Introduction

Context

Following a long gestation, in 2009, a new Act entered the English legislative seascape – the Marine and Coastal Access Act (MCAA). The MCAA provides a comprehensive regulatory framework for all things marine,[1] including marine conservation in Part 5. The Act brings in many new institutional and regulatory tools for the conservation of the marine environment, constituting a notable addition to the pre-existing marine conservation framework, primarily reliant on EU conservation law. Until the MCAA, the predominant marine protected areas (MPAs) in English waters were Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), known as European Marine Sites, designated respectively under the Habitats and Birds Directives.[2] In terms of domestically driven marine designations, the Wildlife and Countryside Act 1981 provided for the designation of Marine Nature Reserves.[3] However, Marine Nature Reserves could stretch only to three nautical miles, and their accompanying byelaws had a very limited scope. Only one Marine Nature Reserve was designated in England.[4]

This introduction begins with a brief discussion of the salient innovations that are found in Part V of the MCAA that trigger the wider questions at the core of this book, emphasising how English marine conservation law provides an interesting example to explore complex and foundational issues in environmental law and environmental social sciences.

The MCAA provides for the establishment of a new type of nationally important MPA, the Marine Conservation Zone (MCZ).[5] MCZs, together with

[1] For an overview of the MCAA, see T. Appleby and P. J. S. Jones, 'The Marine and Coastal Access Act – A Hornets' Nest?' (2012) 36 *Marine Policy* 73–77.
[2] Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, OJ L 206/7 (the Habitats Directive) and Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds, OJ L20/7 (Birds Directive).
[3] Sections 36 and 37 of the Wildlife and Countryside Act 1981.
[4] The first and only English Marine Nature Reserve was Lundy Island.
[5] Section 116 of the MCAA.

European Marine Sites, Ramsar sites[6] and the marine components of Sites of Special Scientific Interest (SSSIs),[7] form an MPA network under Section 123 of the MCAA. The network approach, championed by the MCAA, is in line with international calls to build ecologically coherent networks of MPAs.[8] On the one hand, this reflects the impact of international policy targets on domestic law, hence pointing to the interaction of multiple scales in marine governance. On the other hand, it reflects the scientific acknowledgement that networks, rather than isolated sites, are better instruments to conserve biodiversity in an environment subject to global environmental change and consequently ecological variation and adaptation. In a fluid marine environment and a time of global environmental change, it is difficult to imagine conservation law creating fixed boundaries and it is reductive to discuss conservation initiatives as detached from those larger issues, affecting regulatory solutions and requiring adaptation strategies. Adaptive governance for conservation law in the context of climate change will be discussed in Chapter 7 of this book.

Another section of Part V of the MCAA is also of primary interest because of its innovative nature. This is Section 117(7) that allows the appropriate authority to have regard to socio-economic consequences in designating MCZs. Although the section does not express a mandatory requirement, it is ground-breaking because it contemplates the possibility to consider more-than scientific reasons for establishing an MPA. Until the MCAA, English conservation law,[9] including the Habitats Regulations[10] transposing EU Habitats and Birds Directives into domestic law, had restricted the grounds of designation of protected areas to scientific reasons only. The scientific purity of designation has been reiterated by domestic and EU courts on multiple occasions.[11] Thus, Section 117(7) breaks with a tradition and a legal culture that has separated scientific reasons from social

[6] Ramsar Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar) 2 February 1971, in force 21 December 1975, 996 UNTS 245 (Ramsar Convention).

[7] Sites of Special Scientific Interests are designated under Section 28 of the Wildlife and Countryside Act 1981.

[8] See for example Decision VII/5 of Conference of the Parties (COP) 7 of the Convention on Biological Diversity, UNEP/CBD/COP/7/5 calling for the establishment of a representative network of MPAs by 2012. This decision was acknowledged by the Johannesburg Plan of implementation of the World Summit on Sustainable Development. Also, the Convention on Biological Diversity's Aichi Target 11 requires ten per cent of marine areas to be conserved by 2020 through ecologically representative and well-connected systems of protected areas.

[9] Section 28(1) of the Wildlife and Countryside Act 1981, as amended, for Sites of Special Scientific Interest.

[10] The Conservation of Habitats and Species Regulations 2017 (SI 2017/1012) (Habitats Regulations) and The Conservation of Offshore Marine Habitats and Species Regulations 2017 (SI 2017/1013) (Offshore Habitats Regulations).

[11] For example, Case C-44/95 *R v Secretary of State for the Environment, ex parte Royal Society for the Protection of Birds* [1996] ECR I-03805; Case C-371/98 *R v Secretary of State for the Environment, Transport and the Regions, ex parte First Corporate Shipping Ltd* [2001] ECR I-9235 (*ex parte First Corporate Shipping*).

considerations in designating protected areas. By contemplating the possibility to take into account socio-economic consequences, Section 117(7) potentially provides a more inclusive way to think about conservation, acknowledging that conservation interventions do not happen in a social vacuum but may impact on societies and economies and that such interests may be considered from the start, rather than only at later stages when management measures are developed, as it is the case under EU conservation law. In England, this provision has been implemented by setting up a participatory process in which four regional projects, involving a range of interest groups, carried out initial site selection of MCZs and gathered local knowledge and views on both ecological and socio-economic issues affected by potential designation. Such process and its pitfalls will be the subject of discussion in Chapter 5 of this book.

The explicit inclusion of socio-economic interests in Section 117(7) of the MCAA and its implementation based on a participatory rhetoric reconnects with a long-standing interest of mine in the relationship, put simply, between people and parks. Exploring such relationship and how it is played out in law enables one to analyse an underlying, wider relationship – the one between society and nature – that has been a central preoccupation of environmental social scientists for a long time. Many studies have questioned the dichotomy between society and nature on philosophical, political and ethnographic grounds.[12]

In the field of conservation, anthropologists, geographers and political ecologists have carried out detailed studies of site-based conservation often condemning protected areas for undermining social interests and advancing a technocratic environmental regime, championed on the basis of rationality, objectivity and science. The literature on fortress conservation has been especially vociferous in uncovering forms of social and economic dispossessions in the name of an (invented) pristine nature, scientifically determined.[13] However, critiques have not stopped at fortress conservation as they have also deconstructed policy discourses and legal practices of community-based conservation projects. Community-based conservation initiatives have been accused of proposing essentialised understanding of community as a homogenous, organic social unit, tied to a specific locality. Far from being fixed coordinates in the geography of conservation, communities and localities are instead created and recreated by complex social–ecological processes, with environmental law

[12] For example P. Descola, *Beyond Nature and Culture* (University of Chicago Press, 2013, translated by J. Lloyd); T. Ingold and G. Palsson (eds.), *Biosocial Becomings: Integrating Social and Biological Anthropology* (Cambridge University Press, 2013); J. W. Moore (ed.), *Anthropocene or Capitalocene?: Nature, History and the Crisis of Capitalism* (Kairos, 2016); B. Latour, *Politics of Nature: How to Bring the Sciences into Democracy* (Harvard University Press, 2004, translated by C. Porter).

[13] See for example, D. Brockington, *Fortress Conservation: The Preservation of the Mkomazi Game Reserve, Tanzania* (African Issues, 2002); R. P. Neumann, *Imposing Wilderness: Struggles over Livelihood and Nature Preservation in Africa* (University of California Press, 1998); N. L. Peluso, 'Coercing Conservation: The Politics of State Resource Control' (1993) 3 *Global Environmental Change* 199–217.

occupying a powerful, but not exclusive, role in such processes. Scholars, especially working in the global South, have argued that community-based natural resource management is part of a transnational discourse shared by top-down development agencies whereby to govern is not to dominate by direct command but to act on the actions of others by producing particular types of environmental subjects and it falls short of expectations.[14] This is not dissimilar to what in the global North has been called the post-regulatory state[15] and linked to the discourse on de-centring of regulation.[16] In the field of community-based conservation and participatory conservation projects, the state does not disappear, but it becomes one element in multiple circuits of power, including statutory nature conservation agencies, non-governmental organisations, local communities and independent scientific experts. The roles of these different institutions in English conservation law will be discussed in Chapters 2, 6 and 8 of this book.

These observations are helpful to start sketching a complex picture of conservation and to show that not all conservation interventions require the preservation of a pure nature and the exclusive use of direct regulation, culminating, in extreme cases, in coercive evictions. Indeed, many conservation initiatives, like the English marine one under the MCAA, involve the setting of conditions for participation and the structuring of a field of possible actions to cultivate new patterns of responsibility, create new environmental subjectivities and steer the behaviour of actors along particular courses to achieved predetermined, often global, environmental goals.[17] There is also an important epistemological opening at play in such participatory initiatives: local and traditional knowledge is not excluded but integrated in the decision-making. However, the way in which this knowledge is conceptualised often requires, to use Scott terminology, 'a narrowing of vision'[18] and may contribute to freeze identities along predetermined stakes.[19] This is most visible in the discussion

[14] See for example, M. Leach, R. Mearnes and I. Scones, 'Environmental Entitlements: Dynamics and Institutions in Community-Based Natural Resource Management' (1999) 27 *World Development* 225–247; T. M. Li, 'Engaging Simplifications: Community-Based Resource Management, Market Processes and State Agendas in Upland Southeast Asia' (2002) 30 *World Development* 265–283; W. Dressler et al., 'From Hope to Crisis and Back Again? A Critical History of the Global CBNRM Narrative' (2010) 37 *Environmental Conservation* 5–15.

[15] C. Scott, 'Regulation in the Age of Governance: The Rise of the Post Regulatory State', in J. Jordana and D. Levi-Faure (eds.), *The Politics of Regulation: Institutions and Regulatory Reforms for the Age of Governance* (Edward Elgar, 2004), pp. 145–174.

[16] J. Black, 'Decentring Regulation: Understanding the Role of Regulation and Self-Regulation in a "Post-Regulatory" World' (2001) 54 *Current Legal Problems* 103–146.

[17] A. Agrawal, *Environmentality: Technologies of Government and the Making of Subjects* (Duke University Press, 2005).

[18] J. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (Yale University Press, 1998).

[19] M. Pieraccini, 'Re-thinking Participation in Environmental Decision-Making: Epistemologies of Marine Conservation in South-East England' (2015) 27 *Journal of Environmental Law* 45–67.

of MCZs designation, undertaken in Chapter 5 of this book. Besides, public participation is wider than local resource users, and Chapter 6 shows this by concentrating on two institutions to consider the extent to which they help to democratise marine conservation law. The first institution is a statutory one, introduced under Part 6 of the MCAA, the Inshore Fisheries Conservation Authority (IFCA) and the latter is a very well-known actor in the environmental field, the environmental non-governmental organisation (NGO).

Thus, the relationship between people and parks has not simply to do with people in or people out, nature with or without society, but it requires a careful analysis of the ways in which the socio-economic interests are portrayed and included in conservation interventions, the scales that are at play and the production of knowledge(s) accompanying these processes. These issues will be discussed in relation to regulatory impact assessments (IAs) as well as the management of fisheries in MPAs, respectively, considered in Chapters 3 and 4 of this book. Does a division between society and nature persist when socio-economic interests are included in MPAs governance from the start, but they are articulated as separate interests from the environmental ones and their representation is confined to specific local actors/users? Does the law contribute to the establishment of institutional solutions that can help overcoming such dichotomous understanding or does it reinforce it? How are these issues played out at larger scales when conservation initiatives move beyond single site designation and attempt to capture large ecological networks? And finally, how static are these constructions and to what extent social, political and ecological processes destabilise them or contribute to their reproduction?

This book provides answers to these broad questions from the perspective of English marine conservation law and regulation, explored in its social–ecological context. Focusing on English, not even United Kingdom (UK), conservation law and regulation may seem parochial, but it is actually a way to provide a grounded and detailed legal and regulatory analysis, less achievable with a more macro-focus. It is also because the environment is a devolved matter in the UK, and therefore, devolved administrations have their own conservation laws and regulations in place. Having said this, an examination of English law cannot be done in isolation given that its development has been strongly tied with EU conservation law and key international treaties on biodiversity and the sustainable use of the marine environment.[20] An examination of English law reveals the interactions of multiple governance scales and their impact on the domestic approach, as discussed in Chapter 2. With the UK having recently left the

[20] For example, Convention on Biological Diversity (Rio de Janeiro) 5 June 1992, in force 29 December 1993, 31 ILM 822 (1992) (Biodiversity Convention); United Nations Convention on the Law of the Sea (Montego Bay) 10 December 1982, in force 16 November 1994, 21 ILM 1261 (1982) (UNCLOS); Convention for the Protection of the Marine Environment of the North-East Atlantic (Paris) 22 September 1992, in force 25 March 1998, 32 ILM 1068 (1993) (OSPAR Convention).

European Union, the regulatory analysis is even more interesting due to the climate of regulatory uncertainty that such departure has created and the steps the government has taken and is taking in relation to the role of EU law. These issues are to be discussed in Chapter 8, which is dedicated to the effects of the UK exit from the European Union on marine conservation law. As it will be explained in Chapter 2, which provides an overview of the legal framework, the Court of Justice of the European Union (CJEU) has been pivotal in enforcing nature conservation law and supporting a strong precautionary approach to the management of European Marine Sites. The strong precautionary approach of the CJEU has influenced the English approach to fisheries in European Marine Sites leading to a revised approach to ensure that all existing and potential commercial fishing operations are managed in line with article 6 of the Habitats Directive. Such a revised approach to fisheries management follows a risk-based approach and requires a great mapping effort by the regulators of all the fisheries activities, which is explored in depth in Chapter 4 of this book. Thus, England provides a really stimulating case to study MPAs law and regulation in a context of not only environmental change but also regulatory change.

Methodology

Methodologically speaking, the book draws on desk-based research (doctrinal and documentary analysis), complemented by insights from empirical research. Primary sources, studied and analysed during the desk-based research, include marine conservation law, relevant marine and environmental policy documents as well as regulatory tools, such as IAs and byelaws related to MPAs.

The empirical research consisted in semi-structured interviews[21] conducted over a number of years with actors involved in and/or affected by the decision-making processes over European Marine Sites and MCZs. Some of these interviews were conducted as part of a large Economic and Social Research Council (ESRC)-funded project on MPAs governance, which I carried out from 2012 to 2015.[22] During that project, face-to-face semi-structured interviews with marine representatives in three selected case study areas[23] in the UK were held, focusing primarily on issues related to the establishment of MCZs, which was

[21] Semi-structured interviews can be defined as interviews in which the interviewer has an interview guide that is prepared in advance with a series of open-ended questions that can be varied depending on the replies and additional questions can be added. This format is preferable to a structured interview format as it provides flexibility rendering the interview an iterative and reflexive place for the development of thoughts and perspectives for both the interviewer and the research participant. At the same time, semi-structured interviews provide a level of structure that enables the researcher to focus on specific themes of interest (cf. unstructured interviews). For a definition of semi-structured interviews, see A. Bryman, *Social Research Methods*, 4th ed. (Oxford University Press, 2012), p. 419.

[22] ES/K001043/1.

[23] Isles of Scilly, South-East England (Dover to Folkstone) and North-West Scotland (Arran and Barra).

underway as well as European Marine Sites. The cases were selected due to their geographical diversity, type and number of MPAs and conservation histories and approaches. There was an appropriate number of case studies to enable comparative observations without compromising on methodological and analytical depth. Research participants ranged from local sea-users, such as fishers, to regulators, statutory nature conservation bodies and environmental NGOs, following a snowball sampling technique.[24] This meant that I made initial contact with key representatives of the organisation under study, such as the chairman of a fisherman's organisation, and then such contacts provided contacts of other fishers working in the area. Snowballing sampling technique is useful in instances in which the aim is to access networks of participants, who may be reluctant to engage with the researcher without an introduction from a trusted, known individual. The rich empirical data generated by that project has been discussed in various publications already[25] and here only the views gathered during the interviews with South-East fishers are reported and form the basis of the discussion in Chapter 5, as they are most telling in discussing multiple epistemologies at play in MPAs regulation and MPAs law's role in contributing, or failing to contribute, to commoning and environmental democracy.

To provide an up-to-date picture on the implementation of English MPAs law, five elite semi-structured interviews[26] with national-level representatives of government, statutory nature conservation bodies and environmental NGOs, were conducted in May 2021. As the research participants were the key national representatives for their institution on MPAs regulation, they were selected following a purposive sampling technique.[27] Elite interviews have permitted an exploration of current issues such as MCZs management measures, the revised approach to fisheries in European Marine Sites and the UK exit from the European Union, referred to as Brexit. Such elite interviews were conducted online due to the global pandemic brought about by COVID-19. The choice to focus on national representatives for the elite interviews, rather than local representatives, was due to the scope of this book, which is primarily national.

[24] Bryman, Social Sciences Methods, p. 424.

[25] For example, see, M. Pieraccini and E. Cardwell, 'Towards Deliberative and Pragmatic Co-management: A Comparison between Inshore Fisheries Authorities in England and Scotland' (2016) 25 *Environmental Politics* 1–20; M. Pieraccini and E. Cardwell, 'Divergent Perceptions of New Marine Protected Areas: Comparing Legal Consciousness in Scilly and Barra, UK' (2016) 119 *Ocean & Coastal Management* 21–29.

[26] There is no single definition of what an elite is and therefore of elite interviews. Here, I define elite as highly skilled people holding key professional positions and power at the national level in the field of marine conservation. For a critical take on elite interviews and the issue of power, see K.E. Smith, 'Problematising Power Relations in "Elite" Interviews' (2006) 37 *Geoforum* 643–653. For a methodological introduction into elite interviews, see W. S. Harvey, 'Methodological Approaches for Interviewing Elites' (2010) 4 *Geography Compass* 193–205.

[27] Purposive sampling is the opposite of random sampling as its goal is to sample participants in a strategic way. See Bryman, Social Research Methods, p. 418.

The choice to interview regulatory actors, rather than sea-users, was primarily due to the fact that the objective of these interviews was to investigate regulatory strategies and current practices, rather than sector-specific approaches to and sea-users views on conservation. Besides, owing to the safety measures introduced during the COVID-19 pandemic and the unfeasibility of carrying out fieldwork, online interviews were not deemed to be appropriate for reaching certain sea-users, whose work does not afford them much time to spend in front of a computer. To comply with ethical standards for primary qualitative research, names of all research participants are omitted in the text below and only broad group/institutional categorisations are provided. For instance, references are made to a statutory nature conservation body representative, without specifying which statutory nature conservation body it is, thereby maintaining the anonymity of the research participants. When quotations are reported from more than one research participant within the same group, a numbering system has been adopted. For example, environmental NGO representative n. 1, environmental NGO representative n. 2, etc. Again, for ensuring anonymity of research participants, only the month and year of the interview are reported, as participants may be aware of the day of the interviews of other participants, especially when interviews were conducted in small local settings.

Overall, the qualitative data collected empirically has permitted a more nuanced understanding of the processes at play in MPAs law and regulation as it has captured different actors' reflections on these processes and multiple perspectives on marine conservation, not all of which are fully represented in decision-making processes and/or are visible via desk-based research only.

In summary therefore, this book analyses marine conservation in its social and ecological context, employing a mixed method approach.

Structure of the Book

The book is divided into four main thematic areas, each containing two substantive chapters, as follows. The four broad themes used to cluster the discussion are: spatialisation, rationalisation, democratisation and adaptation. These themes, whether explored singularly or as part of a broader narrative, are familiar ones to environmental social science and law scholars and are pertinent for the discussion on MPAs law and regulation, for MPAs are spatial tools and their regulation is the product of interaction among different scales, regulatory choices regarding their establishment and management are deemed to be based on rational and democratic values and strategies and ecological and political changes require their governance to be adaptive.

Part 1 of the book, entitled *Spatialising Regulation*, provides a critical introduction to MPAs as a place-based tool and presents a map of the regulatory actors and institutions involved in English MPAs governance. Chapter 1 employs the language of the commons and commoning to show that MPAs have complex and multiple roles and characterisations. The language of the commons that

first appears in Chapter 1 becomes valuable throughout the book in providing analytical categories to explore the different themes. More specifically, Chapter 1 argues that MPAs can be defined in two main ways. The first consists in conceptualising MPAs as spaces for the management of common-pool resources. In this sense, MPAs can be understood as enclosures or new commons depending on the perspective. The second consists in the conceptualisation of MPAs as spaces for commoning, that is, spaces for democratising environmental governance and for the shared production of social–ecological commons. Chapter 2 explores the extent to which these roles and characterisations are played out in English law, focusing on the key institutions and regulations involved and the multiple governance scales at play. Theoretically, Part 1, and especially Chapter 1, is influenced by works of political ecologists and geographers on conservation and the production of territory.[28]

Part 2 of the book, entitled the *Rationalisation of Regulation*, draws on key works on risk in environmental regulation scholarship[29] as well as Science and Technology Studies,[30] which complement the regulatory analysis by problematising the role of science and its relationship to society. This part engages also with the use of cost-benefit analysis, which forms the basis of much risk-based regulation and well embodies the regulatory attempt at rationalising regulation. In discussing cost-benefit measures, this part provides a critical reading of scholarship promoting cost-benefit analysis as the solution.[31] In providing such analysis, this part connects with the characterisation of MPAs as enclosure discussed in Chapter 1, as MPAs are primarily understood as a neutral tool to conserve a scientifically predetermined nature. The first chapter of this section (Chapter 3) discusses the role of cost-benefit analysis using the example of IAs for MCZs, while the second (Chapter 4) explores risk-based regulation using the example of the revised approach to fisheries to European Marine Sites.

To investigate the theme of the *Democratisation of Regulation*, Part 3 of the book uses selected deliberative democratic theories to critically analyse the opening up of decision-making in the field of MPA regulation in England, reconnecting with the literature on commoning explored in Chapter 1. This part asks which voices are heard and which are silenced in the marine political community due to dominant cultural discourses and institutional practices. It considers institutions and processes of decision-making, focusing on the designation of MCZs in Chapter 5 and on two key actors playing a key role in the democratisation of decision-making in Chapter 6, namely environmental NGOs and IFCAs.

[28] For example, R. Sack, *Human Territoriality: Its Theory and History* (Cambridge University Press, 1986); P. E. Steinberg, *The Social Construction of the Oceans* (Cambridge University Press, 2001); S. Whatmore, *Hybrid Geographies: Natures, Cultures, Spaces* (Sage, 2002).
[29] For example, J. Black and R. Baldwin, 'When Risk-Based Aims Low: Approaches and Challenges' (2012) 6 *Regulation and Governance* 131–148.
[30] For example, B. Wynne, 'Uncertainty and Environmental Learning: Reconceiving Science and Policy in the Preventative Paradigm' (1992) 2 *Global Environmental Change* 111–127.
[31] For example, C. R. Sunstein, *The Cost-Benefit Revolution* (MIT Press, 2018).

The final theme of the book, entitled *Adapting Regulation*, is explored in Part 4. Chapters 7 and 8 provide a critical reading of the current efforts to conserve marine biodiversity in a changing ecological and political climate. Chapter 7 argues, from an adaptive governance perspective, that MPA regulation needs to be dynamic, requiring revisions and experimentation to deal with the complexities and uncertainties of environmental change and discusses the extent to which this is what MPAs law in its current state delivers. This chapter connects with the discussion on the continuous production and reproduction of socio-legal systems and the role of the more-than human in supporting or destabilising the boundaries created, discussed in Chapter 1. Chapter 8 continues with the analysis of adaptation and uncertainty but focuses on political, rather than ecological uncertainty, discussing marine conservation law in the context of Brexit, analysing recent legal developments.

The Conclusion of the book (Chapter 9) is primarily of a reflexivenature, summarising the main points running throughout the book by providing an assessment of English MPAs law and regulation using the conceptual categories introduced in Chapter 1.

In navigating English marine conservation law following a thematic socio-legal analysis, the book builds a bridge between environmental law and environmental social sciences scholarship, reflecting on key debates on nature and society and environmental decision-making and showing the usefulness of the language of the commons for the forging of key analytical categories.