

Knowledge and landscape in wind energy planning

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'Landscape' is relatively underexplored in legal scholarship,¹ notwithstanding its occasional centrality to legal analysis, and the ways in which law contributes to the shaping of landscape.² Landscape is also intriguing from the perspective of one of the key preoccupations of environmental lawyers, exposing starkly the perennial tension between expert and lay discourses: whilst intuitively open to lay intervention, diverse values, and local experiences of the world, landscape is simultaneously subjected to highly technical, expert-based discourses and assessments. This makes landscape a promising area in which to explore ideas of knowledge in law. Most of the legal literature on 'knowledge' focuses on the ways in which different 'expert' knowledges find their way into, and then shape, legal processes and decisions. In this paper, I am more concerned with the ways in which the planning system, and planning law, receives different knowledge claims, and accepts some of them as things we 'know' about the world for the purposes of reason giving. Although the planning system does not 'find facts', planning, like other areas of law, inevitably both shapes and is based on an inextricable combination of facts and values.

Wind energy is an especially fruitful area for the exploration of landscape, since wind farms consistently raise concerns about landscape and seascape. In this paper, I explore knowledge claims on landscape within the context of applications for development consent for large wind farms, those which fall within the criteria for a 'nationally significant infrastructure project' (NSIP) under the Planning Act 2008.³ My discussion turns around four tentative categories of knowledge claim, categories that are not fixed or easily separated, and are irretrievably mixed with other (non-knowledge) types of claim; even their description as 'knowledge' may be contested. Two of my four categories are very familiar: expert or technical knowledge claims, which might be contrasted with experiential or lay (or sometimes local) knowledge claims.

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¹ Although see J Holder 'Law and landscape: the legal construction and protection of hedgerows' (1999) 62 MLR 100; less directly, KR Olwig 'The law of landscape and the landscape of law' in P Howard, I Thompson and E Waterton (eds) *The Routledge Companion to Landscape Studies* (London: Routledge, 2013). I am also grateful to Victoria Jenkins for discussions on this topic.

² See Holder, *ibid*. See also the casual listing of 19th century industrial legislation in M Drabble *A Writer's Britain: Landscape in Literature* (London: Thames and Hudson, 1979) p 204.

³ Offshore generating stations over 100 Mw, and until 2015 onshore generating stations over 50 Mw, see below n 24.

These are contested and shifting categories that have been explored in many different areas of decision making.⁴ I add two further, less well-discussed, categories. I discuss prior institutional knowledge claims, by which I mean knowledge that has formerly been absorbed within the system, in this case by means of statutory landscape designations. And my fourth category comprises the professional knowledge claims of the expert planner, in this case the Examining Authority (ExA) appointed by the Planning Inspectorate to advise the Secretary of State.

The discussion here is very particularly about the ways in which planning approaches knowledge claims in respect of (1) landscape and seascape impacts of (2) nationally significant (3) wind energy projects. Landscape is interesting precisely because of its slightly ambiguous status in terms of factual claims; in other areas no doubt knowledge will be constructed differently. Wind is a nice study, not only for its landscape and seascape impacts, but also because climate change exposes the complexity of land use, discouraging any knee jerk advocacy of local resistance.⁵ And the NSIP process under the Planning Act 2008 is distinct from local planning authority processes, with their specific local concerns and democratic links with local people. Empirical evidence seems to confirm what lawyers would expect: local and centralised planning processes approach lay and local knowledge and experience differently.⁶ The Planning Act also provides an unusually extensive, but confined, set of resources on decision making. Changing any of these three criteria would make for a different analysis, and a different paper. Certain conclusions drawn from these cases do however fit in well with observations made in other areas, and others are at least suggestive of more far reaching lessons, as discussed further below. Perhaps, however, one of the most vivid lessons from this set of material is precisely that knowledge is not universal, but is constructed through a particular legal and social process.

The 2015 rejection of the application for development consent for the Navitus Bay Wind Park⁷ provides an interesting comparison with earlier nationally significant wind energy infrastructure

⁴ Eg M Aitken 'Wind power planning controversies and the construction of "expert" and "lay" knowledges' (2009) 18 *Science as Culture* 47; B Wynne 'Creating public alienation: expert cultures of risk and ethics on GMOs' (2001) *Science as Culture* 446; J Petts and C Brooks 'Expert conceptualisations of the role of lay knowledge in environmental decision making: challenges for deliberative democracy' (2006) 38 *Environment and Planning A* 1045; JC Scott *Seeing like a state: how certain schemes to improve the human condition have failed* (New Haven: Yale University Press, 1998) especially ch 8.

⁵ Much of the literature has been about overcoming opposition, M Aitken 'Why we still don't understand the social aspects of wind power: a critique of key assumptions within the literature' (2010) 38 *Energy Policy* 1834.

⁶ Aitken, above n 4.

⁷ Secretary of State decision letter, Department of Energy and Climate Change, 11 September 2015. All of the material discussed here is available at <https://infrastructure.planninginspectorate.gov.uk/>.

applications, which had all been granted consent.⁸ After a brief introduction to the decision in Navitus, followed by an equally brief introduction to the multiple meanings and rich layering of landscape,⁹ I turn below to the different ways in which knowledge is introduced and constructed in the NSIP process, drawing some conclusions about the laborious shaping of objectivity in a difficult area.

The Navitus Bay Decision

In 2014, Navitus Bay Development Limited applied for a Development Consent Order under the Planning Act 2008 for up to 194 wind turbine generators off the Dorset and Hampshire coasts to the west of the Isle of Wight.¹⁰ The application was rejected by the Secretary of State, following the recommendation of the Planning Inspectorate, on landscape/seascape grounds.

Under the Planning Act 2008, an application for a Development Consent Order is made to the ExA, appointed by the Planning Inspectorate. The ExA reports its ‘findings and conclusions’ to the Secretary of State, including a recommendation.¹¹ Although the ExA Report is not binding,¹² its detail and sheer bulk¹³ provide it with a high level of authority within the system, and its reasoning and explanations are generally understood as broadly the reasons and explanations for the final decision. Planning law revolves around the provision of reasons, and in providing the first home for those reasons, the reports provide a good starting point for understanding how different contributions to the decision making process have been received. The Secretary of State makes the final decision, and her reasons are contained in a letter to the applicant, often explicitly leaning on the conclusions in the ExA report. Fundamental disagreement between the Secretary of State and the Planning Inspectorate is unusual, either generally or within the NSIP process, but the Secretary of State is entitled to disagree provided

⁸ Twelve development consent orders for wind farms had been granted up to this date. The Mynydd y Gwynt Wind Farm was subsequently rejected by the Secretary of State on 20 November 2015, following a recommendation to approve by the ExA. The Secretary of State was unable to conclude that there would be no impact on the integrity of a Special Protection Area. S Treger and P Grace “‘There weren’t a few birds”: the Mynydd y Gwynt Wind Farm DCO refusal and the Habitats Regulations’ [2016] JPEL 545. These cases do not mark the end of nationally significant wind development: a development consent order was granted to the Hornsea Offshore Wind Farm (Project 2) on 16 August 2016.

⁹ Howard, Thompson and Waterton, above n 1.

¹⁰ The applicant also put forward a Turbine Area Mitigation Option (TAMO), with fewer turbines over a smaller area, primarily to address landscape issues.

¹¹ Planning Act 2008, s 74.

¹² See Bruno Latour’s slightly amused/perplexed discussion of the role of the ‘Commissioner’ in the French Conseil d’Etat *The Making of Law: An Ethnography of the Conseil d’Etat* (Cambridge: Polity Press, 2010) ch 5.

¹³ The ExA Report for Navitus is especially lengthy at 521 pages plus appendices.

she gives adequate reasons. The nature of any disagreement will dictate the nature of the reasons needed, but the court will not interfere with matters of planning judgment.¹⁴ Submissions can be (and are, sometimes in great numbers¹⁵) made by interested parties between the ExA report and the Secretary of State's decision.

The decision on the application 'must' be made in accordance with any relevant National Policy Statement, other than in specified circumstances, most pertinently if the decision maker 'is satisfied that the adverse impact of the proposed development would outweigh its benefits'.¹⁶ The National Policy Statements for energy generally (EN-1), and for renewable energy (EN-3)¹⁷ contain a strong presumption in favour of development, and have been crucial to the consenting of locally-controversial, nationally significant wind farm development. They anticipate many possible local objections, and often go on to explain why these various concerns need not (or less commonly cannot) outweigh the need for energy infrastructure development.¹⁸ The National Policy Statements make it clear that wind farms will always have significant landscape and visual impacts, and that mitigation of these impacts may not be feasible since that would reduce the amount of electricity generated.¹⁹ ExA reports, including Navitus, rehearse the various statements in the National Policy Statements that tend to lessen the impact of the strongly expressed views of local people, and even findings of very severe visual impacts,²⁰ which are almost inevitably outweighed by the policy need for renewable energy.

Visual and landscape issues were however decisive in the rejection of the Navitus Bay project:

The key issue of greatest concern to the Panel is the adverse impacts arising from the visual effects of the offshore elements of the proposed development on a range of national and international designations. The level of harm resulting from the Project's offshore elements is considered by the Panel to be of such seriousness as to outweigh its benefits.²¹

¹⁴ That the distinction between fact or planning judgment is not always easily drawn, *Lord Luke of Pavenham v Minister of Housing and Local Government* [1968] QB 172, is perhaps self-evident from the perspective taken in this article. The parties must be given an opportunity to respond to any disagreement on the facts, Infrastructure Planning (Examination Procedure) Rules, SI 2010/103, r 19.

¹⁵ <https://infrastructure.planninginspectorate.gov.uk/projects/south-east/navitus-bay-wind-park/?ipcsection=docs&stage=7&filter1=Recommendations>.

¹⁶ Section 104(7). See the discussion in M Lee et al 'Public participation and climate change infrastructure' (2013) 25 JEL 33.

¹⁷ DECC, *Overarching National Policy Statement for Energy (EN-1)* (2011); DECC, *National Policy Statement on Renewable Energy Infrastructures (EN-3)* (2011).

¹⁸ Lee et al, above n 16; Y Rydin, M Lee and S Lock 'Public engagement in decision-making on major wind energy projects' (2015) 27 JEL 139.

¹⁹ EN-1, above n 17, paras 5.9.8, 5.9.21.

²⁰ ExA Report and Recommendations, *Clocaenog Forest Wind Farm* (2014) is particularly striking.

²¹ ExA Report and Recommendations, *Navitus Bay Wind Park* (2015) para 21.2.77.

The difference of result between Navitus and the other applications, where landscape concerns were also strongly expressed, is difficult to explain. In the end, the planning judgment is simply different. This may be about the facts on the ground; the Navitus Bay project was certainly huge, and perhaps its location was just 'worse' than the others:

'The ExA draws the Secretary of State's attention to the unique physical characteristics of the Navitus Bay location ... The area is characterised by exceptional scenic, dramatic qualities of the coastline and the presence of notable geological and historic features and headlands at various points along the coastline. A combination of these factors renders the area unique in terms of its landscape/seascape environment, and particularly sensitive to offshore energy developments in its vicinity.'²²

Whilst I do not argue that we can make a simple connection between differences in result and differences in knowledge making practices, there may also be distinctive patterns of knowledge claim in Navitus. The technical and expert knowledge claims of the applicant were very robustly challenged by objectors, and specifically through competing technical and expert knowledge claims. And further, the shape of the prior institutional knowledge was novel in this case, since the project would affect an area designated as a World Heritage Site. The shifting political and policy context for wind development may also have affected the ability for objectors' inputs to be properly *heard* within the process. Government policy had virtually reversed between the issuing of the National Policy Statements in 2011 and the rejection of the Navitus application in 2015, from enthusiasm²³ towards wind farm development to downright hostility, at least to onshore wind.²⁴ This may reflect public opposition in an interesting interplay between high level policy and individual decisions.²⁵ For current purposes, whilst any change of approach had not been provided for in the formal policy contained in the

²² Ibid, para 7.3.269. Note also the dismissal of claims of a precedent in the approach taken to the nearby, consented, Rampion wind farm, see ExA Report and Recommendations, *Rampion Offshore Wind Farm* (2014).

²³ The previous Labour government had been especially positive about wind energy, and note the presence of Liberal Democrat Secretary of State in the Department of Energy and Climate Change 2010-2015.

²⁴ Onshore wind has been removed from the NSIP regime in England (Infrastructure Planning (Onshore Wind Generating Stations) Order 2016, SI 2016/306); local decision making is now governed by fairly hostile policy: planning permission should only be granted where 'following consultation, it can be demonstrated that the planning impacts identified by affected local communities have been fully addressed and therefore the proposal has their backing,' House of Commons: Written Statement (HCWS42) Department for Communities and Local Government (Greg Clark), 18 Jun 2015, <http://planningguidance.communities.gov.uk/blog/guidance/renewable-and-low-carbon-energy/particular-planning-considerations-for-hydropower-active-solar-technology-solar-farms-and-wind-turbines/> Paragraph: 015 Reference ID: 5-015-20140306. In Wales, Developments of National Significance (Specified Criteria and Prescribed Secondary Consents) (Amendment) (Wales) Regulations 2016 provide that onshore wind farms over 50 Mw, like those between 10-50 Mw, are 'Developments of National Significance', which under the Planning (Wales) Act 2015 are decided by the Welsh Ministers.

²⁵ Notwithstanding an apparent 'bar' on policy challenges. For earlier examples, see S Owens 'Siting, Sustainable Development and Social Priorities' (2004) 7 *Journal of Risk Research* 101.

National Policy Statements,²⁶ the legislation (as it must) provided enough room in the weighing of costs and benefits for decisions to reflect the broader change of mood. As well as raising interesting questions about the role of law, and our sometimes unrealistic (although often necessary) focus on discrete decision making ‘points’,²⁷ this brings out the contingency of knowledge, the ways in which governance and politics affects the ways in which landscape is represented and ‘known’ in the system.

Landscape, seascape and visual quality

Landscape is often a central issue in opposition to windfarms.²⁸ I shall not go too far into the voluminous literature, in many disciplines (although, as suggested above, not in law), on landscape. But landscape is a rich and complex issue, and how that richness and complexity is reflected (or not) in the knowledge claims fed into the process, and the reasoning provided, is potentially revealing. For the sake of simplicity, I will use the word ‘landscape’ to include also seascape.²⁹ There was for some time an assumption that putting wind farms at sea would avoid the sorts of landscape and place based concerns that had dogged onshore wind farms. The extent of discussion of ‘seascape’ in offshore applications³⁰ is a powerful reminder, however, that local resistance is not limited to onshore developments.³¹

²⁶ Material changes to a National Policy Statement must be subject to a sustainability appraisal and public consultation, and laid before Parliament, Planning Act 2008, s 6. A strategic environmental assessment may also be required.

²⁷ This is for another day. The literature is both vast and not quite on point, but see eg A Stirling ‘“Opening up” and “closing down”: power, participation and pluralism in the social appraisal of technology’ (2008) 33 *Science, Technology and Human Values* 262; B Wynne ‘Seasick on the third wave? Subverting the hegemony of propositionalism’ (2003) 33 *Social Studies of Science* 401.

²⁸ Even ‘the’ central issue, eg M Wolsink ‘Planning of renewables schemes: deliberative and fair decision-making on landscape issues instead of reproachful accusations of non-cooperation’ (2007) 35 *Energy Policy* 2692; M Woods ‘Conflicting environmental visions of the rural: windfarm development in mid-Wales’ (2003) 43 *Sociologia Ruralis* 271; M Aitken, S McDonald and P Strachan ‘Locating “power” in wind power planning processes: the (not so) influential role of local objectors’ (2008) 51 *Journal of Environmental Planning and Management* 777.

²⁹ See also EN-1, above n 17, para 5.9.1.

³⁰ Other than those very far out to sea eg ExA Report and Recommendations, *Hornsea Offshore Wind Farm Project 2* (2016); at 90km out to sea, the project cannot be seen from the shore, para 5.8.3. Even far offshore, there is inevitably associated land-based development.

³¹ Eg O Woolley ‘Trouble on the horizon? Addressing place-based values in planning for offshore wind energy’ (2010) 22 *JEL* 223.

It is largely accepted that 'landscape' is not only literally human-made,³² but historically, culturally and socially (we might add 'legally') constructed, and that landscape in turn contributes to the shaping of cultural and social (and legal) life.³³

'Landscapes are culture before they are nature; constructs of the imagination projected onto wood and water and rock ... But ... once a certain idea of landscape ... establishes itself in an actual place, it has a peculiar way of muddying categories ... of becoming, in fact, part of the scenery'.³⁴

Landscape is not simply physical or visual. Questions of home and belonging, 'a passionate attachment to the places of childhood',³⁵ and spiritual, emotional and social matters, pervade discussion of landscape. In this, landscape resonates with 'place attachment', 'a complex phenomenon incorporating an emotional bond between individuals and/or groups and the familiar locations they inhabit or visit ... often featuring social and physical sub-dimensions'.³⁶ A sense of connection to landscape or attachment to place will not necessarily mean opposition to development or change;³⁷ and the idea of a singular place attachment has been criticised.³⁸ Place attachment can however be an important way of analysing resistance to renewable energy projects, and its rootedness is helpful in understanding the profundity of responses to even apparently mundane landscapes. It also underlines the near inevitability of misunderstandings and disagreement, and for current purposes, demands an interrogation of what is included in reasoning on landscape.

As a 'work of the mind',³⁹ landscape pervades literature. Obviously, the scholarship is both vast and beyond my own expertise. What has become known as the 'new' nature writing, highlights, in its mixture of memoir and meditation on landscape,⁴⁰ the relationships between

³² Eg J Raban 'Second nature' (2008) 102 *Granta* <https://granta.com/second-nature/>, including a discussion of 'landscaping in reverse', see also K Olwig 'Virtual enclosure, ecosystem services, landscape character and the "re-wilding" of the commons: the Lake District case' (2016) 41 *Landscape Research* 253. Note the narrow approach to 'natural' beauty in *Meyrick Estate Management Ltd v Secretary of State for the Environment, Food and Rural Affairs* [2007] Env LR 26.

³³ Much of the literature referred to here raises this at least implicitly. On 'co-production', see especially S Jasanoff (ed) *States of Knowledge: The Co-Production of Science and Social Order* (London: Routledge, 2004).

³⁴ S Schama *Landscape and Memory* (London: Harper Collins, 2004) p 61.

³⁵ Drabble, above n 2, p 7.

³⁶ P Devine-Wright and Y Howes 'Disruption to place attachment and the protection of restorative environments: a wind energy case study' (2010) 30 *Journal of Environmental Psychology* 271, citations omitted, see also the discussion of 'place identity'. B Wattchow 'Landscape and a Sense of Place: A Creative Tension' in Howard, Thompson and Waterton, above n 1.

³⁷ Devine-Wright and Howes, *ibid*.

³⁸ Eg V Plumwood, 'Shadow places and the politics of dwelling' (2008) 44 *Australian Humanities Review* <http://www.australianhumanitiesreview.org/archive/Issue-March-2008/plumwood.html>; H MacDonald *His for Hawk* (London: Penguin Random House, 2014) ch 28.

³⁹ Schama, above n 34, p 7.

⁴⁰ Eg R Mabey *Nature Cure* (London: Vintage, 2008); MacDonald, above n 38; A Liptrot *The Outrun* (Edinburgh: Canongate Books, 2016).

individual experience and landscape, as well as connections between particular forms of social and cultural life and landscape.⁴¹ This area of literature has been enormously successful, but is of course not without its critics. Whilst not all of the criticism of a diverse literature that does not necessarily even self-identify as ‘nature writing’ seems entirely fair,⁴² it may be useful. Particularly telling is the criticism that the writing is for the metropolitan reader, representing an urban vision of ‘countryside’, and that (perhaps in consequence) there is an absence of real concern for ‘nature’.⁴³ First, this criticism emphasises the reality of the constructedness of landscape; it is almost the point that the landscape is what the individuals and communities of users, beholders, writers and readers make of it. It also feeds into a bigger question of the extent to which ‘landscape’ incorporates broader ecosystem and biophysical aspects of land, including how and whether a thriving ecology affects human responses to landscape.⁴⁴

The powerful mixture of issues inherent in landscape suggests special challenges for achieving the knowledge necessary to provide acceptable reasons for a decision, and reinforces the intuition that landscape will be a revealing area in which to study knowledge claims. In particular, singular expertise in any particular area is unlikely to provide a rounded picture of landscape; lived experience is an important factor; and the planning process itself (talking, thinking and writing about landscape) partially constitutes the dynamic meaning of landscape.

Some ‘official’ statements do begin to recognise more complex socio-cultural manifestations of landscape, in addition to its more obvious physical or aesthetic aspects. The European Landscape Convention 2007 defines ‘landscape’ as ‘an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors’, and attaches value to landscapes that are ‘everyday or degraded’, as well as those that might be considered ‘outstanding’.⁴⁵ Landscapes should be recognised in law ‘as an essential component of people’s surroundings, an expression of the diversity of their shared cultural and natural heritage and a foundation of their identity’.⁴⁶ Natural England has pointed to a ‘democratisation’ of landscape, ‘a growing sense that all landscapes are important to people

⁴¹ Eg J Rebank *The Shepherd’s Life* (London: Penguin, 2015), which read next to Olwig, above n 32, speaks to the potential contest over ‘community’; R McFarlane *Mountains of the Mind* (London: Granta Books, 2003).

⁴² R McFarlane ‘Why we need nature writing’ *New Statesman* 2 September 2015.

⁴³ M Cocker ‘Death of the naturalist: why is the new nature writing so tame?’ *New Statesman* 17 June 2015.

⁴⁴ EN-1 and EN-3, above n 17, and the ExA Reports deal with ‘biodiversity’ separately from landscape and visual impacts.

⁴⁵ See Drabble’s chapter on ‘The Industrial Scene’, including discussion of mixed feelings towards ordinary (and ugly) urban landscapes, above n 2.

⁴⁶ Council of Europe, ETS No.176, Articles 1, 2 and 5.

and that they are capable of contributing to human wellbeing in many different ways, not only as a source of natural beauty'.⁴⁷ Landscape Institute Guidelines, which as discussed below feature heavily in Navitus, adopt the European Landscape Convention definition, and approach landscape as more than visual perception.⁴⁸ And although the National Policy Statements do not define or describe 'landscape', EN-3 acknowledges that '[t]he seascape is an important resource and an economic asset', and refers to the need to assess ('where necessary') 'how people perceive and interact with the seascape'.⁴⁹ The separation in the national policy of visual impacts from landscape,⁵⁰ may also imply that landscape is more than the 'view'. Paradoxically, because visual receptors are people (residents; people using key routes, recreational landscapes or public rights of way; people visiting viewpoints⁵¹), human responses may be more openly discussed in respect of visual impacts than landscapes.

The density of 'landscape' is however difficult to carry through to decision-making at any level,⁵² and as the regulatory process progresses there is a certain 'narrowing of vision'.⁵³ To the extent that they are clear, the ExA Reports tend to reason around landscape as predominantly a visual or aesthetic question, focusing on surface appearance, on the physical rather than the symbolic or socially constructed. This reduction of landscape to a physical entity is apparent in certain of the knowledge claims discussed below, especially the technical / expert knowledge claims, and in this it resonates with efforts to universalise through technical expertise in many areas of regulation. Moreover, at first glance, it hardly simplifies, given the centuries of debate about subjectivity and objectivity in aesthetic judgments.⁵⁴ The prior institutional knowledge claims discussed below become an even more important resource: as well as 'settling' questions of aesthetic value, they may in some cases implicitly enrich the notion of landscape beyond the physical.

⁴⁷ Natural England, *Summary of Evidence: Landscape* (2015) para 3.4.

⁴⁸ Landscape Institute and Institute of Environmental Management and Assessment *Guidelines for Landscape and Visual Impact Assessment* (2013) especially ch 2.

⁴⁹ Above n 17, para 2.6.200 and 2.6.203.

⁵⁰ EN-1, above n 17, para 5.9.18.

⁵¹ Navitus, above n 21, para 7.2.29.

⁵² A Butler 'Dynamics of integrating landscape values in landscape character assessment: the hidden dominance of the objective outsider' (2016) 41 *Landscape Research* 238; K Olwig 'The practice of landscape conventions and the just landscape: the case of the European Landscape Convention' (2007) 32 *Landscape Research* 579.

⁵³ Scott, above n 4, p 11.

⁵⁴ Which persists in landscape assessment, A Lothian 'Landscape and the philosophy of aesthetics: is landscape quality inherent in the landscape or in the eye of the beholder?' (1999) 44 *Landscape and Urban Planning* 177; P Selman and C Swanwick 'On the meaning of natural beauty in landscape legislation' (2010) 35 *Landscape Research* 3.

Knowledge claims⁵⁵ and reason giving

Over recent decades, scholars have arrived at an understanding of knowledge as plural and contested, rather than monolithic and self-evident, and embedded in social processes, rather than existing out there in the world, ripe for discovery. The identification of a space for the construction of knowledge and for the inclusion and assessment of multiple (sources of) knowledge has thus become a central question for much environmental decision making.⁵⁶ The NSIP process is one such space. At least four types of knowledge claim are addressed in the ExA reports. These categories are not watertight, and it can be problematic to attempt to draw bright lines between different types of knowledge, or between knowledge and other inputs.⁵⁷ My four (provisional) categories are: prior institutional knowledge claims; expert or technical knowledge claims; lay or experiential (or sometimes local) knowledge claims; and professional planning knowledge claims. The purpose of this paper is not to argue that any of these categories should receive increased priority; all forms of knowledge have their strengths and weaknesses, and any knowledge claim should be scrutinised. The intention is simply to explore the resonance of these claims, focusing on Navitus, but referring occasionally to other ExA reports.

The contested nature of 'knowledge' extends to the categorisation of inputs to decision making as 'knowledge claims' at all. I am particularly concerned with claims to know facts about the world (not a simple category, of course), not necessarily with certainty, but with sufficient rigour for proceeding. Knowledge claims do not extend indefinitely, and to make a knowledge claim is to do more than simply speak.⁵⁸ Emotional claims, for example, are significant, but different, as are ethical claims.⁵⁹ I am less concerned than I might be with insisting that any particular statement is indeed a 'knowledge' claim, both because it would be futile to deny that firm lines are elusive, and more importantly because we see in the claims discussed below, at the very

⁵⁵ Y Rydin 'Re-examining the role of knowledge within planning theory' (2007) *Planning Theory* 82 on the framing as 'knowledge claims'.

⁵⁶ Ibid. On the fragmentation and social construction of knowledge in regulation more generally, see J Black 'Decentring regulation: understanding the role of regulation and self-regulation in a "post-regulatory" world' (2001) 54 *Current Legal Problems* 103.

⁵⁷ B Wynne 'May the sheep safely graze? A reflexive view of the expert-lay knowledge divide' in S Lash, B Szerszynski and B Wynne (eds) *Risk, Environment and Modernity: Towards a New Ecology* (London: Sage, 1996); M Pieraccini 'Rethinking Participation in Environmental Decision-Making: Epistemologies of Marine Conservation in South-East England' (2015) 27 *JEL* 45.

⁵⁸ Rydin, above n 55.

⁵⁹ Rydin, *ibid*, argues that there should be a claim of causality. H Collins and R Evans 'The third wave of science studies: studies of expertise and experience' (2002) 32 *Social Studies of Science* 235 argue that experience is not knowledge, but see Wynne, above n 27.

least, epistemological disagreements about landscape.⁶⁰ The applicant's experts' claims to have predicted the landscape impact of a particular development are roundly resisted. That is explicit when local actors demand additional or better (technical) evidence from applicants, or provide competing technical expertise of their own. But it may also be implicit in lay and more intuitive expressions of the value of a local landscape. Moreover, this epistemological disagreement is both heightened and rendered more significant by the ambiguity and complexity of 'landscape', as glimpsed in the discussion of landscape above – the disagreement is about what landscape is, as well as what impacts we expect in this particular place.

These issues could also be profitably explored from a 'public participation', rather than a 'knowledge', perspective; public participation as a way to encourage learning, and to improve the substantive outcomes of decisions.⁶¹ However, thinking in terms of knowledge is a useful approach to assessing the ways in which certain sorts of input are heard. Reasons form the legal basis of decision making in planning, but there are few black and white tests or rules available to support the provision of legally and socially acceptable reasons. The reasons need to explain, if only for a particular time and situation, how the decision maker knows what it is dealing with. Law has both carefully expressed and wholly unspoken ways of knowing,⁶² in which it takes the evidence presented (knowledge claims) and determines whether it constitutes valid evidence (including knowledge) that provides a good reason for a decision.

1. *Prior Institutional Knowledge Claims*

EN-1 provides that 'Landscape effects depend on the existing character of the local landscape, its current quality, how highly it is valued and its capacity to accommodate change'.⁶³ The assessment of the existing character and qualities of a landscape is dominated by what I characterise here as prior institutional knowledge claims. Statutory, national landscape designations, or other designations where landscape or 'setting' is significant, are the primary sources.

⁶⁰ In a different context, Wynne, above n 57 and 'Misunderstood misunderstanding: social identities and public uptake of science' (1992) *Public Understanding of Science* 281.

⁶¹ Eg Lee et al, above n 16; C Armeni 'Participating in environmental decision-making: reflecting on planning and community benefits for major wind farms' (2016) JEL forthcoming.

⁶² A Sarat, L Douglas, M Merrill Umphrey 'Complexity, contingency and change in law's knowledge practices' in A Sarat, L Douglas, M Merrill Umphrey (eds) *How Law Knows* (Stanford: Stanford University Press, 2007) 2.

⁶³ Above n 17, para 5.9.8.

Designations play a major role in the ExA's Report on Navitus. The applicant's impact assessment recognises the significance of the 'highly designated coastline, with numerous national designations and a World Heritage Site international designation'.⁶⁴ The World Heritage Convention provides for the listing of 'cultural' and 'natural' heritage of 'outstanding universal value', and states have 'the duty of ensuring the ... protection, conservation, presentation and transmission to future generations' of listed sites.⁶⁵ The Jurassic Coast World Heritage Site (WHS)⁶⁶ had been listed as 'representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features'.⁶⁷

The 'specialness' of heritage designations and their setting is flagged in EN-1. The presumption in favour of the conservation of designated heritage assets is greater the more significant the designated asset. Further,

'Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. ... Substantial harm to or loss of designated assets of the highest significance, including ... World Heritage Sites, should be wholly exceptional.'⁶⁸

Impact on the WHS was an important factor in the decision to reject the Navitus application, even though it was clear that the WHS 'was not inscribed for its natural beauty and aesthetic importance', and that any impact on its geological and geomorphological value would be insignificant.⁶⁹ The 'setting'⁷⁰ of the WHS would however be compromised by the project.⁷¹ The Secretary of State's decision letter on the WHS is clearer than the ExA Report, explicitly *not* relying on any threat to the status of the WHS, but citing the 'high hurdle' set by EN-1, concluding that the project 'though not damaging to the protected feature of the World Heritage Site, would adversely affect the use and enjoyment of that Site', and that these effects are unacceptable.⁷²

⁶⁴ Navitus, above n 21, all para 7.3.5.

⁶⁵ Arts 1-4.

⁶⁶ UNESCO Convention Concerning the Protection of the World Cultural Heritage (1972).

⁶⁷ Criterion viii, UNESCO, *Operational Guidelines for the Implementation of the World Heritage Convention* (2015) WHC.15/01. On the Jurassic Coast, see <http://whc.unesco.org/en/list/1029>

⁶⁸ EN-1, above n 17, para 5.8.14.

⁶⁹ Above n 21, paras 9.3.14, 9.3.10.

⁷⁰ See more generally N Hewitson 'Heritage assets and their setting: views from a lawyer' [2015] JPEL 13 Supp OP66. Planners are generally obliged to have 'special regard' to the 'setting' of listed buildings, Planning (Listed Buildings and Conservation Areas) Act 1990, s 66; *Jones v Mordue* [2016] JPEL 476 (CA). For NSIPs, 'regard' must be had, Infrastructure Planning (Decisions) Regulations 2010, SI 2010/305, reg 3).

⁷¹ Above n 21, para 9.3.15.

⁷² DECC, above n 17, paras 23-29.

The impact on the setting of the WHS is intimately connected to the impact of the project on various Areas of Outstanding Natural Beauty (AONBs),⁷³ with the ExA observing that ‘the special qualities marking the coastal stretches of the AONB’ could not be ‘disassociated from the experiential aspects of the WHS’.⁷⁴ Whilst the WHS designation distinguishes Navitus from other applications, the examination of routine national landscape designations is consistent with ExA reports on other applications. Along with National Parks, AONBs are the dominant landscape designations in decisions on nationally significant wind projects.⁷⁵ A National Park comprises ‘extensive tracts of country’ where it appears to Natural England or Natural Resources Wales that

‘(a) ... natural beauty’ (‘wildlife and cultural heritage’ may explicitly be taken into account), ‘and (b) ... opportunities ... for open-air recreation ...’ make it ‘especially desirable’ that ‘necessary measures’ should be taken for the (broader) purposes of ‘conserving and enhancing the natural beauty, wildlife and cultural heritage’ of the area, and ‘promoting opportunities for the understanding and enjoyment of [its] special qualities’.⁷⁶

Natural England or Natural Resources Wales may designate an area *not* in a National Park as an AONB if

‘it appears’ to them to be ‘of such outstanding natural beauty that it is desirable that the provisions ... relating to [AONBs] should apply to it, for the purposes of conserving and enhancing the natural beauty of the area’.⁷⁷

The ExA Report goes methodically and in detail through each of the designated areas potentially affected by the Navitus proposal: the New Forest National Park, three AONBs (including two Heritage Coasts within the AONBs, part of the purpose of which is to ‘conserve, protect and enhance: the natural beauty of the coastline; their terrestrial, coastal and marine flora and fauna; their heritage features’⁷⁸), and the Jurassic Coast WHS. The Report considers receptors within the different designations, and viewpoints and landscape character types.⁷⁹ The ExA concluded that ‘the adverse impacts of the Project on the qualities that merited the

⁷³ ExA report, above n 21, para 9.3.15.

⁷⁴ Ibid, para 9.3.20.

⁷⁵ Development *within* a designated area should only be granted ‘in exceptional circumstances’, EN-1, above n 17, para 5.9.10; the applications discussed here are for projects that affect designated areas.

⁷⁶ National Parks and Access to the Countryside Act 1949, s 5.

⁷⁷ Countryside and Rights of Way Act 2000, s 82. Natural Environment and Rural Communities Act 2006, s 99 confirms that human intervention in the landscape (including explicitly agriculture, woodlands or park) does not prevent land being of (outstanding) natural beauty, under any enactment. This was a response to the narrow interpretation of ‘natural’ beauty in *Meyrick*, above n 32.

⁷⁸ Natural England *Corporate Report: Heritage Coasts: Definition, Purpose and Natural England's Role* (2015). Heritage coasts are not statutorily designated, but are ‘defined’ by agreement between the relevant local authorities and Natural England.

⁷⁹ Landscape character assessments are discussed extensively in ExA reports. They are a process for identifying landscapes spatially and then characterising them as particular types of particular value, see Special Issue *Landscape Research* (2016) 41(2).

AONB and [National Park] designations would be significant', and that this is a matter of 'significant weight' against the proposal.⁸⁰

This emphasis on designation, which is consistent with other ExA Reports (and of course, consent has in almost all cases been granted), provides an external assessment of the current landscape and the values associated with that landscape. Importantly, but unsurprisingly, this manifestation of prior institutional knowledge is not challenged or unsettled in the process. One of the valuable roles of law here is to provide stability by cutting short debates.⁸¹ But equally, the *meaning* of the designation (an AONB is an area – note, not a 'landscape' - that appears to be 'of such outstanding natural beauty' that it should be so designated) is hidden from sight. 'Natural beauty' as the legal criterion for designation does not reflect the fullness of 'landscape' as discussed above. So at first sight, and often on a closer look,⁸² reliance on designation is likely to reduce the meaning of landscape to the aesthetic and the visual. However, the process for designation can be lengthy and involve many people, inevitably calling into question the presumed self-evidence of 'natural beauty'.⁸³ National Parks are slightly more broadly defined than AONBs, expressly incorporating 'wildlife and cultural heritage' within the concept of 'natural beauty', and with broader purposes. But even for AONBs, Natural England take the view that

'fauna and flora ..., geological and physiographical features and cultural heritage can contribute to the natural beauty of all landscapes and that any assessment of natural beauty must take these factors into consideration ... the presence of particular wildlife or cultural heritage features can make an appreciable contribution to an area's sense of place and thereby heighten the perception of natural beauty'.⁸⁴

So whilst having to take care to comply with the statutory role of 'natural beauty',⁸⁵ the designation process for AONBs may flesh out the bare statutory definition,⁸⁶ as may the subsequent management and protection process. The Dorset AONB management plan,⁸⁷ for

⁸⁰ Above n 21, para 21.2.27.

⁸¹ Eg S Jasanoff 'Serviceable truths: science for action in law and policy' (2015) 93 *Texas Law Review* 1723; Latour, above n 12, on the 'arret'. Objectors of course are not likely to want to unsettle the award of a designation, since it supports their claims.

⁸² Butler, above n 52.

⁸³ Selman and Swanwick, above n 54. There have been no recent new AONBs, but boundary variations are more common, and do include consultation and reporting, <http://www.suffolkcoastandheaths.org/about-us/aonb-boundary-review/> An order must be confirmed by either a minister or the National Assembly for Wales, Countryside and Rights of Way Act 2000, s 83; National Parks and Access to the Countryside Act 1949, s 7, schedule 1.

⁸⁴ Natural England *Guidance for Assessing Landscapes for Designation as National Park or Area of outstanding Natural Beauty in England* (2011) para 6.3.

⁸⁵ *Meyrick*, above n 32.

⁸⁶ See Olwig, above n 52, arguing that the meaning of landscape is found in the process rather than in a top down definition (or in scientific reasoning); Selman and Swanwick, above n 54.

⁸⁷ Countryside and Rights of Way Act 2000, s 89.

example, is extensive, ‘stretching’⁸⁸ ‘natural beauty’ to include ‘manmade, historic and cultural associations and our sensory perceptions of it’,⁸⁹ and pointing to the tranquillity, wildlife and historical aspects of the area, as well as aesthetic questions.⁹⁰ Periodic management planning also provides at least the possibility of evolution of the construction of the meaning of landscape.

This broader context suggests that reliance on prior institutional knowledge has the potential to bring into the planning process some of the multiple complexities of landscape and place discussed above, which would otherwise be difficult to handle. Nevertheless, however rich (or otherwise⁹¹) the designation might be, the ‘known’ qualities of a particular landscape becomes difficult to contest. Whilst understandings of landscape are generally understood to be dynamic, the focus on prior institutional knowledge claims limits the space for any further or deeper elaboration of, for example, place attachment, or the effects of the proposal itself on the ways people respond to landscape.

A further role for prior institutional knowledge in the form of designation is the implicit downgrading of the sensitivity of landscapes that have not been nationally designated. These ‘everyday’⁹² landscapes are not ignored,⁹³ and one way they enter the decision is through discussion of ‘visual receptors’ found outside nationally designated areas.⁹⁴ This is a matter of impression, but non-designated landscapes seem to enjoy less space and energy in the reports and the ExA approach is brief and relatively dismissive. This section of the Navitus Report, for example, concludes by citing the National Policy Statements, to the effect that virtually all nationally significant energy projects will have effects on landscape.⁹⁵

The special attention to designated areas in ExA reports is legally necessary, since decision makers must ‘have regard to’ the purposes of the designation: of ‘conserving and enhancing the natural beauty of the [AONB]’; and of ‘conserving and enhancing the natural beauty, wildlife and cultural heritage of the National Park ... and ... promoting opportunities for the

⁸⁸ Selman and Swansick, above n 54.

⁸⁹ Cited in Navitus, above n 21, para 7.3.50.

⁹⁰ *Dorset AONB Management Plan 2014-2019*, <http://www.dorsetaonb.org.uk/the-dorset-aonb/management-plan>.

⁹¹ Butler, *ibid.*

⁹² Above n 46.

⁹³ Although ‘local landscape designations should not be used in themselves to refuse consent’, EN-1, above n 17, para 5.9.14.

⁹⁴ Navitus, above n 21, para 7.3.234 onwards.

⁹⁵ *Ibid.*, para 7.3.258.

understanding and enjoyment of [its] special qualities'.⁹⁶ In this context, one role for National Policy Statements has been to endorse the acceptability of at least some harm to designated areas, given the need for renewable energy development. The careful attention to designation is especially important when consent is granted – and recall that in the case of nationally significant wind farms, consent is the norm. The ExA Report for the (approved) Rampion Offshore Wind Farm, for example, 'gives substantial weight to conservation of the natural beauty of the landscape and countryside within the [South Downs] National Park', which even according to the applicant will be subject to 'significant and adverse' effects from a number of viewpoints,⁹⁷ nevertheless concluding that the benefits of the project are not outweighed by the costs.

2. Expert or technical knowledge claims

Without entering into questions of who counts as an expert and what counts as expertise,⁹⁸ and taking for granted that the expert or technical knowledge claim is not value free,⁹⁹ the knowledge claims considered here are technically framed contributions, using consistent language and benchmarks, and self-consciously aspiring to objectivity. The methodologies used are often formalised and approved in planning policy, including the National Policy Statements, or in professional 'good practice'. The National Policy Statements themselves are fairly bland on assessment of landscape impacts. EN-1 says simply that 'A number of guides have been produced to assist in addressing landscape issues', and in listing some of those guides,¹⁰⁰ blurs the line between professional good practice and government policy. These established, officially 'approved' methodologies are a constant theme of the ExA reports, and in some cases provide shelter against criticism of the applicant's methodology.¹⁰¹ A failure to

⁹⁶ Countryside and Rights of Way Act 2000, s 85; National Parks and Access to the Countryside Act 1949, s 11A(2) and s 5(1).

⁹⁷ Rampion, above n 22, para 4.53.

⁹⁸ The decision not to have public inquiries under the Planning Act 2008 seems to have sidestepped some of the boundary work around the personal qualities of the speaker when evidence enters law. See Aitken above n 4; in courts, S Jasanoff *Science at the Bar: Law, Science and Technology in America* (London: Harvard University Press, 1995) especially ch 3.

⁹⁹ There is a startling example in the applicant's Seascape, Landscape and Visual Impact Assessment: 'large scale, open views / panoramas' necessarily to *reduce* the susceptibility of a landscape, para 13.3.76. This is however obliquely challenged in the ExA Report as a misapplication of guidance, above n 21, para 7.2.26.

¹⁰⁰ EN-1, above n 17, para 5.9.5, footnote 125; including the second edition of the Landscape Institute publication, above n 48.

¹⁰¹ The use of guidance was important to the ExA's explicit finding that the applicant's visualisations had not been 'deliberately misleading or intentionally under-representative', above n 21, para 7.2.54 onwards.

follow, or properly to interpret and apply, approved approaches can conversely be a barrier to the acceptance of claims about impact.¹⁰²

The applicant's use of the listed (and other¹⁰³) established, officially 'approved' methodologies and technical framings of landscape and visual impacts are found in its Seascape, Landscape and Visual Impact Assessment, contained in the Environmental Statement prepared as part of the mandatory environmental impact assessment. Apparently neutral visual artefacts feature heavily,¹⁰⁴ including dozens of maps, photographs, photomontages and wireframes, prepared according to methodologies found in professional guidance. These visual artefacts illustrate a range of issues, including the extent of the proposed project, the location of designated or sensitive areas, the existing appearance of the landscape and the predicted appearance of the project. Both the applicant and the ExA Report devote considerable space and effort to organising the consideration of landscape impact. The 'sensitivity' of landscape receptors is assessed on a three point 'high-medium-low scale' by reference to 'susceptibility' (ability to accommodate development) and value; susceptibility is rated as 'high-medium-low' and value as 'national, international, local, community or limited'.¹⁰⁵ Guidance is crucial in establishing this approach, and the approval of those methodologies in government policy is an important legitimacy measure. 'Magnitude' of effects is measured on a 'high-medium-low-very low' scale, by combining consideration of scale, extent and duration of effects.¹⁰⁶ Finally, the crucial question of significance of effects is assessed, combining sensitivity and magnitude in an exercise of planning judgment.¹⁰⁷ All of this makes for a lengthy, technical assessment, presented in cool language that differs markedly from some of the more heated language used by those resisting the development, or in some of the literature.¹⁰⁸ This careful attention to categorising landscape impacts is a consistent feature of all of the ExA reports on windfarms, with the applicant's Environmental Statement at the centre of the discussion, and debate over methodologies.

¹⁰² '... if the DTI definitions had been used in their complete form then seascapes might have been ascribed higher sensitivity', *ibid*, para 7.2.26.

¹⁰³ See the list of thirteen guidance documents used in the applicant's seascape, landscape and visual impacts assessment, para 13.28.

¹⁰⁴ Y Rydin et al 'Artefacts, the gaze and sensory experience: mediating local environments in the planning regulation of major renewable energy infrastructure in England and Wales' in M Kurath et al (eds) *Rethinking Planning: Tracing Artefacts, Agency and Practice* (London: Palgrave, forthcoming).

¹⁰⁵ Above n 21, all para 7.2.22.

¹⁰⁶ *Ibid*, para 7.2.38.

¹⁰⁷ *Ibid*, paras 7.2.45, 6.2.46.

¹⁰⁸ Links to detailed submissions and documents can be found in Annexes to the ExA Report, above n 21. Most contributions are actually very measured in Navitus, certainly without the emotional intimacy observed in P Burke Wood and J Young 'A Political ecology of home: attachment to nature and political subjectivity' (2015) 34 *Environment and Planning D* 474. Woods, above n 28, notes the failure of emotional claims in planning.

Whilst the applicant's Seascape, Landscape and Visual Impact Assessment is a central document, there are other significant technical inputs. The applicant's methodologies and conclusions ('the steps and approach used to reach judgments about significance'¹⁰⁹) were vigorously challenged in Navitus by 'a wide range of statutory, non-statutory bodies, local authorities and individuals', including Natural England.¹¹⁰ Natural England's statutory 'general purpose' includes 'conserving and enhancing the landscape',¹¹¹ and it is the government's statutory advisor on development matters in respect of AONBs and National Parks.¹¹² Some of the Local Impact Reports prepared by local authorities under section 104 of the 2008 Act also engage in detail with the technical knowledge claims made by the developer.¹¹³ Further, the main objector to the project was an apparently unusually well-resourced, well-advised group called Challenge Navitus. Challenge Navitus understood the advantages of detailed critique of the applicant's technical case, and of providing its own competing technical material. This material was important in the ultimate reasoning of the ExA, which 'notes that the quantity and quality of Challenge Navitus' visual representations to the examination are impressive',¹¹⁴ and relies on Challenge Navitus at a number of points.¹¹⁵ Again this is a little impressionistic, but Navitus may be distinctive in the quality and quantity of technical challenge to the applicant's case. The expert/technical knowledge claims made by Challenge Navitus offered the ExA an alternative vision of reality for the reasoning process, and for the ultimate exercise of planning judgment. It is equally important to note however that parts of the applicant's technical evidence are rejected in other ExA reports, without the application being refused.¹¹⁶

3. Lay or experiential knowledge claims

The lay and experiential knowledge claims made by (local) lay actors in the process are perhaps most likely to be contested as a form of 'knowledge'. As suggested above, even if

¹⁰⁹ Above n 21, para 7.2.1.

¹¹⁰ Ibid, para 7.2.1 and 7.2 generally.

¹¹¹ Natural Environment and Rural Communities Act 2006, s 2(2)(b).

¹¹² Countryside and Rights of Way Act 2000, s 84.

¹¹³ Planning Inspectorate *Advice note 1: local impact reports* (2012). Local Impact Reports are often a little bland, and as there is no requirement to 'balance' the pros and cons of the development, they do not always advocate any particular outcome. But see eg Bournemouth Borough Council para 5.2.12 onwards, Dorset County Council para 5.1.1 onwards, Christchurch Borough Council para 4.54 onwards. Note also the tendency to support the judgments of others when they are perceived to be more expert, eg Dorset County Council and Purbeck District Council support Challenge Navitus' visualisations, Hampshire County Council supports the representations of Dorset County Council, the New Forest District Council and the New Forest National Park Authority in respect of landscape and visual issues.

¹¹⁴ Although some of the material was to be 'treated with some caution', above n 21, para 7.2.62.

¹¹⁵ Eg ibid, para 7.3.62.

¹¹⁶ See eg Clocaenog, above n 20, paras 4.62, 4.70.

we doubt the categorisation of some of this material as a ‘knowledge’ claim, there is *at least* a potential epistemological conflict embedded in the lay claims about landscape.

In Navitus, although the project was ultimately successfully resisted, there is no reliance on lay / experiential knowledge claims in the reasoning for the decision. Few are even referred to. Local Impact Reports, which ‘should draw on existing local knowledge and experience’,¹¹⁷ contain lay responses alongside the expert challenges mentioned above. Bournemouth Borough Council for example states that there is ‘serious concern that the proposal would introduce an alien “industrial landscape” to an area that has natural beauty as its core socio economic value’.¹¹⁸ The New Forest National Park Authority includes a reproduction of Turner’s *Moonlight at Sea*, to highlight how ‘the iconic views from the Park’s coastline across to Hurst Castle and the Isle of Wight have inspired people for generations’.¹¹⁹ These sorts of contributions are not discussed in the ExA Report. Similarly, the ExA concluded, in response to the suggestions from interested parties, that ‘a sense of place’ is ‘not a principal issue to be considered separately, but fell within one or other of the topic headings identified’,¹²⁰ without explicitly referring to it again in the Report. Some efforts to convert lay understandings into technical knowledge also fall short. For example, the ExA agrees with the applicant that some images provided by those resisting the proposal are ‘simply unrealistic with no defensible methodological evidence base’ or ‘contrived’ or ‘misleading’. And in another reminder of the role of accepted methodologies in establishing the acceptable approach to knowing, the ExA said that ‘it is difficult to establish the techniques used to prepare images or their compliance with guidance’ and explicitly did not rely ‘on images that cannot be properly validated’.¹²¹

Whilst no one who studies environmental decision making will be surprised to see lay knowledge claims (indeed lay contributions generally) being neglected in decision making and reason giving, it is especially striking in respect of landscape. Landscape seems, as mentioned in the introduction, intuitively open to lay perspectives and values. Moreover, the literature on landscape discussed above reinforces the importance of lived experience. If landscape is not simply a physical thing ‘out there’, but dependent upon past, present and future human relationships and understandings, lived experience partially *constitutes* the facts about the world that we seek to ‘know’.

¹¹⁷ Planning Inspectorate, above n 113.

¹¹⁸ Executive Summary, para 1.

¹¹⁹ Page 13.

¹²⁰ Above n 21, para 4.0.4.

¹²¹ Ibid, paras 7.2.59-60.

Other ExA reports discuss lay evidence on landscape in more detail than Navitus, although lay objections to other nationally significant wind farm proposals were not decisive. The ExA in the Burbo Bank Report is careful to acknowledge ‘the sincere care, concern and love’ expressed by local people ‘for the qualities of their local environment and the opportunities that it provides’. But ‘just because these opportunities will be changed by the development does not equate to a finding that the change will occasion unacceptable harm’,¹²² turning to impact assessments and the need for renewable energy. And in a return to the importance of methodology, whilst the applicant’s conclusions on landscape were disputed, the objectors ‘did not bring a significant body of evidence to rebut the applicant’s assessments which I was able to test and weigh in the balance’.¹²³ In Rampion, the ExA ‘received many representations from interested parties who were private individuals’ about the impact of the proposal on the South Downs National Park, with a ‘typical’ concern being about the ‘cluttering of the view’. The ExA gave ‘careful consideration’ to these representations, but turned swiftly to the applicants’ (technical) impact assessment.¹²⁴ Similarly, the Brechfa Forest West Wind Farm Report was ‘informed’ by responses from the local community,¹²⁵ but the reasoning concentrated on the discussion of methodologies for landscape assessment.¹²⁶

4. Professional planning knowledge claims

By contrast with judges and courts (notwithstanding increasing specialisation in the lower courts, and the huge experience some judges bring to planning matters), the ExA brings its own planning expertise to the table. This is a very significant resource. It may be a little paradoxical to discuss it in terms of a knowledge claim, since the ExA also determines the strength of the various knowledge claims for the purpose of the decision making process. But nevertheless, the evidence from professional experience enters into the process in a provisional way, its significance awaiting the construction of the reasons for the decision. We might also contrast this with the way in which the Secretary of State exercises planning judgment, relying perhaps on a legitimacy based less in expertise and planning experience, more on political experience and democratic status.¹²⁷

¹²² ExA Report and Recommendations *Burbo Bank extension wind farm* (2014) para 4.18.

¹²³ *Ibid*, para 4.19.

¹²⁴ Above n 22, para 4.342.

¹²⁵ ExA Report and Recommendations *Brechfa Forest West wind farm* (2012) para 4.12.

¹²⁶ *Ibid*, para 4.30.

¹²⁷ The Secretary of State has statutory responsibility for making these decisions, see by analogy *Wind Prospect Developments Ltd v Secretary of State for Communities and Local Government* [2014] EWHC 4041 (Admin).

The most striking way in which the ExA's own knowledge enters into the knowledge base for the decision is through the site inspection (or visit). Site visits are not legally required or legally decisive,¹²⁸ and are not mentioned by the National Policy Statements.¹²⁹ Visits are however a routine part of planning practice, and both accompanied and unaccompanied 'site inspections' are provided for in the Examination Procedure Rules.¹³⁰ Ultimately, whether to visit a site, and the conclusions to be drawn from such a visit, are matters of planning judgment. As long as there is no question of irrationality or procedural unfairness, the courts do not intervene.

Site visits bear a great deal of weight in ExA conclusions on landscape and visual impacts, and considerable resources are put into them. The Navitus ExA made accompanied and unaccompanied visits on at least fifteen occasions, including at night and including to other offshore wind farms.¹³¹ A visit can sometimes have a very direct impact. The applicant for example had argued that the presence of shipping would reduce seascape sensitivity, 'but at our site inspections we did not gain an impression of regular and high levels of activity as a defining characteristic of the seascape'.¹³² On occasion, the technical evidence is almost trumped by the site visit: conclusions 'are based on our experiences of the area and inspections at identified viewpoint locations' which are simply 'assisted by the images [photomontages and wireframes] on site'.¹³³ Given the inability of technical resources like photographs or wireframes to capture the cultural, historical and multi-sensory¹³⁴ depth of landscape, the additional perspective offered by visits is importantly enriching.¹³⁵ The exercise of the ExA's professional planning knowledge is not limited to visits. For example, relying on broader questions of judgment, the ExA explains that different conclusions in the Report from those offered by the applicant, 'stem largely from judgements relating to differences of opinion on scale, extent and magnitude of effects' as well as 'the sensitivities ascribed to receptors or where the Panel does not agree that a "moderate" impact can be disregarded'.¹³⁶

¹²⁸ Notwithstanding judicial agreement that a photomontage is 'no substitute' for a site visit, the Secretary of State can disagree with a planning inspector on landscape issues, even when the inspector visited the site, but the Secretary of State did not, provided that he 'had sufficient material before him': *Ecotricity (Next Generation) Limited v Secretary of State for Communities and Local Government* [2015] EWCA Civ 657 [35], [38]. Here we see considerations of administrative practicalities shaping the construction of knowledge on landscape.

¹²⁹ Although they do appear in professional guidelines.

¹³⁰ Above n 14, r 16.

¹³¹ Above n 21, para 1.4.13.

¹³² *Ibid*, para 7.2.27, 7.3.108.

¹³³ *Ibid*, para 7.2.65.

¹³⁴ Especially interesting are expressions of tranquillity and openness.

¹³⁵ Rydin, Lee and Lock, above n 18.

¹³⁶ *Ibid*, para 7.2.67.

We see similar reliance on visits and judgment in other cases. The ExA visited the residential properties at particular risk from the Clocaenog Forest proposal, and ‘gained a full appreciation of the degree of change in visual amenity which was likely to occur.’¹³⁷ In Rampion the ExA ‘was struck by the extent to which visibility and perception of the size of the wind farm altered, depending on the colour of the sky, shadow and sun and the height from which the wind farm would be viewed’; sea mist during an offshore visit confirmed this perspective on the variability of weather conditions.¹³⁸ And whilst the applicant’s technical ‘indicative night time visualisation’, demonstrated clear visibility from Brighton Promenade, the ExA’s night time site visits encouraged it to accept the applicant’s position that ‘the urbanised setting of the brightly lit coastline and ... lighting from shipping operating in the area’ was important, as was mitigation by weather conditions.¹³⁹

Striving for objective judgment

We might draw a few conclusions from the discussion above. First, prior institutional knowledge claims, in the form of prior decisions on the status of a particular landscape, are powerful in the assessment of the values associated with that landscape, its ‘beauty’ and its merit. These claims are unproblematically incorporated into the reason giving process, as something ‘known’ about the world. Second, expert or technical knowledge claims dominate a great deal of the reasoning, and are best defeated by challenges expressed as competing technical knowledge claims. Third, lay or experiential knowledge is notable for its absence from the Navitus ExA Report, and whilst in other decisions it is treated with rhetorical respect, it does not generally feed into the reasoning. And fourth, notwithstanding the influence of standardised methodologies and approaches, professional planning knowledge claims are a persistent feature of the reasoning. This is not surprising, given that ultimately decisions are a matter of planning judgment.

The precise conclusions drawn here are, as suggested in the introduction, specific to the particular context of (1) landscape impacts of (2) nationally significant (3) wind energy projects. In a sense, this is the point: knowledge, for the purposes of providing reasons for a decision, is constructed within a particular legal and social process, just as the reasoning and decision are constructed by what we know.¹⁴⁰ But equally, there may be broader food for thought.

¹³⁷ Above n 20, para 4.210.

¹³⁸ Above n 22, para 4.338.

¹³⁹ Ibid, para 4.340.

¹⁴⁰ Jasanoff, above n 33.

Most obviously, a preference for expert/technical knowledge over lay/local knowledge is a familiar theme in environmental decision making, and to see it repeated reinforces existing understandings. Given both the importance of experience to shaping 'landscape', and the subjective elements of landscape assessment, it is especially striking here. The other two knowledge claims (prior institutional knowledge, professional planning knowledge) have not hitherto been much discussed in the literature. Prior institutional knowledge is central to many legal processes, and whilst the precise contribution of such knowledge claims is likely to vary, we see here the potential for prior designation to perform a number of roles. Most obviously, prior institutional knowledge claims provide a certain level of stability on difficult value judgments, in this case including aesthetic judgments. They may also, if richer approaches to landscape have been unearthed during the designation process, bring into the decision a complexity that would otherwise be difficult to capture. The attraction of this more 'orderly' way of absorbing the messy intricacies of landscape is obvious. But something, at least the dynamism and particularity of the social construction of landscape, is likely to be lost, even in the very best of cases; and in many cases, the designation process may also rely in the final instance on primarily narrow technical approaches.¹⁴¹ Moreover, the designation process is 'black-boxed', so the actual richness or poverty of the understanding of landscape is never exposed or discussed.

Professional planning knowledge is also an important resource throughout planning, due to the role of 'planning judgment', and similar professional knowledge claims can be found throughout administrative law. A close look at landscape suggests some ways in which the exercise of professional judgment opens up space for other knowledge claims. Planners are not bound by expert evidence, in the sense of being obliged to follow the conclusions of experts on matters of planning judgment, including the significance and acceptability of impacts. That means that even if no competing expert evidence is put forward, the ExA could reach its own conclusions, provided adequate reasons are given.¹⁴² This in turn creates an opportunity for lay knowledge to speak and provide supportive reasoning. It is interesting that the ExA does not take that step. It prefers technical evidence to support its professional expertise, and also its own (professional) impression of the site over the lived experience of local people.

¹⁴¹ Butler, above n 52.

¹⁴² G Nardell and J Thornton 'Inspectors and experts: the scope and intensity of the duty to give reasons in cases turning on expert evidence' [2012] JPEL 888. It may be more arduous evidentially to provide good reasons for disagreement on the facts, but see above n 14.

The three types of knowledge claim that feature in the reason giving process may speak to the same aspiration to objectivity: 'objectivity' not in the sense of facts that can be relied upon by all people everywhere regardless of their position or interests, or objectivity as a state of mind; but in Jasanoff's terms, objectivity as a hard-won social achievement.¹⁴³ Turning to our three knowledge claims, first, prior institutional knowledge removes some of the controversy over value to another forum, and provides a neat and tidy set of facts for decision making. Secondly, however well-understood the embedding of values in expert or technical knowledge claims, one of the familiar functions of highly technical approaches is to be seen to achieve consistency between decisions and decision makers, and to step back from political controversy. Thirdly, professional knowledge claims may speak to a similar assertion of emotional distance¹⁴⁴ and shared values.

The knowledge built from these three sets of claim is not necessarily expected to represent a full picture of the facts:¹⁴⁵ the reason giving process does not seek 'truth pure and simple', but "serviceable truth".¹⁴⁶ It is common for knowledge, and the methodologies behind it, to be valued in law not for their offer of truth, but primarily for their 'pragmatic utility',¹⁴⁷ their ability to provide more or less stable and acceptable 'facts' for a process to go forward.¹⁴⁸ Knowledge of what we mean by landscape, and what change within it and to it will amount to, allows for particular ways of organising our social world. This seems most obvious with the cognitive techniques that I classify as expert / technical knowledge claims.¹⁴⁹ But it applies equally to the other two categories, whose approaches provide 'legible',¹⁵⁰ stable and plural understandings of an otherwise complex, indeterminate and unreadable landscape. All of this

¹⁴³ S Jasanoff 'The practices of objectivity in regulatory science' in C Camic, N Gross, and M Lamont (eds) *Social Knowledge in the Making* (Chicago: University of Chicago Press, 2011).

¹⁴⁴ Although note Jasanoff's observation that the British use of the authority of 'the great and the good' in scientific controversy is almost the opposite to distance, *ibid*. She argues that these elites can provide a 'view from everywhere', a common sense knowledge whose truthfulness will appear to all, *ibid* and *Designs on nature: science and democracy in European and the United States* (Princeton: Princeton University Press, 2005). The members of the ExA are named, and so their professional authority is to some degree personalised, but distance may be a greater feature of their routine regulatory decision making.

¹⁴⁵ Bird modelling in these cases provides an even more stark example than landscape; they may not express it in these terms, but it is doubtful that anyone really expects that the modelling of bird mortality provides a real prediction of the numbers of birds that will be killed by the wind farm.

¹⁴⁶ Jasanoff, above n 81, p 1725.

¹⁴⁷ A Lang 'Governing "as if": global subsidies regulation and the benchmark problem' (2014) 67 *Current Legal Problems* 135 p166.

¹⁴⁸ This adds another dimension to the need for reflection on models in law, E Fisher, P Pascual and W Wagner, 'Understanding environmental models in their legal and regulatory context' (2010) 22 *JEL* 251.

¹⁴⁹ A Lang 'The legal construction of economic rationalities' (2013) 40 *JLS* 155 emphasises 'the important role that cognitive technologies ... play' in the construction of 'economic rationality', p 169. See also Scott, above n 4, for a striking example of the ways new techniques of assessment have shaped forests (and our appreciation of them), ch 1.

¹⁵⁰ Scott, *ibid*.

both speaks to, and begs questions about, the social purposes of knowledge in planning.¹⁵¹ In the first instance, the purpose of the knowledge is simply to allow decisions to proceed, and to allow us to govern landscape (and wind energy). In many cases, the social as well as legal adequacy of reasons will be uncontentious. It is not difficult, however, to envisage situations in which the attempt at resolution and settling fails, and challenges to the deeper policy commitments (often pro-development) embedded in what we ‘know’ in planning persist, notwithstanding the assertion of authority in a completed decision making process.¹⁵²

Conclusions

There are obvious difficulties and concerns about the knowledge practices on display in these decisions. In particular, decision making is not adapting to embrace lay knowledge, even in this apparently most opportune area; on the contrary, objectors are adapting the presentation and communication of their experience to fit in with the dominant technical mode of decision making.¹⁵³ This is potentially exclusionary and reductive of the real concerns, and in particular diminishes any opportunity explicitly to discuss place attachment.¹⁵⁴ But for instrumental and short term reasons, it seems to be the best option available to those seeking to contribute to planning decisions. Just as objections to applications must be framed in planning terms (about land use), and challenges before the court need generally to be on procedural grounds rather than substance, landscape objections to NSIP proposals are most likely to be heard if framed in technical terms, and if directly and precisely challenging of the competing technical presentation of the applicant.

But my purpose here is not to advocate any particular approach, it is to explore the complex dynamics of these extraordinarily richly documented decisions. The constructed nature of knowledge is very apparent when we try to understand landscape, and the laborious elucidation of reasons speaks to a concerted effort to construct objectivity. The different claims, from different sources, work together and overlap in the discursive process of reason giving, providing not a true, but a defensible, ‘serviceable’ vision of landscape. One knowledge claim does not have to crowd the other out – save of course that in the end there is barely even a tension between expert and lay knowledge claims on landscape, as the latter disappears from view.

¹⁵¹ Wynne, above n 27.

¹⁵² Something like this may be what is happening in EU regulation of GMOs, see M Lee ‘The Ambiguity of Multi-Level Governance and (De)-harmonisation in EU Environmental Law’ (2013) *Cambridge Yearbook of European Legal Studies* 357 (also discussing industrial pollution); Wynne, above n 4.

¹⁵³ Also Pieraccini, above n 57; Aitken, above n 4, citing Epstein’s work with AIDs activists.

¹⁵⁴ See the debate between Collins and Evans, above n 59 and Wynne, above n 27.