ones) is not likely to make ecosystems stop working or, in most cases, to make them function very differently than before"

(Ehrenfeld, 2005, p. 33). Whether this means there are no boundaries at all on the acceptable range of natural variability, is unclear.

Nevertheless, insofar as the sod-the-cod discourse is underpinned by this conception of the ecosystem, it is the resilience of the whole ecological and social ecosystem, rather than the performance of any particular species in it, that should be the aim of management. Cod should not, therefore, be treated separately from other species, still less at their expense, but be integrated into an overall management strategy (RSE 2004, para. 7.20). For example, "Stocks of different species of fish have always risen, fallen and moved in reaction to the natural environment, and it has always been the skill of fishermen, as hunters, to adapt their fishing in response to these changes" (editorial, Fishing News, 5/8/05, p. 2; cf. SWFPA, 2007); "The evidence points to a regime shift that looks likely to continue into the future", and management has to adjust to this regime shift, not resist it (NWWRAC, 2007, p. 5); although cod is significant for fishers' earnings, other species are the "principal mainstays" of the North Sea fishery (NSRAC, Fishing News, 14/4/06, p. 20).

This viewpoint rejects the allegation made by the cod-is-god discourse that a regime that lets the cod fluctuate naturally will result in a degrading of the North Sea ecosystem, with an explosion of 'rubbish' species like jellyfish [Scyphozoa] and starfish. The experience of the demise of Newfoundland cod in the late 1980s and early 1990s, where a shrimp/shellfishery has since developed with more commercial value than the past cod fishery (McCulla, 2006; CS, 2007, p. 16), provides grounds for optimism (though there are signs that the shrimp/shellfishery may be manifesting the structural problems that led to the collapse of the cod fishery (Jake Rice pers comm.)).

4.3 Political dimension

The political dimension of the sod-the-cod discourse centres on the notion of stakeholder participation (SP). According to this discourse, humans are part of the ecosystem - indeed, many writers prefer to use the term 'socio-ecological system' rather than 'ecosystem', to emphasise the role of humans in it (Walker et al., 2002). Humans interact with other organisms in the marine ecosystem, both affecting it and being affected by it. On this view, fishers and other stakeholders must be involved in attempts, like the CRP, to manage the ecosystem, otherwise such attempts will fail: "If nothing else...the cod crisis has highlighted the issue of stakeholder participation, which is set to achieve greater attention within ICES and the new Common Fisheries Policy" (Bannister, 2004, p. 334); "Stakeholder participation is essential if we are to rebuild cod stocks successfully" (CS, 2007, p. 3). The top-down approach of the CRP exemplified the elitism of the cod-is-god discourse: in Ian McSween (Chief Executive of the Scottish Fishermen's Organisation (SFO))'s words, "The message from the Commission was that there would be a new cod recovery plan whether you liked it or not" (CS, 2007, p. 34). But a top-down approach would not succeed: "the current system of fisheries governance is flawed...The RACs should not simply be asked to comment on proposals from the Commission; they need to be at the very heart of the process for rebuilding cod stocks" (CS, 2007, p. 3); "The RACs consider that the reason why the cod recovery plan has failed to deliver its objectives is as much a failure of governance as a failure of any specific measure...the top-down...approach inherent in the existing cod recovery plan...[is] the antipathy of good governance" (NWWRAC, 2007, p. 4). Of course, the logic of this argument is that not only fishers, but the whole of society, has a right to participate in deciding the CRP, because everyone has a stake in the sea, but it is a moot point which of our two discourses would be endorsed by society.

Hamish Morrison (SSF Chief Executive) suggested that "The stakeholders have to work out and implement a cod recovery plan themselves" (Fishing News, 17/1/03, p. 3) – a suggestion that has been taken up by the Scottish Executive in its launch of a voluntary scheme to protect North Sea cod stocks, in which real time area closures will be enforced in response to skippers' reports of high concentrations of juvenile cod (SE, 2007). A similar scheme was proposed by the NFFO (2007), in which fishers would themselves take responsibility for cod recovery, by adhering to voluntary "Cod Avoidance Plans".

There is a wider strategy in this political dimension of the sod-the-cod discourse – to use the cod issue in order to challenge the CFP's hegemonic domination, and reinforce the case for the devolution of European fisheries policy decision-making to regional management councils (not just regional advisory councils, as at present) (CS, 2007, pp. 36, 50, 55). Clearly, the sod-the-cod discourse wants to substitute one form of politics (bottom-up, decentralised, participative co-management – logically

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involving all stakeholders) for another form of politics (top-down, centralised, elitist authoritarianism) in European fisheries governance.

5. Policy consensus building

During 2007, attempts were made to modify the antagonism between the two discourses, in order to reach a consensus on a revised CRP. The Cod Symposium held in Edinburgh in March 2007 was a major consensus-building exercise, and four main points of concord emerged out of its deliberations. First, there was agreement that cod decline was caused by *both* overfishing and environmental factors: "There is little point in trying to separate the effects of fishing from the effects of environmental change. It is now clear that they can act together to damage cod stocks" (CS, 2007, p. 1). This element of consensus reflected the views of both scientists and fishers. For example, many 'establishment' scientists accept that alongside overfishing, climate change poses a threat to cod stocks (CS, 2007, p. 38; Turrell, 2007; O'Brien *et al.*, 2000, p. 142; Horwood *et al.*, 2006, p. 964; Brander & Drinkwater, 2005, p. 1; Drinkwater *et al.*, 2005, pp. 1203-1204; Beaugrand *et al.*, 2003, pp. 661, 663; Blanchard *et al.*, 2005). Equally, many fishers admit that overfishing has played a significant role in depleting North Sea cod stocks. For instance, Sam Lambourn (chair of NWWRAC) stated that "It had been generally agreed that the decline we had seen in cod had been caused by very heavy fishing pressure at a time when the recruitment of cod had been poor, probably because of environmental change (CS, 2007, p. 35; cf. NWWRAC, 2007, p. 4).

The second point of consensus reached at the Cod Symposium was that North Sea cod stocks could recover, though not necessarily to their former level because of climate change (NWWRAC, 2007, p. 5; CS, 2007, p. 1). Indeed, there was a feeling that the stocks were already recovering. ICES (2007b) stated that "Our scientific surveys show that the number of young fish has increased". Mike Park (executive chairman of SWFPA) referred to the "good news story...of the heartening signs of renewed cod abundance in the North Sea", and emphasised "that we are eager to continue playing a pivotal role in the continued recovery of cod" (Fishing News, 20/7/07, p. 2). Similarly, Bertie Armstrong (SFF Chief Executive) said that "For the iconic cod, at last we have scientific confirmation of the fishermen's observations – the stock in the North Sea is recovering" (Fishing News, 19/10/07, p. 2).

Third, steps to protect cod should not prevent the sustainable prosecution of other stocks: "Recovery plans must strike a balance between rebuilding cod stocks and allowing legitimate fisheries for more abundant species to take place" (CS, 2007, p. 3). As Deas put it: "Whilst cod stocks had been low, other commercial stocks had been highly successful within the same ecosystem. Prawns [Nephrops], haddock, monkfish [Lophius piscatorius], saithe [Pollachius virens] and whiting were all in a good state. An important policy objective should be to maintain viable fisheries on these stocks whilst rebuilding cod stocks" (CS, 2007, p. 22).

Fourth, there was consensus that specific biomass targets were less important than movement in the right direction. The Commission expressed this point as follows: "Both in the Cod Symposium and in STECF advice it is pointed out that...it is not possible because of changing environmental conditions to specify a particular biomass level as a target for rebuilding. The right approach would be to reduce fishing mortality and to let the stock recover to whatever level the environment can sustain. In order to follow this advice, a new cod recovery plan should not include specific target biomasses" (CEC, p. 2007: 8). As Deas said at the Cod Symposium, "Movement in the right direction was more important than defining a specific destination...We must...work with the grain of natural change...to move the cod recovery plan to a more incremental approach, where we...husband the signs of recovery as they appeared" (CS, 2007, p. 23).

However, on the issue of whether the signs of recovery of cod stocks justified an increased cod quota, the differences between the two discourses seemed too deep to resolve. The Commission claimed that a consensus on this issue *had* been reached at the Cod Symposium: "The Cod Symposium and STECF concur that cod is still depleted at a low level and is fished at too high a mortality rate... Fishing remains the main impact on the cod stocks, and a reduction in cod catches is the main measure that will deliver cod recovery" (CEC, 2007, p. 4). The Commission reiterated its commitment to further reduce the cod TAC (Fishing News 7/9/07: 3) on the basis of ICES advice which recommended a 50% cut in cod catches from 2006 levels for 2008 (ICES 2007b). UK government officials took a similar line: "...all the scientific advice still points to the need for much less fishing effort if cod stocks are to recover" (Rodney Anderson [Department for Environment, Food and Rural Affairs (Defra)], 2006/7).

But the sod-the-cod discoursers argued for an increased quota, otherwise there would be massive discards of mature cod. As one fisher put it, "The cod recovery programme is now doing more harm than good. The stocks have recovered...but now dumping of the recovered stock is absolutely absurd. Many vessels around the UK have to dump good quality fish in the name of conservation...The quota is so low that it cannot be landed" (Brewer, 2007). Armstrong (2007) explained that "in seeking a TAC increase we are talking about ditching less cod, not catching more". A much more effective way to protect the 2005 cod year class would be a system of real time and area closures, carefully selected in consultation with fishers (NSRAC, 2007b), together with a voluntary 'cod avoidance plan' with incentives of extra days at sea for fishers who sign up to the plan.

5. Conclusion

This article has applied discourse analysis techniques to identify two competing interpretations of the EU's Cod Recovery Programme – the cod-is-god discourse and the sod-the-cod discourse. At one level, the conflict between the two discourses boils down to a dispute over the cause of the cod decline: the cod-is-god discourse blames over-fishing; whereas the sod-the-cod discourse blames climate change. But, beneath this empirical dispute lies a deeper division between two different conceptions of the ecosystem-based approach (EBA) to fisheries management. The cod-is-god discourse conceives EBA to mean restricting human-induced fluctuations to within the standard range of natural variability, which entails protecting cod to prevent fishing down the food chain; whereas the sod-the-cod discourse conceives EBA to mean responding flexibly to the inherent adaptability of the ecosystem to changed circumstances, which permits switching by fishers to more abundant species. Beyond these empirical and conceptual divergences, there lies a political conflict, between the hierarchical or top-down mode of governance exemplified by the cod-is-god discourse, and the participatory or bottom-up mode of governance exemplified by the sod-the-cod discourse.

The fact that the CRP is currently still being implemented, and is scheduled to be extended in 2008 (Borg, 2007), indicates that the social authority of the forces behind the cod-is-god discourse is greater than the social authority of the forces behind the sod-the-cod discourse. This is testimony to the continued dominance of the traditional top-down system of fisheries management under the CFP, in which regulators, relying on the prestige of ICES science, with the broad support of the environmental lobby, are able to impose their will on a comparatively weak and divided fishing industry. However, the sustained moves by the Cod Symposium to create a consensus on a revised CRP suggest that the sod-the-cod discourse has successfully challenged at least some of the foundations of the existing CRP.

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