

Tracking (Im)mobilities at Sea: Ships, Boats and Surveillance Strategies

Kimberley Peters

Department of Geography and Earth Sciences, Aberystwyth University, Penglais Campus, Aberystwyth, Ceredigion, SY23 3DB Email: k.peters@aber.ac.uk Phone: 01970 622583

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ABSTRACT

This paper explores how national governments exercise regulatory power over spaces beyond their jurisdiction, when activities in those extra-territorial spaces have direct impacts within the boundaries of state concerned. Focusing explicitly on the control of shipping mobilities in the high seas and territorial sea zones, it is contended that apparatus of control, in particular, surveillance, are not only complex across spaces of alternate legal composition and between spaces of national and international law, but also across of the differing conditions and materialities of land, air and sea. Indeed, this paper argues that the immobilisation of the undesirable mobilities of ships and boats is inherently difficult at sea because of its very nature – its mobile legal boundaries, its liquidity compared to ‘landed’ fixity, and its scale and depth. Drawing on the case study of offshore radio pirates and the tender vessels which travelled ship to shore to supply them with necessary goods, it is reasoned that greater attention must be paid to mobilities at sea in view of forms of governance in this space. The sea is not like the land, or air, legally or materially, and mobilities cannot be governed, controlled and contained in the same ways therefore, as these connected spaces. Thinking seriously about the issues that arise when surveillance of mobilities is taken to sea, can help work towards better understandings for why security at sea proves so problematic and how those issues can be resolved, when the sea is the stage for contemporary geopolitical concerns in the 21st century.

KEY WORDS: Mobilities, ships, sea, surveillance, piracy, radio

Introduction

“On 28 February 1977 we were informed by the Frontier Police at Calais that the trawler *St Andre des Flandres* registered in the area of Boulogne sur Mer was suspected of delivering provisions to the clandestine broadcasting station Radio Caroline on the ship ‘Mi Amigo’ anchored in international waters off the English coast. The belief was based on the fact that the boat had loaded up with food...which bore no relation to the size and needs of the crew, which comprised of only three men. On 1 March 1977 the boat left Calais at 9 30 heading for the English Coast after having filled up with gas oil... On 2 March 1977... A search was carried out ...which found that there was hardly any trace of the provisions and gas-oil fuel taken out the night before” (Home Office, HO255/1220)

During the late 1970s, a lone pirate broadcasting vessel, Radio Caroline’s *MV Mi Amigo*, was anchored in an area of the English Channel known as Knock Deep, transmitting radio programmes from international waters into the territories of the UK, France and Holland. Anchored fast in position to ensure stability of the enterprise, radio ships were reliant on supplies from the shore to sustain their activities. The above passage recalls one such supply trip and its surveillance by the Radio Regulatory Department of the Home Office (RRD hereafter). Such supplies were chartered from the adjacent shores of England, Holland and France, yet these ‘drop offs’ of goods necessary to fuel offshore broadcasting enterprise were illegal following both a pan-European agreement on the eradication of radio piracy (1965) and the UK’s Marine &c. Broadcasting Offences Act of 1967 (provision 41.3) which resulted from the aforementioned treaty. The desire to eliminate radio piracy was predicated on the fact that stations lay beyond state control physically, due to their position at sea, but through the mobility of sound waves, were able to intangibly infiltrate the porous state boundary with broadcasts which were tuned into by millions of listeners on shore (see Humphries 2003, 27). That the stations were outside of national control, meant that they could, in effect, broadcast what they wished, in contravention to moral or legal norms within a particular territory. The influence of such stations was a potential threat to state security of the airwaves as “radio signals...crossed international borders indiscriminately” (Robertson 1982, 73). In order to ensure security against such a potential breach of order, nation states (unable to exercise power in international waters against such an activity) attempted to control the problem via regulating the elements of the enterprise which fell *within* their legal territorial jurisdiction.

This could be achieved by cutting off a vital ship to shore link – tracking the supply boats which provided goods to the radio pirates and intercepting them when they re-entered territorial waters, where, under the jurisdiction of the state they *could* be seized (see Peters 2011).

The above passage illustrates one of the many recordings made by Home Office officials who surveilled the mobilities of supply boats (otherwise known as ‘tenders’) in an effort to immobilise the broadcasts emanating from international waters. Following this particular interception and ‘search’, evidence was collated to charge those associated with illegal tendering on the *St Andre des Flandres*. The ring leader, Oonagh Karanjia was fined £500 for orchestrating this particular ‘drop’ (HO 255/1220). In this paper, drawing on the case study of broadcasting pirate Radio Caroline and its tender operations in the 1970s, I consider how the Labour government secured British territory in view of territorial and extra territorial mobilities, which had a bearing on life within the boundaries of the nation state. I explore the ways in which a particular method of security – surveillance – was complex when considering its operation across not only differing legal spaces (national and international; the space of the shore, sea and ship), but differing physical or material spaces (the physical composition of the sea compared to and in relation with the land and air). Indeed, examining the surveillance operations led by the RRD and the Essex Constabulary, I demonstrate how the nature of the sea presented particular problems relating to the prohibition of tender boat mobilities, travelling from the pirate radio vessel *Mi Amigo*, to the shore.

Accordingly, this paper unpacks the unique challenges relating to state security when the maritime realm is brought into focus. To date, the study of mobilities and of surveillance has marginalised the sea and ships in investigations. It will be argued, however, that the challenges of surveilling mobilities at sea are different from those on land or air (although these spaces are often connected to the sea through processes of mobility and surveillance) because the sea has a particular legal, fluid and material composition. Whilst this paper focuses on a historical case study of regulation of mobilities at sea to immobilise the aerial vibrations of sound, it is not only past security which may be understood differently through the lens of seas and shipping. In the 21st century, territorial security is increasingly played out in the spaces between and beyond national boundaries where there is opportunity to exploit the potential of such zones (see Langewiesche, 2004). It is pertinent therefore, to think through the surveillance of shipped mobilities in order to better understand how to govern activities beyond territorial boundaries.

In order to work through these arguments, I split the paper into 4 parts. I begin by tracing the study of the sea and ships in the social sciences over the past 20 years, accounting for the lack of recognition of this sphere in academic debate. Connected to this, I next consider how scholarship in mobilities studies and surveillance research might be informed through attention to the maritime realm, highlighting recent examples of work that is beginning to fill the watery void in research within these arenas of study. I next introduce radio piracy, the example around which I will explore mobilities and governance of the sea through surveillance practices. Here I outline the numerous (im)mobilities tied up with the enterprise and government strategies of mobilising action and immobilising piracy on the airwaves. I then explore the ways in which the immobilisation of watery pirate radio related mobilities was a challenge for the British government through three empirically informed sections which draw out the distinctiveness of the sea and ships to the regulatory practices which ensued. Using a variety of data from Home Office records, memos, parliamentary debates and legal documents, I firstly consider mobile legal boundaries at sea, secondly the liquidity of watery spaces, and thirdly the scale and depth of oceans. To finish, I draw conclusions which point towards the broader, contemporary parallels of this discussion that may be reached in order to think seriously about mobility, surveillance and the regulation of shipping in order to secure the sea, and also the land and air.

Seeing the seas: mobilising shipping research

The sea and shipping occupies something of a paradoxical space in that it is, and has been, simultaneously absent and present in the imagination. As Lavery tells us, the sea is evident all around us, in the tangible goods we have in our homes, which have largely travelled via import channels across the oceans on ships (2005, 359). Ninety-five percent of global trade, on average, is carried by cargo ship; not by air, or across the land (Ibid 2005, 359). Accordingly, the sea permeates our everyday lives. But this leakage of sea, on to land, via commodity chains is often obscured: the seas and shipping are not associated with the things around us, from table, chairs, electric items, or food stuffs. Likewise, the seas, ships and boats have featured in many literary and artistic accounts (see Mack 2011). Here the sea fills the imagination with tales of sea creatures, maritime swashbuckling and sublime imagery, whilst concurrently, as Steinberg notes, being abstracted in Western understanding as an empty void, a mere barrier to cross, for modern and postmodern capitalist flows (2001). Indeed,

although in non-Western cultures, the sea has played a much more central social role it has otherwise been predominantly constructed as a space beyond rather than *of* society (Steinberg 2001, 6). Such an abstraction has worked to marginalise the sea in our consciousness, in terms of how it is intimately enfolded with everyday life (Peters, 2010). However, since Steinberg's seminal text *The Social Construction of the Ocean* (2001), there has been a steady stream of research that has attended to the widely acknowledged watery void that is evident across social science disciplines, from human geography to sociology (see for example Anderson and Peters 2014, Lambert et al, 2006; Peters 2010, Steinberg 2010, 2013).

Within this emerging work, the sea has most often been utilised to open up fluid understandings of socio-cultural and political phenomena which move beyond constraining "nation-state centred historical master narratives" (Lambert et al 2006, 480). Other scholars have employed the sea as a metaphoric device for rethinking histories of imperialism and colonialism (see Lambert 2005, Ogborn 2002, 2008) and broader global relations (Linebaugh and Rediker 2000) as the sea represents a space of circulation and exchange. However, critics have argued that such approaches abstract the sea from its 'real' material form. The sea as symbolic, pays attention to what the sea *comes* to symbolise rather than the sea itself – and hence the oceans remain somewhat marginalised in our understandings of them as physical spaces which underpin actual lived realities (Anderson and Peters 2014, 20). Yet with a post-human turn in the discipline, alert to the more-than-human elements that are entwined with our daily lives (see Whatmore 2006), the materiality of the sea, its aesthetic qualities, motion, texture and physical composition are currently driving research agendas (see Jones 2011, Lehman 2013, Peters 2012, Steinberg 2013, Vannini and Taggart 2014). This follows a material turn across the social science disciplines whereby 'matter' is understood as elemental; the building blocks for life; air, fire, water, geology and so on (see Anderson and Wylie 2009). Here the very *nature* of the sea comes into focus as co-composed with human existence (see Lehman 2013, Peters 2012, Vannini and Taggart 2014).

Such work which attends to the connections between the sea as a material reality and the socio-cultural life which unfolds in view of these particular watery physical conditions has also brought renewed attention to ships (Peters 2012). The ship has, surprisingly, gained only occasional consideration until recently, in social scientific study (Hasty and Peters 2012, 661). Research concerning ships has focused on vessels as tools in the creation of knowledge about the world (see Sorrenson 1996, Hasty 2011, Laloe 2014), the ship as a material space (assembled and disassembled, see Ryan 2006 and Crang 2012 respectively), and the ship as a

site with particular social realities which emerge specifically in view of on board conditions, framed by wider geopolitical contexts (see for example Marcus Rediker's *The Slave Ship* where the social canvas of the ship is illustrated in view of broader racial and political constructions of colonialism which foreground the behaviours on board, 2007). However, to date, there has been surprisingly little work on mobilities of ships and shipping and also on the geopolitics of shipping and governance at sea (for exceptions see Cowen 2007, 2012 and Martin 2012).

The lack of attention to the mobilities of ships can be attributed to technological and conceptual shifts over the past century. As Peters explains,

Today the car, train, plane and virtual networks (the internet for example) are seen as the most important technologies that govern how people move and this view is reflected in the wealth of 'mobilities' research ... The ship, deemed as slow, old-fashioned and out-dated has eluded study (2010, 1263).

With the recognition that "our world is a water world" (Anderson and Peters 2014, 1) consideration is now being paid to mobilities facilitated *by* ships (Anim-Addo 2014, Cook and Tolia-Kelly 2010, Stanley 2006) and the mobilities *of* ships (Peters 2012, Vannini 2008, see also, the introduction to this issue). Yet there is still, arguably, much work to do in order to take seriously how ships make a world of people, raw materials, services, capital, mobile through global transportation, and how ships themselves are mobile in view of technology, legal barriers and boundaries which separate national space from international space, and the very nature of the sea.

Indeed, it is these latter concerns that this paper attends, considering how ships are mobile or immobilised through apparatus of national and international control (focusing specifically on surveillance as an act of regulating space) and in view of the changing physical conditions of the sea at any given time, due to its material composition as liquid, vast and deep. Such a focus also takes the study of surveillance to sea. To date, surveillance studies have both land centric, and also urban centric (see Lyon 2007). In recent years surveillance studies have expanded to take seriously the surveillance of the air (see Adey 2004a, 2004b) and virtual surveillance of telecommunications and cyber spaces (Lyon 2007). Yet, as Adey notes, the surveillance of port areas, and indeed shipping beyond the shore, in

the high seas, has eluded critical examination (2004, 1367). This is in some respects unsurprising. As Steinberg notes, the sea is, by its nature inaccessible, distant, deep – we cannot study it as easily as we might the land; its very physicality providing a barrier to research (Steinberg 1999, 372). It also follows the traditional view of the sea as beyond our daily lives and existence; a space ‘out of sight and mind’ (Ibid 1999, 367). Yet, as the sea and ships are now increasingly acknowledged as connected to and integrated with our lived realities, surveillance of these spaces in view of security of both the sea, and the land and air, is necessary in view of 21st century concerns: terrorism, environmental degradation and resource exploitation (Langewiesche 2004).

Whilst surveillance studies have paid attention to the ways in which mobilities are tracked, recorded and watched (Bennett and Regan 2004) in light of the multiple, complex ways in which people, goods and ideas are mobile (Sheller and Urry 2006), surveillance of sea-based mobilities have been largely absent (although see Cowen who has explored security of ports 2007, 2010). Yet, what might be learned by considering how surveillance works in watery realms? As Lambert et al note, the sea has a “potential” to unlock alternative understandings because, fundamentally, it is a space unlike the land, the air or the virtual sphere (2006, 480). For example, Adey, Whitehead and Williams have theorised the specificity of aerial surveillance in view of the unique perspectives possible from above (2011, 2013). The authors explore the legal shape of air space as jurisdiction alters vertically (Ibid 2011, 177) and further work by Adey, Anderson and Lobo-Guerrero (2011) explores how the material and elemental quality of air impacts security. Drawing on the volcanic ash cloud of 2010 they demonstrate how the air fails to respect boundaries and movements of ash threatened the security of global transportation flows (2011). In other words, such work has pinpointed the specificity of the legal and material character of air to open up fresh debates regarding mobility and security.

Whilst this paper attends in part to the air (and the movement of sound, ship to shore), here I unpack the specificity of the sea to understanding mobility and surveillance and the surveillance of mobilities. To do so, I take both a legal and a post-human approach, drawing on contemporary theories of the more-than-human to consider the very nature of the sea in the regulative strategies of surveillance that work to immobilize the movements of ships and boats (and on the other hand, consider how those surveilled also harness legal and material conditions to avoid surveillance). To do this, I draw on the case study of offshore radio piracy, which I now introduce in greater detail.

Immobilising aerial and watery mobilities: introducing radio piracy

In Britain, prior to 1964 (when the first radio pirate aiming broadcasts specifically to a British audience began transmissions), there was a monopoly that permitted just three radio stations; the Light, the Third and the Home, all operated by the BBC, to broadcast (Chapman 1992, 31). Due to a government charter (1927) no other broadcasters were allowed to transmit programmes within British territory. Broadcasting was thought to be a powerful medium and consequently the government wanted to ensure it was a resource that was stringently controlled (Lewis and Booth 1989, 52). Having just one agency, the BBC, in charge of broadcasting, guaranteed that what the public consumed through the radio was informing, educative and in good taste (Cain, 1992, 12). However, by the 1960s, with a new youth culture emerging, a post-war economic boom, the advent of the portable transistor radio to replace the weighty wireless, and the beginnings of a wave of rock n' roll (see Marwick 1998), there was a demand for an alternative to the BBC's programming, which was often accused of being snobbish and elitist, and failed to air the plethora of new music emerging at the time (Crisell, 1997, 27).

Radio pirates realised that they could escape the legislative stranglehold of the British broadcasting monopoly if they were to locate themselves outside of British territory in the high seas zone. From this extra-territorial location, they were physically beyond the reach of British legislation, but the broadcasts they aired could legitimately permeate the boundary back into the state, with no legal consequence. This practice was reliant on the mobility of sound waves moving through the air (Connell and Gibson, 2007) – connecting two disparate spaces. Accordingly radio pirate bosses converted ships, destined for international waters, whereby it would be possible to utilise the mobility of signals through the air to transmit popular music to the masses on land. The ships involved in pirate radio endeavours then, were largely immobile (except for the undulation of the vessels, driven by motion of the sea). They would be anchored, often for years at a time, in the same place. Yet from this place; they became mobile in a completely different sense. Through the power of broadcasting, the ship moved into every garage, workplace, home, car where the radio broadcasts were picked up by listeners on land.

Following the end of World War II and with the onset of the Cold War, this was perceived as too much of a threat to state security. However, when seeking to regulate Radio Caroline, the government did not aim to control broadcasting frequencies or transmitting

output – the factors defined as the problem that required government regulation. Rather, they sought to control the places from which the transmissions originated and which enabled such transmissions – the ships and tender boats at sea (Peters 2013). Actions directed against the air, by way of signal jamming the use of unauthorised or already allocated frequencies would prove fruitless, as Lord Newton described during a Lords’ debate in 1964,

...it would be costly and it would take some months to arrange; it would also...cause the ‘pirates’ to keep changing their frequencies in order to overcome the jamming...Jamming stations would be really adding to that situation of uncoordinated and unregulated use of frequencies (HL Deb 18th June 1964, vol. 258, cc. 1380).

The government therefore had to consider how else they might control this aerial problem. In 1966 the government passed the MBO Bill, (which came into effect on August 15th 1967) which would attempt to suppress offshore radio piracy. The Act aimed to achieve the suppression of radio transmissions through making it an offence for a British National to work on a pirate ship in a broadcasting capacity, an offence for boats leaving British docks to supply the ships, or take people to and from the ships and an offence for British companies to advertise the station anywhere inside British territory. Aside from provision c.41.3 the Act was designed to incapacitate the ship to, in turn, to incapacitate broadcasting. The law was in many respects, a law to control all other mobilities which would by default control the aerial mobilities which were the threat to state security. However, when the legislation was brought into force its provisions were not implemented – its mere existence forced the closure of 13 of the 14 pirate radio stations lining Britain’s shores in the 1960s (the exception was Radio Caroline who vowed to continue but which also shut down transmissions just 8 months later). In 1974¹, however, Radio Caroline returned and set sail for an anchorage in the English Channel and for the first time the MBO Act was to be implemented.

The Radio Regulatory Department (RRD) was responsible for the enforcement of the MBO Act, alongside the police and military who also had enforcement powers under the provision of the Bill. For the RRD, it was paramount to regulate the activities of the resurrected radio pirates as they posed the threat of ‘noxious’ broadcasting. Indeed, in 1970, Radio Caroline temporarily broadcast for two weeks aboard a Dutch pirate vessel in an attempt to sway the general election and oust the Labour government who had legislated

again them in 1967. Such broadcasting was demonstrative of the power of these offshore corsairs to reap influence over state subjects. When Radio Caroline returned in a more permanent capacity in 1974, regulation was therefore paramount against the threat to the moral and political security of the state.

Accordingly, the RRD and police kept their eye on movements between the shore and the radio ships – the mobilities of tender boats – which were run by a listening community mobilised into action. If the authorities could watch and record these movements, they could capture and prosecute offenders of the Act, cut off the networks to the ship and control the airwaves. Thus the practice of surveillance at sea, of shipping, was integral to the enforcement of the MBO Act from 1974-1980². Although the law gave the authorities other avenues of potential prosecution, such as enforcing the law against British businesses broadcasting advertisements on pirate radio stations, the authorities kept their focus firmly on the ship and its tenders; not these broadcasts (see Peters 2013). However, the immobilization of tenders was challenging because whilst the act of surveillance in international waters was within the jurisdiction of the British government, they had no power within international waters to intercept those mobile tender boats, registered outside of Britain, which facilitated the running of the radio vessel. The authorities would have to wait until those boats re-entered national waters where their law then took precedence. Yet these operations were fraught with difficulty because of the very nature of the sea in terms of both the plural legal spaces involved (national and international; ship, sea and shore) and because of the very material, physical composition and nature of the sea. I next trace these challenging conditions for the regulation of activities at sea in view of state security, beginning with the mobile legal boundaries at sea.

Mobility and legality

Offshore radio piracy illustrates a case of what Beckmann et al call ‘legal pluralism’ where the enterprise operated ‘under plural legal constellations’ whereby there is a ‘coexistence’ or ‘overlapping’ of legal orders which complicate the use of and control of space (2006, 4). In the 1970s, the Radio Caroline vessel *Mi Amigo* was occupying international waters. In this zone, at this time, there was no stipulation in the Law of the Sea (1958) which prohibited broadcasting from vessels or structures in the high seas area (Robertson 1982, 77). As such, within this legal framework, the station was not in breach of international regulation.

Moreover, the ship was flagged (conveniently) to Panama, a nation with no law such as the MBO Act, which would prohibit ships to broadcast, as islands of law subject to the state controls of that nation. Subsequently, the ship as portion of Panamanian territory, occupying the international space of the sea, was not in breach of regulations in view of its activities. The Labour government, however, argued that an agreement on frequency allocation from the International Telecommunications Union (ITU hereafter) was breached (1959) (House of Commons Debate 2 June 1964 vol. 695 cc.933). As Lord Aberdare stated in 1964,

With no regard for ... international agreements, Radio Caroline is broadcasting on 197.5 metres and Radio Atlanta on 200.7 metres, neither of them wavelengths allocated to this country. The frequency used by Radio Caroline is close to frequencies in use in Czechoslovakia and Belgium, and the Belgium authorities have already made their protest about interference.... It is therefore essential, if we are to honour international agreements into which we have entered in good faith that we should take urgent steps to close down these "pirate" radio stations (House of Lords Debate 18 June 1964 vol. 258 cc.1363).

Yet, in a memo responding to parliamentary resistance, a professional lawyer writing on behalf of Radio Caroline objected to the arguments put forward, on the basis that the international Law of the Sea took precedence over the ITU agreement on frequency allocations. As the memo states,

it is very much part of this memorandum to suggest that an indirect assertion by the States of a power of control over shipping carrying on innocent activities on the seas is a direct and real contravention of the policy underlying the High Seas Convention of 1958.(HO255/1007)

Here the Radio Caroline organisation utilised overlapping or fluid boundaries of law to argue their case, knowing that the Law of the Sea carried greater weight because of the historically engrained freedom of ships at sea to carry out activities without interference (for exceptions see United Nations Convention on the Law of the Sea, Article 22, 1958).

Subsequently, in the first instance, Radio Caroline (and other offshore pirates) used the legal nature of the sea specifically to protect their activities, arguing that ships

broadcasting “are doing so on the high seas and in exercise of the undoubted right of freedom of the seas” (Memo, HO255/1007). Resultantly, knowing the long established importance of freedom at sea, the British government knew this would have to be respected in any regulation of the activities of the pirates. They could not board and shut down transmissions off the back of the ITU provision – they would have to find indirect methods to contain this extra territorial problem.

Accordingly, in 1974 when Radio Caroline returned to Knock Deep, the government were forced to enact provisions of the MBO Act. However, the implementation of this law was complex because of the mobility of tender boats and further overlapping legal domains. Indeed, supplying the ship was orchestrated tactically by the Radio Caroline organisation to take advantage of legal plurality (Beckmann et al 2006). In order to evade the provisions of the MBO Act, supplies would be arranged from the shores of France, which was almost equidistant to the anchorage of the *Mi Amigo*, as the British shoreline (HO 255/1219). The mobility of the tendering exercise meant that the Radio Caroline organisation could harness this potential to evade British legal provisions and take advantage of the protection which they were afforded by travelling from French waters to international waters.

However, whilst supplying from France was not illegal (no equivalent of the MBO was in place and broadcasts were not infiltrating French air space and as such were not a French concern) – British officials could ask for assistance from the continent, as evidence collected could be used to prosecute in view of the wider pan-European agreement (1965) on which the MBO Act was based. British ships could not survey in French territorial waters as this was beyond their legal control. They were subsequently reliant on French surveillance. Yet this relied on the French co-operating and surveilling shipping from their shores, of suspected tender boats, flagged conveniently, sailing into international space, on behalf of the British authorities. Such circumstances made surveillance at sea fraught with difficulty because of the number of agencies and legal provisions that came into play. Mobility across legal boundaries by tenders therefore complicated the powers of and possibilities of surveillance at sea by the British. Whilst the British authorities could often conduct their own surveillance of boats moving ship to shore, they were also reliant on the French government for the accumulation of evidence. They could also only intercept tenders within their own national waters, not extra-territorial zones (where it is illegal to board a ship flagged to another nation, Law of the Sea 1958, Article 22) or French waters. This legal plurality, requiring the need for cross-nation coordination, meant that there was only one prosecution

against a French national for supplies to the *Mi Amigo* between 1974 and 1980, in spite of numerous launches from Boulogne (HO 255/1219).

Liquidity and fixity

However, it was not simply the legal canvas of the sea or the fluid mobilities of tenders that complicated regulative strategies of surveillance. The material or physical composition of the sea also played a role. Firstly, the aforementioned borders between territorial and extra territorial space were rarely clear cut. The sea (in this case) as a liquid element (as opposed to its other states, as a solid in the form of ice), is composed of loose particles. It is the molecular composition of water in liquid form which facilitates its movement, as these looser particulars are then subject to wider elementary forces of wind, gravitational pull and so on (see Jones 2011, Peters 2012). As Chris Bear and Sally Eden ask, in their research of fishery certifications, “how far can ... strict cartographic boundaries deal with the essential fluidity of seas and oceans?” (2008, 488). In other words, whilst a border or boundary on land, as a solid material, may become in some sense solidified and thus visible and obvious, borders on sea are less ‘set’ or evident. They are more akin to aerial borders, yet have vertical depth rather than height. Whilst boundary practices on land involve markers of territory (walls, check points, fences); at sea, the materiality of the space dictates somewhat different bordering practices. Whilst the 12 nautical mile territorial sea zone may be clearly marked on a map; a solid line representing a definite distance from the shore separating two legal zones; in reality that line is not solid. No line can be marked across the ocean due to its materiality, no wall can be built, no fence erected, no check point installed. Moreover, with shifting tides back and forth the point of measurement of the territorial sea is constantly changing with the motion of the sea as it ebbs and flows. This materiality and mobility of the sea caused multiple instances of confusion for the RRD because exact legal boundaries could not be clearly identified. This was compounded by the lack of tracking technologies available at the time (the mid to late 1970s)³.

In 1975 the RRD and Essex Police Constabulary surveilled both the mobility of tenders and of the *Mi Amigo* itself, as it drifted from its permanent anchorage in the Knock Deep channel. In November of that year, a strong Force 8 to 9 wind had whipped up a storm of bad weather and the radio ship had broken its anchor chains and begun to move in situ with the mobile sea, its engines having failed (RRD Report, HO255/1219). It was unclear,

due to the undistinguishable and imprecise location of the territorial boundary, whether the *Mi Amigo*, and the tenders which came to assist the ailing ship, were in international waters, or the British sea zone. In other words, it was unclear if the ship could be boarded and tenders intercepted (in line with British Law) or whether they were protected from such action by international law (RRD Report, HO255/1219).

On the 13th November, however, broadcasting commenced “at about 09 30 GMT” from the *Mi Amigo*. “Navigation equipment ... showed that the broadcast on 1187kHz was coming from the ship ... its position was considered to be within UK territorial limits” (RRD Report HO255/1219). The word ‘considered’ used in the report is indicative of the uncertainty over the positioning of the ship and the “fast twin prop tender” which was supporting the activities as the vessel drifted. Accordingly, believing the ship and tender to be occupying British territory, the RRD and police, who had been surveilling activities from safe distance, boarded the vessels and made several arrests, as well as removing transmitting equipment. When the case came to Southend Magistrates Court in December, however, the surveillance of the RRD and Police was deemed inaccurate. Whilst they believed they were watching a ship in distress and an assisting tender, *within* territorial limits, the moving and ambiguous boundary of the sea could not be determined and as such the “experts on maritime law advised no further physical or legal measures could be taken against the *Mi Amigo*” (HO255/1219). As such, the surveillances of borders and boundaries at sea is fraught with difficulty because such borders and boundaries are not static, fixed, solid and easily identified – they shift and move as the sea moves, and with only a slight change of position, a vessel may be within or outside of any particular zone of legal jurisdiction, as this instance identifies.

Moreover, such surveillance was made more challenging because of the material liquidity of the sea and how this shaped the technology and means of surveillance possible. Unlike modes of surveillance on land, such as wall-mounted CCTV cameras that work to provide an uninterrupted survey of a given area (Bennett and Regan 2004, 452), such surveillance is not possible at sea because of its materiality. On the one hand, there are few permanent, solid structures at sea from which permanent surveillance could be facilitated. On the other hand, even if there were, such is the vastness of sea spaces; fixity would not necessarily ensure the best vantage point for surveillance. Furthermore, whilst surveillance strategies are varied and not always reliant on fixity (i.e. the CCTV camera may be fixed to the solidity of a wall, but it can pan left to right, up and down), recordings are, by and large,

continuous in nature (Lyon 2007, 29). The CCTV camera (unless faulty or vandalised) will pan constantly, providing a continual record of an area. Similarly data surveillance of internet use or telecommunications (via virtual or audio surveillance) may also consist of long term, on-going records. At sea, such recordings, over such a vast space, are not possible in the same ways. Rather, surveillance is reliant on the mobility of surveillers to travel across the oceans in efforts to capture and record motion, and surveillance is not constant, but occurs as and when necessary in view of a potential threat.

Indeed, in the case of Radio Caroline, the surveillance of tenders was not on-going or fixed. The RRD and Police used small boats, and in later years helicopters, to survey areas of sea when they believed a tender would be supplying the radio ship. Their presence at sea was not permanent or on-going, because this was simply not possible on the ocean. Instead, based on intelligence, the RRD and Police had to be ready to sail to sea and watch activities whenever they believed a pick-up/drop-off was occurring. As such, the authorities had to be ready to set sail at short notice, as soon as a tender was detected through forms of audio surveillance (listening to Radio Caroline's broadcasts to detect if tenders were mentioned) and/or visual surveillance (of shorelines). As the Home Office records reveal, they were "unlikely ... to have more than a bare minimum of warning" about potential tendering and as such, were "virtually powerless unless (there is) speedy transport available at comparatively short notice" (HO255/1219). As such, the distinct liquid materiality of the sea informed the surveillance measures and practices possible, where the physical composition of the sea eludes fixed and on-going forms of observation.

Scale and depth

Furthermore the wide geographical expanse of open ocean space made it difficult to keep track of all movements, all of the time, especially in an era without satellite technology and with only long distance photography and notepads as methods of recording (see HO 255 files). Even in contemporary society, with modern Geographical Positioning Systems (GPS) and 'black boxes', observation at sea remains difficult (the recent example of tracking the missing Air Malaysia flight MH370 in the South China Sea and Indian Ocean is one such example). The surveiller needs to know which ship they are looking for in order to find it, and the naked eye is still relied upon to positively identify the vessel (Langewiesche 2004). In the late 1970s the RRD increasingly relied on aerial surveillance to support sea-based

surveillance on boats, as the view from above was broader for watching large areas of ocean and movements of tenders across significant distances (HO 255/1227), (Adey, Whitehead and Williams 2013). However, even with aerial surveillance, such huge expanses of space were difficult to regulate through strategies of observation. As Mr Lancefield, of the RRD noted, when on a surveillance mission to identify tenders supplying the *Mi Amigo*, such surveillance of the sea was challenging because of the ‘ground’ which needed to be covered and the problem of correctly identifying specific ships from an aerial perspective. As the Home Office record states, the helicopter

“was airborne at 12 45hrs ... we first searched on a course west of Caroline, but although we spotted quite a few bats (non-supply vessels), we could not identify the tender ...we then flew down the Essex coast, but again was unsuccessful” (HO255/1227).

Tracking ships over huge distances because of the size and scale (and even texture) of the sea presents particular challenges in the identification of vessels and the capture of evidence. As the surveillance of ships is predicated on the observation of objects, surveillance at sea was reliant on *seeing* the ships, and therefore being able to detect them in vast open spaces. As the evidence from the Zebra 4 surveillance operation of the RRD reveals, it was difficult to search out tenders even from the air where distances could be traversed more quickly and the perspective was enhanced compared to the horizontal 360-degree viewing from the platform of the surveillance boat. Aerial surveillance using Puma helicopters was an action taken in response to the difficulty of sea level, boat-based surveillance, which was slower and offered a flat horizontal perspective limited to looking across rather than down. Yet by the end of the 1970s, even this approach was not wholly successful (HO 255/1227). Indeed, the government found, during a further pirate radio renaissance in the 1980s, that the only reliable method of immobilising the tenders through regulative surveillance strategies was to watch overtly (a tactic not previously used), in the form of a blockade, known as ‘Euro-siege’. This meant positioning surveillance boats within view of the radio ship (Skues 2009, 508). Such surveillance worked to intimidate tenders and curtail their mobilities, preventing them from even approaching the radio ship in the first instance. Such an approach was regarded as threatening in view of the freedom of the seas (see House of Lords Debate 25 July 1990, vol. 521 cc.1547), but gave government agencies the benefit of relative fixity to

more reliably track and observe the mobilities of tender vessels, impossible from covert positions or mobile approaches where the tenders were followed back to shore.

Indeed, the journeys back to shore illustrate another way in which surveillance of the mobilities of tenders was problematized because of the materiality of the sea and the seabed. The vertical depth of the sea in the English Channel varies considerably with a number of significant sandbanks altering the sea's movement and the mobilities of ships. When tenders travelled ship to shore they would often utilise the character of the material environment to evade the following surveillance vessels. Occupying smaller, faster vessels than heavier, larger government boats, tenders could track back into territorial waters on shallower routes, which surveillance vessels could not follow for fear of grounding. Subsequently the tenders were able to use the speed, size and agility of their boats together with the physical environment at sea – its three-dimensionality and depth – to avoid capture in territorial waters where they could be legally intercepted. Such strategies; boat size, route planning and speed in conjunction with the physical geography of the sea were used to counter government attempts at regulative control. For example during the Zebra 3 operation (October 1974) a transcription of the surveillance exercise on board the RRD vessel 'The Miranda' reveals the evasion action of the tender to government surveillance.

Miranda to Robby (code name for Mr Lancefield of the RRD) "Tom thinks it is quite possible he (the tender) might be trying to lose us over the sands"

Robby "Have the shoal (tender) rumbled you, have (they) realised what you are doing, have they taken evasive action over the little sink sands, over?"
(HO255/1224)

Likewise, during the Zebra 4 operation (November 1974) the RRD again reported that they were unable to track the mobility of the tender and consequently "it was decided that the tender must be taking evasive action because we had not spotted it on the MOD Radar, operating from Foulness, and that it was ... slinking up the coast to approach from another direction" (HO255/1227). Utilising depth, and also shelter ('slinking' along the coast) were ways in which the government found immobilisation of tenders challenging in view of the material qualities of the sea. To counter Bennett and Regan's claim that there is "potentially no hiding" in the "surveillance of mobilities" (2004, 453), conversely, at sea, as space which

appears as a monotonous, flat plain, an open space of exposure and visibility (Levi Strauss 1972, 338-9), there are examples of ‘hiding’ through the scale and depth of the seas; its materiality colour, texture, three-dimensionality, size, and the mobile technologies and methods of surveillance which are only partially productive in tracking such shipped mobilities.

Moving forward: conclusions

Tracing the attempts of the RRD to immobilise the movements of radio pirate suppliers, I have demonstrated how overlapping legal spheres between national and international space and between laws of the air and sea, impacted the possibilities of ‘where’ surveillance could occur and how surveillance could be enacted. I have further demonstrated how the complex material physicality of the sea as a liquid space without the benefits of fixity for continuous surveillance practices, and the sea as a space of vast proportions and depth, impacted the ability for government missions to follow through observational operations successfully. Surveillance was often patchy and tender vessels could evade detection in spite of the open plateau of space occupied. Indeed, the open ocean, far from being a space of easy visibility, had a texture, depth and vastness which meant recognition of tenders was difficult, most notably from the deck of the surveillance boat, but also from the improved vantage point of the air. Subsequently it is important to think seriously about the material and changing characteristics of the sea and how these shape regulative practices – not because these conditions can be changed, but so as to think about manipulative strategies for working around these conditions in light of state security (see also Peters 2012).

The case study presented here is a historic one and the conclusions drawn from this are, resultantly, shaped by a consideration of the Law of the Sea in place at the time (1958), technological methods of surveillance, and the broader socio-political climate of the time. Indeed, in 1982 the Law of the Sea changed to revoke rights to broadcast at sea (Article 22, 1982) and technological methods of surveillance have since improved to include GPS and infrared monitoring. The case study of Radio Caroline is also one tied up to post war change and the moral liberalisation of society (Marwick 1998) which drove state desires to protect shores from ‘noxious’ broadcasts that, unlike the BBC’s output, might not be in good taste. However, some broader points of consideration can still be drawn for thinking about the sea in contemporary times, as a space connected to land and air spaces, and therefore, a space

relevant for unpacking the regulation of mobilities which may directly or indirectly move beyond the sea to these cognate spheres.

In the documentary ‘Royal Navy Caribbean Patrol’ (2012), television cameras follow the daily lives of sailors whose role it is to secure the seas and shores of maritime threats – threats that are not simply oceanic insecurities, but that have broader influences on landed and aerial life. In Episode One the scene is set for the series, introducing the vessel HMS Manchester, which will undertake a 7 month deployment to survey international waters adjacent to Montserrat, tracking drug smugglers. Drug smuggling is an example of the ways in which activities at sea (as such pirate radio) cannot be disconnected from connected spaces, when supplies of drugs find their way onto land, and into bars, clubs and the pockets of dealers. Similar to events surrounding offshore broadcasting piracy, engaging with smuggling at sea is a method of securing the shore before the shore is even reached. Smuggling represents a current global concern, a threat to order in numerous states as supplies cross territorial boundaries when the sea is utilised as a crossing zone for trade. However, as the blog postings on the internet web page for ‘Caribbean Patrol’ reveal, there is contention over the Royal Navy’s role in the Caribbean Sea, given most supplies from this area arrive on US rather than UK shores (2012). As one posting remarks, “America's drug problem is America's problem... I wonder how much this tour cost and would it have been better spent combatting piracy off the horn of Africa?” (Pete, 2012). The sea is a place where surveillance as a regulative strategy becomes contentious according to overlapping national concerns. The documentary further shows the care taken to not intercept smugglers until the crew confirm that the activities and people they observe are in breach of the Law of the Sea (1982), so as not to illegally board vessels, in a space of legal plurality. Moreover, the documentary demonstrates the harsh realities of surveillance in the Caribbean during hurricane season when the material qualities of the sea alter from a calm surface ideal for tracking possible smuggling vessels with radar sensors and then binoculars, to the issues of grappling with such surveillance in challenging circumstances where the sea’s physical liquidity causes the ship to list and objects of surveillance to be lost from sight (2012). In these instances, the HMS Manchester relies on specific tactics to counter the physical qualities of the sea. Communications with land; the use smaller inflatable craft which can move through the water at speed; and the deployment of aerial surveillance track suspect vessels when the shipboard horizontal view is obscured (2012). Such strategies and approaches to surveillance are markedly different from surveillance on land, where firstly,

legal boundaries are (mostly) clear cut in view of national jurisdiction; and secondly, the materiality of the land lends itself to alternative practices of surveillance, specific to the elemental solidity of a given area. Such strategies also differ to those employed in skies, due to the depth, colour, and mobility of the sea as a liquid element. In short, the distinct qualities of the sea mean that the Royal Navy prepares for surveillance in view of these specific legal and physical conditions, adapting practice accordingly.

Such adaptation and a greater understanding of the possible legal and material conditions which the sea presents, are fundamental not just in re-visioning how we understand a past phenomenon (in this case the security of land and air spaces from offshore radio piracy), but are also vital for thinking seriously about threats to the security of sea, land and air in future. Attention to the sea is paramount with growing acknowledgement that what happens at sea is enfolded with what happened on land or in the air (Anderson and Peters, 2014). As Langewiesche rather pessimistically argues, the ocean is at the heart of 21st century concerns over state security because,

[g]eographically, it is not the exception to our planet, but by far its greatest defining feature. By political and social measures it is important too – not merely as a wilderness that has always existed or as a reminder of the world as it was before, but also quite possible as a harbinger of a larger chaos to come (2004, 1).

This paper has gone some way in introducing some of the considerations that should be taken into account that are different at sea, to the land, which must be recognised in acts of regulation in order to secure the sea, land and air, whilst also adding to literatures on mobilities and surveillance which have yet to fully ‘go to sea’. Yet there is more work to do to think through the range of mobilities at sea which may be subject to surveillance. Here I have focused on ships and boats as a much maligned focus in mobilities and surveillance literature, but this research must also expand to think not only about the means of mobilities at sea, but the mobilities of things carried by ship, and their surveillance (i.e. containers, see Cowen, 2010, Martin 2012) and surveillance under the surface of the sea in the form of submarine surveillances. However, in this paper I have contributed to timely debates which cross-cut and bring together the study of the ocean with mobilities and surveillance studies, arguing that methods of immobilising undesirable mobilities in efforts to secure state

concerns is complex when we take the particularities of the sea – legally and materially – into account.

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¹ Radio Caroline in fact returned in 1972 alongside Dutch pirate vessels Radio Northsea International (RNI) and Radio Veronica, protected because Holland had yet to enact a version of the MBO Act.

² In 1980 the *Mi Amigo* sank.

³ Nowadays there are GPS satellite technologies that allow ships and ports to more accurate plot and map locations.