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Civilian at Sea: Understanding Fisheries' Entanglement with Maritime Border Security

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ABSTRACT

Fishing in coastal waters can significantly intersect with state efforts to secure maritime borders. Recent cases of illegal fishing, maritime militia operation and piracy, especially in regions such as the South China Sea, have exposed the unpredictable and elusive nature of the ways in which fisheries and the mobility of fishing boats can complicate border security agenda. The current discussions of these topics are, however, largely episodic, scattered, and state-centric, risking poorly-informed policy/naval responses based on a partial understanding of security dynamics involving fishers and fishing boats. This paper identifies the multiple, and at times simultaneous, makeup of fishing entanglement with maritime border security by synthesising and organising its diverse forms into a typology. Supported by the practice theory and the civilian focus in critical border studies scholarship, this review examines eight types under three broad categories, namely: (1) fishing to pose security threat – 'resource scarcity', 'redrawn boundaries', 'Trojan horse'; (2) fishing to aid security objectives – 'civilian scout', 'peace broker'; and (3) security of fishers under threat – 'direct preying', 'coping response', 'alert system'. The results provide further substance to the understanding that civilian movement has functions and meanings that can significantly shape the security trajectories of borders. It is suggested that a widened purview of fishing involvement is engaged in security analyses to enhance the comprehension and handling of this widespread but under-studied maritime border phenomenon.

Introduction

Connection of fisheries to illicit activities occurring at sea such as drug trafficking, people smuggling, piracy, slavery as well as naval instability involving boundary disputes and fishing militia, has been conspicuously pointed out by the latest media and research to add to the ongoing maritime security concerns of coastal states (Belhabib, Le Billon, and Wrathall 2020; Bueger, Stockbruegger, and Werthes 2011; Dupont and Baker 2014; Glaser, Roberts, and Hurlburt 2019; Mileski, Galvao, and Forester 2020; Missbach 2016; Otto 2020; Song et al. 2019). Belhabib, Le Billon, and Wrathall (2020, 992) estimates

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that the use of fishing vessels in illicit drug trade has tripled over the past eight years, with smaller boats increasingly being used to facilitate such cross-border transfers. Illegal fishing has also grown to be a substantial issue not least because of the sheer volume of fish siphoned off (roughly one in five caught fish, Pew Trusts 2018) but also due to its alleged links to transnational crime syndicates (Liddick 2014; Lindley, Percy, and Techera 2019). While there is a long recognition of fishing-associated risks to maritime conflicts, especially those involving disputed boundaries (see Bailey 1996; Mitchell and Prins 1999; between Gibraltar and Spain, O'reilly 1999; between Croatia and Slovenia, Klemenčić and Gosar 2000; between North and South Korea, Van Dyke, Valencia, and Garmendia 2003), there is now arguably a greater urgency towards analysing and addressing these ill-defined phenomena amidst intensified sovereignty struggles and geopolitical sensitivity surrounding regions such as the South China Sea and the Indo-Pacific (e.g., see Pan 2014; Wirth 2016). The fishing-related incidents have shown potential to trigger frequent or complex crime operations and inter-state conflicts while deepening human misery of those onboard and their families (e.g., lengthy jail time affecting household structure and income) (Mackay, Hardesty, and Wilcox 2020; Song 2015; Spijkers et al. 2019; Urbina 2019). For coastal states committed to securing sea borders and maintaining maritime stability, also for intergovernmental actors interested in protecting regional order, any possibility of fishing practice exacerbating the risk of cross-border threats would be an inconvenient management issue at best, a source of dangerous flashpoints at worst. The contemporary nature of the challenges and the heightened attention among policy and academic circles would invite a need for a dedicated unpacking of the issue.

One way to interpret the entanglement of fisheries in maritime border security concerns is to see it through the prism of civilian operation, that is, to understand the movement and mobility of fishing boats affecting border security as a non-state and private endeavour. The critical security and border studies literature, gaining momentum since the early 2000s, has advanced the civilian dimension as an alternative to the state-centric orientation (e.g., see Johnson et al. 2011; Parker and Vaughan-Williams 2012). Offering critical perspectives as to how border is maintained, imagined or altered, this angle approaches border as accessible space where citizens are imbued with the capacity to act and carry out “borderwork”, that is, “the efforts of ordinary people leading to the construction, dismantling, or shifting of borders” (Hatuka 2012; Rumford 2012, 897). Accordingly, civilians constitute a crucial body populating border regions, including the spaces of conventional and unconventional warfare (Fluri 2011). This civilian effect would be particularly pronounced in frontier regions where the state is often viewed as ineffective, or irrelevant, allowing civilians to operate on “the edges of the power and authority of the state” (Doty 2007, 132) – a proposition that

significantly applies to coastal margins and the large swaths of the seas. A crucial implication is that civilian action does not necessarily result in borders that enhance security, given their private struggles to acquire political and economic opportunities along and across the borders (Mengiste 2021; Rumford 2012). It is also that when borderwork does contribute to regional security and stability through local, small-scale cross-border initiatives, it may simply be superseded and undermined by the national-level security policies (Arieli 2012).

Civilian motivation and activity affecting security dynamics around land border forms a relatively well-discussed scholarly topic (e.g., Arieli 2012; Boms and Zielińska 2019; Doty 2007; Hatuka 2012; Loftus 2015). A lack of equivalent attention is, however, notable in the marine context. The maritime domain is characterised as somewhat communal, fluid and even unstable; thus, a clear demarcation of authority to reliably act upon security threats is typically not well-established (Jacobsen and Larsen 2019; Peters 2014; Steinberg 2001). In the Gulf of Guinea, for example, coastal state capacity in the form of naval assets demonstrably has had no bearing on the ability to curtail pirate attacks or hijackings, meaning stronger navies do not necessarily equate to less piracy in the region (Denton and Harris 2019). The less than clear-cut jurisdictional–institutional division among adjacent states and their sometimes fragile capability, at least in practice, has meant that there is no ‘go-to’ actor but rather a set of different actors that *de facto* intervene in at-sea security matters (Jacobsen and Larsen 2019). This inchoateness speaks to the prevalence of *ad hoc* arrangements in dealing with maritime border security complications as well as the emergence of new actors and alliances who may be subject to fewer restrictions and customs than is the case on land (Jacobsen and Larsen 2019). While the incipient literature has usefully broke away from privileging state as the sole enactor and regulator of maritime borders, there has been a tendency to limit the discussions to new institutional actors entering the scene such as multilateral institutions and non-governmental organisations (NGOs), e.g., the European Union, the United Nations Office on Drugs and Crime, and Sea-Watch (Bueger 2016a; Cuttitta 2018; Jacobsen and Larsen 2019; Liss 2013, 2020). What is still overlooked is the role of ordinary people who have long conducted borderwork in the sea, whose practice may have a considerable effect on border security outcomes. This missing aspect warrants an in-depth and more systematic examination, without which the intricate ways in which civilian activities enhance or hinder security may be inaccurately gauged, thus risking further uncertainty towards dealing with any future aggravations at sea.

This paper identifies fisheries as the quintessential civilian element¹ that intersects with the state projects of maritime border security. A particular concern is coastal fisheries (also referred to as small-scale or inshore fisheries). These are generally distinguishable from large-scale distant-water fleets in

several important ways (see Carvalho, Edwards-Jones, and Isidro 2011; Smith and Basurto 2019). For the purpose of this paper, key differences are that the boats involved in coastal fisheries are smaller in size, more numerous and more widespread. There were approximately 2.8 million motorised fishing boats globally in 2018 (FAO 2020) with a large majority of them (97%) being smaller boats, here defined as being 24 m long or less. Unlike industry-scale boats typically associated with sophisticated equipment, global operation and corporate entity structure, coastal fisheries are thus less technologically detectable, less administratively traceable and less politically recognisable. These characteristics amount to their diffused, informal and even somewhat ungovernable nature (Song et al. 2020). In pursuit of livelihoods by 39 million fishers around the world (FAO 2020), it is perhaps no surprise that the movements of coastal fishing boats can punctuate maritime border regimes in different ways with sometimes unpredictable security outcomes. This has indeed been identified as a policy challenge for states with extensive coastlines such as India and Indonesia (Joseph 2014; Rosenberg and Chung 2008). In offering a focused assessment of this knowledge gap, this paper collects and presents a suite of documented occurrences where fishing activities have influenced border security in the sea, and vice versa. This effort aims to reveal precisely how fishing and security concerns have intersected, under what motivating circumstances, and with what consequences. While emphasis is on smaller boat activity, the industrial fishing sector (often foreign) is also a relevant dimension as their actions have shown to interfere with maritime sovereignty of coastal nations and interact negatively with small-scale fisheries (Belhabib, Sumaila, and Le Billon 2019; DuBois and Zografos 2012). The organised information, shown in the following sections, will inform readers of how to interpret these entanglements, which often reflect diverse and conflicting security narratives for the various actors involved.

This study relies on a review of peer-reviewed publications to articulate the various ways in which fisheries are implicated in maritime border security.² This is done by constructing a typology that differentiates the nuanced roles of fisheries as a security actor and the varied impacts generated through their involvement. Three broad narratives help elucidate the intersections – how fisheries pose a security threat; how they aid state’s security efforts; and how the security of fishers themselves are affected along the way. An inductive approach was employed in the development of a typology (Thomas 2006). Since 2014, the author has engaged in scholarly and policy analyses related to maritime borders, illegal fishing and boundary disputes as it pertains to coastal fisheries. Supported by a broad range of insights gained from this ongoing work, this article draws on a focused desktop study consisting of a review and synthesis of published literature spanning the recent 20-year period. Over 30 peer-reviewed articles retrieved from online searches – using Scopus and Google Scholar conducted in April 2020 with a combination of search words

“maritime security”, “border” AND “fishing or fishery” – formed the basis of the review. Papers were reviewed to identify the specific dynamics and the effects of security implications in the enclosed case studies. The author’s personal libraries were also scanned for relevant work including book chapters and grey documents, as well as numerous online media reporting of various incidents. To ensure the validity of the source data in terms of its descriptive and analytical content, the review mainly focused on refereed material, albeit being limited to English-language outputs. Overall, the review process resulted in a typology deemed comprehensive enough to account for all major explanations of fishing involvement in maritime border security affairs, despite also striving for conciseness.

Below, the article first situates the theoretical relevance of the study topic in the ‘security as practice’ thesis. Then, it provides the typology in three parts – (1) fisheries to threaten border security; (2) its role in aiding state security objectives; and (3) impacts the threats have on fishers and their responses, using real-world examples gathered from the review. The ensuing discussion illuminates most salient findings by way of a synthesis to enhance our collective understanding of this civilian phenomenon with a view to enabling a productive inclusion of fishing and fishery actors in maritime border security considerations.

Theoretical Background: The ‘Practice’ Lens

Situating fishery’s intervention in maritime border security can be supported by the ‘security as practice’ thesis (Bueger 2016b; Côté-Boucher, Infantino, and Salter 2014; Salter 2013). Led by the practice turn across the social sciences (e.g., Schatzki, Knorr-Cetina, and Von Savigny 2001), practice theory is about privileging “enactments in concrete situations” (Bueger 2016b, 129). The focus is less on underlying factors such as structures or discourses which have played a dominant role in the analysis of security (e.g., security dilemma, Jervis 1978; securitisation theory, Buzan, Wæver, and De Wilde 1998). Here, elevated are practices, as they fuel action and construct meanings. Comprising three components – “bodily movements”, “practical knowledge”, and “objects used in a practice” (Bueger 2016b), fishing is clearly a practice, albeit in very literal terms, for it embodies spatial movement enabled by specialised knowledge about the sea and the fish through the use of tools such as boats and gear. Although practices are always part of larger structural configurations (e.g., government regulations and seasonal ecological cycles), practices embody stories, experiences and behaviours of those exercising them, which is specific to each individual’s intimate and detailed understanding of the work. Any act of fishing will thus differ and form a distinct practice. Usefully linking the idea of practice to border security, Côté-Boucher, Infantino, and Salter (2014, 198) states: “practice is thus the starting point for developing a deeper knowledge of

the diverse configurations of actions that make up border security and for elaborating fine-grained analyses of the variety of ways in which border security is enacted”.

Addressing maritime border security from the angle of the everyday practices of fisheries offers several advantages. It promises to enrich the empirical basis of border security studies by focusing on those engaging in the production of (in)security on the ground (Salter 2013). As such, studying practices goes beyond examining the text of policies or speeches to offer insights to the real outcomes in terms of what actually happens to people as well as the border (Côté-Boucher, Infantino, and Salter 2014). Secondly, it offers the possibility of illuminating the ways in which vulnerable and marginalised groups (e.g., small-scale/artisanal fishers in the coastal context, see Korda, Gray, and Stead 2021; Satizábal et al. 2021; Song, Bodwitch, and Scholtens 2018) exercise power as they impact border priorities vis-à-vis state elites whom security regimes come to typically reflect and privilege (Côté-Boucher, Infantino, and Salter 2014; Loftus 2015). This possibility arises with the admission that there are numerous scales from which decisions are made about the border, and that practices “originate from actors/agents who are not necessarily strategically positioned politically or institutionally” (Doty 2007, 130; Laine 2016). Thirdly, paying attention to practice, according to Bueger (2016b), has the objective to “produce knowledge of practical value that can speak to societal and political concerns”. For example, studies of people smuggling, piracy and illegal fishing have often yielded insights that shed light on the concerns of human security and livelihoods (Mengiste 2021; Missbach 2016; Okafor-Yarwood 2020). The both exceptional and mundane practices of borderwork therefore “arguably signals an evolution in the logics of security governance” (Loftus 2015, 123), as they can be used to deliver a more authentic illumination of social reality.

It follows that alternative points of deliberation can open up with the practice lens. For instance, a question may be raised as to how the private actions of fishers lead to decisions that contradict or undermine official border policy. This is a plausible proposition given the numerous and at times idiosyncratic nature of discretionary choices made in the civilian realm (Loftus 2015). At the same time, the practice-oriented discussions also bring attention to the increasingly mobile and fluid character of borders and the extension of (un)official security apparatus that develops with it (e.g., Chambers 2015). Even on land, contemporary border control is said to be less about state infrastructure guarding a physical borderline but more about the deployment of diverse means (including people) that stretches to the entire border area (Loftus 2015). Lastly, privileging practice can lead to highlighting the security of fishers themselves as their wellbeing and livelihoods are directly threatened by the actions of the state and other perpetrators (see Lobasz 2009 for a feminist perspective). Fishing practice, as the most ubiquitous civilian activity that interacts with maritime boundaries, therefore, provides an

opening through which a widened understanding of border security can be sought. Overall, it invites an analysis that can explicitly consider individual fishers as security actor (e.g. through their movements aboard fishing vessels), in addition to treating fisheries in an aggregate sense as an industry or a policy field. In the following section, the varied ways in which fishing mobility has shown to embolden or undermine state’s border security agenda are described, together with the effects of illicit activities on fishers themselves.

The Various Entanglements

Fishing to Pose Threat

Fishing Boats Entering Other Countries’ Waters – ‘Resource Scarcity’ & ‘Redrawn Boundaries’

Maritime border security has traditionally been discussed in terms of military strategy and the responsibilities of navies to protect the maritime domain. The role of fishing in instigating contemporary non-traditional security threats such as illegal fishing, piracy, terrorism, and environmental degradation has thus been met with uneasiness and suspicion for the fear that the rise of these civilian activities will serve to destabilise border security efforts. There are broadly two ways in which fishing practice is seen to pose a threat to the official state effort of securing maritime borders – through engaging in fishing work; and via using fishing as a cover for non-fishing offences (see [Figure 1](#) for a schematic of the typology).

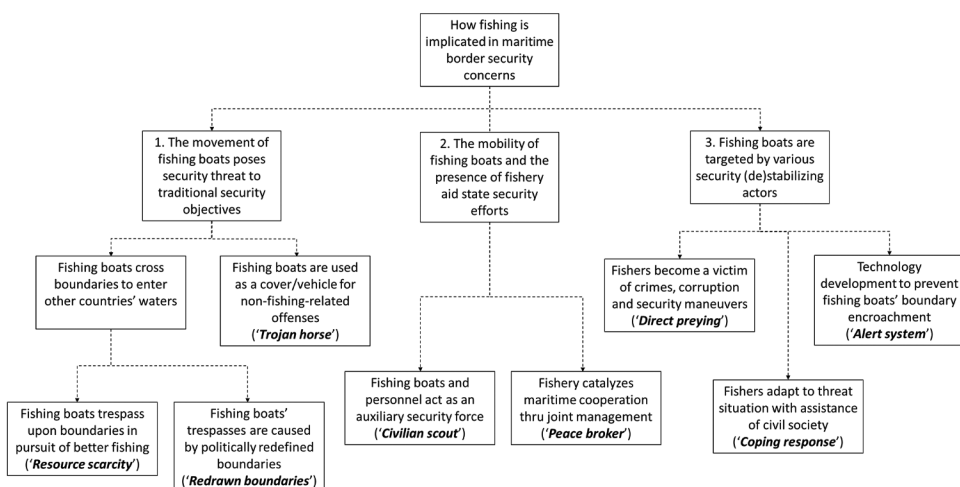


Figure 1. A typology cataloguing manifestations of fishing entanglement with maritime border security.

Representing arguably the most intuitive and straightforward explanation, the first type refers to when fishing boats encroach and trespass upon proclaimed maritime boundaries in pursuit of fishing opportunities. Under this type, two strands of scholarship are further identified. First, the ‘resource scarcity’ theme proceeds with an economic orientation to espouse that the physical trespassing is driven by overfishing and fish scarcity in traditional and domestic fishing grounds. The economic stress borne by fishers becomes a motivating factor to travel afar and beyond the permitted fishing boundaries to compete for remaining resources and even deliberately engage in illegal fishing (Greer 2016; Mendenhall et al. 2020; Muawanah, Pomeroy, and Marlessy 2012; Pomeroy et al. 2016). The so-called ‘fish wars’ that involve threats and physical altercations by opposing navies and commercial fishing fleets may ensue, fuelling violence and insecurity and engendering further scarcity and conflict, while deteriorating the social, economic, and political conditions of the fishing-dependent people. An economic bottom-line combined with the expansionist mindset and the threat of unilateral action, are the basis of this view, which holds close resemblance to the conventional environmental security thesis (Homer-Dixon 1999) (see Box 1 for a summary of a Niger Delta example).

The ‘redrawn boundaries’ theme problematises the physical breach of boundaries by fishing boats through the optic of changing boundary configurations. This view sees that fishers’ boundary trespasses which create unstable security conditions is primarily caused by inter-state border politics. Here, (contestations over) redefined political boundaries end up restricting fishing movement. Because the new boundaries driven by sovereignty claims or geopolitics rarely take into account traditional fishing grounds, fishers are forced to give up customary fishing practice by accepting new spatial ranges or venture into foreign (or contested) territories and risk severe penalties if caught (Manoharan and Deshpande 2018; Pomeroy et al. 2016; Raju 2009; Tagliacozzo 2007). Although intruding upon maritime boundaries can indeed be viewed as an anarchic disruption to the maritime security objectives of the state, when approached from the perspective of fishers, a sense of injustice and helplessness may prevail due to their fishing activities being displaced, invalidated, or made riskier, as well as due to suddenly gaining the label of an illegal and unsanctioned operator (Balint 1999; Song et al. 2020). This theme highlights the bigger structural forces at play that render mobility of fishers as a security threat. Hence, according to this view, trespassing of borders is not simply the doing of the fishers – i.e., solely driven by fishing ambitions – as the ‘resource scarcity’ thesis might otherwise imply (see Box 1 for a description of an Indonesia-Australia boundary example).

Fishing Boats Being Used for Non-fishing-related Crimes – ‘Trojan Horse’

The second type addressing border security breaches refers to fishing being used as a cover or a vehicle for illicit non-fishing-related activities (i.e., ‘Trojan horse’). Much of the literature focusing on this category of entanglement draws on the

concept of transnational organised crime, based on the idea that organising unlawful activities across maritime boundaries involves not just individual fishers operating single-handedly but rather groups of people deliberately arranged to commit offences for illegal gains and exploitation (Bueger and Edmunds 2020; Vrancken, Witbooi, and Glazewski 2019). Analyses on this theme have subsequently exposed the use of fishing boats in the smuggling of migrants and in the trafficking of drugs and weapons (Belhabib, Le Billon, and Wrathall 2020; Beseng 2019; Joseph 2014; Lindley, Percy, and Techera 2019; Manoharan and Deshpande 2018; UNODC 2011; Witbooi et al. 2020). Belhabib, Le Billon, and Wrathall (2020, 997) presents a quantitative confirmation of this trend by estimating that more than half of 106 reported cases of interdiction between 2010 and 2017, totalling 143 tonnes of drugs (e.g., cocaine and heroin) valued at US\$5.4 billion, was carried out by small-scale fishing vessels. Moreover, in addition to fishing boats being the key physical medium of such illegal transfers, fishing people themselves can be enrolled to support the crimes, as they are recruited to work as couriers and skilled operators at sea, as described in the context of the Palk Bay/Gulf of Mannar and the Gulf of Guinea (Manoharan and Deshpande 2018; Okafor-Yarwood 2020). Other occurrences that link fishing boats to maritime insecurity include piracy, armed robbery and acts of terrorism as well as forced labour and murder on deck (Bueger, Stockbruegger, and Werthes 2011; Denton and Harris 2019; Lewerenz and Vorrath 2015; Shih, Chou, and Chiau 2010; Urbina 2019). For example, in the Strait of Malacca, perpetrators have been shown to take over a fishing boat, then use it to conduct piracy-kidnapping of a large commercial boat (Mak 2006; see Box 1 for details of this case). Likewise, the 2008 terrorist attack in Mumbai first involved a hijacking of a fishing boat. The militants associated with a Pakistan-based terrorist group departed from Karachi and took over an Indian fishing trawler on their way to Mumbai. They murdered four crewmembers in the mid-sea, whose bodies were thrown overboard and remains never found, and were able to arrive at the Mumbai waterfront undetected to launch a series of attacks. The seemingly innocuous appearance of fishing boats is thus being wrongly taken advantage of, while innocent fishers are put through a dangerous ordeal. As for the government and the Navy, the difficulty of distinguishing between genuine fishing boats and those that are not (whether domestic or foreign-based) poses a particular challenge, as it puts a strain on countries' law enforcement resources and adds a layer of complexity to already often sensitive inter-state relations.

Fishing to Aid State Border Security Objectives

Fishing Boats and Personnel as an Auxiliary Security Force – 'Civilian Scout'

The dispersed and somewhat invisible and erratic nature of the civilian activity of fishing creates a condition for producing security threats, as outlined above. And yet, mobile fishing practice in the border area can also invite an opposite

effect of making positive contributions towards achieving maritime border security. Owing to their persistent and near-ubiquitous presence in frontier coastal regions, there is a recognition that fishing movements at sea can assist the state in the prevention of security threats by detecting suspicious seaborne activities and reporting them to the Navy (see Song 2015; Song et al. 2019). They implicitly take on the role of an extended arm of law enforcement agencies, whose campaign is particularly valuable given the typically vast extent of maritime space and limited state resources dedicated to the sea. The establishment and operation of fishing militia in the South China Sea by both China and Vietnam is a well-discussed example, who might be equipped with devices such as infrared night vision, binoculars and even firearms (Dupont and Baker 2014; Zhang and Bateman 2017). In Indonesia, there is a similar move to train fishers to participate in the formal defence programme through a reserve component (Nasution 2018; see Box 2 for details of this case). Elsewhere, Raju (2009) reports that Indian fishers are believed to be collaborating with the country's intelligence agency, the Research and Analysis Wing, while Pakistani fishers are supposedly assisting the Inter-Services Intelligence, the Pakistani counterpart. All this, including strengthening the sense of nationalism among fishers and supporting civilian settlements in coastal frontiers and outlying islands, in fact, form part of the long-recognised and practised strategy of combining military and civilian presence to ensure effective territorial control and border security (Newman 1989; Roszko 2015). Côté-Boucher, Infantino, and Salter (2014) observes that border security functions no longer only occur at the actual border lines. Instead, they have spread to heterogeneous sites including inside the societies themselves. In the maritime context, this 'inside' would comprise territorial seas and Exclusive Economic Zones (EEZs) as well as ports and coastal villages. Arguably, beyond the corporeal assistance of fishing action in present days, China and Vietnam have also instrumentalized the past fishing habits of their people – by using the narratives of historical fishing presence in the South China Sea – to authenticate their respective maritime boundary claims (Roszko 2017). Overall, the mobile fishing work near the sea border not only constitutes the function of a 'civilian scout' materially aiding the state monitoring and defence effort, but it can also serve as a means of legitimisation states use to embolden sovereignty claims to the sea.

Fishery to Catalyse Maritime Cooperation – 'Peace Broker'

Fisheries also promote security by serving as a means of inter-state cooperation that helps diffuse political tension and catalyse a cooperative framework towards the resolution of maritime disputes.³ Experiences in various parts of the world have been instructive to this end. In the case of the Sino-Vietnamese Fisheries Agreement for the Gulf of Tonkin signed in 2000, a deteriorating relationship between Vietnam and China over the delimitations of the EEZs

and continental shelves resulted in clashes involving fishers and navies of both sides, which made accessing the sea a dangerous endeavour at the time (Xue 2006). Following the normalisation of bilateral relations in 1991 and a series of negotiations, the two countries came to an agreement on the demarcation line as well as the terms for fisheries cooperation in the Gulf of Tonkin. Analysts have commented that the fisheries issue was one of the critical elements in the negotiation and served as an impetus for finalising the boundary delimitation (De Tréglodé 2016; Wang 2001; Xue 2006). In addition, where disagreements over maritime boundaries remain unresolved and even unlikely, disputing states can still achieve practical arrangements over a common interest, e.g., fisheries utilisation, thereby sidestepping the issue of sovereignty while ceasing the politically-motivated arrest and detainment of fishing boats as well as the naval confrontation and war that can erupt (see Box 2 for the East China Sea example between China and Japan, Zou 2003). This is ensured through the provisional nature of the agreement, which bars the agreement to in any way influence or insinuate change on the protracted question of sovereignty and maritime jurisdiction. Hence, the signed fisheries agreement would have no relevance in affirming, supporting or denying the position of either party so as not to jeopardise the reaching of the final delimitation in the future (Churchill 1997; Wang 2001). The 1990 Joint Statement on the Conservation of Fisheries between Argentina and the United Kingdom was established following the 1982 Falklands war on the basis of such principles to coordinate the management of Falklands Islands-region fisheries. This ‘peace broker’ role of fisheries therefore sees the joint management effort as a feasible and practical way to initiate regional cooperation, which could spill over to other areas of integration such as co-utilisation of seabed resources, and ultimately galvanise diplomatic dialogue towards peaceful maritime relations (Churchill 1997; Kadagi et al. 2020; Lee 2016; Wang 2001).⁴

Security of Fishers under Threat

Fishers as a Direct Victim of Crimes, Corruption and Security Manoeuvres – ‘Direct Preying’

The third major type places an analytical focus on the wellbeing of fishers to describe the impacts maritime security threats have on them. There are three sub-categories. The first two describe how they are directly affected and how they respond to the threats, while the third discusses an information and communication technology to safeguard fishers from accidental or unintended boundary trespassing (Figure 1).

First, fishers are subject to hardship and loss as a result of being directly targeted by destabilising activities such as piracy, foreign illegal fishing and naval attacks. Several notable patterns of this ‘direct preying’ have been documented – for instance, as occurred in the Strait of Malacca in the later part of

the 20th century and into the present days (Mak 2006). In the order of increasing sophistication of predations: (1) fishers onboard being harassed and robbed of cash, fuel and catch by the approaching boats that carry pirates (which are often in the guise of fishing boats themselves, see Section 3.1.2); (2) fishing boats being hijacked and held for ransom instead of just being subject to robbery given the increasing value of modern boats and equipment onboard; (3) skippers being kidnapped for ransom rather the boat itself due to tighter maritime patrolling that makes it harder to escape with a hijacked ship; and (4) fishing boats being forced to pay maritime protection racket via the issuance of “safe fishing certificates” set up by a mafia-like network of pirates, corrupt government officials and rebel groups (Mak 2006; see also Hastings 2020). Additionally, the situation of contested maritime boundaries has introduced an additional source of predation in the form of (5) rogue officials of a neighbouring country harassing fishers for payment and threatening to arrest them for allegedly trespassing the boundaries (Mak 2006, see Box 3 for more details). Beyond the financial burdens of these implications, impacts on fishers also extend to human suffering experienced through violent and unlawful physical treatments. Raju (2009) reveals that Indian and Pakistani fishers were being arrested and even killed by the authorities from the other sides, representing outright violations of human rights principles as well as the United Nations Convention on the Law of the Sea, whose Article 73 forbids imprisonment and corporal punishment of fishers who are found poaching. There was also the “shoot first and question later” policy of the Sri Lankan Navy during the height of the Sri Lankan civil war (Manoharan and Deshpande 2018). This drastic measure was implemented to prevent seaborne attacks on Sri Lankan naval infrastructure by Tamil rebels who were camouflaging as fishers on a fishing vessel. In fact, the number of Indian fishers caught in the crossfire and killed by the Sri Lankan Navy in the neighbouring waters during the civil war is estimated to be well over 150 (Manoharan and Deshpande 2018).

Spatial conflicts with industrial fishing sector pose another threat to the human security of small-scale fishers. In the case of Senegal, incursions by industrial vessels into the artisanal zone had resulted in the destruction of artisanal fishing gears as well as collisions and violence causing injury and livelihood impairment to small boat operators (DuBois and Zografos 2012). Unauthorised presence of Chinese fleets in the East Sea reportedly creates similar consequences for North Korean small-scale fishers. Competition from these larger trawlers displaces the North Korean wooden boats to nearby Russian waters, a venture that has proven to be hazardous and also illegal (Park et al. 2020).

Fishers' Responses to the Threat – 'Coping Response'

The direct and indirect impact of cross-border confrontations and predation on fishing boats have elicited important coping strategies by fishers and civil society groups who support them. There are reports of fishers in both

Indonesia and the Philippines who share self-defence tips, at-sea intelligence and safe navigational routes among themselves as part of being members to a fisher association (Pomeroy et al. 2016). In the Strait of Malacca, fishers and fish traders belonging to Hutan Melintang community devised a monthly pool of money to help pay for the ransom to support those that fall prey to kidnappings (Mak 2006). The fish processors also contribute or lend money, since their own viability as an industry depends on a reliable supply of fish. Such self-organised ‘coping responses’ have helped to relieve the financial and psychological shock of these incidents and made the otherwise despondent situation under their partial control. Furthermore, non-governmental organisations promoting the safety and welfare of fishers play a vital role in some instances, whose service can range from legal, humanitarian and financial assistance, political lobbying on behalf of fishers, facilitating dialogue among cross-border stakeholders, to conducting studies into the arrests (Manoharan and Deshpande 2018). For example, according to Raju (2009), the India-based Alliance for the Release of Innocent Fishermen has worked towards the release of arrested fishers from India and Sri Lanka by providing information to the affected families on the whereabouts of their kin, and also by meeting with the authorities of both countries. The work of NGOs is made all the more crucial because the governments have limitations in serving these functions, including its difficulty to be part of the court cases against their fishers in other countries. Hence, governments have relied on assistance from NGOs in dealing with fishers’ issues arising out of inter-state maritime disputes (Manoharan and Deshpande 2018; Raju 2009). The stated importance of the civil society together with the active organisation of fishers in responding to the dangers likely reflects the regularity and the severity of predation occurring near and across maritime boundaries. It also hints at the general governmental void in dealing with the civilian ramifications of maritime security threats (see Box 3 for the description of a Nigerian example).

Alert System to Prevent Boundary Encroachment – ‘Alert System’

The third theme ‘alert system’ is aimed at mitigating the occurrence of threat situations by creating a detection technology that deters and manages fishers’ boundary trespasses. Published literature on this theme describes advances utilising Global Positioning System (GPS), Global system for mobile communication (GSM) or Automatic Identification System (AIS) that warn the boat by means of visual and audio alert when it approaches national maritime borders, therefore urging its return (see Box 3 for more details of the mechanisms). The system also generates an alarm to notify the government authorities on either side of the border. The rationale for this body of work is stated to be about protecting fishers from harm’s way as much as it is about protecting the border (see Amabdiyil, Thomas, and Pillai 2016; Eaton, German, and Balasuriya 2018; Saravanan et al. 2019; Sivagnanam et al. 2015; Viji et al.

2017; Vivek et al. 2015). More often than not, small coastal boats, especially those operating in the Global South, are vulnerable to crossing maritime boundaries unwittingly, whether by ignorance, engine failure or sudden turbulence, and upon being seized, they may be subject to abduction, detainment, abuse and even death, depending on the degree of hostility and political tension between the bordering countries (e.g., India and Pakistan; China and Vietnam; Russia and Ukraine). Through development of low-cost communication systems, this perspective focuses on preventing physical border transgressions of fishers in order to safeguard their wellbeing and safety-at-sea while building cooperation between adjacent countries in hopes of avoiding undue security escalations.

Discussions and Conclusion

This article has identified multiple ways in which fishing intervention can affect the course of maritime border security. Given that the civilian activity of fishing can aid border security objectives in one context but be a disrupting force in another, different actors (e.g., the navy, politicians, security analysts) with varying mandates may interpret the role of fishing differently and make contrasting judgements. What this review espouses is the potential usefulness of being aware of the many possibilities of fishing entanglement and the various impacts it could bring to the dynamics of a border security regime. It will not be that all fishing build-ups near maritime borders lead to conflicts (e.g., ‘fish wars’) or that all fishing boats tasked with the monitoring of at-sea irregularities help enhance security. There is an element of agency and idiosyncrasy in individual fishing practices shaped by disparate economic and political circumstances that produce diverse scenarios. So, what might appear as a clear-cut case of reckless and recalcitrant fishing movement to some could in fact embody other meanings and functions more closely associated with inter-state geopolitical competition or fishers’ adaptations to the threat situation. Thus, for example, it would be entirely appropriate to construct the controversy and tensions surrounding the Vietnamese and Chinese maritime militia in the South China Sea by drawing on all these themes, ‘resource scarcity’, ‘redrawn boundaries’, and ‘civilian scout’ (see Dupont and Baker 2014; Zhang and Bateman 2017).

Moreover, the same group of fishers may simultaneously carry the complexion of multiple roles, as is described in the case of fishers near disputed maritime boundary between North and South Korea. In this instance, as Song (2015) writes, fishers were receptive towards fulfilling the monitoring request of the Navy to meet state border security objectives. And yet, desiring a more profitable catch, many of them also frequently (and nonchalantly) encroached on prohibited waters to raise the risk of naval confrontations and security disruptions. This point of being both a threat and an aid (in the eyes of

Box 1. Three empirical examples that document the ‘fishing to pose threat’ theme.**‘Resource scarcity’**

Increased competition for the dwindling fish in the Niger Delta has resulted in fisherfolks in Nigeria resorting to illegal fishing on the local scale, as a means of adapting to their changing environment and to secure livelihoods. The lack of opportunities for alternative sources of livelihood and depleting fisheries is identified as a factor that is driving young people from coastal communities to illegal activities such as armed robbery at sea. These actions further undermine the safety of other seafarers and the national security of Nigeria through reduced investment and revenue; it also exacerbates the suffering of those who depend on the marine environment for subsistence. In addition, the way they adapt has the potential to result in transborder conflict in the long term, given that local fishers are increasingly travelling to neighbouring countries to enhance their earnings. From Okafor-Yarwood 2020. Other references: Muawanah, Pomeroy, and Marlessy 2012; Pomeroy et al. 2016; Song et al. 2019

‘Redrawn boundaries’

Discussions between Indonesia and Australia over the mapping of exclusive economic zones led Australia in 1979 to officially declare a 200 nautical mile territorial limit, known as the Australian Fishing Zone (AFZ). This maritime delimitation brought within Australian jurisdiction the traditional fishing grounds which had been integral to the survival of eastern Indonesian fishing communities. The Indonesian fishers had been freely travelling and fishing in the delimited area up until the 1970s. They were seen as subsistence fishers who occasionally strayed into Australian waters. But with the maritime delimitation, those who had previously been portrayed as a few ‘storm-blown fishermen’ were suddenly transformed into ‘commercially-oriented invaders’. If caught fishing outside of a specially designated area known as the Timor Box or MOU area, there are consequences facing fishers such as interception at sea, court cases, boat burning, and incarceration. Worse, they have been effectively displaced from their original resource domain which led to impoverishment and loss of unique customary fishing practices. From Balint 1999. Other references: Raju 2009; Song 2015

‘Trojan horse’

An attack on a Japanese-registered tug *Idataen* occurred on 14 March 2005 in the Strait of Malacca. The pirates, armed with assault rifles and grenade launchers, hijacked a local fishing trawler the day before the *Idataen* attack, and robbed the crew of their valuables and 2,000 litres of fuel. The skipper was then told by the pirate leader that the boat would be used to attack a more valuable prize. The next day, the *Idataen* was spotted and the pirate leader ordered the skipper to ram the tug three times altogether. Finally, after the pirates fired a few shots, the tug came to a stop. After kidnapping the Japanese captain, chief engineer, and a Filipino engineer of the *Idataen*, the pirate leader ordered the fishing boat to sail for the Sumatran coast. The pirates apparently slipped through a maritime cordon because the enforcement agencies were on the lookout for a pirate ship, and not an innocuous Malaysian fishing boat. The fact that two Japanese were kidnapped aroused a great deal of media attention, and much controversy was made of the fact that a fishing boat was involved in the piracy-kidnapping. From Mak 2006. Other references: Belhabib, Le Billon, and Wrathall 2020; Beseng 2019; Joseph 2014; Lindley, Percy, and Techera 2019

the South Korean government) is consistent with a larger-scale observation made earlier on the multi-faceted ramifications of civilian settlement in a border zone. Newman (1989) states that while the implanted civilian presence in the Golan Heights in the late 1960s contributed to strengthening general defence, it also represented an obstacle in the way of maintaining the security of the area, because addressing civilian safety had to come before the tactical response of the Israeli military when Syria invaded during the 1973 Yom Kippur War. Not only do civilian activities not always contribute to the security objectives, but in many cases make the control of borders more difficult. This presents a governability challenge for state and military elites who must recognise the precarious relationships they have with the civilian presence and any associated borderwork.

Box 2. Two empirical examples that document the ‘fishing to aid security objectives’ theme.

‘Civilian scout’

In Indonesia, Coastal Village Development Programme (Bindesir) is implemented by the Department of Maritime Potential of the Navy based on the policies stipulated by the Navy headquarter. The Navy conducts maritime security development in the fishing community by providing legal counselling and training on fish farming and processing. The Navy also provides training so that fishers can recognise all forms of crime at sea. Specifically, the role of fishers is envisioned as an extension of law enforcement agencies to assist in the monitoring and prevention of threats such as illegal fishing and illicit goods smuggling. The expectation is that when fishers witness any acts of violation, they can identify and immediately report it to the Navy and other maritime law enforcement agencies such as the Directorate General of Supervision of Marine Resources and Fisheries. There are examples of cases in Tangerang where fishers who have been trained and educated about the theft of submarine cable has reported a number of incidents. Other cases involve trained local fishers helping to prevent tugboats robbery in Batam area by transmitting information, and the Navy receiving information from fishers on the location of illegal foreign ships. Thus, Bindesir is seen as a strategic step of the Navy to develop the community role in supporting the Navy task of enforcing security at sea. According to the Maritime Portfolio Office of the Navy, the Navy has engaged with 505 coastal villages in Indonesia by 2017. From Nasution 2018. Other references: Dupont and Baker 2014; Roszko 2015; Song 2015; Zhang and Bateman 2017

‘Peace broker’

The history of joint fishery agreement between China and Japan in the East China Sea goes back to the 1950s. It was first led by non-state entities (i.e., civilian fishery associations), who played a crucial role in establishing and developing inter-state fishery relations in the absence of normalisation of diplomatic ties between the two countries. This was replaced by the government-level agreement from 1975 to continue prevention of indiscriminate arrest and detention of fishing boats and maintain a stable fishing order. With the ratification of the UNCLOS regime, a new bilateral fishery agreement was completed in 1997. The different positions on EEZ delimitation, however, led to negotiation on the fishery agreement first with both governments expressing their intentions to continue talks on the delimitation of the EEZs and continental shelves. Despite its nature as provisional, the fishery agreement contained important implications for the future EEZ delimitation since it effectively narrowed the disputed area in the East China Sea between the two countries. It is significant to note that the fishery relationship was the first link of the chain of normalising the overall and comprehensive relations between the two countries, especially in the 1950s and 1960s when there was no formal diplomatic relations. From Zou 2003. Other references: Churchill 1997; De Tréglodé 2016; Kadagi et al. 2020; Wang 2001; Xue 2006

Responding to the need to address maritime security issues collectively and coherently, the understanding gained here could inform the development of a so-called “comprehensive approach” where a collaborative and inter-sectoral cooperation based on partnerships between civilian, military and international authorities creates a holistic environment (Feldt, Roell, and Thiele 2013; see also Chapsos and Malcolm 2017). Furthermore, how fishing practice can be a driver of conflict, a means to cultivate coexistence, and also a recipient of security ordeals, described via the ‘resource scarcity’, ‘peace broker’, and ‘direct preying’ themes in this paper respectively, provide support to the environmental peacebuilding literature which itself encompasses diverse concerns of security, inter-state politics, and livelihoods (Ide et al. 2021). In the process of more meaningfully integrating civilian aspects into the workings of security frameworks, the potential adverse impacts of securitisation on the wellbeing of fishers will need to be made aware of and effectively cared for.

Seeing how fishing activities help concretise the on-ground realities of maritime border security should strengthen argument towards the decentred moments of securitisation. Doty (2007) asks, “what if securitization is a widely

Box 3. Three empirical examples that document the ‘security of fishers under threat’ theme.**‘Direct preying’**

A maritime protection racket has surfaced since 2000 in the Strait of Malacca targeting Malaysian fishing boats. It is reported that Indonesia-based pirates had been issuing monthly “safe fishing certificates” in the name of the Aceh Sumatra National Liberation Front at a price of between RM300 to RM400 per vessel, and that 80% of the approximately 200 boats affected were paying up. In addition, each boat had to pay roughly RM3,000 (~USD790) as the initial “entry fee” to join the protection ring. It is also alleged that some members of the Indonesian enforcement agencies were imposing their own toll on Malaysian fishers found trawling in Indonesian waters. Instead of impounding the boat or asking for a huge ransom, they expect the skipper to pay a toll based on the number of days he would be fishing in that particular area. The fee is about RM100 a day (~USD26), depending on the size of the boat. Thus, it appears that Malaysian fishers have to pay unofficial “taxes”, one way or another, to fish in the Strait. From Mak 2006. Other references: Manoharan and Deshpande 2018; Raju 2009

‘Coping response’

There is considerable consensus among fishers in Nigeria as to how they should respond to violence and threats arising from illegal fishing vessels. Specifically, the general consensus has been that they would not dare to physically respond to threats directed at them. Possible violent responses, such as attacking illegal fishing vessels, or returning fire when their boats came under attack, are not an option because they lack access to firearms. Yet, there is agreement that if they could access firearms, they may seek to defend themselves. It is argued that such responses are indicative of a group of vulnerable people, intent on doing their best to protect their interests in the absence of their government’s positive response to their plights. From Okafor-Yarwood 2020. Other references: Mak 2006; Raju 2009

‘Alert system’

To alert fishers aboard about the identification of maritime boundary and to protect them from crossing the boundaries, an integrated solution that combines the use of Global Positioning System (GPS) and Automatic Identification System (AIS) has been proposed. Here, fishing vessels are equipped with a boat element comprising an AIS transceiver, VHF set and an ‘embedded system’. Using the inbuilt GPS, AIS can find the location of the boat and transmits to the embedded system, which gathers the relative position by comparing with the autonomy and longitudinal values of the boundary. The GSM (the Global System for Mobile Communications) enabled device also allows fishers to compute its precise location using the integrated GPS receiver, and radiates the information to nearest coastguard stations. However, the major disadvantage of GSM is communication failure in the sea. Despite many researches into maritime border security using GSM, these systems may fail near sea borders due to network unavailability. From Saravanan et al. 2019. Other references: Amabdiyil, Thomas, and Pillai 2016; Eaton, German, and Balasuriya 2018; Sivagnanam et al. 2015; Viji et al. 2017; Vivek et al. 2015

dispersed and at times amorphous phenomenon not controlled or even initiated by the elites?” Wæver and colleagues’ influential securitisation thesis (Buzan, Wæver, and De Wilde 1998) has conceived the speech acts of state actors and security professionals to be what ultimately elevates and construes the perception of security. In doing so, however, the myriad of less visible decisions occurring in places and by entities removed from the more central locales of power become inadvertently sidelined (Arieli 2012; Doty 2007). For example, a September 2020 incident of a South Korean civilian fishery inspector jumping off an inspection boat to drift across the disputed maritime boundary to reach North Korea has caused high-level tension in the relations of the two Korean governments, and also bringing with it an ill-fated fatal outcome for the individual himself (Larsen 2020). This example speaks to one private individual’s decision creating an unexpected security shock that had reverberated throughout the two Korean governments and societies. Similarly, unannounced appearances of Chinese

fishing trawlers in remote, disputed parts of the East and South China Sea (e.g., the Diaoyu/Senkaku Islands in 2010 and the Whitsun Reef in 2021) have frequently led to diplomatic tit-for-tat eliciting heated exchanges between the officials in Beijing, Tokyo and Manila (Hagström 2012; Stashwick 2021). Actions of a single fisher or few fishing boats can thus create disproportionately large ramifications to security dealings nationally and internationally (Das 2020; Larsen 2020; Song et al. 2019). Heeding the call to be “alert to situations in which securitization and the mobilization it entails comes ‘from below’” (Doty 2007, 130), fishery therefore can offer a key medium from which to understand the place- and people-based undertaking of maritime border security.

While macro-level analyses of security are important for a strategic inquiry, it remains imperative that the particularities of specific border sites and situations are examined in order to avoid abstracted interpretations of boundary interactions and a narrow reading of security incidents (Fluri 2011). Aided by the typology developed here and the theoretical entry point of ‘security as practice’, I argue that genuine engagement with civilian practice through the actions of fishers and the movement of fishing boats (and not just the aggregate makeup of a fishery as a whole) offers a fresh outlook to dealing with border security in coastal zones. Bringing what has remained an ill-defined and largely speculated phenomenon into sharper focus, it is hoped that the illumination of this much forgotten angle could help invite ongoing discussions and future research in ways that reflect the multifarious entanglement of fisheries in security affairs.

Notes

1. Shipping and seaborne trade has traditionally represented the main civilian angle in maritime security discussions (Bateman 2011). With over 50,000 cargo-carrying ships taking on ninety per cent of world trade, the free and safe passage of international shipping is undoubtedly a key concern (Trelawny 2013). However, recognising that fisheries is an understudied topic and that the context is coastal (or nearby) seas where states compete for boundary claims, this paper focuses on fisheries.
2. I use the term maritime border security to mean a specific parcel of ‘border security’ scholarship that concerns the maritime realm (e.g., Fauzan and Ahmad 2019). Alternatively, when seen from the purview of ‘maritime security’ literature (*sensu* Bueger 2015), my focus would most closely pertain to the theme of ‘national security’ and ‘human security’.
3. See UNEP (2009) and Ide et al. (2021) for extensive discussions about the role of natural resources in conflict and peacebuilding situations.
4. The success of the ‘peace broker’ function of fisheries is, however, nothing but guaranteed. A multi-decade effort by the research community to introduce collaborative fisheries management and a marine park in the South China Sea has failed to gain much political traction, for example (see McManus 1994, 2017; Zhang 2018).

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