

Natural Beauty:
a term fit for public policy in the 21st century?
Exploring changes in the meaning and measurement of
Natural Beauty in AONB policy since 1949

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Author declaration

S.E.M. Marsh conceptualised and designed the study with inputs from PhD supervisors J. Tzanopoulos and R. Fish. S.E.M. Marsh collected and analysed the data. All chapters have been written by S.E.M. Marsh with editorial suggestions by J. Tzanopoulos and R. Fish.

Abstract

Currently nearly one quarter of England's land area is designated as either Area of Outstanding Natural Beauty (AONB) or National Park with a primary legislative purpose of conserving and enhancing Natural Beauty. Additional designated areas are planned as part of the Government's commitment to manage 30% of the UK's land and water for nature by 2030, with new environmental outcome targets set for all designations. Yet, the state of nature continues to decline and people's fair access to Natural Beauty diminishes. In this thesis, I explore the legislative term *Natural Beauty* and how its interpretation and measurement in public policy has affected policy success. Since Natural Beauty remains undefined and contested 70 years after the legislation designed to protect it, I start by critically examining the discourse of those who were instrumental in promoting and securing the National Parks and Access to the Countryside Act 1949 and propose a new theoretical model to understand the Act's intent. In doing so, I bring an aesthetic perspective to bear that reflects how beauty and nature/natural were understood at the time. I then employ a historical narrative approach to examine how and why, in the second half of the 20th century, the holistic concept of Natural Beauty became operationalised and flattened as 'landscape' in response to the demand for measurable and accountable policy decisions. Thematic studies analysing current methods of assessing Natural Beauty suggest that much of the legislative intent has been lost in this reframing, with inconsistent interpretations undermining the efficacy of policy approaches. Finally, I explore whether the policy intent to do no harm to Natural Beauty would be better served by improving decision-makers' understanding of it rather than the current focus on target setting which relies on symbolic or political indicators. Using mixed methods, I examine the attitudes and dispositions of decision-makers and find that, within the workplace, a disengaged and simplified interpretation of Natural Beauty has been internalised which contrasts with the vivid and richly textured descriptions decision-makers provide when asked

about their personal experiences and connections to nature. I argue that returning policy focus to a more holistic and engaged idea of Natural Beauty, and adopting a consistent model, would better serve the current imperative to restore a low carbon, biodiverse, natural/cultural landscape. Within this model the concepts of subject and object (people and land/nature) coexist and interact, and citizens' emotional engagement with nature is no longer an optional add-on. Although Natural Beauty policy alone cannot reverse the declining condition of the natural world, a better conceptualisation of it supported by new guidance offers the opportunity to put the harmonious relationship between people and nature at the forefront of policy in these areas.

Keywords: Natural beauty; Areas of Outstanding Natural Beauty [AONBs]; National Landscapes; National Parks and Access to the Countryside Act 1949; Cultural landscapes; Landscape assessment; Countryside policy; Wicked policy problems; Measuring beauty; Participatory research.

Table of contents

Acknowledgements.....	i
Author declaration	ii
Abstract.....	iii
Table of contents.....	v
List of figures.....	ix
Terminology.....	xi
Abbreviations.....	xii
Chapter 1 Introduction.....	1
1.1 A brief history of Natural Beauty in public policy.....	2
1.2 Understanding <i>Natural Beauty</i> : current state of knowledge.....	4
1.3 The challenge: Natural Beauty – a ‘wicked’ problem?.....	7
1.4 Study purpose and rationale	8
1.5 Research aims.....	11
1.6 Approach to the study	11
1.7 Positionality.....	16
1.8 Thesis Structure.....	17
Chapter 2 Natural Beauty in policy: a literature review.....	20
2.1 Introduction	20
2.2 Natural Beauty in policy guidance and legal judgements.....	20
2.3 Natural Beauty in scholarly discourse.....	30
2.4 Discussion	35
Chapter 3 Understanding <i>Natural Beauty</i> in the 1949 Act.....	38
3.1 The importance of history and context.....	38
3.2 Methods and materials	40
3.2.1 Issues and ethics.....	41
3.3 Setting the scene: Natural Beauty and aesthetic theory in the early 20 th century ...	42
3.3.1 Beauty and pleasure	43
3.3.2 Nature as an aesthetic object.....	45
3.3.3 Beauty, picturesque and the sublime	47
3.4 Natural Beauty and the early campaigners for preservation	48
3.4.1 Natural Beauty and American preservation policy.....	48
3.4.2 Romanticism, Wordsworth and Natural Beauty	49
3.4.3 Natural Beauty and the English countryside.....	50
3.5 Natural Beauty and the 1949 Act’s foundational reports.....	55

3.5.1	Countryside: the raw material for designation.....	57
3.5.2	Natural Beauty: features and phenomenon to be preserved and enhanced.....	61
3.5.2.1	Symbolic landscape character	62
3.5.2.2	Wildlife and features of interest	63
3.5.2.3	More than just physical features: an emotional response to nature.....	65
3.5.3	Assumptions underpinning the designation purpose	69
3.5.3.1	Nature, culture, and the myth of wildness	69
3.5.3.2	Landscape change and ‘the mild continuous epic of the soil’	73
3.5.3.3	Preventing disfigurement and spoilation	76
3.5.3.4	Society as an arbiter of Natural Beauty	77
3.5.4	Alternative perspectives and unheard voices	78
3.6	Chapter conclusions and a new ‘model’ for Natural Beauty	81
Chapter 4	The reframing of Natural Beauty in public policy since 1949.....	88
4.1	Introduction	88
4.2	Methods and materials	89
4.3	Analysis and Discussion.....	91
4.3.1	The changing policy context for Natural Beauty	91
4.3.1.1	Legacy of the 1949 Act: separation and specialism	91
4.3.1.2	Implications of a neoliberal economic paradigm	95
4.3.1.3	High Modernism and quantification in public policy.....	99
4.3.1.4	The operational challenges of language fluidity.....	102
4.3.2	Beauty and the growth of individualism.....	105
4.3.3	The transition from Natural Beauty to landscape	107
4.3.3.1	Landscape: a contested term.....	107
4.3.3.2	Landscape quality and Natural Beauty	113
4.3.3.3	Landscape assessment becomes a tool to describe Natural Beauty.....	115
4.3.3.4	Landscape: a trusted profession.....	117
4.3.4	Paths not taken	118
4.4	Conclusions: the implications for Natural Beauty policy	120
Chapter 5	Measuring and monitoring Natural Beauty: a literature review	125
5.1	Introduction	125
5.2	Methods.....	128
5.3	Themes	129
5.3.1	Early attempts to measure Natural Beauty.....	129
5.3.2	Landscape quality as a proxy for Natural Beauty	131
5.3.3	Using landscape-scale configurations to explain Natural Beauty.....	136
5.3.4	Natural Beauty and landscape condition.....	138

5.3.5	Establishing a baseline or reference state for Natural Beauty	142
5.3.6	Assessing individual experiences of Natural Beauty.....	143
5.3.7	Natural Beauty, wellbeing, and nature connectedness.....	150
5.4	Chapter conclusions	151
Chapter 6	Exploring the efficacy of Natural Beauty measurement in practice	155
6.1	Introduction	155
6.1.1	History and context for Natural Beauty measurement.....	157
6.1.2	Divergent methods for different purposes	159
6.2	Thematic study 1: Analysis of methods currently used to measure and monitor Natural Beauty	162
6.2.1	Methods and materials	162
6.2.2	The role of Natural England’s Evaluation Framework.....	162
6.2.3	The efficacy of individual MEOPL metrics.....	166
6.2.4	A single rating score for Natural Beauty	172
6.2.5	Thematic study conclusions.....	177
6.3	Thematic study II: Analysing the role of Landscape and Visual Impact Assessment (LVIA) in predicting effects on Natural Beauty	180
6.3.1	Applying LVIA to Natural Beauty forecasting.....	180
6.3.1.1	About LVIA.....	181
6.3.2	Methods and materials	182
6.3.2.1	Sampling approach	182
6.3.2.2	Procedures	183
6.3.2.3	Observations and issues.....	184
6.3.3	Results and discussion	185
6.3.3.1	Summary of LVIA conclusions.....	185
6.3.3.2	Theoretical challenges	186
6.3.3.3	Privileging the visual.....	189
6.3.3.4	Reliance on expert judgement	190
6.3.3.5	Baseline studies and the power of narrative	191
6.3.3.6	Gaming and the problem of composite ratings and ordinal scales	194
6.3.3.7	Cumulative effects and the Sorites paradox	195
6.3.4	Thematic study conclusions.....	196
6.4	Chapter conclusions	198
Chapter 7	Natural Beauty and the dispositions of decision-makers	201
7.1	Introduction	201
7.2	Methods and materials	203
7.2.1	Participants and sampling process	203

7.2.2.	Procedures.....	207
7.2.3	Thematic coding principles.....	211
7.2.4	Observations and issues	212
7.3	Results and discussion.....	215
7.3.1	Interpreting Natural Beauty in relation to legislation	215
7.3.2	Interpreting related terms	228
7.3.3.	Individual relationships with beauty	231
7.3.4	Attitudes towards beauty in public policy	251
7. 4.	Conclusions.....	252
8.	Discussion and conclusions	258
8.1	Overview	258
8.2	Why this study was needed and its contribution to the field.....	259
8.3	The implications for theory, policy, and practice.....	260
8.4	Opportunities for future research	264
8.5	Natural Beauty – a term fit for the 21 st century.....	266
	References.....	268
	Appendix 1: Survey Questionnaire.....	297

List of figures

Figure 1. Distribution of AONBs and National Parks across England and Wales.....	9
Figure 2. Progression of ideas relating to Natural Beauty factors (1993 - 2011).	27
Figure 3. Prevalence of <i>scenery</i> and <i>landscape</i> in discourse (English 2019 corpus).....	55
Figure 4. Comparison of key terms used in the main reports.	56
Figure 5. The range of terms and required attributes used by Hobhouse.	58
Figure 6. Requirements on land for designation as an AONB.	60
Figure 7. Phrases relating to the preservation purpose of Conservation Areas (AONBs).....	61
Figure 8. A representation of Natural Beauty as intended by the 1949 Act	85
Figure 9. A comparison between models of Natural Beauty	112
Figure 10. The secondary emotions.	145
Figure 11. Interpretation of the secondary emotion model.....	145
Figure 12. Engagement with beauty scale	145
Figure 13. MEOPPL ‘measures’ in relation to NE’s Natural Beauty indicators.	163
Figure 14. SSSIs in English National Parks and AONBs in Favourable condition.....	167
Figure 15. Proportion of Managed Woodland in AONBs	169
Figure 16. Environmental Stewardship summary data for all England AONBs.	172
Figure 17. Verification test for natural beauty map	175
Figure 18. Allocation of indicators to Natural Beauty components	178
Figure 19. Summary of LVIA method.....	181
Figure 20. Data properties from 25 LVIA’s.....	183
Figure 21. Final Effects rating scores for Natural Beauty	185
Figure 22. Distribution of rating scores for Natural Beauty effects	185
Figure 23. Types of landscape receptor used.....	187
Figure 24. Rating at each decision stage prior to Final effects score	188
Figure 25. Final effects ratings for landscape receptors	188
Figure 26. Distribution of landscape and visual receptor counts for all LVIA’s.....	189
Figure 27. Comparison between number of landscape and visual receptors.	189
Figure 28. Types of visual receptor used in LVIA’s.....	191
Figure 29. Distribution of Final effects ratings scores for visual receptors.....	191
Figure 30. Reasons given for Final effects ratings	192
Figure 31. Analysis of weighting scales	194
Figure 32. The Public Value Framework.....	200
Figure 33. The factors investigated in this thematic study	202
Figure 34. The Natural Beauty policy field in relation to AONBs.....	204
Figure 35. Description of communities of practice investigated in this thematic study.....	205
Figure 36. Investigative activities undertaken by the Study communities	207
Figure 37. Summary of workshop and survey activities undertaken by participants	211
Figure 38. Interpretation of the meaning of <i>Natural Beauty</i>	215
Figure 39. The extent to which Natural Beauty is attributed to countryside features.	217
Figure 40. Example of planning officer workshop outputs	218
Figure 41. Frequency of themes associated with <i>Natural Beauty</i>	219
Figure 42. Frequency of themes relating to enhancement of Natural Beauty.	221
Figure 43. Views on the powers of local authorities to protect AONBs	222
Figure 44. Sample of Diamond 9 workshop outputs	223
Figure 45. Ranking of Natural Beauty sub-factors.	224
Figure 46. Generation of Natural Beauty sub-factors.....	226
Figure 47. Word counts of different Natural Beauty themes in Management Plans.	227

Figure 48. Count of emotion and perception-based words in Management Plans	227
Figure 49. Comparison between themes associated with Natural Beauty and landscape. ..	228
Figure 50. Words associated with ‘landscape’	229
Figure 51. Perceived relationship between Natural Beauty and landscape quality.	230
Figure 52. Relative proportion of key terms used in AONB Management Plans.....	231
Figure 53. Distribution of themes associated with the term ‘beauty’	232
Figure 54. Distribution of themes associated with beauty by community of practice.....	233
Figure 55. The role of different senses in an experience of Natural Beauty.	234
Figure 56. Activity engaged in when last experiencing Natural Beauty	234
Figure 57. Feelings associated with an experience of beauty in the countryside	235
Figure 58 Nature Relatedness Scores (NR6) for CoPs.	236
Figure 59. Features which prompt a real sense of wildness in the countryside.....	236
Figure 60. Examples of participant sketches.	238
Figure 61. Number of features recorded in sketches	239
Figure 62. Types of features recorded in sketches.....	240
Figure 63. Factors associated with an experience of outstanding beauty	240
Figure 64. Emotions registered in an experience of outstanding Natural Beauty	241
Figure 65. Comparison between emotions reported for beauty and meaningful place	241
Figure 66. Example of participants’ diaries.....	242
Figure 67. Responses to questions about beauty in public policy.	252

Terminology

Throughout this study:

National Parks and Access to the Countryside Act (1949) is referred to as ‘the 1949 Act’.

‘Natural Beauty’ is regularly capitalised to indicate that its meaning relates to the legislative intent of the 1949 Act (unless contained in a quote). Where natural beauty is mentioned purely as a general philosophical concept, it is not capitalised.

Terms in italics e.g., *Natural Beauty*, should be read as ‘the term Natural Beauty’.

Preservation is used to represent the legal intent of the 1949 Act – ‘preservation and enhancement of Natural Beauty’. The Countryside and Rights of Way (CRoW) Act 2000 replaced *preservation* in the AONB purpose with *conservation* (retaining ‘and enhancement’) but in this study I mostly use *preservation* to denote legal intent.

This study is concerned with fuzzy concepts denoted by *nature/natural*, *beauty*, *landscape*, and *countryside* whose interpretation in scholarship and policy is not necessarily consistent across disciplines nor with the meanings set out in the Oxford English Dictionary. In this study *countryside* is used to describe a rural area including its settlement and routeway networks. The meaning of other terms is discussed within the text.

Abbreviations

AONB	Area of Outstanding Natural Beauty
BBBBC	Building Better Building Beautiful Commission
BNG	Biodiversity Net Gain
CA	Countryside Agency
CBA	Cost Benefit Analysis
CCW	Countryside Council for Wales
CoCo	Countryside Commission
CoP(s)	Community(ies) of Practice
CQC	Countryside Quality Counts
CPRE	The Countryside Charity, formerly known as the Council for the Preservation of Rural England
CRoW	Countryside and Rights of Way Act 2000
Defra	Department for the Environment, Food and Rural Affairs
DLUHC	Department for Levelling Up, Housing and Communities
DL	Designated Landscapes (AONBs and National Parks)
EIA	Environmental Impact Assessment
ELC	Council of Europe Landscape Convention
EN	English Nature
ESF	European Science Foundation
GLVIA	Guidelines for Landscape and Visual Impact Assessment
HWJAC	High Weald Joint Advisory Committee
IEMA	Institute of Environmental Management and Assessment
IUCN	International Union for Conservation of Nature
LCA	Landscape Character Assessment
LUC	Land Use Consultants
LI	Landscape Institute
LVIA	Landscape and Visual Impact Assessment
MEOPL	Monitoring Environmental Outcomes in Protected Landscapes
MHCLG	Ministry for Housing Communities and Local Government
NAAONB	National Association for AONBs
NCC	Nature Conservancy Council
NPCn	National Parks Commission
NPCe	National Parks Committee
NPPF	National Planning Policy Framework
NE	Natural England
NERC	Natural Environment and Rural Communities
NGO	Non-Governmental Organisation
NPM	New Public Management
OED	Oxford English Dictionary
RSPB	Royal Society for the Protection of Birds
SSSI	Site of Special Scientific Interest
TWBC	Tunbridge Wells Borough Council
UN	United Nations
WCSC	Wildlife Conservation Special Committee
1949 Act	National Parks and access to the Countryside Act 1949

Natural Beauty: a term fit for public policy in the 21st century?
**Exploring changes in the meaning and measurement of Natural
Beauty in AONB policy since 1949**

'This flag of beauty, hung out by the mysterious universe, to claim the worship of the heart of man, what is it, and what does its signal mean to us? There is no clear interpretation. But that does not lessen its value. Like the universe, like life, natural beauty is also a mystery' G.M. Trevelyan 1949, p. 106.

Chapter 1 Introduction

Beauty has been associated with what is just and good in Western tradition since the Ancient Greeks (Eco 2010; Diessner et al. 2008) with ‘Nature’ understood in its broadest sense as ‘all which Philosophy distinguishes as NOT ME’ (Emerson 1836, p. 7). Natural Beauty described the ‘perfect harmony’ between people and nature (Trevelyan 1949, p. 104), and with such distinguished roots perhaps it is understandable that the term ‘Natural Beauty’ was chosen by the post-war Labour Government led by Clement Atlee to front one of its flagship policies to transform Britain (Mullin 2016; Bew 2016). The National Parks and Access to the Countryside Act was passed in 1949 (hereafter called the 1949 Act) with Natural Beauty its golden thread. The term was used to serve three functions. Firstly, as a statement of intent – ‘preservation and enhancement of natural beauty’ – in relation to the general remit of the new National Parks Commission (NPCn), and as the primary purpose of designating Areas of Outstanding Natural beauty (AONB) and National Parks (Part 1, Section 1(a)). Secondly, in relation to the criteria for designation – ‘of such outstanding natural beauty’ for AONBs (Part VI, Section 87(1)) and ‘by reason of their natural beauty’ for the Parks (Part II, Section 5(1)). Thirdly, in the designation name itself – ‘Areas of Outstanding Natural Beauty’¹. Seventy years on, there are 46 AONBs and 15 National Parks in Great Britain and Northern Ireland, with a 24.5 % coverage of the land area of England (Glover 2019). If the 1949 Act’s ambitions had been realised, beauty should now be at the centre of land use decisions, but this is not what happened.

This study investigates the role of Natural Beauty in public policy in England, why the importance of beauty receded, what ideas replaced it, and the extent to which the 1949 Act’s

¹ On 22nd November 2023, AONBs were rebranded as National Landscapes. AONB remains the legal and formal term.

ambitions for its preservation are still relevant to land use policy and nature conservation management today.

1.1 A brief history of Natural Beauty in public policy

Despite the declaration in 1918 by the avant-garde poet, Tristan Tzara, that ‘...beauty is dead’ from which, arguably, the importance of beauty in art never quite recovered (Hromas 2016), beauty was a strong motivating force in countryside policy in the first half of the 20th century (see e.g., William-Ellis 1938; Trevelyan 1949 & 1929). It was by no means certain that Natural Beauty would come to define the ambitions of the 1949 Act, although it was present at the start. Its first mention in policy was at the National Trust’s inaugural meeting in 1894. A constitutional resolution was passed, moved by one of its founders Octavia Hill, stating the desirability of enabling places to be dedicated to the nation for their ‘natural beauty’ as well as their historic interest (Murphy 2002, p. 106). The term was incorporated in the 1907 Act to establish the ‘National Trust for Places of Historic Interest and Natural Beauty’, but it was not defined (Hall 2003). On the death of its founders, the Trust’s nation-wide campaigning spirit was taken up by the Council for the Preservation of Rural England (CPRE), formed in 1926 (Ibid.). In 1929, Ramsay Macdonald’s government indicated it was serious about the idea of protecting areas for their Natural Beauty, setting up a National Park Committee (NPCe) under the chairmanship of Rt Hon Christopher Addison MP (Yapp 1984). The committee concluded that ‘areas of natural beauty’ needed protecting from ‘disorderly development and spoilation’ (NPCe 1931, p. 39). Progress was slow until a civil servant, John Dower, was appointed to look at the issues in 1942 (Sheail 1984). Dower’s report proposed that the purpose of legislation should be preservation of the ‘characteristic beauty of the landscape’ (1945a, p. 15). The subsequent National Parks Committee (NPCe) chaired by Arthur Hobhouse and set up to consider Dower’s proposals used both ‘landscape beauty’ and ‘natural beauty’ in its recommendations to Government (see e.g., NPCe 1947, p. 8). No evidence has been found

indicating that any discussion around choice of terms took place during the drafting of legislation, but it was *Natural Beauty* that was selected for the 1949 Act (Holdaway 2007).

In the latter half of the 20th century, the idea of beauty retreated from being a laudable principle of public policy to the domain of personal preference and experience (Herrington 2016; Kieran 2010; Powers 2010). The geographical extent across which the Countryside Commission (NPCn's successor body) was required to consider Natural Beauty shrank from all of England and Wales to 'the countryside' (The Countryside Act, 1968 s1(2)), disappearing altogether when Natural England was created with an amended responsibility for 'conserving and enhancing the landscape' (NERC Act 2006, s2(2)). Natural Beauty remained the primary purpose of AONBs and National Parks, but became largely silent in decision-making², replaced by a simplified technical lexicon associated with the discipline of landscape. In addition, the intention of the 1949 Act to do no harm to beauty which was, arguably, a very modern concept in its reflection of the precautionary principle now embedded in international environmental law (Wiener 2007; UN 1992), has been reframed as a quantifiable problem. The second half of the 20th century saw a high modernist approach to public policy adopted which was predicated on simplification, systemisation, and measured accountability (Raworth 2017; Goodin, Rein & Moran 2011; Lawton 2005). In common with other public policy areas, preservation and enhancement of Natural Beauty now relies on measurement techniques to demonstrate policy success. Seventy years on from the 1949 Act, *Natural Beauty* remains largely undefined in relation to legislation, and its treatment in land use policy and planning rests on guidance and techniques developed through seven decades of practice in the discipline of landscape rather than aesthetics.

² Beauty reappeared in the *25 Year Environment Plan* (HM Government 2018) as an objective for the wider natural environment not just designated landscapes (see e.g., p.28).

1.2 Understanding *Natural Beauty*: current state of knowledge

The 1949 Act did not define *Natural Beauty* or expound any underlying aesthetic theory. It did, however, add a qualification,

‘References in this Act to the preservation of the natural beauty of an area shall be construed as including references to the preservation of the characteristic natural features, flora and fauna thereof’ (Section 114 (2)).

The insertion of ‘including’ suggests that a wide interpretation is assumed encompassing more than just the features listed (Holdaway 2007). Huxley, a member of the NPCe, provides an indication of the thinking, noting that the preservation of Natural Beauty is ‘the whole principle underlying the planned utilization of our limited resources’ (WCSC 1947). However, by the 1970’s use of *Natural Beauty* was on the wane and policy makers seemed less confident about its meaning. The Countryside Commission advised that ‘there is doubt about the meaning of ‘natural beauty’’ and proposed instead the use of ‘landscape quality’ to justify an area’s value, suggesting that quantification methods to evidence it were more advanced (1971, p. 16). The Natural Beauty purpose for AONBs was re-confirmed by the Countryside and Rights of Way Act (CROW) 2000 but, in the absence of a definition for *Natural Beauty*, AONB partnerships were unclear about the scope of their responsibilities. In order to assist, the Countryside Agency issued non-technical guidance for the sector,

“‘Natural Beauty’ is not just the look of the landscape, but includes landform and geology, plants and animals, landscape features and the rich history of human settlement over centuries’ (Countryside Agency 2001b, p. 6).

The statement again indicated a broad interpretation and specifically recognised the cultural nature of designated landscapes, but it had no legal status. Uncertainty about the inclusion of landscapes with a high cultural imprint erupted at the New Forest National Park Inquiry (see

‘Meyrick Estate Management Ltd & Ors v Secretary of State for the Environment and Rural affairs’ 2005). Clarification that they could be included was provided subsequently by the Natural Environment and Rural Communities Act (NERC) 2006.

Pressure to review designation boundaries led Natural England (NE) to publish draft designation guidance in 2011 which includes an evaluation framework outlining a representational model of Natural Beauty. Six Natural Beauty factors – landscape quality, scenic quality, relative wildness, relative tranquillity, natural heritage features, and cultural heritage – are identified and supported by 31 variables (indicators). Naming these factors has for the first time given form and meaning to *Natural Beauty*³ (2011, p. 13). The six-factor model is used to assist judgements of sufficiency of Natural Beauty for boundary review (see e.g., NE 2018) and underpins the recently published Natural Beauty map and metric (LUC 2022a), but it is not used in statutory AONB Management Plans to identify the Natural Beauty to be preserved. Management plan guidance instead recommends the use of characterisation to describe Natural Beauty. Some Plans adopt landscape/historic characterisation approaches while others use a mixture of locally determined ‘special qualities’ (CA 2006 and 2001a). Inconsistency between the interpretation of *Natural Beauty* for the purposes of designation and to identify the features to be preserved and enhanced creates ongoing confusion, although revised management plan guidance currently in preparation may bring both in line with the six-factor Evaluation Framework⁴.

³ When the Evaluation Framework for Natural Beauty was published as part of draft designation guidance in 2011, the Chairman of South-East and East Protected Landscapes (SEEPL) wrote to the Chairman of NE challenging the model for its inconsistencies and upland bias. The document was subsequently withdrawn and remained as a Draft version and unpublished for some years until Gov.uk replaced NE’s website in 2018 when a simplified summary of the Framework’s six factors appeared on the landing page for AONBs and National Parks without reference to its origin. The full designation guidance including an unmodified Evaluation Framework has recently been republished on Gov.uk to support AONB boundary reviews (see e.g., Hankinson Duckett Associates 2013).

⁴ Natural England’s Management Plan Guidance Steering Group, 10th March 2023.

Despite the persistence of *Natural Beauty* in legislation, its interpretation in policy and practice has attracted very little scholarly attention. Selman and Swanwick's *On the Meaning of Natural Beauty in Landscape Legislation* (2010) based on work for the Welsh Government, is the main study in the field. Selman and Swanwick take a landscape perspective, setting out what they term a 'modern understanding of natural beauty' and define it as 'concerned with', 'related to', and 'about' – landscape (Ibid., p. 22). For others, beauty remains at the heart of the legislation. Holdaway's (2007) study of the intentions of the 1949 Act, also commissioned for the Welsh Government, observes the centrality of beauty in government discourse leading up to the 1949 Act, drawing attention to the wide range of words used to preface it. In Fiona Reynolds book *The Fight for Beauty: Our Path to a Better Future* (2016) she strikes a more campaigning tone, championing Natural Beauty as a public policy principle. Arguably, through promoting her passion for Natural Beauty, Reynolds revived 'beauty' in the lexicon of the AONB sector⁵ and facilitated its inclusion in the *25 Year Environment Plan* (HM Government 2018)⁶. More recently Jenkins, an environmental lawyer, has come to the defence of *Natural Beauty* for its contemporary resonance, observing its longevity in policy and arguing that, while Natural Beauty as an aesthetic concept is a challenging notion in law, it can form the basis of a 'reasoned, robust and transparent system' providing the associated aesthetic theory is clarified (2020, p. 23). Jenkins suggests that the field remains open for someone to explore Natural Beauty through an aesthetic perspective (2020). An ambition this study intends to realise.

⁵ Fiona Reynolds was a keynote speaker at the NAAONB Conference in Colchester in 2019.

⁶ Fiona Reynolds was a member of the Landscapes Review panel chaired by Julian Glover and appointed by Michael Gove, then Secretary of State at Defra, who oversaw preparation of HM Government's 25-Year Environment Plan (2018).

1.3 The challenge: Natural Beauty – a ‘wicked’ problem?

The absence of a consistent definition for Natural Beauty in policy or scholarship has allowed multiple interpretations to develop in practice, with actors tailoring their version in support of their own arguments. Volume housebuilders claim that it is about fossilising the countryside, preventing necessary new homes (see e.g., DLUHC 2023), while environmental NGOs argue that its people-centred focus on cultural landscapes diminishes the importance of nature recovery and obstructs the rewilding necessary to meet climate and nature recovery targets⁷. In planning policy, conserving and enhancing Natural Beauty is considered synonymous with conserving and enhancing landscape, which is treated as a static scene harmed only by visual intrusion (see e.g., TWBC 2021), while natural environment policy evaluates Natural Beauty as a measurable subset of environmental health (see e.g., Bingham 2014). In common language and non-expert discourse, Natural Beauty is a subjective ‘eye-of-the-beholder’ quality while its 1949 Act manifestation as AONBs and National Parks is challenged as an elite, male, white and western construct (see e.g., Place Collective 2021; Herrington 2014).

Lack of clarity about its meaning frequently frustrates those required to apply Natural Beauty policy in decision-making with critics arguing that *Natural Beauty* is ambiguous, confusing, subjective, or outdated. For instance, Mr Justice Sullivan remarked ““more modern” legislation would not be satisfied with such a straightforward and simple concept as “natural beauty””⁸ (although its seeming simplicity has defied attempts to define it). Similarly, Appleton observed it had become a ‘meaningless cliché’ (1994, p. 113), while Selman and Swanwick consider that it has been ‘stretched to the point where its continued policy and legal fitness is

⁷ South East regional eNGO meeting, 29th January 2020.

⁸ ‘Meyrick Estate Management Ltd & Ors v. Secretary of State for Environment, Food and Rural Affairs’ (2005).

questionable' (2010, p. 4). Others regard it as an important concept in policy, nonetheless, providing specific meaning is assigned to it (Jenkins 2020; Parsons 2008).

Questions remain about whether the Natural Beauty policy problem relates to how it is interpreted or how policy success is measured. Probing any of the assumptions underpinning its use in public policy reveals the 'wicked' nature of the problem (Dronova 2019; Rittel & Webber 1973). Its meaning is queried because of a political need to demonstrate that policy goals are being delivered and resources have been allocated wisely, but the measurement problem is difficult to define because pursuing a solution returns us to the question, just what is Natural Beauty? Exploring measurement techniques in practice exposes the different mental models of Natural Beauty held subconsciously by decision-makers, prompting further challenges about whose perspectives are deemed legitimate. The inherent complexity of the topic and lack of linear logic pathway from research question to solution frustrates the search for its cause (Ibid.). Searching for solutions requires strategic and multi-scale thinking involving complexities across multiple domains – human systems, natural systems and their interactions over place and time (Dronova 2019; Head & Xiang 2016; Head & Alford 2015) but, like other wicked policy problems, it is only by exploring solutions that the problem is fully understood (DeFries & Nagendra 2017; Rittel & Webber 1973).

1.4 Study purpose and rationale

This study adopts Jenkin's (2020) recommendation that the starting point to understand Natural Beauty lies in its interrogation as an aesthetic concept. However, rather than viewing it through the lens of modern aesthetic theory, I focus on the historic context and consider aesthetic theory prominent in the decades preceding the 1949 Act, tracking this through to the present day to explore the changing dispositions of decision-makers. While Natural Beauty in public policy is a broad theme, I limit the scope of this study primarily to AONBs. Anyone interested in how

Natural Beauty has been operationalised in policy will need to disentangle beauty from other considerations. While both AONBs and National Parks share a common Natural Beauty purpose, the Parks' Natural Beauty purpose has been amended to add 'wildlife and cultural heritage' (Environment Act 1995, s61(1)(1a)), and Parks have a second purpose concerning public enjoyment. Exploring Natural Beauty decisions in the National Parks is therefore complicated by overlapping concepts of wildlife, cultural heritage, and access. To mitigate the problem, this study focuses on AONBs who retain the singular purpose of conserving⁹ and enhancing Natural Beauty. They have, in addition, a designation name – Area of Outstanding Natural Beauty (AONB) – rather than '... Park', which should leave decision-makers in no doubt about the policy intent.

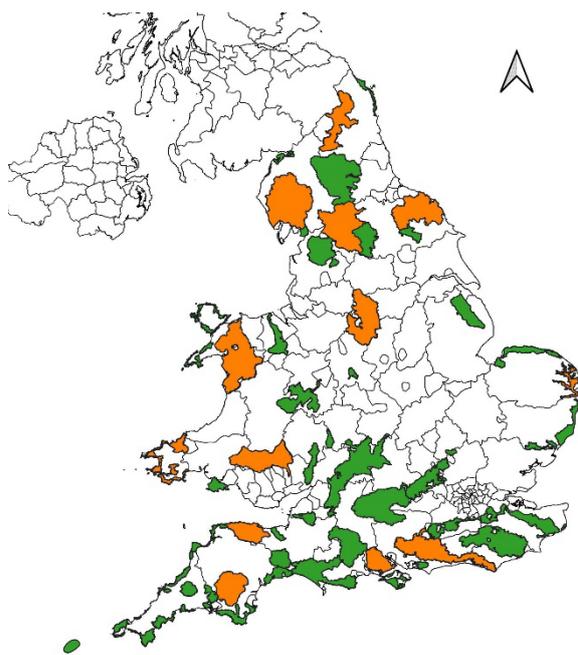
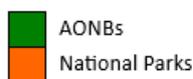


Figure 1. Distribution of AONBs and National Parks across England and Wales.



Today, AONBs cover nearly twice the area of National Parks in England and are home to a population of 1.2 million, six times than that of National Parks. AONBs include spectacular coasts, extensive areas of moor and heath, and iconic lowland cultural landscapes (Figure 1). Most scholarly work exploring the 1949 Act and its legacy has, however, been carried out from a National Parks perspective (see e.g.,

⁹ Changed from 'preservation' (in the 1949 Act) by the Countryside and Rights of Way Act (CRoW) 2000.

Reynolds 2016; Mair & Delafons 2001; Blunden & Curry 1990; MacEwan & MacEwan 1982), and AONB designation has received very little attention in scholarship (Anderson 1990). There are two notable exceptions, Margaret Anderson (1990, 1981, 1980), whose comprehensive studies of AONB designation in the 1980's and 90's provides an AONB perspective on history and land use; and Holdaway and Smart's book *Landscapes at Risk?* (2001), which considers the management of AONBs and their future. In addition to these, there are a handful of documents commissioned by public bodies about AONBs, notably Kenneth Himsworth's (1980) review of AONBs for the Countryside Commission (CoCo), and a number of AONB policy statements (e.g., CA 2001a; CoCo 1998, 1991a).

Despite the retreat of beauty generally in public policy, empirical surveys show that people still consider that the beauty of the natural world belongs in some way within its remit (Parsons 2010). In this study I consider whether Natural Beauty, far from being an obsolete concept, has increasing resonance today. I consider whether *Natural Beauty* might be a less bureaucratic term than *landscape* and less utilitarian than the currently popular *natural capital* and investigate whether its resistance to easy measurement and necessary requirement for hard thinking (Brady 2003) might actually be an advantage. At a time when soaring ambition and a shared sense of purpose is needed by society to reverse the catastrophic decline in the natural world and improve the well-being of the nation, I conclude that Natural Beauty, with its associated values of justice, health, and happiness, is as relevant today as it was in 1949. Natural Beauty offers, as I discuss in the following chapters, an interdisciplinary meeting place for a shared civic discussion about the societal value of land and the living things which share its space, rather than the all-too-common trade-off between economic and other objectives (see zu Ermgassen 2022).

1.5 Research aims

Seventy years on, a policy designed in the first half of the 20th century now applies across one quarter of England, yet we have no agreed conceptual framework to decide to what extent the policy is working. This study examines the intentions of the 1949 Act and its legacy in policy today with the aim of formulating a unifying theoretical framework (or ‘plausible model’) for Natural Beauty which can better support decision-making and improve the likelihood of policy success. In order to achieve the above, this thesis seeks to answer the following research questions:

1. What did the architects of the 1949 Act understand by *Natural Beauty*, what assumptions were made, and what were their intentions for its preservation?
2. How has the framing of Natural Beauty in public policy changed over time, why, and what are the implications?
3. How has policy success in terms of preservation of Natural Beauty been measured and monitored?
4. How do present day decision-makers understand Natural Beauty, and how might their interpretation of it effect policy success?

1.6 Approach to the study

Natural Beauty is by necessity interdisciplinary and as a subject of study cannot be easily pigeon-holed (Bakhshi 2010). Bourassa describes this with feeling as ‘excruciatingly interdisciplinary’ (1991, p. xiv). In one of the few lectures on the subject, Brady (2015) observes the absence of beauty from contemporary geographical scholarship and its flattening to a form of quantifiable visual scenery in landscape assessment. Brady argues for a more philosophical approach to the problem rooted in conceptual inquiry informed by empirical evidence (Ibid.). Mindful of Brady’s comments and aware of the challenges made by scholars

about the lack of theory underpinning many studies of nature/landscape aesthetics (Jenkins 2020; Butler 2016; Bourassa 1991), this study draws on aesthetic theory and supplements insights with empirical evidence. However, it is not a philosophical contemplation of the idea of natural beauty per se. Rather, it focuses on how *Natural Beauty* has been understood and operationalised in public policy.

To compare and contrast different approaches to the meaning and measurement of Natural Beauty, I view all interpretations as representational models (or metaphors) for Natural Beauty and ask whether they are adequate for the intended policy purpose (Thompson 2022). This involves questioning whether models include relevant and sufficient information; whether identified variables are weighted logically, and whether assumptions and uncertainty statements are made explicit as part of the narrative (Ibid.).

In the absence of a single unifying public policy theory, I draw on a range of theoretical and analytical frameworks to seek explanations for the ‘why’s’ and ‘how’s’ of Natural Beauty policy (Cairney 2019, Smith & Larimer 2009). In common with policy studies generally, this study is concerned with consequences, the outcomes of the actions and behaviours of those who interpret and apply the policy (Goodin, Rein & Moran 2011). In the first half of the 20th century, central Government’s role in policy making closely resembled that of the traditional policy cycle with clear initial phases of agenda setting, policy formulation and legitimisation (Kulaç & Örgür 2017; Smith & Larimer 2009; Jones 1977; Lasswell 1970). Policy intent in this period can be more readily understood from discourse surviving from the (mostly elite) actors who set the agenda and rationale through their writings. To study these texts in chapters 2 and 3, and understand their interpretation of *Natural Beauty*, I use Fairclough’s *Analysing Discourse: Textual analysis for social research* (2003) written for social scientists. Although there is no single ‘truth’ to be uncovered in an exploration of the meaning of *Natural Beauty*, an understanding of its meaning in the context of the 1949 Act can be agreed upon through

analysing language (George 2021; Gadamer 2004; Warnke 1987). Fairclough (2003) explains that this interpretation is a complex process – partly a matter of understanding what words mean, partly judging the intent or otherwise of the social agent themselves, and partly understanding influences from the social or institutional context in which events take place, with meaning resulting from the interplay of all three. In chapters 2, 3 and 7, I supplement this qualitative textual analysis with a corpus-based word count analysis using *SketchEngine*, a corpus software allowing identification of keywords and patterns of co-occurrence (or collocation) between keywords and other words. For archive material such as handwritten letters or scanned images, documents need first to be converted using OCR software to a suitable file format such as .txt, although some error is possible if documents are damaged or unclear.

Campbell's *Ideas, Politics, and Public Policy* (2002) – a summary of how ideas can shape policy rather than individual self-interest (or 'rational choice') – is used in chapter 4 to explore how taken-for-granted paradigms and normative ideas residing in the background of policy making has constrained how Natural Beauty was interpreted and assessed in the years following the 1949 Act. As Campbell recommends, I pay attention to the causal processes by which ideas exert effects on policy, identifying how actors and the institutional conditions under which they exert influence shapes how policy is translated into practice. Closely aligned to the influence of ideas is the power of narrative to sustain ideas and maintain coalitions of elite actors (Jones & McBeth 2010). In chapters 2, 4, 6 and 7, I have kept in mind how the persuasiveness of narratives and credibility of the narrator described in Jones and McBeth's *A Narrative Policy Framework: Clear enough to be wrong?* (2010) can shape individual beliefs and actions about Natural Beauty.

It is arguable whether the communities involved in Natural Beauty policy are truly 'epistemic' (Haas 2021, 1992). What is considered trusted and expert knowledge in the field –

the normative beliefs, shared knowledge and agreed set of practices – tends to be held by professional members of the Landscape Institute who perceive themselves as outside AONB policy. However, the principles of epistemic communities (Haas 2021) and forms of social learning they engage in (Dunlop & Radaelli 2018; Hall 1993) are relevant to chapters 4 and 7 which consider the role AONB teams and planning decision-makers play in institutionalising these views and using them to define problems and identify solutions.

Today, significant shaping of policy occurs at a local level, often relying on collective norms and persuasion (Cairney 2019; Goodwin, Reid & Moran 2011). Here the idea that social agents construct reality both individually and collectively is helpful in explaining outcomes (Hilgers & Mangez 2015; Wacquant 1992; Bourdieu 1984). Bourdieu is under-utilised in organisational studies (Emirbayer & Johnson 2007), but I draw on it here, utilising Bourdieu's idea of 'field' – a relational concept anchored in forms of power (or capital) – to assist me in Chapter 4 and 7 to identify social agents who influence AONB policy to varying degrees but are usually considered to be entirely external to it. Recognising that individual actors bring durable dispositions conditioned by social origins and formative experiences ('habitus') has informed my approach to investigating the position-taking of individual decision-makers in relation to Natural Beauty in chapter 7. Where these individual decision-makers engage in sharing and learning based on their common interests they are grouped into Communities of Practice (CoP) for analysis in chapter 7 (Lesser & Stock 2001; Wenger 1998). These communities are defined by their shared domain of interest, the competencies within which they interact, innovate and problem solve, and their shared tools and narratives (Wenger-Traynor 2015; Wenger 1998).

In public policy it is also important to recognise other influences, including cognitive limitations and behavioural constraints arising from the ingrained dispositions of individual decision-makers (Bourdieu 1984) and the effects of the decision-making environment. These

latter issues can manifest as time pressure and limited access to information and specialist skills (Wheeler 2020; Flache & Dijkstra 2015). Trading accuracy for effort in these situations is commonplace (Wheeler 2020; Van der Pligt 2015; Stigler 1961) with rational choice theories explaining the use of heuristics (cognitive short-cuts) by public sector actors in chapter 4 and 7 to reduce the complexity of decisions (Dhami, al-Nowaihi & Sunstein 2019; Dale 2015; Flache & Dijkstra 2015) and help avoid social traps or minimise the reputational risk from challenging normative views (Flache & Dijkstra 2015).

In gathering data about individual dispositions towards Natural Beauty in chapter 7 and exploring any differences between communities of practice, I use grounded theory (Charmaz 2006; Glaser & Strauss 1967). The interpretation of *Natural Beauty* is contested and the language around it is fluid, often mutating into other equally contested terms related to landscape, hence applying established theories of nature/landscape aesthetics is problematic. Grounded theory allows me to ask open questions in order to identify patterns in meaning and approach the topic from different angles triangulating emerging themes and ideas (Heale & Forbes 2013). I use thick description (Geertz 1973) to map out this complex terrain (see e.g., Bormpoudakis & Tzanopoulos 2019) and explain how Natural Beauty is interpreted today, how this interpretation has changed over time, and why a particular path was followed, and others abandoned.

Rittel and Webber (1973) observed how defining problems in public policy, particularly planning policy, and locating their cause becomes ever more difficult as we realise how interconnected and multi-scaler social and ecological systems are. These ‘wicked’ problems do not lend themselves to a linear study. Investigating a wicked problem requires diving in somewhere and continually revising and reviewing where the topic is approached from and how it is characterised (Head & Alford 2015; Rittel & Webber 1973). In approaching this study, I explored the meaning and measurement of Natural Beauty simultaneously, employing a

hermeneutic approach – circular and iterative – regularly testing ideas about how the two main aspects of the problem relate to each other and allowing the results to come into view as my understanding became deeper and richer (George 2021). The results, however, are presented here in a more linear form, with a narrative that runs along a quasi-historical timeline from the early 20th century writings of the architects of the 1949 Act to the actions of decision-makers today. To draw attention to paths that could have been taken but were not, I thread counterfactual arguments (‘what ifs?’) and observations on hidden assumptions and implications through the narrative of this study.

1.7 Positionality

I have been immersed in the AONB sector for 30 years as Director of an AONB Partnership. This embeddedness presents opportunities and challenges. On one hand, I have seen at close quarters the growth of the sector from the early 1990s (when funding was first directed to build AONB teams), and the transition from the Countryside Commission – an avowed landscape agency – to Natural England, a body focused more on scientific nature conservation. On the other hand, just like other actors in this field, certain normative dispositions concerning Natural Beauty and landscape have become subconsciously embedded in my thinking. As Brady (2003) notes, approaching the subject of Natural Beauty requires hard thinking. To facilitate this and achieve a reflexive distance from the subject, I spent much of the early part of this study exploring different perspectives on the aesthetics of nature/landscape. I am also conscious that my instinctive interpretation of key terms is inevitably shaped by 30 years working in the sector and drawing on a particular body of knowledge and accompanying terms. To understand the intent of the 1949 Act’s architects in chapter 3, I therefore quote their words rather than paraphrasing them, and seek interpretations consistent with their historic context. Perhaps the most incisive observation on the approach to the Natural Beauty problem was made by Eric Newton,

‘[Natural Beauty] has proved impregnable to the frontal attacks of the aestheticians . . . none the less it would seem reasonable to stalk the word, to outflank it and creep upon it from behind. Eventually one must have the courage to meet it face to face, but a preliminary reconnaissance demands subtlety rather than courage’ (quoted in Born 1974, p. 16).

This thesis represents the ‘stalking’ of the Natural Beauty problem over many years.

1.8 Thesis Structure

Following the introduction which provides an overview of the thesis and explains the approach, Chapter 2 reviews the limited scholarship in the field. It charts the inconsistency and conflicting nature of the terminology used and the paucity of foundational theory connecting the key themes of landscape, nature and aesthetics which converge in Natural Beauty, illustrating why this study is needed.

Chapter 3 investigates the legal intent of the policy to preserve and enhance Natural Beauty through, for the first time, examining its historic context and what was understood by the term at the time by those who laid the foundations for the 1949 Act. The prominent aesthetic theories of the day are considered, and the discourse of key actors critically reviewed, revealing that the meaning of Natural Beauty was broader and more holistic than its interpretation today. In conclusion, a new theoretical framework for Natural Beauty in public policy is proposed which reflects the three key themes embodied in the legal term *Natural Beauty* – symbolic landscape character, physical features of interest and the pleasurable emotions people associate with an aesthetic experience in nature.

Chapter 4 situates Natural Beauty policy within the wider economic and public policy environment in which economic orthodoxy and the ideas of measured accountability shaped organisational behaviour. It investigates why the focus on beauty receded in the second half of the 20th century and how a particular interpretation of landscape came to replace it. I argue that

this was not an intentional switch, more the convergence of policy necessity (in terms of the need to demonstrate measurable accountability) with a rising profession which had established a technical expertise that met this need. However, replacing the idea of Natural Beauty with the idea of landscape brought different assumptions and mental models to the meaning and measurement problem.

In the absence of an accepted body of knowledge about Natural Beauty measurement, chapter 5 examines the scope of what this body of knowledge might encompass, and the considerable conceptual challenges involved. Scholarship concerning related concepts such as scenic beauty and landscape quality is reviewed and an understanding of modern aesthetic theory and the Natural Beauty model derived in chapter 3 drawn upon to identify relevant studies from other disciplines. It notes that the act of measurement is itself a form of meaning making and explains how selecting easily measurable things such as views and scenery has encouraged an interpretation of Natural Beauty constructed from these building blocks.

Chapter 6 analyses current approaches to measuring and monitoring Natural Beauty, demonstrating how little of this scholarship is used in practice. Two thematic studies are undertaken, the first examining methods based on Natural England's (2011) Evaluation Framework, and the second analysing the efficacy of a predictive tool from the landscape planning sector (Landscape and Visual Impact Assessment (LVIA)) in assessing the effects of change on Natural Beauty. Attempting to measure Natural Beauty has always been seen by philosophers as a foolhardy mission (Born 1974), and the results of these thematic studies suggest that the pitfalls identified in the 1960s and 70s have not yet been overcome. Approaches suffer from inadequate conceptualisation of Natural Beauty and methodological inconsistencies in the selection and weighting of indicators, how operator subjectivity is addressed, and how uncertainty is acknowledged. However, as chapter 6 recognises, the requirement for

measurement in public policy is unlikely to abate with government intent on setting new targets for AONBs (Defra 2023).

Chapter 7 investigates how the knowledge and understanding of decision-makers can shape Natural Beauty outcomes and may provide an alternative approach to measuring policy success (Barber 2017). It utilises a range of techniques developed to support the participative engagement of citizens in land use planning to analyse decision-makers' relationship with Natural Beauty. It finds that, 70 years on, individual's relationships with beauty in the countryside are very similar to that anticipated by the 1949 Act, but that in the workplace ingrained assumptions about the term *Natural Beauty* get in the way. Decision-makers in the planning community appear to overcome their instinctive beauty response and act based on a flattened understanding of the term, often shorn of human interactions, which has become the normative view in the sector. In the AONB community this is less marked, but nonetheless, uncertainty about *Natural Beauty* has led to its replacement with alternative terms which are presented as easier to operationalise.

Chapter 8 draws together conclusions from these investigations into the meaning and measurement of Natural Beauty and proposes that the term, far from being obsolete, has increased resonance today, providing its meaning in relation to the 1949 Act's intent is better defined. Crucially, bringing Natural Beauty back at the heart of AONB policy offers us a different way of seeing, and the opportunity to put the restoration of a harmonious relationship between people and nature at the forefront of policy thinking.

Chapter 2 Natural Beauty in policy: a literature review

2.1 Introduction

Scholarly explorations of the meaning of Natural Beauty in public policy are sparse. Selman and Swanwick's *On the Meaning of Natural Beauty in Landscape Legislation* (2010) remains the singular scholarly study referenced in practice, with alternative perspectives such as those proposed by Holdaway (2007) or Jenkins (2020) yet to penetrate thinking. Anyone looking to understand the meaning of Natural Beauty in policy today tends to start with policy guidance and legal precedent, where inconsistencies are immediately apparent. This chapter begins with these sources then moves on to critically review the limited scholarship which contributes to the present-day interpretation of Natural Beauty in order to set the scene for a more detailed examination of what was intended to be encompassed by *Natural Beauty* in the 1949 Act.

2.2 Natural Beauty in policy guidance and legal judgements

Natural England's *Guidance for Assessing Landscapes for Designation* (2011) states that Natural Beauty is 'not defined exhaustively in legislation' (2011, p. 11). No definition of the term was included in the 1949 Act, although a qualification was added in Section 114 (2),

'References in this Act to the preservation of the natural beauty of an area shall be construed as including references to the preservation of the characteristic natural features, flora and fauna thereof'.

The Countryside Act of 1968 was more specific about natural features, revising the latter half of s114 to '... its flora, fauna and geological and physiographic features' (s21(7)), but removing any reference to 'characteristic' features, implying that Natural Beauty could encompass common biophysical features. The 20th century interpretation of *physiography* is explained by the Oxford English Dictionary (OED) as 'physical geography; esp. the descriptive study of

landforms ...' (OED 2023). Both 'natural features' and 'physical geography' imply a wide scope of features to be considered, including features which might now come under the category of geographical expressions of culture, for example, ditch and bank systems (Anderson 2010). In 2000, the Countryside and Rights of Way Act restated the qualification explaining 'Any reference in this Part to the conservation of the natural beauty of an area includes a reference to its flora, fauna and geological and physiographic features'(s92(2)), with the retention of *includes* confirming a wide interpretation of Natural Beauty (Holdaway 2007). However, this breadth and what has been perceived as a lack of weight given to wildlife within the qualification, has been subject to wide-ranging challenge. The IUCN is concerned that insufficient focus on nature conservation compromises the status of AONBs as Category V Protected Areas (see e.g., IUCN 2014), while planning bodies continue to query the weight to be given to biodiversity issues in planning decisions about Natural Beauty in AONBs (see e.g., Kent 2021; Slatford 2021).

Although Natural Beauty was not defined in the Act, the annual reports of the National Parks Commission (NPCn) summarised in the journal *Nature* during 1950s and 1960s do not indicate that the object of the preservation purpose was in any way unclear (see e.g., *Nature* 1966, 1961). However, in 1971, an internal Countryside Commission (CoCo) memo labelled 'In Confidence' advised that 'There is doubt about the meaning of 'natural beauty' and suggested that *landscape quality* might be a useful substitute (CoCo 1971, p. 16). This hesitancy of language in relation to Natural Beauty is evident in the first review of AONBs undertaken by Kenneth Himsworth in 1978. Himsworth was asked by CoCo to undertake a review of AONBs as a 'personal study'¹⁰ (Himsworth 1980 p. 11). He notes the requirement of the 1949 Act that areas to be designated as AONBs have 'outstanding natural beauty', but explains, 'this

¹⁰ Himsworth was previously the National Park Officer in the Lake District.

has been translated as “landscape of scenic beauty” (1980 p. 86), thereby downplaying the role of flora and fauna. Himsworth makes no further comments about the meaning of Natural Beauty, but the uneasy relationship between landscape and nature is again evident in his recommendations. He acknowledges that the statutory term is ‘natural beauty’ then proceeds to suggest that planning authorities formulate policies for the protection of areas of ‘landscape beauty’, while on the previous page explaining that nature and landscape are different, although closely linked (1980, p. 88).

As well as inconsistencies in the relationship between landscape beauty and Natural Beauty, policy-related discourse exhibits some confusion about the differences in interpretation of *Natural Beauty* between the designation criteria and the preservation purpose. The issue emerged in the 1990s primarily in relation to National Parks and was prompted by a challenge to the designation of the New Forest National Park (NFNP) which exposed an inconsistency in the Environment Act 1995. The Environment Act 1995 had added ‘... wildlife and cultural heritage’ to the National Parks’ preservation purpose but left the designation criteria unchanged as simply ‘natural beauty’ (1995, s61(1)). In a subsequent High Court judgement¹¹, Mr Justice Sullivan rejected the Countryside Agency’s contention that cultural heritage could also reasonably apply to the designation criteria. He concluded that the use of ‘natural’ in the 1949 Act must mean ‘relative “naturalness”’ and could not be substituted by a test of “visual attractiveness” or “landscape quality” which were different concepts¹². He added that, once an area is designated, other features may need protecting even while they are ‘wholly lacking in

¹¹ The case of ‘Meyrick Estate Management Ltd & Ors v. Secretary of State for Environment, Food and Rural Affairs’ (2005).

¹² He explained that his interpretation was reflected in the Department of Environment Circular 12/96, although the quotation provided from the relevant paragraph mentions ‘wildness’ rather than ‘naturalness’ and no explanation is given for this discrepancy.

beauty’¹³. Although AONBs were not the subject of this judgement, two key issues arise. Firstly, Mr Justice Sullivan’s ascertain that history, cultural associations and archaeology are not important in assessing whether an area has sufficient Natural Beauty for designation is at odds with the reasons given by the National Parks Commission (NPCn) for the designation of many AONBs. In the NPCn’s reports on AONB designation, the contribution made by cultural heritage is clear with features such as fishing villages, castles, villages, language traditions and landscape archaeology, all mentioned as important contributors to Natural Beauty (see e.g., NPCn 1955). The second issue relates to his suggestion that the factors added to the National Park purpose by the Environment Act in 1995, namely wildlife and cultural heritage, were added to encompass those features that lacked sufficient beauty but still require protection. For AONBs, whose purpose remains solely Natural Beauty, this implies that preservation is directed only at those features that are considered sufficiently beautiful and not at more commonplace features – an approach which would require bringing aesthetic judgement to bear on individual features¹⁴.

To resolve the exclusion of cultural heritage from the designation purpose that the judgement implied, an amendment to the designation criteria for National Parks was added to the Natural Environment and Rural Communities Act (NERC) 2006 which allowed Natural England to take into account wildlife and cultural heritage (in their own right) alongside Natural Beauty in the designation of National Parks (s59(1)). This confirmed that designation of new National Parks could include land that was ‘not wholly natural’ and even settlements could have cultural heritage qualities that added weight to the case for designation (Parry 2008).

¹³ ‘Meyrick Estate Management Ltd & Ors v. Secretary of State for Environment, Food and Rural Affairs’ 2005, para 49.

¹⁴ Any consideration by Government agencies of the implications of this judgement for AONBs, if it did occur, has not been shared with AONBs.

However, the purpose and designation criteria for AONBs remain unchanged and the implications for AONBs remain unspecified¹⁵.

An Inquiry into the designation of the South Downs National Park (SDNP) after the NERC Act (2006) raised an additional issue (Parry 2008). Natural England argued that the traditional approach which required National Parks to be relatively wild areas possessing ‘characteristic natural beauty’ was wrong; these factors could be considered but were not a precursor (Ibid., p. 9). The Inspector noted that ‘characteristic natural beauty’ was not a term used in legislation¹⁶, likening it to ‘distinctive or common character’, ‘individual and coherent identity’ (Ibid., p. 19), or ‘unifying factors’ (Ibid., p. 23) and concluded it was more ‘restrictive’ than Natural Beauty which was the ‘proper test’ (Ibid., p. 22). Furthermore, he suggested that the ‘test’ might now just be ‘key characteristics’ which need not be present Park wide and might produce sub-areas which ‘can be beautiful in different ways’ (Ibid., p. 22). In doing so, the Inspector subtly altered the scale at which perceived character operates as a component of Natural Beauty from the idea of a distinctive and coherent area of countryside to a collection of landscape character areas determined at variable scales. Inspectors’ judgements, and the judgements of the Courts have driven more recent interpretation of *Natural Beauty*¹⁷, but the degree of discrepancy in their opinions is notable, as is the absence of underpinning scholarship in the case references.

The above cases suggest a degree of naturalness is an important consideration in designation, albeit interpreted in different ways, but the SDNP inquiry suggested a wider range of key characteristics be considered. This reflected the growing reliance of government

¹⁵ The Countryside and Rights of Way Act 2000 repealed and replaced s87 and s88 of the 1949 Act, bringing the AONB preservation purpose partially into line with that of National Park’s, namely to ‘conserve and enhance the natural beauty of the area’, but it did not add wildlife and cultural heritage (CROW 2000, s82(1)).

¹⁶ Although *characteristic landscape beauty* was used in the foundational reports (see Dower 1945).

¹⁷ Discussion with officers from NE’s designation team, January 2023.

agencies on landscape character assessment as a basis of evaluating Natural Beauty for designation. From the early 1990s, the Countryside Commission (CoCo) was increasingly confident in the technical ability of landscape assessment to describe Natural Beauty, suggesting that landscape assessment could ‘provide an understanding of the special character [of AONBs]’ (CoCo 1991a, p. 5), although naturalness was not proposed as a factor in characterisation (see Swanwick 2002). Since by the start of the 20th century all but two of the current AONBs had already been designated (Holdaway and Smart 2001), it is clear that landscape character assessment was not in fact being used to evaluate but rather to promote and celebrate the designation¹⁸. AONB management plan guidance at the time also relied on landscape assessment, recommending its use to identify and describe the ‘features that merit special protection’ (CA 2001a, p. 38), and suggesting that what makes the AONB significant ‘should be based largely’ on landscape character assessment (CA 2006, p. 20), an approach which ignored documents in the archive which set out the reasons for each designation¹⁹. The Countryside Agency (CA) recognised that landscape assessment might have limitations, observing that ‘describing what makes a landscape ‘outstanding’ is different from describing its landscape features’ (Ibid., p. 8), but no checks were put in place to ensure that the qualities identified at designation were adequately represented by character assessment.

Notwithstanding the nod to landscape assessment, AONB Management Plan guidance over the years provided no consistent explanation of what was meant by Natural Beauty (see CoCo 1992; CA 2001a; CA 2006). Again, the assumption appears to be that its meaning was self-evident. The most comprehensive guidance explains ‘Natural beauty’ is not just an

¹⁸ Brooke (1994) explained that the purpose of landscape characterisation was to justify the designation and contribute to a ‘celebratory description of England’ (p. 128), with the then Chairman of Countryside Commission, Sir John Johnson, adding that the intention was to ‘raise awareness of th[ese] beautiful landscape[s]’ (CoCo 1994, p. 1).

¹⁹ These were subsequently pulled together by Ray Woolmore contracted to Natural England and are set out in the Designation History series, most of which is not currently available electronically.

aesthetic concept, and ‘landscape’ means more than just ‘scenery’ (CA 2001a, p. 12). It proceeded to scope *landscape* which ‘encompasses everything – ‘natural’ and human – that makes an area distinctive’, but not *Natural Beauty*. National Park management plan guidance is similarly lacking (CA 2005), with discussion about the meaning of Natural Beauty also absent from guidance to government on designated landscapes (see e.g., CoCo 1998), and guidance to public bodies on their duty of regard to the purposes of designated landscapes (NE 2010; Defra 2005).

In the absence of any definitive guidance on the likely scope of *Natural Beauty* from the Government bodies set up to exercise the provisions of the relevant Act’s²⁰, a statement included in Countryside Agency’s guide for AONB partnerships became the most utilised interpretation in practice:

‘Natural beauty is not just the look of the landscape, but includes landform and geology, plants and animals, landscape features and the rich history of human settlement over centuries’ (2001b, p .6).

However, without reference to its origin, and with Countryside Agency publications being archived by government in the last decade, this statement has limited weight in decision-making.

Natural England’s designation guidance provided for the first time an evaluation framework for Natural Beauty to be used ‘as an evidence-base’ in future AONB designation or boundary change (2011, p. 12). The Guidance identifies Swanwick’s (2002) seminal publication on landscape character as the origin of the six Natural Beauty factors proposed. To

²⁰ The Countryside Commission (CoCo) set up under the *Countryside Act* 1968; the Countryside Agency whose powers were transferred from CoCo in 1999, and Natural England set up under the NERC Act 2006.

explore their origin further, I compared the six factors with evaluation criteria in the 2002 guidance and two other assessment documents bracketing these dates (Figure 2).

Landscape Assessment (Countryside Commission 1993, CCP423) Described as 'criteria for evaluating landscapes for designation' as AONBs or National Parks (Ibid., p. 25)											
Scenic quality	Landscape as a resource (rarity or representativeness)	Conservation interests [wildlife, geology, archaeology, culture and history]		Unspoilt character	Sense of place	Consensus					
Landscape Character Assessment: Guidance for England and Scotland (Swanwick 2002, p. 57) Described as criteria for considering 'natural beauty and amenity', based in part on the concept of landscape value* (defined as the 'relative value that is attached to different landscapes' (Ibid., p. 53))											
√	Rarity	Representativeness	√	Associations (with people, events etc.)	x	x	x	Landscape quality	Wildness	Tranquillity	
A Draft Statement on Natural Beauty: A Summary Consultation paper for the Countryside Council for Wales (Swanwick, Selman and Knight 2006, p. 9) Described as 'criteria that can be taken into account in defining landscape value and hence "natural beauty"' (Ibid.)											
√	√	√	√	Integrity (intact rural character)	√	x	√	Perceptual qualities such as wildness and tranquillity		Expressions of landscape in art, media, language, folklore	
Guidance for Assessing Landscapes for Designation as National Park or Area of Outstanding Natural Beauty in England (Natural England 2011, p. 13) Described as 'factors related to natural beauty' originating from Landscape Character Assessment Guidance 2002 (Ibid.)											
√	x	Natural heritage features	Cultural heritage	x	x	x	√	Relative wildness	Relative tranquillity	<i>(inc. in Cultural heritage)</i>	
(appeal to the senses)		(its influence on the perception of beauty)	(its influence on the perception of beauty)				(physical state of the landscape)	(the degree to which it can be perceived)	(the degree to which it can be perceived)		

Figure 2. Progression of ideas relating to Natural Beauty factors (1993 - 2011).

*The reference to 'landscape value' is likely to relate to wording in the Hobhouse Report which used a range of phrases to describe designation purpose including that they should focus on 'area[s] of outstanding landscape value' (NPCe 1947, p. 3).

Only one factor (Scenic quality) has been retained from 1993 with another remodified (Conservation Interests). The remaining factors have disappeared, and new factors have been added. It is unclear why the 1993 factors which are identified as 'criteria for evaluating landscapes for designation ...' have been abandoned. Figure 2 shows that, by 2011, the idea of landscape primarily as a physical resource with specific perceptual qualities (unspoilt character and sense of place) attached to it, had changed so that all factors were framed as perceptual qualities. The loss of 'consensus' as a factor from 1993 is notable, with decisions shifting to be expert led, although the Guidance stresses that it is incumbent on Natural England (the experts) to 'make a judgement as to whether people are likely to perceive a landscape as having

sufficient natural beauty’ (2011, p. 11). At what geographical scale people or landscape are considered is not clarified, nor is the nature of the perceived aesthetic experience, nor the relationship between value and Natural Beauty. Although now used consistently in AONB designation and boundary review, only a handful of AONB management plans have adopted these six factors to describe Natural Beauty (see e.g., King and Martin 2021).

The new factors introduced in 2002, subtly change the mental model of Natural Beauty offered. For example, ‘Relative wildness’ conjures in the mind’s-eye a particular form of landscape (Nash 2014) but wildness is not specifically associated with the conditions for AONB designation (see chapter 3). Although used by Dower in relation to National Parks, the idea of ‘Wildness’ is not necessarily a key factor in Natural Beauty. Rather, it is a practical consideration with conditions of extensiveness and relative wildness mentioned in relation to National Parks because, ‘it is only in such country that the public at large either desires or can satisfactorily be given a wide measure of recreational access’ (Dower 1945a, p. 6).

Further confusion about the meaning of Natural Beauty was added by the wording in the National Planning Policy Framework (NPPF) in 2012 which appeared to replace the legal purpose with a new phrase *landscape and scenic beauty* (MHCLG 2021a, para. 176). Natural England remain unconcerned about this change suggesting that the new phrase simply distinguishes those aspects of Natural Beauty from habitats, biodiversity, and the historic environment which are considered elsewhere in the NPPF, proposing that the effects on landscape and scenic beauty jointly can be regarded as effects on Natural Beauty²¹. The implication here is that other factors such as habitats and biodiversity do not play a significant role. The idea that the term ‘beauty’ in *Natural Beauty* just relates to scenery, and that by

²¹ Internal NE planning guidance and discussion with NE national planning team, 12 January 2021.

implication those drafting the 1949 Act mistakenly used *natural* rather than *scenic* pervades landscape discourse and practice (see chapter 5).

Contradiction, inconsistency, and uncertainty in relation to *Natural Beauty* abound across government guidance and reports. Almost every review of designated landscapes (except Himsforth in 1980 who did not consider the issue) has found the meaning of *Natural Beauty* lacking and sought to expand the preservation purpose in law to deal with the problem. The Edwards Review of National Parks in 1991 noted that Natural Beauty was about more than scenery and recommended that the term be replaced by ‘scenic beauty, natural systems and landforms, and the wildlife and cultural heritage of the area’ (Selman and Swanwick 2010, p. 13). In Wales, the designated landscapes review recommended that the conservation purpose of both AONBs and National Parks be revised, replacing *Natural Beauty* with ‘distinctive landscape and seascape qualities’ (Marsden, Lloyd-Jones & Williams 2015, p. 11)²². Similarly, the Landscapes Review in England also proposed a revised conservation purpose for both AONBs and National Parks – ‘recover, conserve and enhance natural beauty, biodiversity and natural capital, and cultural heritage’ (Glover 2019, p. 38), implying they too consider that *Natural Beauty* is too narrow²³. However, the Review did provide, hidden in the text, an explanation for Natural Beauty which suggests that their interpretation of it is in fact much broader and additions to the purpose may be unnecessary – ‘natural beauty is about the human response to a place as well as the things in the place itself. It elevates us in mind and spirit’ (Glover 2019, p. 27). Only the Countryside Council for Wales (CCW) has sought to explore options for defining *Natural Beauty* rather than replacing it (2006, p. 2). Drafted by Selman and Swanwick as part of their work for CCW in 2006, and further refined through stakeholder

²² In 2018, the Welsh Minister for the Environment rejected the proposal and announced that the wording of the preservation purpose would be retained.

²³ A decision on the change is awaited.

workshops, the statement has never been widely shared. Nor has it been formally adopted, perhaps because its intention was a contemporary interpretation of the term, albeit consistent with the 1949 Act rather than a specific one in the context of the legislation (Selman and Swanwick 2010).

2.3 Natural Beauty in scholarly discourse

There are few scholarly articles reflecting on Natural Beauty in relation to the legislation and a corresponding lack of theory (Herrington 2016). A search of google scholar and other environmental journals and repositories for – *legislation OR law OR policy AND “natural beauty” AND meaning OR interpret* or defin** – yields one relevant result – Selman and Swanwick’s *On the Meaning of Natural Beauty in Landscape Legislation* (2010). However, many other studies address the aesthetic qualities of nature/landscape/scenery and the natural environment in general (see e.g., Jacques 2021; Davoudi & Brooks 2019; Krebs 2014; Brady 2003; Lothian 1999; Carlson 1977). A lack of focus on the legislative interpretation of Natural Beauty is perhaps surprising since beauty remains resonant with people and the values encapsulated in Natural Beauty are as sought after today as they were in 1949 (Jenkins 2020; ten Brink et al. 2016; Herrington 2016; Harvey & Julian 2015).

In one of the few detailed accounts of AONBs in legislation (as opposed to National Parks), Anderson (1990) documents conflicts and disagreements in their history but makes no comment on the meaning of Natural Beauty. What was to be preserved and why was seemingly obvious. Similarly, MacEwen and MacEwen’s book, *National Parks: Conservation or Cosmetics?* (1982), which was credited with giving the National Park movement the intellectual basis it had lacked (Hall 2008), showed no curiosity about the meaning of Natural Beauty despite its forensic account of the legislation’s achievements and contemporary challenges. While nature had a chapter to itself, beauty was not explored beyond its association

with picturesque scenery. *Natural Beauty*, MacEwen and MacEwen explain, was ‘taken from Wordsworth’, and is interchangeable with scenery (1982, p. xii), which implies that Wordsworth’s interest was scenery rather than nature (see chapter 3). Holdaway and Smart’s ‘Landscapes at Risk?’ (2001) also appear to assume that *Natural Beauty* can be equated with *scenery*, in their recommendation that the importance of AONBs as cultural landscapes requires *wildlife* and *cultural heritage* to be added to *Natural Beauty* in the conservation purpose.

Selman and Swanwick’s, *On the Meaning of Natural Beauty in Landscape Legislation* (2010), commissioned to inform the Welsh designated landscapes review, is considered to be the most comprehensive interpretation of Natural Beauty (Peacock 2016). Selman and Swanwick – a landscape planner and a landscape academic respectively – explain the meaning of Natural Beauty using *landscape*: Natural Beauty is ‘concerned with landscape’, ‘related to landscape character’, ‘about landscape value’ (Selman & Swanwick 2010, p. 22). The assembling of ‘landscape value/natural beauty’ and ‘scenic quality’ in a single figure (Ibid., p. 21), suggests all three terms are considered synonymous. In reviewing the main National Park Committee reports, Selman and Swanwick note the use of *landscape* by the reports’ authors as a prefix to *beauty*, *character*, and *quality* deducing that these phrases, subsequently replaced by *Natural Beauty*, suggest a focus on the idea of ‘important landscapes’ (Ibid., p. 11), although this raises the question, important for what? – presumably at least in part, their beauty. They observe what they consider is a gradual clarification of *Natural Beauty* in the second half of the 20th century and suggest that ‘character is emerging clearly as the basis for describing the special qualities of individual landscapes and beauty is being interpreted as an expression of landscape quality’ (Ibid., p. 14), although where these ideas are emerging from is unclear. In chapter 4, I explore how, while these ideas are important components of Natural Beauty, their elevation into the defining aspects occur within a relatively small cohort of individuals as an increasingly confident landscape profession intersects with political demands for more

measurable outcomes from public policy. *Character*, like many other terms in the field is contested in both its scope and scale (see chapters 5 & 6) with its application in Natural Beauty policy generally focused on broad landscape-scale assessment. A landscape-scale approach to character continues to underpin policy and research (see e.g., Tatum, Porter & Hale 2017) with the danger that the finer-grained ecological character and dynamic processes that form part of an individual's aesthetic experience in nature, are obscured.

Selman and Swanwick's scholarship legitimises an additional term, *special qualities*, which is now firmly part of the sector's vernacular. The term was introduced by the Environment Act 1995 in relation to revising the recreation purpose of National Parks to 'promoting opportunities for the understanding and enjoyment of the special qualities of those areas by the public' (s61(1)). *Special qualities* is only used in AONB legislation in relation to Conservation Boards (CROW 2000)²⁴. However, *special qualities* is now a common term in AONB Management Plans (see e.g., SCHP 2018), government discourse (see e.g., Glover 2019); planning evidence (see e.g., Farmer 2021) and scholarship (see e.g., King and Martin 2021; Jenkins 2020), where it is used to represent Natural Beauty. Although *special qualities* is not formally defined, Natural England describe it thus, 'those aspects of the area's natural beauty, wildlife and cultural heritage, which make the area distinctive and are valuable, particularly at a national scale'²⁵, which suggests that only valued aspects are included rather than the natural world as a holistic and functioning system.

Holdaway's *Origins and Intentions of the 1949 Act: Natural Beauty* (2007) provides a different perspective. He reviews the key reports and speeches by Government Ministers on the Bill in both Houses of Parliament, illuminating and confirming the emphasis on beauty.

²⁴ Legislation for AONB Conservation Boards includes reference to the function of 'increasing the understanding and enjoyment by the public of the special qualities of the area ...' (CROW Act 2000, s87(1)).

²⁵ Internal planning guidance provided informally by the NE national planning team, 12 January 2021.

Landscape is identified as only one of a range of words, including *natural*, *countryside* and *scenery*, used to qualify *beauty*. Holdaway evidences this view by reference to comments made during the passage of the Bill through the House of Commons in 1949. For example, by the Minister (Mr Silkin MP) who frequently drops *natural* and *landscape*, and uses ‘beauty of the countryside’, ‘outstanding beauty’, ‘exceptional beauty’ and on numerous occasions ‘beauty’ on its own (2007, p. 8-9). Holdaway’s focus on beauty is supported by *The Case for National Parks*, a pivotal early pamphlet published by the Standing Committee on National Parks (SCNP) in 1938. Beauty of both landscape and nature is addressed but it is ‘natural beauty’ for which the British people feel a ‘longing, too often a thwarted longing’ (SCNP 1938, p. 1). Holdaway’s confirmation of the emphasis on beauty remains peripheral to the policy debate and part of the reason may be the inaccessibility of his report. While a search online for the meaning/origin of Natural Beauty in legislation will provide a repository copy of Selman and Swanwick’s 2010 academic paper, Holdaway’s report remains the output of a contract to CCW and not widely publicised.

Two additional points made by Holdaway are pertinent to understanding what the architects of the 1949 Act intended for Natural Beauty. The first relates to Dower’s definition of the preservation purpose,

‘characteristic landscape beauty ... [with] wildlife and buildings and places of architectural and historic interest [to be] suitably protected [and] established farming use ... effectively maintained’ (1945a, p. 6),

which was only dropped just before the Bill was presented to the House of Commons and was still in use as ‘Notes on Clauses’ after the Bill had been through its main stages (Holdaway 2007). The fact that *landscape* was available to those drafting the Act but not used suggests its meaning at the time was not considered adequate to the task. The replacement of Dowers comprehensive statement, which had been generally agreed, by the simple term *Natural Beauty*

indicates that those drafting the Act considered that the term encompassed all that was included in Dowers' statement. The second point concerns the suggestion by civil servants at the time that *Natural Beauty* should not be defined too closely to allow for flexibility in the areas to be designated so that an AONB or National Park could be 'what the Minister deems it to be' (Ibid., p. 39). This flexibility is useful for designation purpose but not so helpful when attempting to set management prescriptions for conservation and enhancement activities as part of statutory management plans.

Holdaway's focus on beauty has been taken up more recently by Jenkins (2020) who does not attempt to define *Natural Beauty* but accepts as its starting point the notion that beauty represents the intent of the legislation. Jenkins observes that it is up to lawyers to consider how aesthetic appreciation can form the basis of a regulatory framework (Ibid.). With beauty adopted as the focus, the challenges and complexities of such a concept can be examined. Jenkins expertly sets these out, exploring the need for aesthetic theory to underpin the approach and how issues arising might be dealt with in law (Ibid.). For example, moderating the role of expert knowledge through including an understanding of a landscape's public meaning which is required to underpin the position of beauty as the subject of a regulatory regime (Ibid.). This public meaning, Jenkins suggests, should encompass physical properties and their cultural context (Ibid.). An indication that we may have come full circle in welcoming *Natural Beauty* as a legal term, is apparent from Richardson, Barritt and Bowman's (2019) enquiry into beauty as a contributor to international environmental law. Like Jenkins, they recognise the challenges of articulating Natural Beauty as a legal standard but observe the importance of law in setting democratic and transparent process standards which allow society to express its aesthetic relationships with Nature (Ibid.). The importance of participatory processes is stressed but they point out that interpreting Natural Beauty as only the special qualities valued by people risks

downgrading common-place nature and overlooking the importance of nature for its own sake (Ibid.).

2.4 Discussion

A review of the relevant literature confirms the paucity of scholarship about the meaning of Natural Beauty in legislation despite its prominence in countryside policy for 70 years. No consistent definition of *Natural Beauty* is shared across policy guidance and scholarship, with the absence of a clear underpinning theory to justify the use of concepts such as ‘landscape’ or ‘special qualities’ to represent it. Natural Beauty is commonly associated with scenery, yet this interpretation is not translated into tools for designation purposes or to monitor change. Differences between the scope of *Natural Beauty* for designation and for the legal preservation purpose are blurred, and the consistency of its use between AONBs and National Parks remains unclear. Policy makers have confronted these challenges by seeking to amend what was a singular Natural Beauty purpose by adding new environment/culture-related terms in the hope of reflecting what is generally agreed to be a wide meaning. However, each attempt has failed, perhaps reflecting the difficulties in defining what are inevitably themselves overlapping and contested terms.

Perhaps surprisingly, there has been little attempt to fully explore the scope of *Natural Beauty* itself with a view to accommodating this agreed breadth of meaning. From the discourse it appears that there is a reluctance by policy makers, practitioners, and some landscape scholars to tread into the field of aesthetics, despite Holdaway’s (2007) meticulous account of the centrality of beauty in legislation. There are signs this has begun to change, with legal academics leading new thinking rather than practitioners in the sector, although it might be reasonable to assume that the latter might be motivated to do so by the failure of policy as it is currently configured to protect Natural Beauty (CPRE 2021; Glover 2019). This apparent

reluctance to think differently may be reflective of the paradigm shift needed to change the lens through which Natural Beauty is viewed from a landscape-based one to an aesthetic one, along with the corresponding loss of familiar heuristics employed by public-sector actors to help make day-to-day decisions quicker and easier.

Amongst AONBs and National Park practitioners there was, until the Landscapes Review²⁶ (Glover 2019), a strong reluctance to define *Natural Beauty*, underpinned by the idea that the flexibility offered by such a vague and broad term is a strength²⁷. However, there are dangers in such an approach. Chibucos, Leite & Weis (2005) identify a range of negative consequences associated with an absence of theory and a weak knowledge base which include inconsistent decision making; capture of the field by a dominant player; a tendency to ‘re-invent the wheel’; and an absence of challenge to value-laden judgements by individual decision-makers who have internalised hidden assumptions (Ibid.). All these features are evident in Natural Beauty policy and practice today. Into this gap left by the lack of theory, other disciplines have stepped. The language of landscape, rather than beauty or ecology, and the tools and techniques developed in the discipline of landscape planning dominate decisions about Natural Beauty (see chapter 4). Arguably, any benefits arising from not defining *Natural Beauty* are outweighed by the limitations we are now witnessing in the failure to prevent harm to components of Natural Beauty which were assumed to be encompassed by the term in law but for which no clear justification is provided in guidance (see e.g., CPRE 2021; RSPB 2020; Cox et al. 2018).

²⁶ The Landscapes Review concluded that the term *Natural Beauty* was inadequate and proposed adding to it, rather than defining its scope more precisely (Glover 2019).

²⁷ Discussions with NAAONB and retired Countryside Commission officers suggest that civil servants have been wary of unpicking the core principles behind the legislation.

The social agents constructing the policy in the first half of the 20th century considered the meaning of Natural Beauty to be self-evident (Holdaway 2007, Selman and Swanwick 2010), lending weight to the idea that we can only understand its meaning by considering the history and context in which the term and any related terms were used at the time (Greis and Slocum 2017). Chapter 3 addresses the gap formed by the current lack of theory and seeks to provide a richer analysis of what was understood by *Natural Beauty* in the run-up to the 1949 Act, drawing on an examination of contemporary aesthetic principles and related discourse.

Chapter 3 Understanding *Natural Beauty* in the 1949 Act

3.1 The importance of history and context

In the 1949 Act, the term ‘Natural Beauty’ was used in relation to AONBs to serve three different functions:

- i) As a name: Areas of Outstanding Natural Beauty (1949 s1(a)).
- ii) As an object of the preservation purpose: ‘for the preservation and enhancement of natural beauty’ (1949 s1(a)).
- iii) As a criterion for designation: any area which appears to be of ‘such outstanding natural beauty’ (1949 s87(1)).

It is arguable whether the intended meaning of the term on each occasion is identical, and no studies have been undertaken to consider whether the qualities identified at the point of designation (see e.g., Woolmore 2002 & 2013), are those which management plans now aim to preserve. Function (i) is clearly about an area of land or physical place which possesses outstanding Natural Beauty. Functions (ii) and (iii) suggest *Natural Beauty* is being used in subtly different ways. *Preservation* – ‘the action of preserving from damage, decay, or destruction ...’ (OED 2023) – and *enhancement* – ‘the action or process of enhancing ...’ (Ibid.) – implies actions to be taken in relation to things or phenomenon, albeit selected because they contribute to the experience of beauty. Whereas using beauty to select areas for designation suggests that aesthetic appreciation and an aesthetic judgement is being brought directly into play²⁸.

²⁸ The 1949 Act did not attempt to rank areas for their beauty but did set a bar – outstanding – over which areas must pass to be designated as an AONB, suggesting that some form of measurement could be applied to Natural Beauty to determine on which side of the bar an area might sit.

Natural Beauty is a legal term. The law is delivered through language, and interpreting the meaning of words in law requires an understanding of context (how they were used in discourse at the time), the legal intent (what the law intended to achieve), and how the law was shaped by its environment at the time of enactment (Teesdale 2014). This chapter investigates the history and context of *Natural Beauty* in the years leading up to the 1949 Act. It deals with two complex concepts – the idea of beauty and the interpretation of *natural*. *Natural* and *beauty* are both non-technical words, and the use of ordinary language in legal texts is common, reflecting the assumption that the law should be understood by different people in the same way (Greis and Slocum 2017). The meaning of terms in discourse, however, is culture and context dependent (Shariatmadari 2020). In the case of beauty, its meaning has never been absolute and immutable (Eco 2010), with the architects of the 1949 Act likely to have internalised the prevailing aesthetic theories of the time. In the 70 years since the 1949 Act, the common understanding of *Natural Beauty* has changed (Powers 2010), but it is not unusual when a term endures for such a long period for there to be a divergence between the linguistic and legal interpretation of its meaning (Durant 2018). In terms of legislative intent, history and context will always have a role to play (Greis and Slocum 2017).

This chapter takes a deeper look at history and context than the other scholarly studies on the meaning of *Natural Beauty* discussed in chapter 2. It explores the aesthetic theories that would have been familiar to the architects of the 1949 Act; and looks critically at the discourse of key actors and the political and economic context that shaped their thinking. The documents used have been mined before to inform histories of the National Park movement but not to examine what was meant by *Natural Beauty*. The chapter concludes by proposing a framework for understanding *Natural Beauty* in the context of the 1949 Act which is then applied in later chapters to explore how its interpretation has changed over subsequent decades and how this has affected the outcomes anticipated.

3.2 Methods and materials

This chapter addresses Research Question 1: What did the architects of the 1949 Act understand by Natural Beauty; what assumptions were made, and what were their intentions for its preservation and enhancement?

I approached this task by undertaking a critical analysis of key texts drawing on Fairclough’s *Analysing Discourse: Textual analysis for social research* (2003). The meaning of Natural Beauty is explored through examining a range of sources associated with the 1949 Act including texts from the decades preceding the Act and from the early days of implementation to illustrate how *Natural Beauty* was interpreted by those who influenced and reflected upon the Act. To reduce the chance of bias towards familiar words and help track changes in terminology, the narrative is supplemented with word counts from the main documents²⁹.

Texts used include:

Government commissioned reports (the foundational reports)	Prepared to consider the preservation of land prior to the 1949 Act. In particular: Report of the National Park Committee under the chairmanship of Christopher Addison M.P., hereafter named ‘Addison Report’ (NPCe 1931); report by John Dower to the Ministry for Town and Country Planning, hereafter named ‘Dower Report’ (Dower 1945); Report of the Wild Life Conservation Special Committee under the chairmanship of Dr. Julian Huxley, hereafter named ‘Huxley Report’ (WCSC 1947); Report of the NPCe under the chairmanship of Sir Arthur Hobhouse, hereafter named ‘Hobhouse Report’ (NPCe 1947) ³⁰ .
Hansard records	Parliamentary debates where these are relevant.
SCNP reports	Reports and publications of the Standing Committee on National Parks (SCNP) set up by Council for the Preservation of Rural England (CPRE),

²⁹ In the last few years some of the key texts have been digitised and are accessible on digital libraries such as <https://archive.org> and <https://www.hathitrust.org/> which enable a ctrl/f search for words and phrases which is more reliable than a manual search for key terms, although the context of each term needs to be checked to avoid dual meanings.

³⁰ Each of the key reports uses a different title for the areas to be preserved with Addison using ‘National and Regional Reserves’ (NPCe 1931); Dower, ‘National Parks and Other Amenity Areas’ (Dower 1945a); Hobhouse, ‘National Parks and Conservation Areas’ (NPCe 1947).

	founded in 1926 and considered to be the main pressure group for National Parks in the 1930s (Sheail 1995; Blunden & Curry 1990). Available from SCNP's archive held at The Museum of English Rural Life (MERL).
NPCn reports	Reports of the National Parks Commission (NPCn) set up by the 1949 Act and charged with implementing its purposes. AONBs play a minor role in the early reports of NPCn; only getting their own section in the Eighth Report (1957). Held by the National Archives.
Departmental file notes	Archive files from the Ministry of Housing and Local Government to shed light on the thinking of Ministers and Civil Servants during the drafting of the Bill. Held by the National Archives (selected folders from COU1/2/3 and HLG 92/93).
Government agency reports	Policy and guidance documents from the Government agencies that replaced the NPCn; namely the Countryside Commission in 1968, Countryside Agency in 1999 and Natural England in 2006. Paper and digital documents collected during 30 years in the sector, digital documents and archive material provided by individuals from the agencies concerned.
Articles and publications by leading thinkers on the subject	Articles and publications written by those who are considered by historians of the National Park movement (see e.g. Reynolds 2016; Selman & Swanwick 2010; Sheail 1995; Blunden & Curry 1990; Matless 1990; MacEwan & MacEwen 1983) to be particularly influential in articulating and promoting the ideas of natural beauty, including the architect Clough William-Ellis, the geographer and chemist Vaughan Cornish, and the planner Patrick Abercrombie.

3.2.1 Issues and ethics

In dealing with discourse from the early part of the 20th century, I am mindful that many voices are unheard. The authors of all the main texts are men. Women are not absent from the history of Natural Beauty – Octavia Hill was instrumental in setting up the National Trust whose early mission was the preservation of Natural Beauty (Murphy 2002), and Ethel Haythornthwaite sat on the NPCe chaired by Hobhouse – but neither authored any of the key texts contributing to its meaning. Similarly underrepresented are those who worked the land. Although this is a study of land-use, rural workers left few written records. It is the opinions of others, often an educated elite, whose writings remain and whose views are accepted as normative (Bourne 1956). The texts considered in this study reflect communication between these individuals many of whom knew each other.

3.3 Setting the scene: Natural Beauty and aesthetic theory in the early 20th century

Most of the actors who campaigned for the Act, drafted its foundational reports, or steered it through parliament came of age prior to the First World War when a gentleman's education in public schools and elite universities was a liberal one, and the study of philosophy and classical literature was deemed to prepare men for influential positions in politics and the civil service (Shen 2016, Williams and Filippakou 2010). Aesthetics would have been an important component of their training and influenced the way they looked at the world and the role government played in society (Shen 2016). There were exceptions, Ramsay MacDonald (1866-1937) and Herbert Morrison (1888-1965), both Labour politicians, left school at 14; and a formal liberal education was not open to the few influential women involved such as Octavia Hill and Ethel Haythornthwaite, but this does not mean that these individuals were necessarily unaware of philosophy and classical thought.

The discipline of modern aesthetics was founded in the 18th century by Baumgarten who defined aesthetics as 'the science of sensible knowledge' (Makkreel 1996, p. 66). Aesthetic theory is not concerned only with beauty or the perception of beauty (Bourassa 1991; Bosanquet 1904) and cannot alone explain the meaning of Natural Beauty in the context of the Act. However, it prompts questions about the conceptualisation of beauty and provides an aid to check that beauty was indeed the focus, rather than *beauty* being used for political expediency to replace another term, such as *landscape*. 'Beauty is truth, ... and the sensible manifestation of the good' Santayana explained in 1896 (p. 14), but no definition of beauty has met with universal acceptance (Bosanquet 1904). The idea of beauty implies a corresponding concept of ugliness (Eco 2010), and for many of the 1949 Act's social agents the preservation of Natural Beauty in the countryside was necessary to provide a refuge from the rapacious grasp

of urbanisation. Its protection was, as G.M. Trevelyan noted, part of the mission to ‘sweep back the tide of man-made ugliness’ (Trevelyan 1949, p. 93).

In classical tradition, the beauty of an object was associated with form which is ordered, well-proportioned and harmonious (Eco 2010). Hogarth’s *Analysis of Beauty* published in 1753 explored form in search of the principles of natural beauty. These he identified as – fitness, variety, uniformity, simplicity, intricacy, and quantity (vastness) – which when blended together in a composite and embodied whole, bestowed beauty on an object. Form, in terms of a wholeness and harmony of parts, remains dominant in aesthetic assessment of landscape today (see e.g., Jiang 2018; Podolak & Kondolf 2016). By the end of the 18th century, attention had moved from the object to the subject (perceiver), with beauty located in sensory perception (Burke 1823). This shift coincided with increased focus by philosophers on the beauty of nature (Brady 2003). Building on the work of Shaftesbury, Hume and Burke, Kant was the first to set out a comprehensive theory of the beauty of nature, or natural beauty (a term he uses interchangeably) in his *Critique of the Power of Judgement* published in 1790, and his theory remained dominant well into the 20th century (Frierson 2011, Guyer 2009; Brady 2003).

3.3.1. Beauty and pleasure

Kant proposed that beauty is experienced as an immediate feeling of pleasure which lies beyond simple perception by the senses (1951). This feeling of pleasure was thought to be connected primarily to the form of the object, with other qualities such as light, colour or sound performing a lesser or modifying role (Ibid.). Although in Kant’s account of beauty he is moving through nature and surrounded by it, his is more a reflective judgement of beauty than the full-bodied immersive experience suggested by later philosophers such as Dewey (Hildebrand 2021; Leddy & Puolakka 2021). The concept of disinterestedness – the experience of pleasure not based on a known concept or desire – was critical to Kant’s beauty. Disinterestedness was not intended

to mean indifference, but rather that one's attention is attuned to the object for its own sake instead of a means to a utilitarian end or sensory gratification (Brady 2003), although Santayana countered that if experiencing Natural Beauty requires financial or cultural capital, its acquiring can be selfish not disinterested (1896). Attending to an object for its own sake and allowing the free play of the imagination, as Kant's theory requires, suggests distraction is likely to be a problem, and it is notable that solitude and quietude are important ideas in the writings of the 1949 Act's social agents (see e.g., Dower 1945).

In a judgement of beauty, Kant suggests the only thing that can be known without empirical evidence is that the object should be universally pleasing (Guyer 2009). Kant's idea of universality is challenged by Santayana who questions how universal such judgments are unless, at a minimum, others share our culture (1896). However, arguably, Kant's ascertain does not necessarily imply that everyone finds the same thing beautiful, just that one expects it to be so when the judgement is made (Guyer 2009). In judging something beautiful, our focus is shifted from ourselves to reflect on others in society which is the first step towards considering social justice (Scarry 1999). It is perhaps unsurprising therefore, that in the early 20th century, beauty was seen as a moral good and distinct from selfish interest (Hromas 2016; Heyde 2014; Bosanquet 1904), rather than the trivial pursuit of individual hedonistic pleasure or without value and politically suspect as it is today (Herrington 2016, Powers 2010). Under the latter approach, which sees beauty as 'in the eye of the beholder', no individual view holds sway over any other (Zangwill 2014). For AONBs, this position suggests that society should not hold the volume housebuilders to account for eschewing designs harmonious with Natural Beauty since society has no right to judge it.

A judgement of beauty for Kant was not the same as a moral judgement in that it did not address the rightness of wrongness of things, but interest in Natural Beauty was a sign that someone was inclined to be a good human being (Diessner et al. 2008, Budd 1998).

Schopenhauer agreed, suggesting that Natural Beauty improves the mood and effects thinking favourably, proposing that ‘in its presence a person will think most correctly’ (1966, p. 404). The idea that beauty was of itself good, and that those pursuing it were virtuous, infuses the writings of the 1949 Act’s social agents. Beauty at the time encompassed all the values and intent worthy of a government that sought to transform Britain to a fairer and more just society (Smith 1978). From its inception the idea of preserving Natural Beauty was seen as a proper aspiration for society and one which the nation state should not leave to private individuals. J.M. Keynes, writing in G.M Trevelyan’s *Britain and the Beast* (1938), expressed incredulity that preservation of the countryside’s Natural Beauty should be left to charity, citing this as an example where the state should step in and create social wealth for the benefit of all. The notion of beauty as a unifying principle representing a societal good has been rather underplayed by historians of the National Park and AONB movement, but it is possibly critical to understanding how all sections of society rallied behind the idea and the Bill was passed even at the tail end of a Labour Government which had run out of steam (Bew 2016).

3.3.2 Nature as an aesthetic object

Although the perceiver (subject) plays a prominent role in Kant’s Natural Beauty, an object is still involved (to a greater or lesser extent) and therefore the properties of the object will be relevant to its beauty (Zangwill 2013; Guyer 2009). Kant observed a clear distinction between the beauty of nature and art, with the former being considered superior and the latter explained as a beautiful representation of a thing (Berleant 2012; Honderich 1995; Budd 1998). Aesthetic qualities can be attributed to physical objects, such as art, which have boundaries, but nature/landscape ‘does not come framed’ (Berleant 2012, p. 83). As a general concept nature/landscape is unboundaried and more difficult to systematise (Hepburn 1984). It tends to be treated differently than art as an aesthetic object because of the assumption that art is a product of human intentionality which allows its aesthetic appreciation to consider the ideas

and intentions of its maker (Brady 2003; Bosanquet 1904). Arguably, intentionality is equally relevant to the countryside with all of England and Wales shaped by humans in the process of colonising, settling, and exploiting land (Williams 1980). Human modification even extends beyond land cover to the morphology of biophysical features such as rivers, crops, or trees (e.g., pollards, coppice, hedges, or orchard trees) and livestock breeds.

Schopenhauer's approach to nature in his most famous work *The World as Will and Representation* first published in 1818, illustrates the complex set of ideas embodied in nature as an aesthetic object at the time. For Schopenhauer, nature is 'she' and occurs in the uncultivated and wild places not 'under the rod of correction of the great egoist' (1966, p. 404). However, he proceeds to contrast the Natural Beauty of an English garden, which rests on concealing the art as much as possible so that nature appears to be freely active, with nature's subjugation and 'slavery' in French gardens (Ibid., p. 405). Nature is where he cannot see the hand of humans, although any rural labourer would not be fooled.

The confusion around nature as an aesthetic object persists. It is universally recognised that there is almost no land and no landscape in Britain which has not been subject to intentional human processes³¹ (see e.g., Hoskins 1955; Dower 1945), yet the OED (2023) defines *nature* as, 'the phenomena of the physical world collectively including plants, animals and the landscape as opposed to humans or human creations', an interpretation which obscures the complex interactions between the two. *Nature* remains a contested and complicated term but there is a dearth of alternative terms to describe degrees of naturalness (Parsons 2008).

³¹ What is considered to be the natural landscape of Britain developed since the last ice age and persisted into the Anglo-Saxon period. By 1066, however, England had become a land of villages and cultivation (Hoskins 1955).

3.3.3 Beauty, picturesque and the sublime

Beauty and the sublime are distinct categories in traditional aesthetic theory together with the picturesque and ugliness (Brady 2003). Burke believed that beauty and the sublime were of a different nature; the sublime founded on pain, beauty on pleasure (1823). For Burke, power is critical to the sublime; with vastness and magnitude, infinity and ‘delightful horror’ causing tension in our nerves (1823 p. 99). Kant considers there is an object involved in our concept of Natural Beauty, but the sublime is boundless, and we need to seek it ‘merely in ourselves’ (1951, p. 144). Scholarship on designated landscapes (see e.g., Reynolds 2016, Selman & Swanwick 2010) tends to emphasise the importance of the sublime and the picturesque as a motivation for landscape preservation citing the work of Romantic poets and painters which is infused with these ideas. However, the balance of emphasis between beauty and the sublime can be unclear. For example, Wordsworth’s *Guide to Lakes* (1906) uses *sublime/sublimity* (32 counts) significantly less than *beauty/beautiful* (110 counts). Neither Addison, Dower nor Hobhouse use *sublime/sublimity* in their reports, although they do ascribe a high value to wilder country often associated with the sublime. The imagery of the sublime is powerful, but it may be that as interest in the scientific study of scenery and natural processes developed in the early 20th century and travel increased, some of the mystery and fear associated with the sheer scale of mountains, and the starry heavens receded, leaving less of a feeling of fear in the perceiver.

Picturesque evolved from a term for a scene or place representing nature in an idealised form to a term used for a classical paradise that could be visited and contemplated (Heyde 2014). William Gilpin created a set of rules for composing a painterly picturesque view (Miall 2005) and popularised the idea of undertaking a fashionable secular pilgrimage, which included the Lake District, to rival the Great Tour of Europe (Edmonds 2006). Ideas of the picturesque fostered a love for rough and previously uninviting landscapes, such as high moorland and mountain, as a contrast to the tame amongst an elite in the 18th century that had the leisure time

to travel (Edmonds 2006; Burchardt 2002). These ideas fed into the National Park movement but, amongst Addison's list of proposed areas for preservation and Hobhouse's Conservation Areas [AONBs], cultivated lowland countryside was equally represented alongside high mountain and moorland. It seems that later discourse has, by focusing on Dower's original list of National Parks which were mostly located in the more mountainous West and North, fostered an over-emphasis on upland and open moorland landscapes in its interpretation of Natural Beauty at the expense of pastoral lowland landscapes. Part of this emphasis may also be a legacy of the interest in wilderness and the American preservation movement.

3.4 Natural Beauty and the early campaigners for preservation

3.4.1 Natural Beauty and American preservation policy

National Parks in the US are referenced at the start of all three government reports into landscape designations prior to the 1949 Act (see NPCe 1931, Dower 1945a and NPCe 1947), contrasting their approach with what was intended in Britain. Crucial to the American national park movement was recognition that what was once thought of as endless wilderness was fast disappearing (McDonald 2001). In Britain, the report authors recognised that there was no true wilderness left, but it did have 'unspoilt country', 'areas of beautiful and wild country' or 'fine country' which needed protecting (NPCe 1947, p. 8).

Like the National Parks movement in Britain, US national parks had writers and artists whose ideas about the beauty of nature inspired the designations. It was Ralph Waldo Emerson in his famous essay, 'Nature', who declared that while people can own land, 'none of them owns the landscape' (1836, p. 11), a foundational idea in British landscape policy and one that suggests an interpretation of *landscape* that is entirely perceptual (Matless 1998). Also influential was Henry David Thoreau, a philosopher and early ecologist, who wrote in support of national parks 'we need the tonic of wildness' (1854, p. 272), although the landscape he

wrote about was not wilderness (Nash 2014). Thoreau found beauty in a balance between nature and culture expressed in the form of a partially cultivated pastoral realm (1854). His appreciation of Natural Beauty is modern; multi-sensory, engaged and intensely moral (Berleant 2018). However, it was Frederick Law Olmsted, considered the father of American landscape architecture (Sperber 2007), who was the first to argue that the state had a responsibility to its citizens to protect the beauty of nature for their own mental and physical wellbeing (Roper 1973), an idea taken up enthusiastically in the 1949 Act.

3.4.2 Romanticism, Wordsworth, and Natural Beauty

The Dower Report referenced Wordsworth's *Guide to the Lakes* first published in 1810 as 'the finest statement of case ... for landscape preservation' (1945, p. 19), but others went further suggesting that *Natural Beauty* originated with him (MacEwan and MacEwan 1982). In his poetry, Wordsworth vividly describes nature and the emotional response it evokes, but what is inspiring him is rarely without human influence. In his famous poem composed in 1798 near Tintern Abbey in the Wye Valley AONB, Wordsworth proclaims himself 'a worshipper of nature', describing images of natural topography and the River Wye, but also 'plots of cottage-ground', 'orchard tufts', 'meadows' and 'pastoral farms' (Poetry Foundation 2023); clearly all features that utilise natural materials but have been crafted by people. In *Guide to the Lakes*, Wordsworth likens his writing to a 'sermon ... upon the subject of taste in natural beauty' (1906, p. 145). His interpretation of Natural Beauty is broad, ranging in scale from a landscape view – the 'beauty and intricacy with which fields and coppice-woods are often intermingled' (Ibid., p. 43), to the tiny delicate 'beauty' of lichens and mosses (Ibid., p. 45). For Wordsworth, buildings have as much claim to Natural Beauty as mountain scenery as exemplified by his comments on the 'singular beauty of the [cottage] chimneys' (Ibid., p. 62).

In a letter to Sir George Beaumont written in 1805, Wordsworth comments ‘let him keep himself as much out of sight as possible’ (1906, p. 178), referring to the laying out of estate parkland so that it appeared that nature had done all the work. Like Schopenhauer before him, Wordsworth is articulating the idea that human intentionality in the countryside is disguised. This is perhaps the key to understanding how the Romantic poets and painters saw Natural Beauty at the time; as nature ‘crafted’ by an invisible hand to form beautiful countryside (Lowenthal 1991, p. 215).

3.4.3 Natural Beauty and the English countryside

In the early decades of the 20th century, four leading advocates took on the case for the preservation of Natural Beauty – George Macauley Trevelyan (1876-1962), Vaughan Cornish³² (1862-1948), Clough William-Ellis (1883-1978) and Patrick Abercrombie (1879-1957) (Selman and Swanwick 2010). The roots of the legislative meaning of Natural Beauty are likely to lie with these individuals (Ibid.), supported by the Cambridge geologist J.E. Marr (1857-1938). Although not a vocal advocate for preservation, Marr’s book *The Scientific Study of Scenery* (1920) first published in 1900 remained the leading work in its field until the 1950’s (Stoddart 1987).

The primacy of wilderness evident in the US National Park movement is less obvious in the writings of these early campaigners. For the admired historian, G.M. Trevelyan, it was the endangered English countryside that stirred his patriotic feelings and needed protection (Cannadine 2012). His Rickmann Godlee lecture in 1931, *The Call and Claims of Natural Beauty* (1949) is cited by Selman and Swanwick (2010) as most closely linked to the term *Natural Beauty* in the period preceding the legislation, but it is his plea on behalf of the National

³² Cornish brought his idea to bear on the CPRE of which he was a member, the Royal Geography Society at which he spoke regularly, and the Addison committee to whom he gave evidence (Goudie 1972).

Trust, *Must England's Beauty Perish?* published as a pamphlet in 1929 that honed his idea of Natural Beauty in relation to the English countryside and articulated its meaning to a wider public. Here the 'beauty of nature and landscape' (with *landscape* used interchangeably with *scenery*) is melded together into Natural Beauty (Trevelyan 1929, p. 9). Trevelyan's precious English landscape/scenery was small-scale and delicate, 'a combination of nature with the older arts of man in a harmony' (Ibid., p. 17). All was threatened by 'the crude levelling machinery of modern life' which was 'denaturalizing the lowland landscape' (Ibid., p. 101). The Natural Beauty Trevelyan wanted to save was to be found in the old countryside of Turner, Cobbett and Constable which was 'even more beautiful, perhaps, than it had been in its wilder state' (Trevelyan 1929, p. 14). It's beauty was evident at multiple scales from the sight of a crocus pushing up through the soil – an allegory for renewal and rebirth that provides 'a sense of joy, more primaeval and powerful than mere delight in its yellow colour' (Trevelyan 1949, p. 96) – to the 'green and ordered landscape of field, hedgerow and coppice' (Ibid., p. 98), and the wildness of mountain scenery – 'nature in its most natural ...' (Ibid., p. 101).

Trevelyan considered that the beauty of the old countryside represented what is good about the nation (1929). His English countryside is the 'beloved' (Trevelyan 1929, p. 9) whom we – the people, 'the exploiter' (Ibid., p. 10) – could 'injure' (Ibid., p. 14), with remorseless development. He asks, 'What if "natural beauty" be one of England's greatest assets, spiritually ... and financially' (Ibid., p. 15) and conjures it as 'the England to save which the young men went to die in the Great War' (Ibid.). Like the idea of wilderness in US National Parks, the Natural Beauty of England's pastoral landscapes embodies the values of the nation; albeit in the view of some scholars, backward looking values (Matless 1998, Burchardt 2002). The words of Clough William-Ellis, a member of the 10-strong Hobbouse Committee, are similarly illuminating about the morality of the countryside's Natural Beauty. In *England and the Octopus*, he uses *Natural Beauty* frequently explaining how we are 'at the beginning of ...a long

lease from Nature ... For generations at least, the bed we make our children must lie on ...' (1928, p. 12). He talks about the 'sacredness of natural beauty' (1928, p. 19) and juxtaposes the severe penalties for blasphemy from the church and state, 'mere perishable words' (Ibid., p. 20), with the toleration or encouragement given to acts 'brutally disregarding of natural beauty' (Ibid., p. 20). In words that would find resonance today in the debate about monetising beauty as cultural capital he explains, 'Because natural beauty is so prodigal, because so much of it is free, we are in danger of disregarding it like the air we breathe' (1928, p. 22). William-Ellis is championing Natural Beauty not for its own sake but for the positive human emotions it yields – 'the most ecstatic pleasure of which humanity is capable' (1928, p.23), although he notes that on most occasions the experience is of 'a happy awareness ...' (Ibid.).

For the early campaigners, Natural Beauty was to be found in 'country, town and village, the normal visible setting of our ordinary everyday lives' (William-Ellis 1928, p. 23), where 'nature has been subject to the profound process of remodelling by human hands' (Abercrombie 1930, p. 8), rather than other urban areas which were 'conscious, artificial and regular' (Ibid., p. 1). Debate about the degree to which the human hand had crafted nature/landscape was evident with Abercrombie posing the question how much 'wild scenery ... is really wild' (1930, p. 6) after noticing roads intersecting with 'even the wildest moors' (1930, p. 6). However, what was important at the time was the contrast with industrial towns which were 'ruthless, joyless' (William-Ellis 1928, p. 38), their 'beastliness' needing to be countered by protecting the beauty of the countryside (Ibid., p. 31).

Not all the early campaigners were so exercised about the detrimental effects of urbanisation. Abercrombie commented, 'seriously is not the damage largely skin deep?' in response to William-Ellis's pessimism (1928, p. 181). Reflecting the confidence of planners at the time, Abercrombie was also convinced that beauty could be created as well as preserved and farmland was capable of being made more beautiful if only Government would redirect

tree planting to the ‘thousands of acres of dull derelict agricultural land that would be enhanced by [it]’ (Abercrombie 1930, p. 183) – a view that would perhaps find favour with the rewilding movement today (see e.g., Prior and Brady 2020). William-Ellis, an architect, was also optimistic about enhancing beauty. His aspirations for new developments in the countryside were decidedly modern, for example, he proposed that new communities be accommodated in sociable mixed-use village units, with allotments, glasshouses, space for craft industries and permanent open space let out to new ‘small-holder commoners’ (1928, p. 88)³³.

Illustrating that beauty and its study was not just the preserve of artists, poets, and philosophers, Sir Francis Younghusband, President of the Royal Geographical Society had in 1920 explained that the role of geography was to, ‘compare the beauty of one region with the beauty of another’ (quoted in Cornish 1944, p. 15). To assist, two geographers – Cornish and Marr – sought to put the study of Natural Beauty on a more scientific footing. In *The Scientific Study of Scenery* (1920), Marr applied the visual aesthetic qualities attributed to nature by Wordsworth and Ruskin to the earth, sky and sea, identifying five ‘attributes’ – size, form, surface character (or texture), colour, and movement³⁴ – of which, like Hogarth, he considered form ‘by far the most important’ (1920., p. 2), although for Marr scenery was not just a framed view, and he emphasised the shaping of land by natural/cultural processes. Cornish wrote many papers on the beauty of ‘scenery’ but was described in the journal *Nature* as dedicated to the

³³ It is a sad fact that in the 30 years I have been Director of the 1500 km² High Weald AONB, only one such imaginative scheme has crossed my desk. Proposed by the Crane Valley Community Land Trust in 2018 on a farm adjacent to a small town, it offered 60 affordable units in a mixed-use development with space for craft and small-scale rural businesses on the ‘brown field’ component with allotments and community agriculture in the surrounding fields. The Trust were gazumped by a national housing developer who sought permission for a further 165 housing units on the fields with no capacity for land management, craft activities or community growing included (currently refused by the Secretary of State, April 2023, and subject to a High Court appeal).

³⁴ It is remarkable how little ideas about aesthetic qualities in landscape appreciation have changed in over a century. A list of 10 aesthetic ‘factors’ in Natural England’s guidance on landscape character assessment (Tudor 2014, p. 42), includes all five of Marr’s attributes (although Size is named Scale), with the remaining factors relating to patterns of enclosure (which Marr did not deal with); the perceptual qualities of Balance (proportion), and Diversity (uniformity of composition).

‘understanding of natural beauty’ (1948, p. 839) illustrating the interchangeability of terms at the time. For him, arcadia, a pastoral landscape in harmony with nature, was the ‘beautiful ideal’ (1928a, p. 277) with buildings introducing a ‘perfect concordance of line and texture’, harmonising in tone and colour with the surrounding nature (1944, p. 104). Unsurprisingly perhaps, his recommendations to the National Parks Committee for areas to be preserved included both lowland areas such as the Forest of Dean and South Downs together with upland moorland (Nature 1930). For Cornish, harmony was the main qualifying criterion for beauty (1928a, 1926) but this was not just the harmony of pure form proposed by Kant. Rather, it related to function and purpose – the sky for the harvest; the wind which drove the corn-mills, and the dynamic interaction of people and livestock – ‘in the driving of the furrow we saw the best picture which the world provides of the partnership between beast and man’ (1928a, p. 276). The cooperation of other senses was also valued in deepening the Natural Beauty experience with Cornish (a chemist before he was a geographer) referring to the smell of fresh air and fragrance; the feel of crisp cold, barny warmth or salty breeze, and the sounds of bird song and rustling leaves (1926).

The detailed writing of Marr and Cornish in relation to Natural Beauty are mostly absent in scholarship today, perhaps because their writing uses the now dated term *scenery* rather than the more modern *landscape*. However, in the early part of the 20th century *scenery* was still a common term for the physical geography of place, and it was not until the 1940s that *landscape* usage started to rise while the use of *scenery* continued to decline (see Figure 3, p. 55).

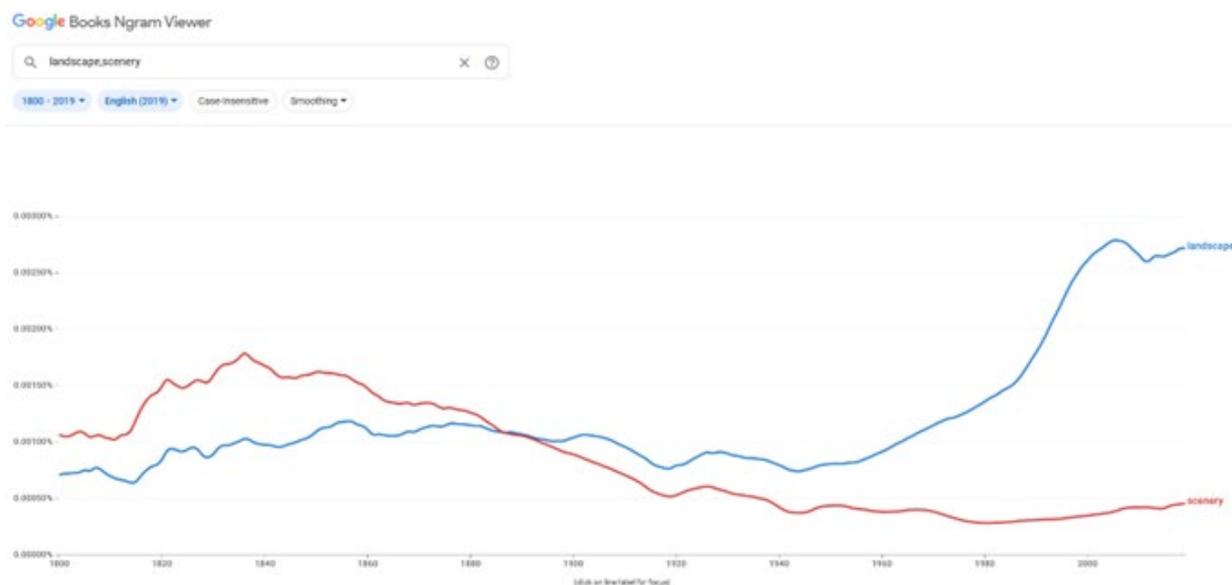


Figure 3. Prevalence of *scenery* and *landscape* in discourse (English 2019 corpus). Source: Google Books Ngram Viewer, 8 March 2022.

3.5 Natural Beauty and the 1949 Act's foundational reports

In response to the early campaigners, Ramsay Macdonald set up in 1929 the first National Parks Committee (NPCe) under the chairmanship of Rt Hon Christopher Addison MP to investigate whether it was desirable or feasible to set up National Parks in Britain (NPCe 1931)³⁵. Little progress was made until a civil servant, John Dower, was appointed to look at the issues (Sheail 1984). Dower developed Addison's ideas and reported in 1945³⁶. A second National Parks Committee (NPCe), chaired by Arthur Hobhouse, was set up subsequently to consider Dower's proposals³⁷ with the Wild Life Conservation Special Committee (WCSC), chaired by Julian

³⁵ Addison preferred the term 'National Reserves' to National Parks and suggested a second category 'Regional Reserves' (NPCe 1931). Areas of countryside from both lists became AONBs.

³⁶ Dower proposed three categories – National Parks, 'Reserves for Possible National Parks' and 'Other Amenity Areas' (1945). Areas of countryside from all three lists became AONBs.

³⁷ Hobhouse proposed two categories – National Parks and 'Conservation Areas', the latter becoming AONBs in the 1949 Act (NPCe 1947). One area proposed as a National Park – the South Downs – was originally designated as an AONB, becoming a National Park in 2010.

Huxley (who also sat on Hobhouse’s committee) running alongside it. Both reported in 1947 and their recommendations formed the foundations of the 1949 Act.

Natural Beauty was not the only term used in the reports to describe what was to be preserved. While the focus is on beauty, three common prefixes are used – *scenery*, *landscape* and *natural*. I compare how the use of these terms change over the three main reports in Figure 4. *Natural Beauty* was clearly the dominant term in 1931, reflecting its use by the early campaigners. *Landscape beauty* was not mentioned at all by Addison but became an increasingly popular term in later reports reflecting the rising usage of *landscape* more generally (see Figure 3, p. 55). Even Dower, who consistently used *landscape beauty* in all his writing (see e.g., 1942a, 1945a, 1945c), also employs *Natural Beauty* and *beauty* regularly. His final report in 1945 mentions *landscape beauty*, *characteristic landscape beauty*, and *characteristic beauty*, as well as *scenic beauty* and *Natural Beauty* to describe what was to be preserved. Hobhouse similarly favours a variety of terms, in one paragraph using *landscape*, *natural scenery* and *Natural Beauty* interchangeably (NPCe 1947, p. 60). Whether the mutability of terms is down to individual author preference, a desire to make the language more

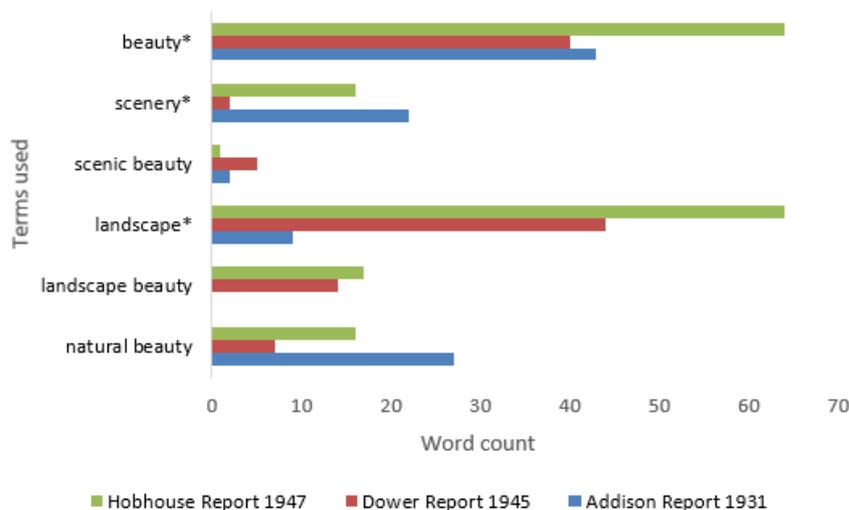


Figure 4. Comparison of key terms used in the main reports.

Counts are based on using search or ctrl/f for each document and checking each result.

*All counts

interesting, or general trends is unclear, but it was *Natural Beauty* that was selected in the 1949 Act to represent all of these ideas.

The following sections explore how the four foundational reports built on the ideas of the early campaigners and crafted them into Natural Beauty legislation.

3.5.1 Countryside: the raw material for designation

While it was beauty that was to be preserved, the foundational reports, like the early campaigners before them, focus on countryside as the place where beauty is found. Hobhouse, although he used *landscape* frequently, explains that the ‘raw material’ for designation is ‘the countryside’ (1947, p. 7) or ‘fine country’ (1947, p. 8). *Countryside* itself is an imprecise term, not entirely interchangeable with *landscape* (Fairclough and Sarlöv-Herlin 2005), but the wording of the 1949 Act suggests that it is land in its physical manifestation rather than purely the perceptual qualities of landscape that is being designated – ‘Any area in England and Wales’ in the case of AONBs (1949 Act, Part II, Section 87 (1)), or ‘extensive tracts of country’ in the case of National Parks (1949 Act, Part II, Section 5 (1)).

In the Hobhouse Report (NPCe 1947), a range of requirements on countryside to be designated as an AONB³⁸ are indicated by the premodifiers or postmodifiers qualifying the nouns used to describe countryside. Hobhouse’s statements imply that features of great interest or value (plants and animals, geology, and physiography, scientific and general) are as important as beauty to the designation i.e., designation is not purely an aesthetic judgement. In addition, land, he explained, should be comparatively extensive and unspoilt, a term generally

³⁸ Hobhouse adopted Dower’s conditions for National Park’s – ‘an extensive area of beautiful and relatively wild country ...’ (1945a, p. 6), but Dower had provided no detail on his other categories – ‘Reserves for Possible National Parks’ and ‘Other Amenity Areas’ – most of which became AONBs (Ibid.). This gap was filled by Hobhouse.

equated with absence of industrialisation and modern urbanisation. I draw the relevant statements together in Figure 5.

Qualifications or conditions (Premodifier)	What is to be designated (Noun)	Qualifications or conditions (Postmodifier)
<i>Extensive</i> [NPs, 8/28]		of outstanding landscape value [AONBs, 3/10] <i>of beautiful and relatively wild country</i> [NPs, 8/28] of fine countryside and coast ... but yet possess outstanding landscape beauty [AONBs, 51/227]
Comparatively extensive [AONBs, 56/255]	Area(s)	all have great natural beauty or special interest [AONBs, 51/227]
<i>Fine</i> [NPs, 8/28]	Country	of special beauty and interest [AONBs, 51/228]
Interesting [AONBs, 52/233]	Land	of high landscape quality, scientific interest, and recreational value [AONBs, 51/228]
Unspoilt [AONBs, 54/244]		selected for great interest of their plant and animal life and their physical and geological features [AONBs, 56/255]
Wild and unspoilt [NPs and AONBs, 73/Conclusion]		of great value either physiographically or geologically or containing complex communities of plant and animal life [AONBs, 52/233]
		of outstanding scientific value [AONBs, 52/233]

Figure 5. The range of terms used to describe what is to be designated as an AONB, and the qualifications and conditions suggested by phrases (pre- and postmodifiers) used in conjunction with these terms, with the main National Park criteria for comparison. Source: Hobhouse Report (NPCn 1947). [page no./paragraph no.].

Huxley summed up what was intended in a single paragraph. He described AONBs as areas of countryside possessing,

‘a distinctive character whose nature and value depend partly on the physical structure of the country, the rocks of which it is composed and the sculpturing of hill and valley, partly by the local climate, partly on the natural and semi-natural vegetation that may present and partly on the crops that are grown and the agricultural regimes. All these elements blend into a whole which often possesses both singular beauty and high scientific interest’ (WCSC 1947, p. 21).

Huxley did not refer directly to buildings and glosses over human crafted landscape artefacts, but his description clearly describes a biogeographic unit³⁹, implying all of its human-nature interactions blended into a harmonious whole are part of its Natural Beauty. This Natural Beauty was to be ‘singular’ or ‘special’, suggesting that these places offer a beauty experience different from the ordinary⁴⁰, although whether this resulted from their distinctive character, special features of interest, or comparative extent (which allowed for more prolonged aesthetic experiences), is unclear.

To explore how the designation criteria has evolved today, I derived and tabulated the main requirements on land to be designated an AONB from Hobhouse and Huxley’s reports and compared these with the Natural Beauty factors used in current designation guidance (Figure 6, p. 60). The latter uses *landscape* rather than *countryside* or *land* to describe the raw material for designation. Differences are evident at a fundamental level – current factors are articulated as predominantly perception-based whereas Hobhouse and Huxley balance perceptual qualities with physical features. Also, in the range of factors considered important, with the requirements for a distinctive character and comparative extent disappearing, and a new factor – tranquillity, added. In addition, landscape/natural beauty has been narrowed to ‘scenic’ beauty (see Maurici 2014). It is interesting to note that the iterations of landscape

³⁹ Today, approaches used to describe AONBs predominantly employ landscape assessment techniques which fragment AONBs into smaller units based on predominantly visual rather than biogeographic factors (see NE 2011, CA 2006).

⁴⁰ While the beauty of land manifesting as countryside needed to be considered special, singular, or outstanding to be designated, other practical non-aesthetic factors also applied. Hobhouse did not consider that an assessment of relative beauty should be carried out and, like Dower, suggested that geographical distribution and threats from harm should be considered in the selection of areas. (NPCe 1947). Post 1949, choice of boundary was also practical as well as aesthetic. Judgements were made by officers of NPCn or CoCo and tended to follow roads, rivers, or other natural features, with decisions drawing on perceived character and qualities infused with a depth of experience gained by spending years assessing and comparing landscapes and their scientific interest across the country (interview in November 2019 with Ray Woolmore who led a number of AONB boundary investigations and authored the AONB designation history series).

assessment criteria applied to AONB designation (see Figure 2, p. 27) appear disconnected from Hobhouse and Huxley’s intention as set out in Figure 6.

Requirements of land for designation as an AONB – derived from Hobhouse (NPCe 1947) and Huxley (WCSC 1947)						
Beauty (landscape/ natural)	Unspoilt/ Wild	Character	Extent	Value (landscape/ recreational/ physiographic/ geological/ scientific/ [ecological])	Interest (plant & animal/ physical & geological/ scientific/ agricultural)	Quality (landscape)
<i>Special</i> <i>Outstanding</i> <i>Singular</i>		<i>Distinctive</i>	<i>Comparative</i>	<i>Great</i> <i>Outstanding</i>	<i>Great</i> <i>Special</i> <i>High</i>	<i>High</i>
‘Factors related to natural beauty’ for designation purposes (NE 2011)						
Scenic beauty	Relative wildness Relative tranquillity				Natural heritage features & Cultural heritage	Landscape Quality*

Figure 6. Requirements on land for designation as an AONB and necessary conditions (derived from Hobhouse & Huxley) with current Natural Beauty evaluation factors for comparison (NE 2011, p.13).

Red: Articulated as perception-based Black: Physical Green: Other

*unless interpreted as condition

The requirements set by Hobhouse and Huxley on countryside worthy of designation gives clues to what might be important in its Natural Beauty, but a more in-depth picture emerges from how the foundational reports describe what is to be preserved and enhanced in these areas.

3.5.2 Natural Beauty: features and phenomenon to be preserved and enhanced

Extracting phrases related to the preservation purpose from the Hobhouse Report (NPCe 1947, illustrates that beauty (natural/landscape) and features of interest (general/natural/scientific⁴¹) are consistently linked together (Figure 7).

<i>Protection</i>	of	beauty and interest [AONBs, 3/10]
<i>Preservation*</i>		natural beauty and interest [AONBs, 51/228]
<i>Safeguarding</i>		the landscape [AONBs, 54/243]
<i>Conservation</i>		all features of natural and scientific interest [AONBs, 54/243]
		natural beauty and interest [AONBs, 55/248]
		landscape beauty and natural interest [AONBs, 55/249]

Figure 7. Phrases relating to the preservation purpose of Conservation Areas (AONBs) [page no./paragraph no.] in Hobhouse (1947). Only phrases directly relating to AONBs are included or where their relation to both AONBs and National Parks is specified

**Preservation* was chosen for the wording of the 1949 Act, amended to *conservation* in the Countryside Act 1968.

Within the foundational reports the discourse about the Natural Beauty purpose manifests under three main themes – the idea of a symbolic landscape-scale beauty relating to distinctive areas of countryside; the contribution of wildlife and other features of interest to this symbolic character and as a component of beauty in its own right, and the pleasurable emotions associated with appreciating the beauty of nature which were thought to improve people’s wellbeing.

⁴¹ In view of the emphasis by Hobhouse on scientific interest it is somewhat perplexing that the Government’s Landscapes Review questioned the importance of wildlife to Natural Beauty (Glover 2020).

3.5.2.1 Symbolic landscape character

In the 1930s and 40s, the traditional countryside which inspired the early campaigners was under increasing threat and there was a feeling that rural Britain, already diminished, was on the brink of being lost altogether (Harris 2015). Love of nation is a powerful sentiment (Tuan 1974), and even in the midst of war the *Recording Britain* project was launched to secure for posterity a visual record of all the small details, quite country corners and picturesque rural buildings that contributed to a sense of the nation's continuity in the face of threat (Harris 2015). Since the 19th century, one of the most important icons of British national identity has been its countryside, symbolising a distinctive cultural identity imbued with a timeless beauty (Matless 1998; Lowenthal 1991, Cosgrove 1984; Williams 1973). Countryside was presented as the communal creation of the people, although those whose hands had crafted it had no rights to roam over it (Hayes 2020; Christophers 2019). However, these landscapes represented more than just a communal history of toil. They were infused with stories, art, and music – John Constable and Dedham Vale, Thomas Hardy and Dorset; Edward Elgar and the Malvern Hills – all adding extra layers of myth and aura (Harris 2015; Sharma 1995; Lowenthal 1991). These were symbolic places expressing 'cultural values, social behaviour and individual actions' (Huang & Xu 2018, p. 25): a fitting legacy for future generations.

The Addison Report proposed that areas should be selected for their beauty, 'one supreme example of each principal type of scenery' representative of Britain for which preservation should be the primary consideration (NPCe 1931, p. 20), an intention consistent with the idea summed up by Stanley Baldwin MP⁴², who remarked 'England is the country, and the country is England' (quoted in Lowenthal 1991 p. 1)⁴³. In common with early

⁴²Stanley Baldwin (1867-1947) served several stretches as prime minister during the interwar years.

⁴³ Raymond Williams explains how 'in English, 'country' is both a nation and a part of the 'land'; 'the country' can be the whole society or its rural area' (1973, p. 1).

campaigners, Addison considered wild country, such as Snowdonia and the Lakes, and lowland landscapes, such as the Broads, South Downs, and Wye Valley, of equal beauty and merit (Ibid.). In describing the proposed policy, Addison explained that it was

‘all about the nation, the countryside of which, ‘has an intimate charm, and an association of the land and its monuments with the life history of the race, which is justly regarded as an invaluable heritage’ (NPCe 1931, p. 8).

While sharing the aspiration for a national network of iconic areas, Dower’s considerations were more operational and his language more technocratic. Areas were to be preserved for their ‘characteristic landscape beauty’ (Dower 1945a, p. 6) but this quality was to be symbolic since these areas were to be extensive and not comprehended in a single view. None of the Reports suggest that character was to be used to strictly define designation boundaries. Rather it embodied ideas of place attachment (see e.g., Altman & Low 1992, Tuan 1974, Relph 1976) and provided a description of the area that would bring these iconic landscapes to life in people’s imaginations.

Several scholars have argued that the idea of quintessential, English countryside presented as a nostalgic rural idyll was always an artificial confection designed for town dwellers (Burchardt 2002, Matless 1998; Goody 1996), and love of the countryside was not necessarily accompanied by a love of wilder nature. Writers tended to emphasise the painterly view of a detached observer looking at a framed scene, rather than the rural reality of daily struggle with, but spiritual dominion over, nature (Thomas 1984) but, by the first part of the 20th century, this had begun to change (Ibid.).

3.5.2.2 Wildlife and features of interest – Natural Beauty at a fine-grained scale

Wildlife and features of scientific and general interest were important contributors to Natural Beauty from the start, as the editors of *Nature* indicated with their concern that Cornish’s use

of the term *scenery* was too restrictive because ‘to many the sense of communion with nature is bound up with observation of the plants and animals of the country’ (Nature 1930, p. 3176). Work by the British Correlating Committee for the Preservation of Nature had identified 66 areas where the protection of flora and fauna required particular attention and recommended these to the Addison Committee (NPCe 1931, p. 68-70). The majority were included in Huxley and Hobhouse’s Conservation Areas which later became AONBs.

Dower listed ‘wild life’ as one of the factors that should be ‘safeguarded’ through designating his category ‘(C) Other Amenity Areas’ (1945, p. 8) many of which became AONBs. He explained that wildlife conservation was an ‘integral part’ of designation and although wildlife was not to be the governing principle, surrounding nature reserves by protected countryside as natural and undisturbed as possible would aid their conservation (1945a, p. 43). The WCSC agreed, adding that the extent of land designated would allow for the continuance of the very human interactions necessary for their survival (WCSC 1947). Their reasoning for the importance of wildlife as a component of beauty reflected the earlier remarks made in the journal *Nature*, with Huxley explaining that, ‘... part of the enjoyment to be derived from [AONBs] is attributable to the ability to observe wildlife of all kinds at relatively close quarters in its natural surroundings’ (WCSC 1947, p. 10). He proceeded to note ‘the conservation of scenic beauty is intimately bound up with the conservation of wild life and physical features’ (Ibid., p. 23), indicating that a richness and abundance of flora and fauna is essential to Natural Beauty.

While Huxley’s report illustrates how interest in flora and fauna had grown, love of animals for their own sake was not a driver of the 1949 Act. Dower, along with many of his contemporaries, was a firm supporter of ‘field sports’, although Dower was clear that the recreational needs of the many should outweigh the sporting pleasures of the few (1945a, p.

32)⁴⁴. The roots of this division between deserving species that contribute to human enjoyment and others, is expertly documented by Thomas, who uses the term ‘concealment’ to sum up this relationship (1984, p. 303). Thomas notes that the cruel sports of the lower classes (bull-baiting and cock-fighting) were banned by the 18th century but what were considered gentlemen pursuits (fox-hunting and shooting) were not (Ibid.), with the latter still seen by some today as legitimate activities for enjoying Natural Beauty in the countryside (Delingpole 2015).

3.5.2.3 More than just physical features: an emotional response to nature

The role of positive emotions in the way Natural Beauty is described in the foundational reports distinguishes it from a simple set of physical factors or perceived qualities. Dower reflected a common sentiment expressed by earlier advocates of the policy when he explained, ‘There can be few national purposes which, at so modest a cost, offer so large a prospect of health-giving happiness for the people’ (1945a, p. 57). The Standing Committee for National Parks had noted that such an initiative was a necessary adjunct to the Government’s proposed ‘national health scheme’ (SCNP 1938, p. 1), while Cornish in 1942 was even more prescient,

‘It is of the utmost importance that all who are concerned with the social problems which await us when peace returns should realize that beauty of environment is no mere luxury but an essential factor in the welfare of the nation’ (quoted in Goudie 1972, p. 9).

In 1950 the NPCn attempted to place beauty firmly within land use policy debates alongside the economy and other considerations, explaining that ‘unspoilt natural beauty is properly regarded as a national resource’ (NPCn 1950, p. 824). This national resource was to be harnessed for justice and the moral good of the nation to improve the lives of the growing urban

⁴⁴ Dower’s vision remains unfulfilled. Driven grouse moors make up over a fifth of some designated landscapes yet the illegal persecution of birds of prey, a symbol of beauty to many, continues (Barkham 2021).

working classes. When introducing the Bill to parliament, Lewis Silkin MP, stressed the importance of happiness to society,

‘When this Bill becomes law, we shall have created an instrument of which we can be justly proud; we shall have begun a new era in the life of this country, an era in which human happiness, beauty, and culture will play a greater part in its social and economic life than they have ever done before’ (HC Deb 29 January 1947).

Designated countryside, Dower explained was, ‘not for any privileged or otherwise restricted section of the population, but for all who care to refresh their minds and spirits and to exercise their bodies in a peaceful setting of natural beauty’ (1945a, p. 13). They would be ‘in the full sense national ... for people – and especially young people – of every class and kind and from every part of the country, indeed of the world’ (Ibid.). All forms of quiet recreation ‘active or passive’ were welcome (Ibid., p. 23). The idea that landscape could be owned by everyone even while land was privately owned legitimised the Government’s focus on recreation access to deliver this happiness for all. Speaking in a debate on National Parks in House of Commons a few months before the War ended, Mr Molson MP welcomed the fact that these landscapes were to be ‘preserved to provide urban people access to the countryside for their ‘enjoyment’ (Hansard HC Deb, 20 March 1945), with Major Procter MP agreeing that the Act would give people access for ‘quiet enjoyment’ to the ‘wonderful panorama of beauty’ (Ibid.).

The post-war settlement by the Labour Government proposed improvements in four key areas for both urban and rural working people – agriculture and small-holders; new towns; town and country planning and national parks (Tichelar 2019). Concern for the countryside and people’s freedom to enjoy it, linked to an irreverence for the established order, was a hallmark of the Labour Party’s thinking at the time (Smith 1978). There is a strong strand of thought amongst scholars that sees the mass working-class campaign for access as a deciding factor in the preservation of these areas (Blunden and Curry 1990; Gilg 1996), but it was not just access

to any outdoor facilities for active recreation that was demanded. If designation had been just about health and happiness through engagement with nature, the focus might have been on towns where people live and their hinterland⁴⁵. It was, however, to meet demand for a more specific experience – access to countryside where people could roam for the purpose of ‘enjoyment of its beauty’ (Dower 1945a, p. 15). As Tuan observed, ‘space is freedom’ (1977, p. 3) and the Act sought to ensure everyone, now and in the future, had the freedom to enjoy Natural Beauty in a countryside setting. In this regard, designated landscapes could be viewed as an earlier and complimentary version of Respublica’s demand for a right to beauty where people live (Harvey and Julian 2015).

Demand for access to Natural Beauty was coming primarily from urban populations whose numbers were increasing towards the end of the 19th century⁴⁶ (Friedlander 1970). The experience of urbanisation was not just a result of population density in towns but the increasing size of settlements and the shift from agriculture to non-agricultural activities which pushed urban people further and further away from nature (Law 1967). The first phase of National Park designations was designed to deliver for the new burgeoning cities of the north, while designation of AONBs enabled the NPCn to meet their ambition of providing access to the enjoyment of nature for working people from London and other urban areas. Hobhouse explained that,

'Many of the areas proposed [for AONBs] are within easy reach of large centres of population.

These more accessible areas will provide enjoyment for people living in towns and cities more

⁴⁵ Enhancing nature in towns had already been addressed by the early town planning and garden city movement exemplified by Raymond Unwin and Barry Parker’s realisation of Ebenezer Howard’s Garden City proposals in Letchworth in 1904, and Unwin’s proposal for a green belt around London in 1929 (Miller 2015; Amati 2008; Creese 1964; Howard 1902).

⁴⁶ By the First World War the population in England and Wales had doubled from the 1850s, and 80% were urban (Law 1967).

remote from national parks, who will be able to explore their [AONBs] in shorter periods of leisure' (1947, p. 52).

The Sixth Report of the NPCn (1955) demonstrated these ambitions, noting that the Gower is a 'very fine area' important because of its proximity to densely populated areas in Wales (1955, p. 12). Similarly, the Surrey Hills was described as 'the finest scenery along the North Downs' and important because of its proximity to London (1955, p. 13).

The idea that working people in cities and towns would have leisure time to spend in the countryside is relatively recent. The *Bank Holiday Act* of 1871 had given workers a few days holidays a year, with days out made possible for ordinary people for the first time with the spread of the railways, but it was not until the turn of century that the weekend was born with many workers gaining half day on Saturday as well as Sunday (Dawson 2007). Workers may have had more time for leisure, but they had little income to spend on it so improving facilities for hiking and rambling, cycling and other self-propelled activities was stressed in the foundational reports (Blunden and Curry 1990)⁴⁷. An increase in visitor numbers to these landscapes was expected and challenges from the cheapness and efficiency of transport foreseen. In a comment foreshadowing the current congestion issues in National Parks (Pidd 2021), Brown explained that a designated landscape 'must never be just a national car park' (1946, p. 8). Tourists should drive to the edge of a designated landscape, 'but not too freely through it' (Ibid.). The NPCn were expected to be the guardians of Natural Beauty, preventing harm from visitors (Ibid.), a role which, arguably, disappeared when Natural England replaced the Countryside Agency in 2006, and the organisational purpose to conserve Natural Beauty was lost.

⁴⁷ At the time of the Holidays with Pay Act in 1938, 15.5 m workers did not receive paid holidays in any form but by the 1950s two weeks was not unusual (Dawson 2007).

The broad consensus that pleasure and enjoyment by people is a fundamental component of Natural Beauty tends to be bundled by scholars into the additional recreation purpose of National Parks⁴⁸, but AONBs only have the one Natural Beauty purpose, and this was intended to fulfil the same recreation and enjoyment function in the South of the country and adjacent to other urban areas as the National Parks did elsewhere. Experiencing pleasure, and the health and happiness it was considered to bring, were instinctively wrapped up in the idea of Natural Beauty in the minds of the 1949 Act's social agents with the Parks second purpose merely enabling a greater focus on providing resources for access improvements.

3.5.3 Assumptions underpinning the designation purpose

The reports' authors provided no definitive description of Natural Beauty, but three strong themes described above emerge from the foundational reports – the beauty of symbolic countryside character at a landscape scale, the contribution of wildlife and features of interest to Natural Beauty, and the importance of pleasure as an emotional response to nature. To further investigate the anticipated condition of these components of Natural Beauty, I examined the assumptions underpinning the narratives of the Report authors about the countryside and its beauty. Understanding their assumptions can shed light on why some aspects of Natural Beauty were over-emphasised and others underplayed in the discourse of the time. The following sections explore these assumptions.

3.5.3.1 Nature, culture, and the myth of wildness

Although the early campaigners and Reports' authors stressed the beauty of traditional countryside, 'relative wildness' is a key factor in Natural Beauty assessment today (Figure 6,

⁴⁸ Described by the duty on the National Parks Commission, 'For encouraging the provision or improvement, for persons resorting to National Parks, of facilities for the enjoyment thereof and for the enjoyment of the opportunities for open air recreation and the study of nature afforded thereby' 1949 NPAC Act, Pt.1(1)(b).

p. 60). To an extent, wildness was prized as the antithesis of a countryside despoiled by urbanisation and machinery, but its absence did not diminish an area's Natural Beauty (see e.g., Trevelyan 1949; Dower 1945). Abercrombie observed that the country's 'wilderness [had been] largely humanised' (1931, p. 10), and none of the reports' authors and early campaigners were under any illusion about the role people played in the production of these beautiful areas. Hobhouse explains 'the richly varied landscape of our country is a joint creation of natural growth and man's cultivation' (NPCe 1947, p. 9), but it was Lord Strang, Chairman of National Parks Commission (NPCn) who summed up this view most eloquently,

'The intimate and homely beauty of a countryside in which men have lived and worked for centuries, using traditional methods and inherited skills in fashioning houses, byres or implements, using local materials and local designs ...' (NPCn 1959, p. 27).

It was human-crafted artefacts such as hedges, stone walls, tracks, and plough-lines that helped created the intimate tapestry of England's landscape. The cultivation of soil was a symbol of civilisation with beauty attached to its fertility and productivity giving it a 'garden of Eden' quality (Thomas 1984). For millennia, people had been 'human fauna', as Bourne describes rural labourers at the end of the 18th century, crafting natural materials into landscape (1956, p. 81).

The idea that designated landscapes have to be relatively wild stems from Dower's conditions for selecting areas as candidate National Parks. They were to be 'relatively wild country' (1945a, p. 6) or 'sufficiently wild' (1945a, p. 7). However, in a letter to Mr Bosanquet, Dower clarified that 'the wilder country... does not mean 'the "wild" country' (1945b). This suggests parallels with the approach of 19th century Americans to what they perceived as 'the Civilized Wilderness' (Foster 1975); real wilderness being too harsh for many people to appreciate its aesthetic properties except from a distance through a mediated representation (Krebs 2014). Discussion about relative wildness is hampered by the paucity of language to

distinguish between categories of objects that while natural in origin have been shaped or crafted by people to varying degrees. Today, the meaning of *nature* and *culture* has become increasingly differentiated, whereas in the early 20th century the two closely overlapped (Tuan 1977). Additional difficulties arise because words such as ‘wildness’ conjure a particular natural place for some people but can also be a state of mind (Nash 2014). While hunter-gatherers or rural labourers might see themselves as living in a humanised world, outsiders may perceive them in the midst of nature because the environment seems less shaped by people than a city (Tuan 1991). Some scholars have experimented with terms to describe these different states with Lowenthal, for example, using ‘cultivated nature’ to describe a natural inheritance interwoven with the work of generations of people (1991, p. 213), but definitions remain fuzzy and crafted buildings are excluded from his description. The Reports’ authors however, accepted that the work of people and nature could not be so easily separated,

‘because most natural features have some man-made or man-controlled tincture, and because many man-made features derive an integral part of their beauty and interest from their natural surroundings, but also because, in some places, important natural and man-made features actually coincide’ (Dower 1945a, p. 39).

The ordered lowland landscapes (where they had not yet been spoiled) were thought to be no less beautiful precisely because they were ‘the marriage of man’s work and nature’s in perfect harmony’ (Trevelyan 1949, p. 104).

The importance of human artefacts and cultural traditions was particularly evident in the early selection of AONBs. In the Sixth Report of the NPCn (1955), the Lleyn was described as a peninsular

‘of unique character, largely unspoilt and cherished not only for the beauty of its hills ... but for its isolation and tranquillity [which] has enabled many old customs and traditions to be preserved, and the area is regarded as a repository of ancient Welsh culture’ (p. 12).

On each occasion that an AONB was designated, the NPCn report explained that natural and cultural features contributed to their Natural Beauty. The Northumberland Coast AONB was designated for its ‘active fishing villages ... the oldest monastic ruin in the country ... important breeding grounds [for] seabirds, and three great castles ...’ (NPCn 1958, p. 13). The Cotswolds was designated in part because it contained ‘some of the finest villages in Britain’ (NPCn 1966, p. 24), and the South Downs because it ‘bears upon the surface the marks of successive civilizations from the earliest stone age to Norman and later mediaeval times’ (NPCe 1931, p. 78). Ancient artefacts, traditional buildings, and cultural traditions – the imprint of human craft over millennia – were all seen to add layers of meaning to the idea of countryside with the knowledge of the past this invites considered to help bring these landscapes to life in our imagination and deepen our aesthetic experience (Lowenthal 2007; Hoskins 1955).

Within designated areas, the harmonious relationship between traditional buildings and landscapes was considered to enrich Natural Beauty. For Trevelyan it was ‘beautiful farms, farm buildings and cottages’ (1949, p. 104). For Dower, ‘... the villages, farms, woods, avenues ...’ (1945, p. 19). The idea that buildings could contribute to Natural Beauty would not be alien to Wordsworth who described the humble dwellings of the Lake District as having ‘grown ... risen, by an instinct of their own ... so little is there in them of formality, such is their wildness and beauty’ (1906, p. 62)⁴⁹. The novelist, Sheila Kaye-Smith best sums up why traditional buildings were seen as ‘natural’, Writing in William-Ellis’s *Britain and the Beast*, Kaye-Smith explains that the traditional buildings of Kent and Sussex have a sense of natural growth rather than artificial construction which was not just down to time but the fact that they were ‘built of the baked soil on which they stand, of the straw and timber growing on it, they are actually part

⁴⁹ In contrast, the QC at the Pashley Road Planning Inquiry in 2017 exclaimed in a briefing meeting that settlement could not be part of Natural beauty because it was human-made.

of the earth' (1938, p. 35). The non-architects who designed these traditional buildings tended not to try and conquer nature; using pattern repetition and working with topography and function to give these landscapes a pleasing harmony unlike modern places where free standing buildings are often plonked haphazardly in wasteful open space (Kang 2013; Rudofsky 1964).

3.5.3.2 Landscape change and 'the mild continuous epic of the soil'

Romantic landscape painters and nature poets may have interpreted what they experienced as a static scene, but the reports' authors understood that countryside was a dynamic system with both human and natural processes at work, and in their view, there was no antagonism between use and beauty⁵⁰. As Dower explained,

'It is above all else to farming ... that the landscapes of all our potential National Parks owe the man-made element in their character; and it is to the farming communities that we must look for continuance not only of the scenic setting but of the drama itself—the rural life and work, "the mild continuous epic of the soil,"' (Dower 1945a, p. 21).

Some scholars argue that the 1949 Act reflected an idea of custodianship and stewardship prevalent at the time which considered that nature should not be allowed to run riot and the countryside should continue as a place of order, (Matless 1998; Lowenthal 1991). The Report's authors, however, make a more nuanced case, explaining that nature and people have developed in harmony and continued traditional management was necessary to maintain delicately balanced conditions in some biologically rich habitats held in a successional state by management. Without management, ecological change may be 'slow, insidious and not readily detectable ...often irreversible', (WCSC 1947, p. 2).

⁵⁰ A principle reflecting the Vitruvian approach to architecture and design – firmitas, utilitas and venustas [strength, utility and beauty] – (Bianco 2023).

Today, the charge that designation fossilises a cultural landscape at an arbitrary point in time is made both by developers hoping to build (see e.g., DLUHC 2023), and nature conservationists seeking more extensive rewilding to help aid nature recovery⁵¹, but even if fossilisation was possible, it was not the intention. ‘There is no suggestion that National Parks should become museum pieces of natural beauty ...’ explained the Town and Country Planning Association (1944, p. 180). Hobhouse concurred, these areas ‘must not be sterilized as museum specimens’ (NPCn 1947, p. 8), and in case of doubt the National Park Commission (NPCn) restated that designated landscapes were ‘not museum pieces’ (Nature 1954, p. 413). Brown explained how this might work: the NPCn would ‘preserve, for the general public, the place of natural beauty and historic interest, but ... seek to maintain the rights of the local public to use their own place for its own wealth-yielding purposes in familiar and traditional ways’ (1946, p. 5). The architects of the 1949 Act assumed that these traditional⁵² ways would continue.

Dower was comfortable with quite significant change in landscapes providing that change furthered the conservation purpose and was harmonious and beautiful. He recognised that increased recreational use would necessitate ‘a good many new, enlarged or altered buildings’ (1945a, p. 20), and is especially prescient in demanding new buildings to deal with the shortage of farmworkers cottages because, ‘so many cottages have been taken over by week-enders and other visitors – a process which must not be allowed to re-establish itself after the war’ (Ibid.). For these new buildings ‘modesty and simplicity must be [the] rule’ (Ibid.), with all other uses ‘so limited and controlled as to harmonize’ with the designation purpose

⁵¹ South East regional eNGO meeting, 29th January 2020.

⁵² The architects of the 1949 Act would have grown up with a pre-First World War farmed landscape that was labour intensive with most equipment horse-drawn or hand-held. Outside of the parliamentary enclosures of the central province these areas had hardly changed for hundreds of years (Roberts and Wrathmell 2000; Hoskins 1955). Change was beginning to accelerate between the wars with tractors starting to make a real impact on farming, but it was the introduction of the hydraulic system for attaching implements in the mid 1930s that initiated larger scale and more rapid transformation of the landscape (Long 1963; Borchert 1948).

(Ibid. p. 15). The need for positive change in the broader landscape to ‘recreate and enrich the scenic beauty’ was also recognised by Dower (Ibid., p. 19). An insight into his thinking can be gained from his comments on the extensive wartime ploughing up of pasture in the Lake District and Yorkshire Dales which had turned the country ‘brown side up’ (1945a, p. 21). He doesn’t dwell on what is lost but reconceptualises what has replaced it as a positive, exclaiming that the improvement which has resulted enhances the scenic effect adding ‘colour and pattern without any essential loss of character’ (Ibid.). Today, Dower may have embraced rewilding with the same attitude, accepting it as necessary to safeguard society and the planet, and finding something beautiful in a new ecological aesthetic. The Report’s authors, however, did not envisage the catastrophic effects of industrial farming and forestry on wildlife and natural systems (see e.g., Caffyn 2021), although Huxley did express concern that the cultivation of marginal land rich in ‘scientific and cultural value’ (WCSC 1947, p. 46), with modern agricultural techniques and machinery would be capable of causing ‘very drastic changes in the landscape’ (Ibid., p. 47). The seeds of harm were sown in the Agricultural Act of 1947 (part of the same suite of reconstruction legislation as the 1949 Act) which guaranteed markets and fixed prices (Tichelar 2019). Rather than encouraging land reform and small holdings, it consciously promoted agricultural ‘improvement’ through mechanisation, economies of scale and chemicals (Ibid.). The choice to go large rather than small was perhaps not a conscious one, but it reflected the prevailing economic orthodoxy of the time (see e.g., Aldred 2019). A trend further entrenched by the European Union’s Common Agricultural Policy (CAP) which skewed support towards productivity (see e.g., Guth et al. 2022; Ludlow 2005). Farmers became pariahs rather than custodians (see e.g., Matless 1998, Green 1996; Mabey 1981), quite the opposite of Dower and Strang’s ideal.

Today, extensive degradation of biodiversity and natural processes, including the disappearance of even common species from the landscape, affects all of the countryside not

just designated landscapes, but the latter have done no better (see e.g., HoC Environmental Audit Committee 2022; RSPB 2020a, b; Glover 2019). The Reports authors' argument that there is no antagonism between use and beauty has been proved false. The immersive experience of nature that the architects of the 1949 Act hoped to preserve for future generations is very different now from what they anticipated, and this represents a considerable policy failure.

3.5.3.3 Preventing disfigurement and spoilation

For most of the 1949 Act's social agents, the main culprit damaging the countryside and defacing Natural Beauty at the time was not agriculture but 'the advancing tide of bricks and mortar' (WCSC 1947, p. 12), or 'disorderly development [and] spoliation' as Addison described it (NPCe 1931, p. 12). According to Addison both could be prevented through planning control over the area by a 'proper Authority' (Ibid.). Dower's view mirrored Addison's. In a handwritten letter to George Pepler, Chief Technical Advisor to the Ministry of Town and Country Planning, Dower was unequivocal, 'a 100% effective planning control is essential to any worth-while scheme' (1945c). At the time effective control over development seemed a possibility with new planning legislation thought to be sufficient to protect designated landscapes from disfigurement (Blunden & Curry 1990)⁵³. Faith in planning was still strong in the early years of the National Parks Commission (NPCn) with Patrick Duff its first Chairman, confident that damaging operations could be 'so controlled as to harmonise with [natural beauty]' (NPCn 1950).

⁵³ Following the 1949 Act, the Peak District National Park was given full planning powers. Other National Parks had to wait until the Environment Act in 1995, while AONBs still remain without planning powers of any kind. The Landscapes Review proposed that AONBs be given statutory consultee status and that integrated local plans be considered for complex AONBs (Glover 2019), but at a consultation meeting with AONB planning officers in 2022, civil servants from DLUHC were still insisting that friendly dialogue would secure preservation of Natural beauty despite overwhelming evidence to the contrary (see e.g., Dixon, Sinden and Crabtree 2017). An example of how difficult it is to shift an organisation's established norms (Cairney 2019).

Dower's view that for successful preservation of Natural Beauty it would be 'necessary to "kill" a large part of the sum of unrealised "development values" ...' in the countryside (Dower 1945c), aligned with those of Scott and Uthwatt who chaired government committees set up in 1941 to investigate the financial aspects of building (Stamp 1943). This thinking, typical of post-war reconstruction, realigned the relationship between citizen and state through recognising that private enterprise would not deliver what the population wanted, but it did not last (Matless 1998). The failure of successive governments to apply the betterment levy on land values recommended by Uthwatt (which did not survive the Conservative governments of the 1950's) laid the foundations for the interdependence between power, finance, and the housebuilding industry which is, arguably, behind the housing affordability crisis and poor housing design evident in AONBs today (Colenutt 2020; Tichelar 2019)⁵⁴.

3.5.3.4 Society as an arbiter of Natural Beauty

Although Natural Beauty was to be preserved for everyone, a sufficiency of Natural Beauty to merit designation was not to be judged by everyone. The limited elite, who in the interwar years mustered a broad consensus that these areas were outstandingly beautiful, considered that certain groups of people needed to be educated to enjoy it while others were welcome as long as their activities were appropriate (Dawson 2007, Matless 1998; Lowenthal 1991). No poll or survey was carried out to ascertain what areas the public found outstandingly beautiful, nor was that the intention. Judging Natural Beauty was a job for the 'informed'. In a statement to the North Pennines [AONB] inquiry the Chairman of Countryside Commission explained that Dower's choice was personal although it was 'in fairly close accord with "the consensus of informed opinion"' (CoCo 1985, p. 9). The idea that to judge Natural Beauty one needs at least

⁵⁴ This has also created a crisis in affordable housing in the countryside for rural workers who struggle to live in the landscapes they manage, threatening the very land management required to preserve Natural Beauty (see e.g., HWJAC 2009).

to be ‘informed’, reflects earlier philosophical arguments about taste. A taste beyond ‘ordinary nature and the productions of the field ... must be gradually developed both in nations and the individual’, Wordsworth exclaimed (1906, p. 151). Cornish suggested citizens might need training (1944), with the popular philosopher C.E.M. Joad arguing that the countryside should be held in trust until the people were ready (1938). In Dower’s view the fact that the visiting public were as yet ‘insensitive and ignorant of natural beauty’ justified the need for fairer access to appreciate it (1945a, p. 15).

The reports’ authors believed that citizens had a right to experience and enjoy beautiful countryside and they were confident that through fair access, education, and improved facilities they would come to love its Natural Beauty. Responsibility for assessing Natural Beauty and enacting the will of society to designate, however, rested with government, although the retreat from beauty as a shared societal value to a more individualistic one, i.e., in the eye-of-the-beholder⁵⁵ (explored in chapter 4), led to some ambivalence in subsequent policy about the role of Government in elevating one landscape over another⁵⁶. However, without the confidence that society could arbitrate on Natural Beauty, it is unlikely that legislation which sought to preserve nature for the enjoyment of future generations would have passed and endured in public policy for 70 years.

3.5.4 Alternative perspectives and unheard voices

An ‘outsider’ perspective (Butler 2016) tends to be attributed to the elite who already enjoyed these places together with the burgeoning urban working classes who sought opportunities for

⁵⁵ Interestingly, Dower quotes ‘beauty is in the eye-of-the-beholder’ only once in his report in relation to the idea that a charge on the nation to preserve these areas cannot be justified unless people can visit and experience them (1945a, p. 15).

⁵⁶ Exemplified by NE’s launch of its position statement ‘All Landscapes Matter’ in 2010 (Houses of Parliament 2011).

leisure in them. The architects of the 1949 Act were indeed mostly a privileged elite, influenced by tastes and fashions of the day and with the means to contemplate the visual delights of picturesque scenery (Gilg 1996). However, they were also farmers, land managers and ramblers (Goody 1996). This regular immersion in a working countryside is evident in their discourse which displays a range of what might be considered modern interactions between people and nature (see Keniger et al. 2013). The outsider perspective associated with the modern idea of landscape as scenery, where the outsider or observer maintains a certain distance from the object (Bourassa 1991; Cosgrove 1984, Tuan 1974; Relph 1976), is not entirely appropriate for these actors with most exhibiting both insider and outsider perspectives in relation to the countryside they sought to protect. A deeper insider perspective from the people who worked the land, however, does tend to be absent from the discourse.

Division between outsider/insider perspectives in the countryside was driven by factors such as industrialisation, urbanisation, and land enclosure which gradually severed the connection between the people and land (Cosgrove 1984). Before the growth of the private car following the First World War, people living in rural areas⁵⁷ would have been immersed in nature as they stepped out of their front door (Bourne 1956), and been ‘alive, attuned and responsive’ to the landscape they inhabited in a similar way to Nettleton’s fell-runners today (2015, p. 775). Rural labourers were engaged in nature every minute of the working day experiencing nature as both bountiful and an adversary as they sought to survive, make shelter, and produce food (Burchardt 2002, Thomas 1984). As anyone who has shovelled soil with a spade will know, the ditches and hedge banks, winding trackways, and stone bridges that thread through the landscape are crafted as surely as any painting or poem. These artefacts represent a huge amount of human labour over time carried out in all weathers, all seasons and at all

⁵⁷ The majority of people were still living in rural areas towards the end of the 19th century (Friedlander 1970).

times of day. Much local language about this land-shaping has been lost and we have little written evidence so we do not know the extent to which beauty infused these experiences (Bourne 1956, Macfarlane 2015). Several scholars have remarked on the different values that outsiders might bring to the countryside, with Tuan (1977) suggesting that outsiders may see beauty where insiders see hardship, and Bourne noting that outsiders may see only an imitation of the shell of the ‘home-made civilization of the rural English’ and value only symbolic features of this rural heritage (1956, p. 76).

Other areas of knowledge and experience were also unheard and absent from the discourse about aesthetic appreciation of the countryside at the time. The contemporary voices of Black and Ethnic Minority communities have drawn attention to the colonial history of many historic houses and designed landscapes which form crucial nodes for public access in AONBs. According to traditional aesthetic theory judging that a colonial house or parkland is displeasing based on its links with slavery is a moral judgment, not an aesthetic one with both views able to be held concurrently. Where this theory breaks down, however, is in the fast-moving pace of our understanding about the history of many of Britain’s iconic designed landscapes (see e.g., Huxtable et al. 2020). As the distasteful history of some preserved places becomes ingrained in public understanding, it is possible that a new cultural aesthetic will take over in society so that the immediate perceptual response will be displeasure at these places, rather than a feeling of pleasure. Where debates about Natural Beauty embrace more diverse perspectives, for example the ‘What is Natural Beauty?’ symposium held by the Place Collective in 2021, such issues are already being raised. This symposium highlighted the role of different types of knowledge, and who has a legitimate interest in judging beauty, a relevant concern today as conflict increases around land as a resource for housing and other social purposes, and beauty as a value becomes contested.

3.6 Chapter conclusions and a new ‘model’ for Natural Beauty

The transformational nature of reconstruction after World War Two created a political, social, and economic environment which allowed big ideas to flourish (Sheail 1984). Preserving Natural Beauty was one of them. It was normal at the time to consider that countryside was more worthy of protection than the town (Amati 2008; Burchardt 2002; Matless 1998) but the 1949 Act was not just about preserving countryside as a physical reality. It was also about countryside as an idea, and our emotional response to it. *Countryside* encompassed a range of landscapes from pastoral lowlands and coast to upland moors and mountains, and its beauty could be experienced at myriad scales. For the early campaigners, lowland pastoral and cultivated countryside possessed an equal Natural Beauty to open upland and moorland, with the combination of different types of landscape together representing the history and values of the nation’s relationship with land. The simple message these campaigners had for society was summed up by William-Ellis’s publication *Britain and the Beast* (1938) and its central tenet,

‘The British people are heirs to a unique landscape in which beautiful towns and villages have grown in harmonious relation to the landscape ... attachment to our country means attachment to the land and its beauty.’ (Scruton 2014).

The narrative woven by the architects of the 1949 Act built on earlier discourse about the spirit of a nation embodied in beautiful countryside at risk from humanity ‘now armed ... with weapons [to destroy its] natural beauty’ (Trevelyan 1946, p. xii). This imprint of a rural civilisation swiftly disappearing represented a much older and more harmonious relationship between people and nature. Its Natural Beauty embodied a desirable set of societal values such as freedom and belonging, health and happiness, and it was a powerful narrative engaging both politicians and people. Inherent in this narrative is the implication that the countryside is changing, and the story will continue. Society takes centre stage in a joint endeavour to protect

it, with Natural Beauty (like landscape) a resource in which everyone has a stake even if they do not own land (Matless 1998).

The idea of not defining Natural Beauty because it allowed AONBs and National Parks to be what the Minister wanted them to be was a reasonable position to take at the time (Holdaway 2007). The need to prepare detailed management plans for the conservation and enhancement of Natural Beauty was not envisaged, nor was the political imperative to monitor its condition or justify future designations or boundary reviews. Dower's 'characteristic landscape beauty' was totemic, and both Dower and Hobhouse anticipated that character and features of interest could be preserved while allowing rural areas to modernise and accommodate more visitors. Such an objective demands that knowledge about Natural Beauty and the socio-ecological systems that support it are available to decision-makers (Yapp 1984). For many years, there was no consistent representational model of Natural Beauty that decision-makers could draw on in policy. This changed in 2011 with Natural England's Evaluation Framework for Natural Beauty, but the origin of the factors lie in landscape assessment, and they differ from those proposed by Hobhouse and Huxley. This chapter has sought to develop a new understanding of Natural Beauty based on examining the foundational reports and discourse from early campaigners and focusing on AONBs as a means of gaining a clearer picture of the intentions. This understanding is translated into a new theoretical model for Natural Beauty which reflects the policy intent and historical context for *Natural Beauty* in the 1949 Act and the ideas associated with it.

A new model for Natural Beauty in public policy

The model represents the idea of Natural Beauty as intended by the architects of the 1949 Act, albeit inevitably in a simplified form constrained by the categories of components

identified (Thompson 2022) ⁵⁸. Its purpose is to facilitate an improved understanding of what is to be taken account of in Natural Beauty policy, and what dimensions of Natural Beauty need to be addressed in techniques developed to measure and monitor it (further explored in chapter 6). If validated and adopted, it could underpin management plans for the 46 AONBs in England, Wales, and Northern Ireland, and inform assessment of Natural Beauty in policy decisions across 24.5% of England.

The 1949 Act's Natural Beauty is a holistic concept. Its raw material can be described by *countryside* or *landscape* providing these are defined by their physical manifestation as an area of land operating as a dynamic system whose particular nature-human interactions have resulted in a distinctive character. This character describes the area's personality and tells the story of the land over time, a story with a particular set of cultural associations which contributes to an understanding of national identity. *Natural* describes features and processes characteristic of a harmonious interaction between people and nature which were associated, in the first half of the 20th century, with traditional countryside – what we might now call cultural landscapes. Human-made structures are included such as buildings made of predominantly natural materials using traditional skills and crafts, together with vegetation forms and features shaped by people. Natural Beauty emerges from these complex interactions and encompasses any aspect of the countryside/landscape at any scale that people's mind or body can be attuned to. *Beauty* represents the pleasurable emotions associated with an aesthetic experience immersed in or contemplating nature/landscape. Such an experience can be prompted by enjoying a panoramic view, noticing a change in the weather, or pausing to experience the tiniest detail in nature. Positive emotions and a disinterested, non-instrumental perspective are

⁵⁸ The model does not attempt to represent natural beauty as a general concept. Our knowledge of the neuroscience and psychology of aesthetic experiences is currently insufficient to attempt such a feat (Jacques 2021).

necessary conditions for Natural Beauty with fair access to nature/landscape a pre-requisite to achieving wider health and wellbeing benefits for society and to justify citizens' contributions to its protection

The model, illustrated in Figure 8 (p. 85), addresses the interaction between subject (perceiver) and object which is central to the idea of beauty. Natural Beauty is expressed as a combination of three factors reflecting the three interconnected themes which dominate the foundational reports – symbolic landscape character, physical features of interest (including the interfaces between them and processes driving them), and the pleasurable aesthetic experiences representing people's emotional response to nature/landscape. Each factor is of equal importance to the conservation and enhancement purpose⁵⁹. Multisensory perception and emotional engagement with nature are necessary conditions, an approach which challenges the visual bias of some current assessment tools (examined further in chapters 5 and 6).

⁵⁹ Aesthetic experiences cannot, strictly speaking, be 'conserved and enhanced' but the capacity of the countryside to facilitate such experiences can be, and they can be fostered in people through accessibility, knowledge, and culture, encouraged by fair access to land and the removal of barriers to understanding, enjoyment and engagement.

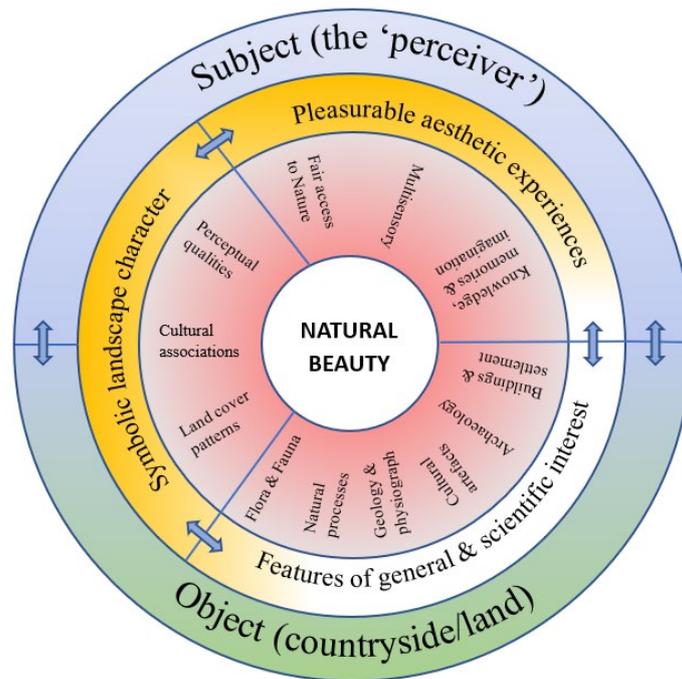


Figure 8. A representation of Natural Beauty as intended by the 1949 Act including factors, explanations, and necessary conditions.

Symbolic landscape character

Telling the story of the landscape over time

Broad scale (designation wide)
 Represents the harmonious interaction between people and nature where land use and beauty are aligned (configurations of land use and types of land management practices which allow nature and natural systems to be healthy and functioning).
 Represents an example of the types of countryside/landscape representative of the history of human-nature interaction in Britain. Encompasses distinctive patterns of land cover and features. Embodies cultural associations with land/water and landscape which tell a story about, or symbolise, national identity or moral good often expressed through art, music, literature, traditional rituals, practices and celebrations⁶⁰.
 Exhibits a high degree of naturalness (which encompasses diversity and abundant biomass of species and genotypes; extent of natural surfaces; use of natural materials; role of natural processes and/ or traditional, mostly small-scale, and non-industrial, shaping or crafting by people).
 Can be described by discourse or art or represented spatially (including pattern metrics) with a narrative component which can include perceptual or aesthetic qualities assigned to it, sufficient to conjure a distinctive place in the minds-eye.

⁶⁰ Although this does not mean that activities representing moral harm are not present or concealed (Thomas 1984).

Features of general or scientific interest (natural and cultural)	Finer-grained scale Encompasses anything in the natural/cultural environment that the mind or body can attune to. Includes habitats and species; geology; built structures ⁶¹ , cultural artefacts, archaeology, soundscapes and viewsapes, seasonal phenomenon, vegetation morphologies and topography shaped by centuries of traditional management or craft (such as coppice/pollards, hedge/bank systems, tracks and paths, hefted livestock breeds and traditional crop varieties). Also encompasses natural and cultural processes underpinning landscape character including traditional land management.
Pleasurable beauty-related aesthetic experiences	Involves a range of positive pleasurable emotions associated with beauty experienced by individual citizens. Allows for involvement of all the senses and includes both contemplative and immersive aesthetic experiences. Dependent on fair access based on the principle that one person's utility (comprehensive benefits derived from a beauty experience) does not diminish that of others or harm the natural resource upon which beauty depends ⁶² .

Explanations and necessary conditions for the factors derived from studying the Reports provide additional information to guide policy. The new model is used in subsequent chapters as a reference point against which to examine the opinions and decisions of later public sector actors.

If there had been no demand to measure Natural Beauty in the years following the Act, the absence of a consistent definition may not have mattered. However, new political and economic realities were at play in the second half of the 20th century which drove what became a policy necessity to measure and account for policy success. Those required to solve the Natural Beauty problem turned to the landscape discipline for help, and Natural Beauty became increasingly defined in policy by how landscape was systemised and categorised for

⁶¹ NE designation officers argue that slate quarries do not contribute to Natural Beauty, but cottages and some ruins can (informal discussion January 2023). I suggest that this is inconsistent. Slate quarry walls can appear like natural cliffs, and weather and catch the sun in the same way as any natural material. In this I am in good company with Ruskin who observed the natural beauty of an Alp catching the sun, which on closer inspection turned out to be a glass roof (quoted in full in Marr 1920, p. 3).

⁶² Akin to the political philosophy of John Rawls (Chandler 2023)

measurement. Chapter 4 explores how and why this new approach developed, and the implications for Natural Beauty policy.

Chapter 4 The reframing of Natural Beauty in public policy since 1949

4.1 Introduction

Central to AONB policy today is the idea that the conservation of Natural Beauty is indistinguishable from the conservation of landscape. In the latter half of the twentieth century discussion about beauty and aesthetics faded from public policy discourse (Keiran 2010), with decision-makers routinely substituting *landscape* for *Natural Beauty*. This reframing has become a rule-of-thumb heuristic,⁶³ a mental short-cut, which replaces something perceived as complex and intangible with a technical term, *landscape*⁶⁴. Once thus reimagined, a cadre of familiar tools developed in the landscape discipline and already embedded in planning policy can be applied to Natural Beauty problems. However, landscape itself is a contested idea and its relationship with beauty is not straightforward. This chapter examines how and why this shift occurred, and what else influenced the interpretation of Natural Beauty in the decades after the 1949 Act. It starts by considering the legacy of the 1949 Act and investigating the economic and political context for environment-related public policy in the second half of the 20th century. The ensuing understanding of normative ideas and landscape language embedded in the field of Natural Beauty policy sets the scene for chapters 5, 6 and 7 which analyse approaches to the interpretation of Natural Beauty today and how it is measured and monitored to determine policy success.

⁶³ ‘Rule-of-thumb’ heuristic allows individuals to make an approximation without doing extensive research (Dale 2015).

⁶⁴ Observed, challenged and discussed at a meeting between the NAAONB and Natural England’s national planning team on 10th July 2023.

4.2 Methods and materials

This chapter addresses Research Question 2 – how has the framing of Natural Beauty in public policy changed over time; why, and what are the implications for policy?

Scholarship tends to focus on how rationality theories and self-interest drive policy making in the West, but the role played by ideas is central to understanding public policy (Cairney 2019; Evans 2018; Campbell 2002). In *Ideas, Politics and Public Policy* (2002), Campbell identifies five types of ideas that affect policymaking, four of which are relevant to this study – cognitive paradigms or world views (taken-for-granted explanations of how the world works, often economic and political, which can constrain the range of policy choices); normative frameworks (taken-for-granted values, norms and principled beliefs – often held unconsciously by policy-makers); frames (choices made by policy-makers to foreground certain ideas – often associated with the crafting and mobilisation of discourse), and programmatic ideas (guidelines or approaches which if simple can facilitate easy to adoption whether or not they are the most effective option).

I use these themes to investigate the wider economic and political context to how and why Natural Beauty has been reframed since 1949 not just in relation to landscape, but as landscape. The challenge in developing a method to explore the impact of ideas is that ‘so much depends on so much else’ (Gaddis 2002, p. 55). Since the purpose here is not to generalise but to explain a particular phenomenon occurring at a particular time, a historical narrative approach is adopted (Sager & Rosser 2018; Lange 2013; Howlett & Rayner 2006), which focuses on ideas but acknowledges other influences. The subject of study is the arc of Natural Beauty policy from 1949 to the present day, and the ideas and actors that have influenced its trajectory. Campbell’s (2002) hierarchy of ideas is used to prompt me to explore the wider ‘world view’ context for the more operational programmatic ideas experienced in practice.

Campbell recommends that attention is paid to the causal processes through which ideas exert effects on policy outcomes (Ibid.). Here the process becomes complicated with ideas transmitted through discursive practices and social learning (Dunlop & Radaelli 2018; Lee 2004; Hall 1993) interacting with individual personalities and forms of thought (or ‘habitus’) which in turn shapes, and is shaped by, the character and practices of organisations (King 2015; Selznick, 1948).

Tracking changes behind the scenes in landscape policy is challenging because of the absence of an easily accessible archive of policy documents and communications within relevant government agencies relating to this period. I reviewed documents from the following sources to inform this chapter with sources chosen which help answer the question, why reframing took place, and why it was through landscape rather than another discipline?

National Archives (selected folders from COU1/2/3 and HLG 92/93)

The digital personal archive of a long-serving civil servant who retired in 2018 – an eclectic mix of background reports, personal notes and internal agency memos.

High Weald AONB Unit paper archives of government policy documents and communications from 1989

Digitised and more recent digital policy documents from the relevant agencies (generally dating from 2000 onwards).

Despite the plethora of documents reviewed, there is a limited amount of information that tracks policy thinking about AONBs during this period. A handful of key documents held in the national archives and in the personal archive of a long-serving civil servant locate the transition point in policy framing from *Natural Beauty* to *landscape* around the early 1970s with several further data points confirming the shift. The reasoning for this change is difficult to ascertain from the documents and the intention of this chapter is to draw together clues from

the ideas and practices of the period using archive material and published documents from relevant government agencies alongside scholarship and writing about wider political trends. It is unlikely that documents exist which explain the shift in detail, and it may be that the transition to a landscape framing was not a conscious one. However, in view of the disparate and non-digital nature of archived documents from this period I cannot be sure other documents exist which may prove otherwise.

This chapter explores ideas from 1949 but few ideas appear spontaneously. Their impact on Natural Beauty policy cannot be adequately examined without first understanding the legacy of the 1949 Act in terms of the structures and functions of organisations designed to implement the policy.

4.3 Analysis and Discussion

4.3.1 The changing policy context for Natural Beauty in the second half of the 20th century

4.3.1.1 Legacy of the 1949 Act: separation and specialism

The battle for ideas appeared to be won in 1949 when the traditional interpretation of beauty as a societal good was embedded in the policy ambition and supported by a coalition of politicians, eNGO's, and the public. No additional explanations were felt necessary with the Bill referred to by the Minister for Town and Country Planning, Mr Silkin, as a 'machinery Bill', designed to set up the organisational structures and processes by which policy goals were to be realised (Holdaway 2007, p. 7). Dower had argued that the considerable overlap between preserving the characteristic beauty of the landscape and wildlife conservation required them both to be under the same organisation, the proposed National Parks Commission (NPCn), but Huxley's view won the day (Sheail 1984). Huxley recommended the setting up of a separate body for wildlife conservation, a 'national Biological Service' (WCSC 1947, p. 4), suggesting that since both

had the same goals, ‘conserving the rich variety of our countryside and sea-coasts’ (WCSC 1947, p. 2) there would be no conflict between the ‘aesthetic’ approach of the NPCn and the ‘scientific approach’ of a biological service (WCSC 1947, p. 1). Huxley clearly envisaged that the decision frame for the NPCn would be an aesthetic one.

Accordingly, two public bodies were set up by the 1949 Act – the NPCn which was charged with the preservation and enhancement of Natural Beauty, and Nature Conservancy charged with setting up nature reserves and studying flora and fauna, geological and physiographic features to contribute to their conservation (Part III, s15). Blunden and Curry (1990), blame the lack of debate about nature conservation during the passage of the Bill on parliamentarian’s reticence in speaking about what were considered scientific matters and it was the discussion of beauty, drawing on a more familiar and shared language, that dominated (Holdaway 2007). The coalition of interests which secured the preservation of Natural Beauty extended across government and into civic society, but it was the strong web of personal relationships between scientists, civil servants and MPs that ensured nature conservation gained its own dedicated body⁶⁵ (Sheail 1984).

The separation of duties between the NPCn and Nature Conservancy has been blamed for lasting divisions between a people focused approach and a scientific one in conservation policy (Jensen 2006; Burchardt 2002; Matless 1998; Roberts 1988). Although the organisational purpose of NPCn and its successor organisations (Countryside Commission (CoCo) and Countryside Agency (CA)) was the preservation of Natural Beauty, the division tends to be described in scholarship as between landscape and nature conservation, or science

⁶⁵ Max Nicholson, an ornithologist who went on to be Director General of the Nature Conservancy, played a pivotal role in achieving a dedicated body for nature conservation as the official in charge of the office of the then deputy prime minister, Herbert Morrison (Sheail 1984). He later founded the multi-disciplinary consultancy Land Use Consultants (LUC).

and amenity, rather than Natural Beauty and nature conservation (see e.g., Blunden and Curry 1990), illustrating that, by the 1980s, the language of beauty was already fading from public policy discourse. Separation and the necessity of vying for funds fuelled a need for these organisations to develop distinctive identities and specialisms. NPCn and its successors employed from a wide field of geography, planning, landscape architecture and natural science⁶⁶, while Nature Conservancy (and its successors NCC and EN) recruited mostly from scientific disciplines. The people and partnership focus of NPCn's successor bodies gave them a political advantage despite their smaller size (Bunce 1994), and in 1994 Lord Marlesford⁶⁷ observed,

‘The Countryside Commission is a more entrepreneurial organisation; indeed it is sometimes almost piratical in nature. It has seldom been reticent in proposing radical new solutions in its statutory role as the Government's watchdog over England's rural beauty. This has on occasion caused friction’ (HL Deb 31 March 1994).

CoCo's embrace of the new profession of landscape and the rapidly developing techniques of landscape assessment to solve Natural Beauty policy problems attest to this pragmatic attitude. These approaches delivered the systematic and seemingly more objective analysis that policy makers of the day wanted.

In 2006, over 50 years after the 1949 Act, Dower's ambition was finally realised and the organisations responsible for Natural Beauty – the Countryside Agency (CA) – and scientific nature conservation – English Nature (EN) – were combined to create Natural England⁶⁸. *Natural Beauty* was excised from the organisation purpose and replaced with *landscape* (NERC 2006). No records exist to explain this change, suggesting that the reason

⁶⁶ Interview with Ray Woolmore, 14th November 2019.

⁶⁷ Lord Marlesford was a member of the Countryside Commission between 1980-92.

⁶⁸ Natural Environment and Rural Communities Act (NERC) 2006.

for reframing was seen to be self-evident, although the Chief Executive of Natural England commented that this represented a ‘simplification’ of the previous purposes⁶⁹.

The birthing of Natural England (NE) had not been an easy one (Marren 2007). The swallowing up of a smaller organisation (CA) responsible for Natural Beauty by a larger one (EN) led to the loss of experienced staff and institutional memory and the gradual archiving of all previous research and guidance on designated landscapes⁷⁰. A diminished role for Natural Beauty and landscape within NE was the result. Jensen wrote of the merger that it ‘will bring the longstanding nature/landscape divide to an end and thus hopefully bring new perspectives to the understanding and managing of landscapes’ (2006, p. 170). Arguably, Dower would have been disappointed. A renaissance in the approach to Natural Beauty or to a wider landscape concept, is not what those of us working in the sector experienced. Beauty was entirely absent from the debates and remained in a diminished role in public policy until re-emerging as a theme in Fiona Reynold’s *The fight for Beauty* in 2016 and the Government’s *25-Year Environment Plan* in 2018. Although the Government’s Landscapes Review made little comment on beauty, it did acknowledge the lack of leadership on landscape (Glover 2019)⁷¹. The diminished role for landscape within NE may partly explain the lack of progress in investigating the theoretical relationships and overlap in policy and practice between the three ideas – Natural Beauty, landscape, and nature – and the policy inconsistencies that endure as a result.

In the years following 1949, no such concerns were apparent. The NPCn was embarking on its mission to preserve Natural Beauty for the nation seeking staff from a broad range of

⁶⁹ In a presentation to Natural England’s Landscape Advisory Panel on 23rd June 2022.

⁷⁰ Interview with Ray Woolmore, 14th November 2019.

⁷¹ Prompting NE to propose establishing a new National Landscape Service (NLS) as an executive function within its organisation together with a non-statutory expert Advisory Panel, established in 2022. The scope and configuration of NLS remains under discussion.

disciplines loosely related to landscape planning. The Nature Conservancy meanwhile recruited scientists and specialists. It was over this organisational topography that the political and economic ideas of the late 20th century played out.

4.3.1.2 Implications of a neoliberal economic paradigm for Natural Beauty policy

The dominant language of public policy discourse in the 20th century has been economics (Mazzucato 2018; Raworth 2017; Lawton 2005), with economic theories and economic models of human behaviour shaping policy questions and determining how success is measured (Aldred 2019; Raworth 2017; Lee 2004; Hall 1989). Natural Beauty policy is no exception. Any analysis of public policy in the second half of the 20th century is incomplete without considering the wider economic and political context in which it exists.

Public policy in the UK following World War Two was mainly shaped by two ideas, ‘Value equals Price’ and ‘Inputs equals Outputs’ (Barber 2021, p. vii). The first reflects the overwhelming dominance in the West of a neoliberal economic paradigm⁷² and the second underpins the high modernist approach to public policy which assumed measured accountability would result in increased public value (Connolly & van der Zwet 2021; Muller 2019). The paradigmatic shift away from Keynesianism to neoliberalism which occurred between the late 1940s and the 1970s a (Vallier 2021; Aldred 2019; Oliver & Pemberton 2004) was accompanied by an increasing reliance on universal quantification and comparison to measure success (Muller 2019; Monbiot 2014). The pressure to quantify drove governments to seek to define outcomes that can’t be measured, such as Natural Beauty, in terms of things that seemingly could be, such as landscape.

⁷² A term used to encompass a range of beliefs that promotes individual entrepreneurial freedoms; sees competition as the defining characteristic of human relations, and favours ‘the market’ over government intervention (Biebricher 2018; Slobodian 2018; Harvey 2005).

Accompanying neoliberal economic beliefs is a political philosophy that skews rights away from communities (the public good) to individuals and companies (Biebricher 2018; Lee 2004; Coase 1974, 1960). How the law assigns rights to land and the extraction of value from it, and how it deals with traditional economic externalities such as water, air and climate, effects both the outcomes for Natural Beauty and the measurement of it. Political principles derived from economists and lawyers such as Ronald Coase and Richard Posner saw maximisation of economic wealth and legal rights determined by economics claimed as moral and normative substitutes for social value and social justice (Tichelar 2019; Dworkin 1980; Kronman 1980). These ideas allowed successive governments to gradually relinquish public control over land and to grant rights to the landowner and developer to extract value from it (see e.g., Conservatives 2010). The aspiration of the post-war Labour Government to secure public control of land and capture any uplift in land values for the public good ⁷³(Hill 1980), did not survive this shift. The potential for value extraction enables, for example, developers to pay to employ experts to argue that the benefits of a particular scheme outweigh harm to Natural Beauty, and it is in their interests to do so since expert knowledge is privileged over lay knowledge in planning decisions (Lee 2017). Power is tilted in favour of landowners and developers and away from communities. The lack of legal rights assigned to local people, future generations, or nature itself leaves local people having a voice (in terms of their vote or through prescribed consultation) but no means, and future generations and nature having no voice and no means. For a public policy whose success relies on people in the future experiencing Natural Beauty, and on nature itself thriving, the minimisation of these contributions fundamentally compromises the preservation ambitions of the 1949 Act.

⁷³ Manifesting in the Town and Country Planning Act passed in 1947, which Dower believed could prevent despoilation of Natural Beauty through planning control.

Many assumptions which underpin economic theory effect the way Natural Beauty is treated in policy. For example, harm to Natural Beauty comes about in myriad ways, some not always obvious to those who perpetrate it. Critics argue that the ‘many hands’ problem whereby each individual act has a negligible effect, but the same act performed by many is harmful (along with the moral dilemmas this imposes) explains our apparent willingness to destroy nature (Spiekermann 2014; Andreou 2006). Economic theory suggests this ‘free-riding’ on the contribution of others (a cornerstone of individualism), is a rational choice, and this idea allows companies and individuals to ignore or overlook detrimental impact from their operations particularly on common pool resources (Aldred 2020; Andreou 2006; Parfitt 1986). It is this attitude which allows each of the intensive poultry units in the Wye catchment, accounting for 20 million birds, to claim it is not their phosphate waste that is the cause of the precipitous decline in water quality in the Wye Valley AONB (see e.g., HC Environmental Audit Committee 2022; Caffyn 2021). A similar claim is made by almost all planning agents in the High Weald AONB who argue that their individual development is not the one that will harm its Natural Beauty (see Chapter 6, Thematic study II). A refutation of free-riding is provided by the Sorites paradox⁷⁴ (Aldred 2020; Andreou 2006), and it is this idea that underpins the requirement on Landscape and Visual Impact Assessment (LVIA) to consider cumulative effects. Taking Natural Beauty as an example of the Sorites paradox we can see that incremental development with houses and roads in a beautiful and unspoilt AONB will at some point lead to harm and the perception that Natural Beauty is spoilt, but when exactly did that happen and how much development is compatible with leaving the AONB unspoilt? (Aldred 2020). ‘Many hands’ problems and others, such as cost distribution issues where damage to common pool resources such as air and water are borne not by the perpetrators of harm but by future

⁷⁴ Related to the idea of collective harm and theories of vagueness such as the ‘many hands’ problem or puzzle of the ‘harmless torturer’ (Gunnemyr 2021; Spiekermann 2014).

generations (Andreou 2006), require a philosophical exploration of not only the morals and ethics of companies but also of public officials who make decisions of behalf of society (Spiekerman 2014; Thompson 1980). Economics or technical approaches alone are unlikely to be able to solve these problems.

The influence of neoliberalism on Natural Beauty policy, particularly the idea that nature can be valued and traded as a commodity (Harvey 2005), is epitomised by the United Nations ‘green economy’ project (UNEP 2011), introduced in UK policy as ‘natural capital’ (HM Government 2011b), and its operationalisation as, for example, monetarised biodiversity offsets (Knight-Lenihan 2020). These approaches tend to be written in the language of economics. They view nature as a set of ‘assets’ that can be accounted for in economic terms (Sullivan 2017; Boehnert 2016; Patel & Crook 2012) and overlook concerns that the very act of valuation can constrain choices and erode the value of what is being priced (Cairney 2019; Price 2017). As early as the 1960s, valuing beauty was already on the agenda with events such as the American symposium entitled *The Price of Aesthetics and Natural Beauty* (Kates 1967). In the UK, exploratory approaches such as *Environmental Capital: A New Approach* jointly commissioned by CoCo, EN, English Heritage and the Environment Agency (CAG & LUC 1997) and its revision as *Quality of Life Capital* (CAG & LUC 2001) saw the use of *capital* growing in environmental policy. The appeal of monetisation methodologies more widely is evident from the work of Fish and Saratsi who showed that people associate it with positive qualities such as ‘transparency, objectivity and clarity’ (2015, p. 7). However, participants in Fish and Saratsi’s (2015) study also highlighted its limitations; the need to compliment it with non-monetary evaluations that can better reflect cultural and historical contexts, and the need to acknowledge complexity and underlying assumptions. Similar criticisms have been made by indigenous groups, anthropologists, social movements, and organisations concerned with environmental justice (see e.g., Sullivan 2017; Kari-Ora 2 Declaration 2012). Despite these

objections, economic approaches have become embedded and normalised in UK environment policy (Sullivan 2014).

In 2014, George Monbiot used *beauty* deliberately and provocatively in his article title *Can you put a price on the beauty of the natural world?* to encompass everything that is good about nature, and which has an intrinsic value not captured by a monetary figure. Monbiot and others (see also, Sullivan 2017), however, are isolated voices external to a public sector in which the necessity of measured accountability is an assumed and embedded norm (Lapiente and Van de Walle 2020; Muller 2018; Dunleavy & Hood 1994). In 2016, the case for a natural capital approach in AONBs was made directly by Dieter Helm, author of *Natural Capital: Valuing the Planet* (2015) and Chair of the UK Natural Capital Committee (until 2020), who spoke to the NAAONB Chair's conference and urged them to adopt the approach in AONB Management Plans⁷⁵. Support for the approach was cemented through Defra funded pilot natural capital assessments of AONBs (see e.g., White et al. 2015). By 2019, beauty has been relegated by NE from a holistic ambition of policy to a service provided by nature whose justification was 'a strong economy and improved health and wellbeing' (Bolton 2019). The Landscapes Review in the same year recommended that *natural capital* be added to the Natural Beauty purpose and be regularly assessed to inform priorities for action (Glover 2019).

4.3.1.3 High Modernism and quantification in public policy

Closely interwoven with the effects of economics on public policy is the impact of normative assumptions about how policy is constructed and operationalised. High Modernism in public policy, which came to the fore in the latter half of the 20th century, is distinguished by a focus

⁷⁵ A follow-on discussion between AONB Lead officers suggested considerable support and only a handful of opponents, with the main argument for natural capital being that, as a small sector dependent on Defra funding (for 75% of our budgets) it was not in our interests to fight against an unstoppable tide (a similar argument is being used in support of Biodiversity Net Gain policies today).

on approaches that are mechanistic, systematic, bureaucratic, and ‘scientific’, with a reliance on rendering complex problems into simple linear models (Goodin, Rein & Moran 2013). The rise of managerialism originating in the first half of the 20th century sought to replace a lifetime’s accumulation of knowledge in a field with rules, laws, and formulae - quantitative technologies that could be held by fewer and others (Muller 2019). ‘Scientific’ decision-making, it was assumed, would enable efficiency and effectiveness in policy to be achieved by fine-tuning and re-directing inputs and regulatory mechanisms (Rittel & Webber 1973). Simple models of cause-effect mechanical relationships between events were adopted drawing on the belief that the economic rationality of human behaviour constituted a fundamental law, (Raworth 2017).

The pressure to systemize, simplify and measure accountability affected the public service ethos, organisational culture, and policy implementation (Lawton 2005). In the 1960s, environmental disciplines such as geography and landscape began to adopt a more quantitative approach to meet these needs leading to a growth in landscape evaluation and landscape assessment techniques (Appleton 1975b). Environmental Impact Assessment (EIA) and environmental Cost-Benefit Analysis (CBA) were progressing along similar paths (Price 2017; Burdge 1991), with ‘Willingness to Pay’ (WTP) adopted as a common value measure for disparate concepts, enabling trade-offs based on price (Price 2017). In such approaches, complex socio-ecological interactions are simplified into a narrow set of causal relationships against which metrics can be developed.

In the 1970s, a set of ideological changes collectively termed New Public Management (NPM), were introduced further shaping the functioning of the public sector (Lapiente & Van de Walle 2020; Lane 2005). The central components of NPM – incentivization, competition and disaggregation – were designed to narrow and contain tasks and responsibilities so that accountability could be better measured and monitored (Lapiente & Van de Walle 2020;

Dunleavy & Hood 1994). The reliance on monitoring and accountability meant that collecting performance indicators became a priority for government (Muller 2018; Hood, 1995), an approach increasingly associated with a requirement for what was termed ‘evidence-based policy’ (Hill and Varone 2021; Stevens 2011).

Metrics, accounting systems and assessment methods often claim not to be decision tools in themselves but a way of organising information to inform decisions. *Quality of Life Capital* guidance for example, states that it ‘provides input to decision takers elsewhere’ (CAG & LUC 2001, p. 16). However, such claims rely on decision-makers understanding the limitations and uncertainties of metrics. The challenge for environmental policy generally, and Natural Beauty policy in particular, is that while High Modernism and NPM sought to bring a scientific perspective and measurement into the public sector, it neglected in many instances to import accompanying principles such as clear testable theories, model validation, and the necessity to state assumptions and uncertainty parameters (Thompson 2022). For example, Biodiversity Net Gain (BNG)⁷⁶ as measured by NE’s Biodiversity Metric (NE 2023) is essentially a predictive approach to measurement which estimates a possible potential outcome for biodiversity if a particular set of proposals are implemented effectively. Accordingly, it is described as a ‘simplification of the ‘real world’’ and ‘not scientifically precise’ (NE 2021, p 14). However, the mental model of cause-effect underpinning BNG remains untested and there is no requirement to list assumptions or explain errors and uncertainty in the predictions (High Weald JAC 2021). The assumption that an accounting method can deliver what professional judgement, or an alternative approach (such as the precautionary principle) cannot, tends to be accepted as a norm across government and third sector conservation organisations. Numbers

⁷⁶ BNG will become the statutory means to assess the extent to which the wildlife component of Natural Beauty is affected by development (Environment Act 2021)

can be trusted over expert judgement even in the face of clear evidence that the results are the opposite of those intended (see zu Ermgasson et al. 2021), indicating the power of normative frameworks maintained by social learning together with a hesitancy to disrupt within communities of practice.

Challenges to the use of simplified models of reality in environmental policy are rare but not new, with Burdge (1991) already questioning the range of variables considered; the scale and duration at which effects are assessed, and the role of monitoring in order to validate assumptions. Today, however, simplified models of reality adopting systemised methods and measured accountability dominate all aspects of public policy (Walker & Boyne 2006). What were billed as techniques to inform decision-making are now driving decisions, as expertise and professional judgement is deemed unreliable (Muller 2018; Beunen & Opdam 2011). The rise of assessment measures for Natural Beauty discussed in chapter 6 mirror this trend. The failure of NPM as a managerial and performance measurement approach to public policy is evident in the limited response of government to current societal challenges with many now arguing that new public (social) value approaches are needed (Connolly & van der Zwet 2021; Lapuente & Van de Walle 2020; Mazzucato 2018).

4.3.1.4 The operational challenges of language fluidity

Part of the difficulty associated with interpreting Natural Beauty today relates to the way language is used to categorise and name things. Words are tools, and far from being objective or neutral, choice of language in the way something is framed or talked about can cue others to think in a certain way and alter their perspective (Enfield 2022; Maron 2017; Macfarlane 2015; Fairclough & Sarlöv Herlin 2005). Language is used to share and coordinate experiences and create connections with others by categorising what we experience (Enfield 2022) but, because it can strip away differences to convey broad ideas, it can also be a source of habit and rigidity

in thought patterns (Bourassa 1991). Words used to classify what can appear to be self-evident ‘things’ but which contain a jumble of concepts and meanings, like *Natural Beauty* and *landscape*, are aptly described by Minsky (2006) as ‘suitcase’ words. For example, the cultural geographer, Williams, observes that *nature*, ‘contains, although unnoticed, an extraordinary amount of human history’ (1980, p. 67). Meanwhile, in practice citizens can interpret *nature* as distinct and something other than man-made (Define Research & Insight 2007). Inconsistencies in interpretation are common with the same citizens considering that *natural* (used in relation to *natural environment*) does encompass land that has been shaped by people (Ibid.). *Landscape* suffers similarly from confusing and inconsistent interpretation. At a training course for planning inspectors in 2015, the group explained that their greatest concern was ‘the inconsistency and imprecision in the language that they find used in the landscape field’ (Swanwick 2015, p. 5) – a message that suggests decades of presenting landscape-related approaches as offering more objectivity than beauty-related ones has not been entirely successful.

Fillmore (1976) posits that words cannot be understood without access to all the essential knowledge that relates to that word, and this idea of semantic frames may help explain why different groups of people with access to different types of knowledge and vocabulary around landscape, nature and beauty hold to their own meanings and assume others concur. The semantic frame behind the 1949 Act related to a philosophical understanding of beauty – societal good, form and harmony, and crucially, a feeling of disinterested pleasure. The shift to *landscape* evokes a different semantic frame and a more technical vocabulary about physical features and perceived qualities (although some, such as form and harmony, may be shared). Unlike their necessary association with beauty, emotion words are not generally part of the technical landscape vocabulary, an attribute that landscape practitioners use to propose that landscape assessment methods are inherently objective (LI & IEMA 2013).

Fluidity of meaning is not the only problem associated with language in Natural Beauty policy. Language is not necessarily designed to convey the fine detail of reality and can be insufficient for scientists (Enfield 2022). Macfarlane notes the paucity of words in the technical canon of landscape and contrasts the ‘dry meta-languages of modern policy-making’ (2015 p. 9) with the richness of the lexis for landscape spoken by workers and walkers, and the ‘seeing’ (Ibid. p. 2) and ‘vibrant perception’ of landscape this might offer (Ibid. p. 9). Public policy actors, however, tend to assert that technical language is sufficient and necessary for policy decision-making and there is no alternative (Swanwick 2015). What appears to be a paucity of words to describe nature/landscape is a recent phenomenon (Macfarlane 2015), but even if we draw on spoken language, our vocabulary to describe detail, for example, the colour or intricate pattern of nature/landscape is tiny compared with the range we can perceive through our retina (Enfield 2022; Sala 2013). Similarly, our language has not developed sufficiently to describe in necessary detail Natural Beauty in terms of the complex emergent system we now understand it to be (Minsky 2006).

Language has a further purpose in the measurement of Natural Beauty rarely remarked upon. It is used in assessment techniques, such as Landscape and Visual Impact Assessment (LVIA) and Biodiversity Net Gain (BNG), to describe a ranked category. In the BNG Metric spreadsheet, condition categories – ‘good’, ‘moderate’ or ‘poor’ – are assigned a number – 3, 2, 1 – representing a ranked value (NE 2021), and this number becomes a mathematical operator in the equations under the bonnet of the spreadsheet. Without sufficient validation and accompanying uncertainty statements, the mathematical relationships implied are accepted as true, and the number outputted (the net gain score) assumes a precision not necessarily justified. In reality, these assessment processes contain a series of finely balanced judgements built on hidden assumptions but with the alchemy of maths, the final output becomes meaningful, and the results gain a more ‘objective’ status (Aldred 2019; Muller 2018). Trust in numbers is such

that the outputs of such assessments appear in Natural Beauty decisions shorn of any uncertainty, despite being predictive processes where the probability of success is unknown (see chapter 6). Their outputs are deemed by decision-makers as objective and neutral ‘evidence’; a good enough approximation to the ‘truth’ requiring minimum effort in a time-poor decision-making environment (Van der Pligt 2015). Such outputs can mislead and misdirect policy, and lack of scientific training in the public sector exacerbates the problem.

For some, the failure of the technocratic ideal of public sector management which relies on objective neutral expertise informing decision-makers is the result of politics now pervading all of decision-making (Krugman 2020). However, this is aided and abetted by the extraordinary effectiveness of language as a means to reframe, influence or detract (Enfield 2022), and a reliance on numbers which is not always justified (Thompson 2022; Aldred 2019).

4.3.2 Beauty and the growth of individualism

Sartwell (2012) observes that one of the most basic issues in the theory of beauty is whether beauty is subjective (located ‘in the eye-of-the-beholder’) or an objective quality of things. Accounts of beauty continue to debate this issue with many philosophers seeking an accommodation between the two (Berleant 2012; Sartwell 2012; Brady 2003). Despite this constructive ambiguity, the politics of beauty in the second half of the 20th century shifted to focus on its subjectivity (Keiran 2010). Individualism, legitimised by Margaret Thatcher in 1979, nudged out the earlier idea of a society built on co-operation and collective moral good (Nuttall 2021), and beauty was relegated to an individual rather than a social value and shorn of its moral qualities (Keiran 2010; Parsons 2010). The perception of it as entirely ‘in the eye-of-the-beholder’ grew, resonating with this new individualism (see e.g., Inside Housing 2023; Bailey 2022). Seen as something society had no right to arbitrate on, beauty faded from policy discourse (Keiran 2010).

In parallel, New Public Management (NPM) sought to minimise the role of the state. For beauty, its individualistic eye-of-the-beholder interpretation facilitated the view that society should not regulate the design of new developments too closely and therefore planning authorities did not need design experts to arbitrate on good design. Public sector architects, urban designers and landscape architects were among the first casualties of local authority ‘re-organisation’ and austerity cuts. The result is a small number of national housebuilders imposing a limited set of off-the-peg site layouts and mix-and-match design details across AONBs of very different landscape character, awarded permission with relatively little scrutiny (BBBBC 2020; Colenutt 2020). Not at all what Dower or William-Ellis had hoped for when they each set out their vision for beautiful new homes for rural workers complimenting the Natural Beauty of designated landscapes (Dower 1945; William-Ellis 1928).

The Building Better Building Beautiful Commission’s (BBBBC) report *Living with beauty* (2020) almost singlehandedly cut across the norm with its quotes celebrating the power of beauty from Octavia Hill and Ebenezer Howard, and its mission to bring back the art of creating beauty in the built environment ⁷⁷. Its report suggested that the idea of beauty as a social good was not entirely dead. However, politics intervened and persuaded the government to quietly drop, for the moment at least, its planning changes including a commitment to beauty (Donnelly 2022), and the reluctance to talk about beauty in planning decision-making remains⁷⁸. If challenged, decision-makers and planning agents will explain that since beauty is in the eye-of-the-beholder, they can make no judgement on it. Despite the protestations of the NPPF that ‘high quality, beautiful and sustainable buildings and places’ is fundamental to

⁷⁷ However, its solution was very modern and cognizant of a technocratic public sector - design codes. Relying on design codes rather than the aesthetic creativity of architects would provide a ‘simplification’ of the design task (BBBBC 2020, p. 38), and such ideas were taken up enthusiastically by government who proposed a digital monitoring system to check compliance (MHCLG 2020).

⁷⁸ In 30 years working with 15 local planning authorities in the High Weald AONB I have not had a single conversation about creating beauty in new developments and only a handful about what good design means.

planning and can be fostered by good design (MHCLG 2021a, p. 38), the majority of housing schemes are created without the input of architects, and without any real engagement with communities or any discussion about beauty (Colenutt 2020; BBBBC 2020).

4.3.3 The transition from Natural Beauty to landscape

The transition from *Natural Beauty* to *landscape* in discourse was noticed by MacEwan and MacEwan in 1982 when they commented that the Countryside Commission ‘tends to equate ‘natural beauty’ with ‘landscape’ (p. 68), and this now familiar subconscious mental switch is illustrated by Himsworth who stated that ‘the protection of landscape should continue to be the prime purpose of designation’ (1980, p. 1). Similarly, Dennier’s review of National Park plans used *landscape* rather than the legal *Natural Beauty*, referring to the preservation objective of the national parks as ‘preservation and enhancement of the landscape ...’ (1978, p. 175). That conservation of Natural Beauty is indistinguishable from the conservation of landscape is so central to AONB policy and practice today that it is barely remarked upon. In 2012 when MHCLG (2021a) used *landscape and scenic beauty* rather than the legal *Natural Beauty* in the new National Planning Policy Framework (NPPF) neither Natural England nor any organisation representing designated landscapes challenged the change because, after all, what was the difference? The use of the language of landscape to describe Natural Beauty has grown alongside the development of landscape as a practice area in its own right so that today Natural Beauty is seen through the lens we currently understand as landscape.

4.3.3.1 Landscape: a contested term

The problem at the heart of all policy and practice concerning landscape is described by three archaeologists and a landscape geographer thus, ‘the elephant in the room is the question of just what is landscape?’ (Olwig et al. 2016, p. 169). Observing landscape professionals and questioning them about the meaning of landscape as I have done throughout this study tends to

elicit a puzzled expression. It's meaning is deemed self-evident but, if pushed, many reach for the Council of Europe Landscape Convention (ELC) which defines landscape as 'an area perceived by people whose character is the result of the traditional interaction between people and nature' (2000). Adoption of the Convention by the UK government has not, however, resolved the confusion in practice. Many landscape architects interpret the ELC definition as confirming that landscape is '9/10th perception'⁷⁹. This coincides with the visually focused interpretation held by many planners and landscape architects working on the early iterations of landscape evaluation in the 1960s and 70s, exemplified by Unwin's definition of landscape as 'the appearance of the land at the interface of the earth's surface and atmosphere' (1975, p. 130). Each contributor on landscape evaluation in the 1975 edition of *Transactions of the Institute of British Geographers* demonstrates different ideas about the categories of things that constitute 'landscape' (and therefore what things are evaluated) and at what scale; problems which Appleton (1975b) touches on in his essay about the absence of theory. Despite over 40 years of further scholarship and practice in the field there is still no consensus about these issues and the ensuing confusion magnifies the difficulties in analysing the efficacy of *landscape* as a useful substitute for *Natural Beauty*.

The etymology and lexicology of landscape is complex (Stilgoe 2015; Lowenthal 2007; Olwig 2005; Bourassa 1991). In scholarship, the idea of landscape as mainly a representation or cultural symbol of our surroundings (Sharma 2010; Cosgrove 1984) vies with its interpretation as predominantly biophysical form, albeit formed by human-nature interaction (Sauer 1925), or as a lived phenomenon (Ingold 2000). OED dates the use of *landscape* to the early 1600's to describe 'a picture representing natural inland scenery, ...' (2023). The two other

⁷⁹ An expression used by the expert witness for the local planning authority at a planning inquiry on a decision called-in by the Secretary of State (see, HWJAC 2021). Whereas discussion with NE's national planning team on 10th July 2023 elicited a consistent response that landscape was primarily about physical things.

interpretations offered by OED – ‘a view or prospect of natural inland scenery ...’, (18th century)⁸⁰, and a more physical interpretation ‘a tract of land with its distinguishing characteristics and features, esp. considered as a product of modifying or shaping processes and agents (usually natural)’ (19th century) – fail to capture the breadth of scholarly interpretation. Stilgoe, a landscape historian, challenges the focus on ‘natural’ as a qualifying attribute, tracing the roots of landscape from Old Frisian where it was used to describe ‘shoveled land’ (2015 p. 2). This interpretation, evoking the graft and labour needed to secure territory to support life, is significant for a modern immersive interpretation of Natural Beauty which relies on an immediate, physical/muscular and visceral engagement with land (Ingold 2011). If land can be shovelled, however, it can also be shaped to serve those with power suggesting that cultural preferences for certain landscapes need to be examined with care (Mitchell 2002; Matless 1998).

The physical shovelling of land is not the only dynamic process overlooked in the OED’s interpretation. Little is made of how people’s perception of landscape is affected by diurnal rhythms, weather, and seasons; or the socio-ecological and geological processes that drive longer term change. For Ingold, landscape is a ‘meshwork’ being woven into life, with the threads of human interactions making and re-making landscape through physical labour (2011, p. 70). Here humans are a key agent of physical change. Similarly, Mitchell proposes that landscape itself is a dynamic medium resting on cultural codes and practices, where we ‘live and move and have our being’ (2002, p. 2). He sees Natural Beauty as an experiential quality of landscape and challenges the idea put forward by scholars that the appreciation of beauty in landscape only began with the invention of landscape painting (Ibid.). Like Thomas

⁸⁰ The idea of landscape as spatial scenery viewed at a distance by an individual arose from the development of perspective in the representation of landscape in art during the Renaissance period (Cosgrove 1984, Olwig et al. 2016).

(1984), Mitchell notes that previous societies and other cultures had a more interactive relationship with the beauty of nature/landscape and observes that the current discourse often rests on a ‘pseudohistorical myth’ (Mitchell 2002, p. 13).

The interpretation of landscape as a spatial unit encompassing biophysical objects shaped by nature-human interactions underpins AONB policy. Carl Sauer, the charismatic and influential cultural geographer (Gade 2014), was one of the first to attempt to fuse the objectivist/scientific account of space with a more culturally determined subjective/qualitative account of place (Furia 2021). In his seminal book, *The Morphology of Landscape* (1925), Sauer defines landscape as,

‘determined first of all by its conspicuousness of form, of soil, and of sufficiently conspicuous masses of rock, of plant cover and water bodies, of the coasts and the sea, of conspicuous animal life and of the expression of human culture’ (1925 p. 302).

He explains that it is equivalent to the term used by German geographers to describe ‘a land shape’ (Ibid., p. 300). It is not simply a scene viewed by an observer – ‘no science can rest at the level of mere perception’ (Ibid., p. 301), although its spatial extent is guided by individual judgement comprehending the summation of its general characteristics (Ibid.). Such a description closely mirrors Huxley’s description of Conservation Areas [AONBs] (see section 3.5.1), but its potency as a cultural symbol or representation is also evident in the discourse of the early campaigners, and in the Addison Report, although *countryside* was used rather than *landscape*. The idea of landscape as a cultural symbol remains strong today (Mitchell 2002; Matless 1998), in part resulting from Emerson’s powerful contention in 1836 that everyone can own landscape even if they do not own land, but also because as a cultural symbol it is a marketable commodity with an identifiable price if packaged as the setting for real estate or as a leisure destination (Price 2017).

As the landscape sector developed and grew from the 1950s, so did the desire to expand the meaning of *landscape* to encompass almost every aspect of our environment making it almost synonymous with *ecosystem* or *nature* (Selman & Swanwick 2010; Daniel 2001). The definition of landscape provided by the Welsh Government's review of designated landscapes illustrates this evolution in meaning, 'landscape' incorporates the total natural environment of the area, together with its biodiversity, human settlements and cultural aspects' (Marsden, Lloyd-Jones & Williams 2015, p. 108)⁸¹. Some authors dissent, suggesting that *ecosystem* and *nature* describe biophysical attributes, while landscape is also social, political, and psychological (Sayer et al. 2006), but even here the role of emotion and the foregrounding of sense perception is unclear. Inconsistency and uncertainty about the role of sense perception in landscape lies at the heart of the current mismatch in the interpretation of landscape across disciplines, and therefore the extent to which its meaning overlaps with that of Natural Beauty.

Although the definition of landscape remains in need of clarification (Olwig 2005), in operational terms its potential breadth was confirmed in landscape assessment guidance (see Tudor 2014, p. 56; Swanwick 2002, p. 2). Presented as a circular landscape wheel which encompasses place/people; natural/cultural, and perceptual/aesthetic qualities, this interpretation superficially resembles the model of Natural Beauty derived in chapter 3.

⁸¹ The review authors explain that they consider their definition 'incorporates' the ELC one (2000) but the critical ELC phrase 'as perceived by people' is missing.

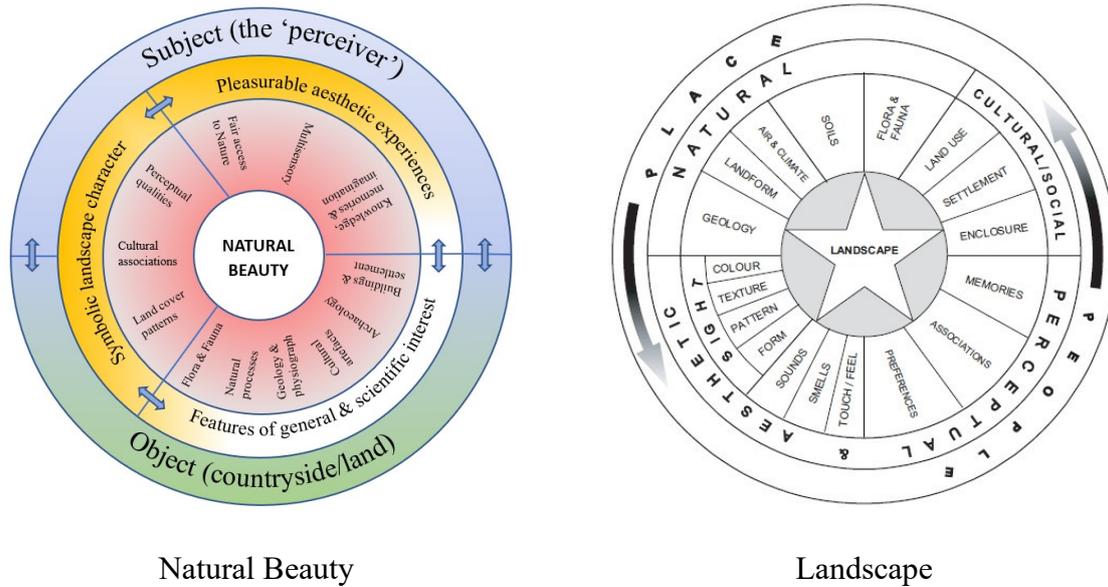


Figure 9. A comparison between models of Natural Beauty (source: section 3.6) and landscape (source: Swanwick 2002, p. 2)

Comparing the two models (Figure 9) it can be seen that there is considerable overlap. Like Natural Beauty, landscape is presented as an interaction between subject and object, although in practice ‘place’ tends to sit in the same category of thing as ‘landscape’. Two fundamental differences are evident. Firstly, the critical role of landscape character in Natural Beauty, which is implied but not specified in the landscape wheel. Secondly, the difference between the descriptive treatment of perceptual and aesthetic qualities associated with landscape compared with the emphasis on their manifestation as emotion directed aesthetic experience in Natural Beauty.

Whether as a biophysical entity, lived phenomenon or cultural symbol, the idea of landscape aligns more closely with the raw material of designation – countryside (NPCe 1947; Fairclough & Sarlöv Herlin 2005), than it does with the concept of beauty. Several scholars suggest that CoCo used *landscape* to mean picturesque scenery in the Romantic landscape tradition (Selman & Swanwick 2010; MacEwen & MacEwen 1982). However, the way *landscape* was used interchangeably with *countryside* in Government publications suggests a

more spatial and physical interpretation⁸². There are no records of any debate about the use of terminology, but both *landscape* and *countryside* in policy tend to refer to a physical place, and it is likely that choice of term was determined by what officers considered would garner most political support at the time.

4.3.3.2 Landscape quality and Natural Beauty

While MacEwan and MacEwan suggested the Countryside Commission (CoCo) interpreted Natural Beauty as landscape, and assessment processes for Natural Beauty today rely on this assumption; the actual phrase used by the Countryside Commission (CoCo) was *landscape quality* (1971). The desire for a more systematic and scientific approach to beauty is evident in CoCo's memo with 'a landscape quality rating' suggested as a means of demonstrating sufficiency of Natural Beauty (Ibid, p. 2.). There appears to have been no discussion about the change in language or the theoretical underpinning that would equate the two ideas. However, the shift was confirmed at the North Pennines AONB Inquiry, when the Chairman of CoCo stated to the Inspector that, 'though the statute speaks of "outstanding natural beauty", in practice this means outstanding landscape quality' (1985, p. 10).

In 1979, Newby sought to explain landscape quality to assist the consideration of landscape in planning decisions in a paper titled *Towards an understanding of landscape quality*. Newby equated quality with beauty, noting that landscapes were designated as 'landscapes of quality' (1979, p. 11), but he also used *quality* as an attribute of which beauty was but one, 'there are landscapes that by virtue of their originality, variety, beauty or some

⁸² The Chairman of CoCo, Sir John Johnson heralds AONBs as 'our finest countryside' in the 1991 policy statement on AONBs (p. 1), but a few years later in the first guide for members of AONB partnerships, he refers to 'our finest landscapes' (CoCo 1994). 'Our finest landscapes' or 'England's finest landscapes' was a strapline used by CoCo in the mid-90s but by 1998, the new Chairman, Richard Simmonds, reverted to 'our finest countryside' in his preface to CoCo's *Protecting our Finest Countryside: Advice to Government*. CA, also preferred *countryside*, setting its Landscape and Recreation Division (LAR) an outcome target of maintaining and enhancing the 'special qualities of the finest countryside' (HC 2006).

other quality ...' (1979, p. 11). Daniel attempted to clarify the issue, observing that use of quality in the singular must mean 'degree of excellence [from OED]' rather than 'characteristics or attributes' which, he suggested, then prompts the question, excellent in what regard? (2001, p. 270). It would be reasonable to assume that in relation to the 1949 Act this must mean excellence of Natural Beauty, suggesting that substituting *landscape quality* may not solve any perceived difficulties in understanding its meaning.

Despite Daniel's insights, *landscape quality* remains a confused and contested idea in policy and scholarship. Lothian (1999) suggests 'landscape quality fulfils all of Kant's prerequisites for beauty...' (1999, p. 191). Whereas, for the Council of Europe Landscape Convention, landscape quality has very little to do with beauty, being about 'landscape features' (Council of Europe 2000, Article 1(c)). In UK policy, the idea of landscape quality shifted from the subjectivist position, with quality as a proxy for beauty (Lothian 1999), to an objectivist one. Landscape assessment guidance reformulated landscape quality as 'condition' or 'physical state' of the landscape (Swanwick 2002, p. 53), although subsequent guidance is inconsistent in describing exactly what is being condition-assessed (see Tudor 2014; LI and IEMA 2013).

In a departure from CoCo's simple idea of equivalence between landscape quality and Natural Beauty, Natural England now uses *landscape quality* to describe just one of six factors that contribute to Natural Beauty, defining it as 'a measure of the physical state or condition of the landscape', with 'scenic quality' a separate factor (2011, p. 13). In the same document landscape quality indicators account for only 3 out of 31 total indicators of Natural Beauty (see Figure 13, p. 163), suggesting that NE's interpretation of landscape quality has narrowed considerably from that of its predecessors. No rationale for this shift in thinking is recorded. In what could be seen as a contradictory approach, a review commissioned by Defra into the monitoring of Natural Beauty for the *25-Year Environment Plan* (HM Government 2018),

restated the equivalence of Natural Beauty and landscape quality (Davoudi & Brooks⁸³ 2019). However, without a theoretical basis for the relationship between landscape quality and Natural Beauty, or landscape and Natural Beauty, the efficacy of these alternative approaches is unclear.

The reluctance to define terms and treat them consistently, and the absence of theoretical models explaining relationships suggests that the reframing of Natural Beauty as landscape was not a deliberate act. It may have been an alignment of circumstances that caused the discipline of landscape to be in the right place when the Countryside Commission needed a new set of tools to meet political demands for a more objective and measurable approach to its landscape designations.

4.3.3.3 Landscape assessment becomes a tool to describe Natural Beauty

The development of a programmatic idea – landscape assessment – as a means of reliably accounting for the sufficiency of Natural Beauty was a turning point in the trajectory of Natural Beauty policy. Beauty was left behind and CoCo fully embraced the rising discipline of landscape. The early techniques were termed ‘landscape evaluation’ and considered at the time to be a statutory requirement on both central and local government (Blacksell & Gilg 1975). One of the early attempts at justifying an AONB boundary using landscape evaluation to ‘measure landscape quality’ was carried out in the Wye Valley AONB by the Geography and Planning department of Middlesex Polytechnic who used the subjective term *outstanding* as a measure of quality (Pennings-RowSELL & Hardy 1973). Pennings-RowSELL later confirmed that AONB designation ‘was not based on any systematic landscape-evaluation methods but rather on the considered opinions of [experts]’ (1975, p. 149). Concerns about it being too subjective,

⁸³ from the School of Architecture and Planning at Newcastle University.

coupled with the lack of consensus about the methods used to evaluate landscape quality, prompted CoCo to turn away from evaluation and concentrate its attention on what became known as landscape assessment (Swanwick 2002). From the mid 1980s onwards, this method became the dominant UK method for considering landscape in decision-making (Sarlov-Herlin 2016, Jensen 2006).

Price calls landscape assessment a ‘systematising of aesthetics’ (2017, p. 74), but most scholars cast it as an objective method of classifying and describing different landscapes (Warnock & Griffiths 2015; Swanwick 2002), even of defining what is meant by *landscape* (Olwig et al. 2016). Selman and Swanwick describe its use in a study of the Kent Downs AONB by Land Use Consultants in 1979 as a ‘signal departure from the vagueness of terminology’ (2010, p. 12), presumably contrasting it with the language of Natural Beauty. However, as Bourassa (1991) reminds us, landscape itself is a contested term and without a coherent foundation in aesthetic theory its application to aesthetic concerns is prone to misinterpretation. Such concerns did not apparently trouble the Countryside Commission who, by the 1990s, had put landscape assessment at the centre of AONB policy (1991a and 1994). Preparing landscape character assessments (LCAs) for all AONBs, CoCo reasoned, would solve the problem highlighted in the 1985 North Pennines AONB inquiry of needing evidence to justify the national importance of designated landscapes (Holdaway and Smart 2001). The focus on LCAs to describe what makes AONBs worthy of designation has been maintained by its successor bodies (see e.g., NE 2011; CA 2001). Consideration of beauty has all but disappeared and procedures in landscape practice developed in the later part of the twentieth century dominate decisions about Natural Beauty.

4.3.3.4 Landscape: a trusted profession

Of all the professions potentially associated with AONB policy such as geography or ecology, it was landscape architects who became the arbiters of Natural Beauty and any assessment of harm to it, a position endorsed by Natural England when they stated that the ‘main technique used to answer questions about natural beauty is landscape character assessment’ (2011, p. 6). The legitimacy afforded to landscape architects in this role arises in part because of the profession’s long association with planning, facilitated by two inter-related factors. Firstly, the rise of a technocratic approach to planning accelerated by the 1968 Town and Country Planning Act (Hill 1980, Shuttleworth 1979) which increased confidence in the process of planning and gave a fillip to planners and related professions⁸⁴ (Delafons 1998). Secondly, the increasing professionalism of both landscape architecture and planning and the interconnected nature of their professional institutes in the early 20th century⁸⁵.

One of the organisations playing a key role in operationalising landscape as the main discipline through which Natural Beauty was described and measured was the multidisciplinary landscape and planning consultancy – Land Use Consultants (LUC), set up by Max Nicolson in 1966 (LUC 2022b). LUC continued to maintain close ties to government agencies and, in the 1980s and 90s, was one of the main bodies developing tools to incorporate landscape into planning decision-making. Its respected alumni, Professor Carys Swanwick, authored many of

⁸⁴ The rationality model of planning embodied in the 1968 Act involved a five-stage model for plan-making (Hill 1980). With each stage intended to be data-driven, the need for landscape quality studies to assist planning decisions became ‘increasingly acute’ (Shuttleworth 1979, p. 14). Landscape assessment techniques evolved to meet these needs. The requirement to undertake Environmental Impact Assessment (EIA) for certain developments (European Economic Community 1995), further fuelled the demand for landscape assessment, with landscape continuing to grow as a shared policy area across Europe (Roe 2007).

⁸⁵ Frederick Law Olmsted’s successful approach to designing urban parks and greenspaces around buildings prompted the formation of the Town Planning Institute (now the RTPI) in 1914. Founder members, disappointed with its neglect of green spaces, went on to establish the Institute of Landscape Architects (now the Landscape Institute (LI)), with Thomas Adams, a former president of the Town Planning Institute becoming President of the Institute of Landscape Architects in 1937 and further shifting its focus from private gardens to public projects (Turner 2020).

the key texts (see e.g., LI & IEMA 2013; Selman & Swanwick 2010; Swanwick 2002). LUC continues to be regularly commissioned by government to address Natural Beauty issues (see e.g., LUC 2022a).

4.3.4 Paths not taken

Less visible than the embedding of landscape assessment techniques into Natural Beauty decision-making, but arguably more significant, are the opportunities for different policy interventions missed through paths not taken in the 70 years since the 1949 Act. Although ecology as a discipline was still in its infancy in 1949 (Sheail 1984) and did not even have a textbook until 1953 (Hataway 2018), it is notable that landscape ecology, which emerged as a distinct discipline in 1986 (Schreiber 1984), did not enter CoCo discourse on Natural Beauty and does not play a prominent role in AONB policy today. Landscape ecology is described as ‘the study of interactions, across space and time, between the structure and function of physical, biological and cultural components of landscapes ...’ (ialeUK 2016). Its strength in relation to Natural Beauty is its interdisciplinary study of landscape at a variety of spatial scales (akin to those in which Natural Beauty is experienced) underpinned by the principles of scientific theory and analysis to explain landscape phenomenon (IALE 2022). Landscape ecology uses landscape as a conceptual and methodological tool, focusing on functioning ecological units as a basis for study (Schreiber 1984), rather than visually perceived landscape character areas. Landscape ecology offers the opportunity to improve the scientific base for landscape in landscape planning (Beunen and Opdam 2011). As a model for Natural Beauty, it might help compliment the more design and perception focused discipline of landscape architecture, but such a shift is yet to be made.

Similarly, aesthetic theory has only been weakly referenced in scholarship about landscape policy as a basis for interpreting and measuring Natural Beauty (Jenkins 2020). The

differences between an aesthetic-led approach to public policy and a landscape-led one is exemplified by the contrasts between the reports of the Government's Building Better Building Beautiful Commission (BBBBC 2020) and the Landscapes Review (Glover 2019). For BBBBC, beauty is at the heart of their mission. It is woven through the analysis and proposals in their report and used to connect people and place; nature and culture; past and future. In contrast, the Landscape Review Panel's lens is landscape. Beauty is viewed as a quality of landscape, sometimes separate from nature (see e.g., Ibid. 2019, p. 11) and sometimes connected as Natural Beauty, but in both cases, it is a fixed thing to be managed. Despite the definition of Natural Beauty as 'about the human response to a place as well as the things in the place itself ...' (Glover 2019, p. 27), it is treated in the report as a thing and required to be 'in a better condition' and 'look up and outwards' (Ibid., p. 8); 'more must be done [for it]' (Ibid. p. 9). Most references to beauty are concerned with expressing a desire to protect it as an aesthetic object using terms such as *enhance*, *strengthen*, *safeguard* or *support* (Ibid.). In contrast, for BBBBC, beauty is not a thing but a connecting idea and an ambition. Beauty, they explain,

'includes everything that promotes a healthy and happy life, everything that makes a collection of buildings into a place, everything that turns anywhere into somewhere, and nowhere into home' (BBBBC 2020, p. iv).

Beauty is not merely visual, rather it involves the 'wider spirit of the place', and it can be experienced at many scales, occurring in the detail of things and in broader landscape patterns (BBBBC 2020, p.10). In this respect, BBBBC's interpretation of beauty is far closer to that of the 1949 Act.

In an illustration of how architecture is more comfortable with the language of beauty, but the landscape sector is not, BBBBC set up debates about beauty open to the public supported by discussions in architecture magazines, such as Dezeen (see e.g., Jacob 2018). No

debates on beauty were held by the Government's Landscapes Review (Glover 2019). Despite the landscape profession's long engagement with Natural Beauty, there is a reticence about discussing beauty. It is perhaps a sign of beauty's retreat more generally from public policy that even for a discipline founded on the principle of designing places that are pleasing to people, beauty is not generally a matter for debate.

4.4 Conclusions: the implications for Natural Beauty policy

Landscape remains a contested term today (Olwig et al. 2016; European Science Foundation 2010). Many embrace its multiple meanings as an aid to mediate between different interests and facilitate the weaving together of many strands of history and memory, nature and culture which draw on the importance of place (Fairclough & Herring 2016; Butler 2014; Krebs 2014; Sharma 2010; Matless 1998). However, the breadth of meaning and the everydayness of the term results in multiple values some of which are hidden, subordinated, or understood only by others within a shared culture or area of practice (Butler 2016). *Landscape* is an idea, like *Natural Beauty*, that encompasses the connection between people and place. However, unlike *Natural Beauty*, the association of positive emotions emerging from these interactions is not a necessary condition and an aesthetic judgement is not involved, although aesthetic qualities can be attached to it.

Jensen called the National Parks Commission (and by implication its successors) a 'landscape agency' (2006, p. 163), and there is no doubt that *Natural Beauty* policy is concerned with landscape in all of its interpretations set out in this chapter, although it should be noted that the bodies set up to protect AONBs were (from 1968 – 2006) named 'countryside' bodies rather than 'landscape' ones. What is more difficult to unpick is the mental switch employed that replaces *Natural Beauty* with *landscape* in relation to the designation purpose and in the criteria for designation. What is lost is the focus on a particular idea – beauty – with its

associated emotions and aesthetic values which the 1949 Act's social agents considered so important that they not only made the purpose of the designation but also the organisational purpose of the bodies set up to protect the whole of the countryside of England and Wales (NP&ACA 1949, Part 1, 1(a); Countryside Act 1968, 1(2)).

Despite transformation change in the policy environment over 70 years and the retreat of beauty from public policy, *Natural Beauty* in law has survived. Its persistence does not necessarily reflect a great love for the term amongst those required to use it. Rather it may be that the risks of making a legal change without opening up every aspect of the Act for scrutiny has deterred those seeking to replace the term⁸⁶.

In practice, the shift from the conceptual and unmeasurable idea of beauty to the technical and seemingly measurable idea of landscape depended on the latter's positional advantage within the broader institutional framework of landscape policy, rather than any scientific argument. Hall makes the point that policy failures and anomalies can facilitate paradigm shift as they accumulate (1993). Beauty did not satisfy the political need to evidence AONB designations in the 1970s and Countryside Commission (CoCo) officers were pragmatic in seeking tools from landscape architecture that were already being tailored to the high modernist public sector environment. The views of aesthetic theorists or landscape ecologists were not sought, nor were they offered. The successful use of landscape assessment at the North Pennines AONB Inquiry (CoCo 1985), cemented its image as an effective tool and more generally landscape as the language to convey Natural Beauty policy. Today, the political drivers are changing again, and it is the language of nature recovery and biodiversity rather

⁸⁶ Discussion on the NAAONB web forum in 2022.

than landscape that government agencies and AONB partnerships are using to frame Natural Beauty policy⁸⁷.

Despite the contested interpretation of landscape, and the confusion and inconsistency associated with its technical lexicon, Natural Beauty policy continues to rely on landscape-originated techniques for decision-making, reflecting the dominance of knowledge created by a certified set of experts (landscape architects) and the epistemic learning this reflects (Dunlop & Radaelli 2018). Bourdieu's *Language and Symbolic Power* (1991) discusses the role of social conditions in bestowing authority on certain social agents to speak, and as Bourdieu suggests, the focus on landscape techniques has not happened by accident. By promoting the language of landscape as the official language of Natural Beauty, CoCo legitimised the discipline of landscape as the holder of expert knowledge in the field (see e.g., CoCo 1985, 1971), rather than other relevant disciplines such as aesthetics or ecology. Over the last 50 years this change has been gradually normalised through policy documents, guidance and assessment methods commissioned by government agencies using technical terminology core to the landscape field. It is difficult to know the extent to which actors from the discipline of landscape sought such a move, but CoCo made a strategic choice in the 1970s to craft a new landscape frame and use it to align Natural Beauty policy with a political focus on what could be measured. Over time, a specific landscape genre became deposited in the habitus of social agents in the same way that musical styles become internalised and part of the habit response of composers, performers and practiced listeners in music and art (Meyer 2010).

⁸⁷ For example, the NAAONB's Colchester Declaration 2019 (<https://national-landscapes.org.uk/the-colchester-declaration>)

Challenge to the dominant narrative in the sector is minimal, partly because of the absence of theory⁸⁸. Without a clear theory linking landscape and beauty, Natural Beauty policy is blown by the prevailing political winds. Bourassa identifies the problem as resulting from a lack of curiosity in the sector about the meaning of *landscape* and *aesthetics* (1991). Scholars seeking to develop and test new theories, and practitioners seeking to challenge Natural Beauty decisions, face additional difficulties due to the absence of an accessible body of knowledge representing practitioner's experience over the 70 years since 1949⁸⁹. No organisation currently draws together practice and theory, although bodies such as the Centre for National Parks and Protected Areas at Cumbria University are moving into this space (CNPPA 2022). AONB partnerships have no archiving capability and neither the responsible government body nor local planning authorities collate Natural Beauty decisions⁹⁰. The problem became more acute in 2012 with the launch by the Coalition government of the centrally controlled Gov.uk. Francis Maude, the Minister for the Cabinet Office at the time announced that a unified and digital delivery of government services would achieve huge savings and put user needs at its heart (Maude 2012), but there appears to have been limited consideration of how access to the vast amount of research and policy documents gathered over decades by agencies such as Natural England and its predecessors could be secured.

As well as loss of digital access to much publicly funded research and policy guidance, the need to present a consistent, plain English web text for public users led to a simplified and

⁸⁸ According to INEP, theory is 'the topography of our strategic map, determining our starting point and our destination, where we lay down paths, and how we focus and direct our energy' (INEP 2013).

⁸⁹ Over the last decade, NE commissioned Ray Woolmore, a CoCo officer in the 1970s, to produce an authoritative account of the designation history of individual AONBs and NP's drawing together in one place a range of archival material (see e.g., Woolmore 2013). The Designation History Series together with the reports of the NPCe and subsequent policy documents are available mostly in paper form only spread across the National Archives, MERL and Natural England's own archives. None are easily accessible. Only recently have the foundational reports of Addison, Dower, Huxley and Hobhouse been available digitally and they have to be searched for across digital libraries such as hathitrust.org and archive.org.

⁹⁰ Individual decision-makers develop their own libraries, but these are easily lost when they move on.

unreferenced set of ‘Natural Beauty criterion’ being offered on Gov.uk in 2018⁹¹. It is likely that this set of criteria, derived from landscape assessment at the end of the 20th century and lacking a theoretical base, will continue to be deposited and rigidified over time as the accepted interpretation of Natural Beauty in the behaviours (and habitus) of decision-makers, including specialist users such as planning officers and planning inspectors as well as citizens (Hilgers & Mangez 2015).

In the absence of theory and associated knowledge, practice continues to build on itself without scrutiny and challenge. The efficacy of using landscape as a model for Natural beauty is not easily challenged and practice continues to ‘reinvent the wheel’. The grand ambition of the Post-War Labour Government to preserve beauty for the nation is in danger of becoming merely an exercise in balancing conflicting claims on land mediated through the technical language of landscape.

The next chapters take a deeper dive into the measurement and monitoring of Natural Beauty in policy today, exploring how the reframing of Natural Beauty as landscape, a paucity of theory, and failure to define terms consistently effects the efficacy of information provided to decision-makers about Natural Beauty. Chapter 5 seeks first to scope the necessary knowledge base for measuring Natural Beauty, drawing on aesthetic theory to help provide meaningful principles to assist a review of measurement approaches in chapters 6 and 7.

⁹¹ <https://www.gov.uk/guidance/areas-of-outstanding-natural-beauty-aonbs-designation-and-management>

Chapter 5 Measuring and monitoring Natural Beauty: a literature review

5.1 Introduction

The challenge of measuring Natural Beauty was evident since the 1960's,

‘Except within the vaguest limits, beauty cannot be described: therefore it cannot be defined. It cannot be measured either in quantity or quality: therefore it cannot be made into the basis of a science’ (Eric Newton quoted in *Measuring Natural Beauty: The Problem of Quantification*, Born, 1974, p. 14).

Ted Born was not the first to query the wisdom of attempting to measure the unmeasurable in order to trade beauty along with other commodities such as timber (Daniel & Boster 1976; Born 1974). In the early 19th century Burke opined, ‘but surely beauty is no idea belonging to mensuration; nor has it anything to do with calculation and geometry’, adding that if it had, we could confirm beauty through agreed measures, but we cannot (1823, p. 129). Today the challenges are evident to those attempting to quantify beauty amongst other cultural ecosystem services, although few question the wisdom of doing so (Jones et al. 2021). Those that do, observe that the problem of its conceptualisation needs to be solved (Ibid.).

The architects of the 1949 Act had no intention of measuring Natural Beauty, another reason perhaps why they felt no obligation to define it. Where boundaries needed to be determined, they relied on professional judgement⁹². MacEwan and MacEwan offer a possible explanation, ‘the point about National Parks is not that they are more beautiful than other areas ...’ (1983, p. 249). However, as the second half of the 20th century progressed, areas proposed

⁹² Interview with Ray Woolmore (14th November 2019), previously the Countryside Commission officer responsible for proposing AONB boundaries on the ground and author of AONB designation history series.

as AONBs by Hobhouse needed to be formally designated. Chapter 4 explains how the political requirement for public policy to be more systematic and quantifiable saw Natural Beauty, which was perceived as a vague concept, reframed as landscape quality, which was considered more measurable.

The dilemma for anyone wishing to understand what was meant by Natural Beauty, and what makes it a particularly wicked problem in policy, is that quantification itself is a form of meaning-making since it requires categorising and naming the things to be measured (Monbiot 2018; Shuttleworth 1979). The desire for measured accountability requires defining things we can't measure in terms of things we can. What is named and measured then become the building blocks of an observer's internal description of the thing, with the appreciation of aesthetic qualities linked to these building blocks (Shuttleworth 1979). For example, putting boundaries around things and categorising them as physical components may obscure transition zones, such as skylines and transition habitats, which can be important in aesthetic appreciation (Stamps 2002; Zacharias 1999; Appleton 1975a). It also shifts focus away from process to form, simplifying and flattening what are complex and dynamic systems (Warnock & Griffith 2015), and ignoring temporal changes and time depth (Dalglish & Leslie 2016; Fairclough & Herring 2016; Ingold 2000). Combining the measurement of different types of things into composite measures can also subconsciously cue certain meanings, and even the act of combining can suggest that the whole is being accounted for, causing non-measurable factors to be overlooked (Jacques 2021; Stiglitz, Fitoussi & Durand 2019). In addition, the weightings given to different factors in composite measures can stress the importance of some components over others. For example, when scores for landscape effects and visual effects are combined into a score for Natural Beauty in a planning judgement (see chapter 6), it implies that Natural Beauty consists of just these factors weighted equally. This interpretation is absorbed subliminally by decision-makers. Over time it becomes internalised and applied as a familiarity heuristic allowing quick

decisions to be made which avoid time spent on scrutinising often multiple and weighty evidence reports⁹³.

Today, measurement data is increasingly seen as a central resource for decision-making with public bodies employing the term ‘data-driven’ to justify their commitment to ‘evidence-based policy’, an approach reliant on quantification and accounting (Szukits 2022; Hupperz et al. 2021; Saltelli & Giamietro 2017). Hard thinking and expert judgement on Natural Beauty have been replaced in policy by quantitative assessments based on simplified models (Brady 2015). However, despite Natural Beauty sitting at the centre of national landscape policy for 70 years and applying across 24.5% of England (Glover 2019), no public or scholarly body has examined Natural Beauty measurement in policy as a subject or drawn together the range of literature that might pertain to it. This is a surprising omission. Chapter 5 seeks to respond to this gap. It scopes and explores the existing literature on measuring the aesthetic qualities of nature/landscape and reviews their efficacy for measuring Natural Beauty in the context of public policy.

What is meant by measurement in this study?

Measure in policy is used in subtly different ways. A strict interpretation is provided by the National Physical Laboratory (NPL), the organisation responsible for UK primary standards, who explain that measurement requires an instrument, and a result is not complete

⁹³ As part of a training session on Natural Beauty in relation to strategic housing and land allocation decisions held in 2019, a group of planners visited several sites in the High Weald AONB proposed for housing. The first site was a field adjacent to housing and surrounded on three sides by mature treed hedges and woodland. The second, also a field and adjacent to the first, was open on two sides with long views. Approaching the first site, I asked for their thoughts. The response was immediate and unanimous - the site should be allocated because the impact on Natural Beauty was negligible due to visual screening from trees. No further evidence was sought, and no questions asked about the ecological value of the grassland, the likely longevity of the tree screen or impact of development on biodiversity. Similarly, the response to the second site was immediate but the answer completely different – the site should not be allocated. Discussion concentrated on visual issues – which views might be most impacted and whether these were publicly accessible.

unless accompanied by a statement of uncertainty (Bell 2001). In public policy, *measure* is used more loosely. For example, ‘measurable’ net gains for biodiversity in national planning policy (MHCLG 2021a, p. 62, paragraph 180) relies on number labels for categories and provides no uncertainty statement (see NE 2023). Such use is more akin to estimating or ‘reckoning up’ for which the Oxford English Dictionary (2021) provides alternative terms such as *assess* or *evaluate*. Most of the techniques used in relation to Natural Beauty are methods of assessment and evaluation. In this study I use *measure* in its broadest sense to encompass appraisal, assessment, and evaluation.

5.2. Methods

The scope of a literature review of Natural Beauty measurement needs to take account of the different terms used to describe Natural Beauty since the early 1960s when legislation in America first required forest managers to consider intangibles such as beauty along with timber yields (Ode, Hagerhall & Sang 2010; Daniel 1990; Arthur, Daniel & Boster 1977; Carlson 1977). These early attempts assumed that Natural Beauty could be assessed through its material component in the form of a particularly configured landscape whose quality (qualified by a premodifier – either *aesthetic*, *scenic*, *visual* or *landscape*) could be ranked or rated by a sample population (see e.g., Arthur, Daniel & Boster 1977). In the UK, evaluation of what is usually termed ‘landscape quality’ became the focus of scientific and scholarly interest as a means of taking beauty into account in land use planning, reflecting similar trends in the US (Zube, Sell & Taylor 1982). While landscape evaluation became the main technique explored in scholarship, more recently *landscape quality* has been increasingly interpreted in practice as physical landscape condition (see e.g., LI & IEMA 2013). This adds further complexity to any literature search. *Condition* can relate to the physical pattern of land cover; the health of biophysical aspects of the environment (such as biodiversity or the functioning of natural processes), or the state of historic monuments and built structures.

The initial phase of this literature review used a hybrid search combining a systematic key-word search with snowballing using related terms. A search of the library and data repositories (EthOS, Google Scholar, Scopus, and the University of Kent) and environmental journals (e.g., through a systematic search of relevant journals available through Taylor & Francis Online) for “*Natural Beauty*” AND *assess** OR *metric** OR *measure** OR *analy** OR *monitor** is not particularly fruitful. Swopping out *natural* for *scenic* is slightly more profitable, along with replacing the phrase ‘Natural Beauty’ with *aesthetics* or *aesthetic value* or *landscape quality*. To encompass literature related to landscape evaluation, a similar approach was adopted using *landscape quality* and related terms such as *landscape evaluation*, *landscape preference*, *visual landscape quality*, *landscape condition*, *landscape value*. The body of work on which it rests - scenic quality assessment, was also explored using terms such as *scenic beauty* and *scenic quality*. A broader search of journal articles related to *ecological/environmental/landscape condition* was then undertaken to fill gaps. Finally, studies exploring individual beauty experiences were investigated, using search terms related to *aesthetics* and *beauty* and waterfall searches based on techniques for their study, such as participatory engagement, art, discourse, and ethnography. All literature was reviewed keeping in mind contemporary aesthetic theory relating to natural beauty in general, and the intentions of the 1949 Act relating to the legal term Natural Beauty. The literature review is presented in themes in part mirroring the chronological development of measurement techniques.

5.3 Themes

5.3.1 Early attempts to measure Natural Beauty

In terms of my original strict search criteria only one paper stands out - *Measuring Natural Beauty: The problem of quantification* (Born 1974). Born’s (1974) principal challenge concerns the need to establish aesthetic principles in terms of the things to be measured and their scale;

the relationship between subject and object; whose judgement of beauty is being measured, and how ratings scales are labelled and calibrated against other measures. He observed that a static relationship is assumed while in outdoor nature the experience of natural beauty involves a dynamic interrelationship between subject and object. He also noted the limitations of photographic representations of the natural world suggesting that the use of framing chosen by a photographer is likely to prompt a judgement of photographic rather than natural, beauty (Ibid.). Born's challenges remain pertinent to much landscape evaluation work today (Jacques 2021; Brady & Prior 2020).

Born was in the vanguard of work in the 1970s and 80s to develop quantitative evaluation techniques for landscape (Swanwick 2002; Bourassa 1991). The first sophisticated technique – Daniel and Boster's Scenic Beauty Estimation Method (SBE) – sought to measure Natural Beauty, but the authors explain that they prefer *scenic beauty* since it more precisely describes the technique which involved participants rating images of a scene (1976). Unlike Natural Beauty, scenic beauty assessment has been the subject of considerable study and academic debate (see e.g., Seresinhe, Preis & Moat 2017b; Othman 2015; De Vreis, Groot & Boers 2012; Daniel 1990), with the SBE still used in research today (see e.g., Mo, Chen & Xie 2021). Scenic beauty assessment reached its zenith with Andrew Lothian's book *The Science of Scenery: How we see scenic beauty, what it is, why we love it and how to measure and map it* (2017), with an accompanying website⁹⁴ which included a detailed study of the Lake District National Park. Like Daniel and Boster, Lothian (2017) acknowledged that scenic beauty is subjective but considered that there are ways of measuring it objectively which are replicable and statistically rigorous.

⁹⁴ <https://scenicsolutions.world/>

Techniques for quantifying scenic beauty are of particular interest to AONBs because the National Planning Policy Framework (NPPF) introduced in 2012 substituted the phrase *landscape and scenic beauty* for the legal *Natural Beauty* (MHCLG 2021a). Legal opinion sought shortly afterwards suggested that *scenic beauty* has a narrower interpretation than *Natural Beauty* because of its skewing towards visual qualities (Maurici 2014), yet it has persisted in revisions to the NPPF ever since (MHCLG 2021a). Despite the prominence of scenic beauty in planning policy, and the plethora of techniques developed by scholarship to assess it, not a single planning application has come forward in English designated landscapes since 2012 accompanied by a scenic beauty assessment⁹⁵. In comparison, landscape assessments accompany all larger planning applications. It is an odd omission which prompts a perplexed shrug from planning officers and which neither scholarship nor practice has yet addressed. While Daniel and Boster evidently considered scenic beauty an adequate proxy for Natural Beauty, planning policy today clearly relies on the idea of landscape alone.

5.3.2 Landscape quality as a proxy for Natural Beauty

One of the most common refrains arising from a review of the literature on the aesthetic appreciation of landscape is the absence of grounding aesthetic theory (Jacques 2021; Jenkins 2020; Butler 2016; Tveit, Ode & Fry 2006; Bourassa 1991; Dearden 1987). Over the years multiple theories and frameworks have been proposed but no set of principles or terminology have been agreed (Gobster, Ribe & Palmer 2019). The fluidity of language that ensues creates added complexity. Many landscape evaluation studies include *landscape quality* in their title but most focus on visual quality assessment which authors relate to a varying degree with aesthetics. For example, Spielhofer et al. (2021) juxtaposes landscape quality only once with

⁹⁵ Discussion with NE's national planning team, 10 July 2023.

aesthetics, while Roth et al. express the entirety of their Scenic Landscape Quality model as a ‘Scenic beauty map of Germany’ (2018, p. 113). Some inconsistencies may arise from translation problems but lack of a common terminology resulting from the absence of consistent theory exacerbates the issue. *Scenic beauty* and *landscape quality* continue to be used interchangeably (see e.g., Wartmann et al. 2021; Shuttleworth 1979), although prompted by the Council of Europe’s Landscape Convention (2000), landscape quality assessment is now considered to be a genre in its own right, (Davoudi & Brooks 2019; Roe 2013).

One of the challenges in using evaluation of landscape quality as a model for Natural Beauty is that it assumes beauty can be ranked or rated. Most literature relating to the evaluation of landscape quality relies on preference studies (see e.g., Foltête, Ingensand & Blanc 2020; Frank et al. 2013; Zube, Sell and Taylor 1982). Preference is mostly arrived at by asking a population sample to rate parcels of land (usually represented by a photograph of a scene) or compare one scene/landscape with another (Price 2017). Rating categories are either named (e.g., best – worst) or expressed as a quantity on a ratings scale, for example, from 1 (ugly) to 5 (very beautiful) (see e.g., Frank et al. 2013). Descriptions of what is being evaluated varies between literature. Some rate the quality of a scene (Lothian 2017; Seresinhe, Preis & Moat 2017a; Daniel & Boster 1976); some the impact of detractors (De Vreis, Groot & Boers 2012), while others use the density of landscape images logged on photo-sharing websites as an indicator of preference (Foltête, Ingensand & Blanc 2020). Landscapes rated highly or chosen over others are assumed to have higher aesthetic values.

The difficulty in using ranking or rating to indicate beauty arises from how it is conceptualised and its assumed relationship with nature/landscape. Disagreement persists amongst philosophers about whether everything in nature has the potential to be beautiful or whether negative aesthetic judgements about nature are possible (Brook 2013; Hamilton 2006). If they are not, rating beauty makes little sense. If they are, and *beautiful/ugly* (aesthetic

qualities which ascribe aesthetic value to an object (Brady 2003)) can be placed on a ratings continuum, preference techniques still raise other conceptualisation issues.

Berleant (2012) argues that the experience of beauty in nature/landscape is holistic and engaged; the perceiver is an integral part of the object not an external spectator. Emotion is triggered by an object or event, intertwined with deeper cognitive processing. Crucially, senses rather than the intellect are foregrounded in a beauty experience and the full range of senses can be employed (acting together) depending on the qualities attended to (Brady & Prior 2020; Berleant 2012). Preference studies, especially those relying on images, tend to adopt an outsider perspective and be predominantly visual and non-immersive (Butler 2016). The object (image) is enclosed in borders (framing) and is representative i.e., art rather than immersing the perceiver as nature/landscape (Berleant 2004). Observers make rating choices usually in an indoor setting looking at the framed image from a fixed, short distance. Snap judgements are common in preference (rapid selection of A over B, for example) or some premeditated consideration is involved (which brings thinking before judgement). In such cases, sense experience is restricted, and emotion is ignored.

Factors other than beauty which may be hidden can play into preference. Place attachment can be a strong element of preference (Diener & Hagen 2022; Brown, Raymond & Corcoran 2015; Tuan 1977), with people drawn to personally meaningful places (Gatersleben et al. 2020). Familiarity with certain landscapes, especially length of residency in an area, can enhance some people's perception of landscape quality (Wartmann et al. 2021). For others, familiarity can lead to a preference for contrasting landscapes (Marr 1920). Sense of 'naturalness' shows some correlation with preference (see e.g., Roth et al. 2018; Ode et al. 2009), while other factors such as knowledge of the past, including attachment to particular features, have also been shown to shape preference (Chappell, Parkins & Sherren 2020; Beiling 2013; Hanley et al. 2009). Bourassa draws on Zube to suggest that landscape preference scores

are like the ‘comparison of apples with oranges’ (1991, p. 120), implying that unless we are sure people are appraising the same thing when making such judgements, the results may not be meaningful. Beauty may well play a role in these choices but disentangling beauty from other factors is challenging.

One of the principal concerns about landscape evaluation and preference studies is the privileging of visual over other sense perception, particularly where photographic images are used. Some studies explicitly state that the visual dimension is being used as an approximation of a wider aesthetic appreciation (see e.g., Giné, Albert & Buendía 2021) although it is often called something different such as ‘attractiveness’ (see e.g., Gobster et al. 2020; Palmer 2019) or ‘pleasantness’ (Jiang, Kang, & Shroth, 2015). For others, visual privilege is indirect, arising from the use of photographic images and an outsider perspective as a proxy for an immersed aesthetic experience in the real world. Daniel and Boster justify their visual bias thus, ‘for the general public, the most immediate and direct impact of [change in] land management is visual’ (1976, p. 4). Others argue that there are historical and cultural variations in the sense hierarchy with research being skewed towards the visual because it is easier to study (Hutmacher 2019). Supporting this view is the large increase in such research coinciding with improved computation power and geo-spatial tools (Inglis et al. 2022). Interest in other sense experiences is slowly growing, particularly studies investigating the role of sound in people’s perception of landscape quality/aesthetics (see e.g., Hewlett et al. 2017; Prior 2017; Pijanowski et al. 2011; Pheasant et al. 2010) but such studies have only recently entered public policy consciousness. Aesthetic theory suggests that understanding beauty as a primarily visual experience detaches it from ‘affect, narrative, or other sensory experiences’ (Judge 2019, p. 19).

Real world engagement with nature is very different from our engagement with 2-D images. In the former, more prolonged and multi-sensory engagement is possible, whereas the controlled setting of the latter limits the observer’s body movements and visual stimuli (Cao &

Händel 2019; Coburn, Vartanian & Chatterjee 2017). Composition and framing of images; focal length and depth of field, together with image qualities such as colour, contrast or luminance all have a difficult-to-quantify effect on perception (Bo, Yu & Zhang 2018; Berger 1977). Preference responses to images of a place tend to be extracted more rapidly and automatically, requiring only a glance with minimal reliance on conscious attention, unlike the more extensive cognitive interactions occurring during real world engagement in the same places (Mullin et al. 2017). In addition, the effect of temporal changes such as the interplay of light and weather on physical features are overlooked in inside environments (Ingold 2000).

Elevation of visual sense experience over other senses underpins normative ideas such as the greater impact introduced structures (e.g., wind turbines) are assumed to have on areas rated as more beautiful (see e.g., Palmer 2019; De Vries, Groot & Boers 2011; Carlson 1977). As a result, misfits or detractors are often considered to be a more easily measured proxy for Natural Beauty but, as Born argues by reference to a survey of 1000 Vermont residents who found a dead tree more of an eyesore than a billboard, they are equally subjective (1974, p. 14). Others observe that such assumptions may be invalid since human structures can have a positive effect on beauty (Warren and McFadyen 2010) with symbolic, affective, and socially constructed meaning shaping how they are perceived (Devine-Wright 2005).

Although the evaluation of landscape quality as preference provides a poor proxy for the measurement of Natural Beauty, it may have a role to play in new designations and boundary reviews where the sufficiency of Natural Beauty has already been established for candidate areas and what remains is to gauge public support. It's outsider perspective and relatively simple methods for engaging a wider population could see the rating of candidate areas against a standard (the existing designated area), resulting in a statistically rigorous population preference to sit alongside expert judgement.

5.3.3 Using landscape-scale configurations to explain Natural Beauty

Despite the paucity of theory connecting preference studies to aesthetic experience in outdoor nature, there are a growing number of studies relating preference to landscape configuration with the aim of constructing an ideal – or beautiful – landscape configuration to inform land-use planning and the design of places. Respublica’s plea for a ‘community right to beauty’ in the places people live created new impetus (Harvey & Julian 2015). The report *Living with Beauty* (BBBCC 2021) took up Respublica’s plea and underpins the Government’s intent, expressed in the Planning White Paper *Planning for the Future*, that we need to be more ambitious for beauty in the places we create so there is a ‘net gain’ for beauty not just ‘no net harm’ (MHCLG 2020, p. 21). One of the most prominent examples of a study translating preference to place design originates with the website ScenicOrNot⁹⁶, set up by mySociety and developed by Warwick Business School, which asked people to rate over 200,000 small photographs (one for nearly 95% of the 1km grid squares in Great Britain) on a scale of 1-10 (Not Scenic – Very Scenic). Scholarly analysis of the results against image qualities (Seresinhe, Moat & Preis 2017a) prompted media headlines such as ‘computer trained to determine what makes places beautiful ...’ (Sample 2017). Without a strong grounding in aesthetic theory however, it is difficult to be sure that the conclusions do not capture the well-established aesthetic principles attached to landscape painting (see e.g., Parsons 2010; Hamilton 2006; Moore 1999), rather than dynamic real world aesthetic experiences in nature. Using images to assess people’s aesthetic response to the drone-like hum of a dragonfly in flight, or the feeling of being surrounded by trees and bathed in a sudden shaft of light, is more difficult.

⁹⁶ <https://scenicornot.datasciencelab.co.uk/>

Other studies seek an explanatory relationship between preference and Natural Beauty through exploring spatial land cover patterns (see e.g., Spielhofer et al 2021; Sowińska-Świerkosz and Michalik-Śnieżek 2020; Frank et al. 2013; Ryan 2011), although the results of the two models (preference and land cover) tend to be divergent (Giné, Albert & Buendía 2021).

While land cover pattern can provide meaningful information about physical landscape character as a component of Natural Beauty, it is less reliable in relation to the aesthetic experience of real-world landscapes which might draw on experiences of temporal/seasonal variation or cultural associations and be supplemented by sense responses to heterogeneity at multiple scales simultaneously. Aesthetic theory suggests that the Government's answer to a net gain for beauty in planning decisions – design codes (MHCLG 2021b) – is unlikely to be adequate if they assume visual privilege and do not consider these more complex multi-sense and multi-scale interactions.

Relating aesthetic preference to landscape configuration relies on the idea that a common set of variables can be discovered that correlate with, and can predict, beauty irrespective of individual dispositions. Bourassa (1991) suggests that assessing the formal qualities of nature/landscape as an object is only meaningful if we assume an evolutionary origin for aesthetic preference. Many studies cite Appleton's Prospect-Refuge theory (1975) or Kaplan and Kaplan's (1989) theory relating to coherence, legibility, and mystery as underpinning theory, with beauty thought to aid survival responses or landscape readability. However, Stamps's (2004) analysis of 61 studies based on Kaplan and Kaplan's theory concludes that the idea of common aesthetic preferences remains unproven, although other studies have found some consistency across cultures (Wypijewski 1997). Contrasting opinion proposes that landscape preference is socially constructed and related to cultural norms (Naukkarinen 2017; Gobster et al. 2007; Haidt & Keltner 2004; Nassauer 1995), although some acknowledge that both origins may be present (Stewart 2012). Socially constructed preference

is reflected in the common-sense interpretation of Natural Beauty intended by the 1949 Act, which saw it both as an expression of what Britain's collective culture deemed outstandingly beautiful and as a driver fostering a continued shared cultural identity and values. More recently, some evolutionary biologists have suggested that appreciation of beauty is not necessarily an adaptive response but the pure sensory pleasure of it (which can be unique to species and their environmental constraints), may itself be an engine of evolutionary change (Ryan 2019; Prum 2018). The overwhelming power of human culture however, with its rituals, symbolism, art, and fashions, makes it difficult to unravel the origins of beauty (Ibid.), undermining the efficacy of simple landscape configuration models to explain and predict it.

5.3.4 Natural Beauty and landscape condition

Assessing the condition of landscape character and nature (in its entirety) is integral to Natural Beauty and the preservation purpose of the 1949 Act (see chapter 3). The shift to interpret *landscape quality* as condition suggests scholarship in this genre has the potential to provide meaningful information on Natural Beauty if the object that is being condition-assessed encompasses the intention of the Act (see e.g., Fry et al. 2009). However, current guidance is inconsistent about the scope of *condition*. Natural England propose that condition pertains to 'visual, functional, and ecological perspectives' (Tudor 2014, p. 55), whereas professional landscape guidance is narrower with only visual and static aspects – 'character and elements' – included (LI & IEMA 2013). The former is a closer approximation to the 1949 Act's intention, with the potential to recognise that nature/landscape is a multi-faceted aesthetic object exhibiting the adaptation, emergence, and self-organisation characteristic of multi-scaler complex systems (Carmichael & Hadžikadić 2019; Díaz-Varela, Rocas- Díaz & Álvarez-Álvarez 2016). Such an interpretation implies that condition assessments need to allow for a dashboard of measures relating to different types of things (see e.g., Stiglitz, Fitoussi, & Durand 2019). LI and IEMA's guidance, however, suggests that it still treats landscape as a simple

fixed scene within an imaginary frame to be gazed at and aesthetically judged according to artistic rules – akin to the ‘scenic model’ originating with the Picturesque movement (Brady & Prior 2020, p. 256).

Scholarship on assessing the condition of nature/landscape and monitoring change is extensive, encompassing spatially originating pattern indices, ecological condition, and composite indicators of perceived qualities such as ‘naturalness’. A spatial approach to pattern originated with landscape character areas – areas of land whose visually recognisable patterns of land cover are delineated by fuzzy boundaries and represented by photographic images or oblique panoramas supported by narrative (see e.g., Swanwick 2002; Countryside Commission 1994). Today, increased computational power and remote sensing which can capture the salient aspects of land cover (or habitat) patterning in a quantifiable form has allowed the development of hundreds of spatial pattern indices (see e.g., Sohl et al. 2019; Alphan 2017; Uemaa et al. 2009; Ekström 2003). In these studies, wholeness tends to be equated with beauty while fragmentation or the presence of detractors (or disrupters) is considered undesirable (or ugly) equating to a ‘poor’ condition or ‘low’ quality rating (Jiang 2018). Describing land or monitoring change through narrative or spatial pattern indices was intended to be more objective than evaluating its quality (Swanwick 2002) but putting boundaries around physical things such as vegetation communities or natural features remains complicated, relying on choice of classification system and scale which inevitably introduces subjectivity (Terkenli, Gkolysiou & Kavroudakis 2021). The complexity of land cover at different spatial and temporal scales prompted Haines-Young et al. to suggest that ‘the characterization and monitoring of [land cover] changes pose one of the most challenging problems facing those concerned with countryside management’ (2003, p. 267). Today, even the idea of a visually perceived landscape-scale unit is being challenged, with improved computing power allowing multiple

criteria to be applied to produce functional socio-ecological landscape-scale units (Belote et al. 2021), and these may provide better explanations for culturally determined beauty experiences.

Some pattern indices have been developed to describe landscape qualities that are particularly relevant to Natural Beauty, for example ‘naturalness’⁹⁷, a term used in more modified landscapes instead of *wildness* or *wilderness* (Cao et al. 2022; Nawaz & Satterfield 2022; Chang Chien, Carver and Comber 2020). Some studies are aimed at monitoring the influence of people on land cover – the human footprint (Ekim et al. 2021; Sanderson et al. 2002), others at exploring the relationship between aspects of land cover and people’s perception of beauty (Frank et al. 2013). Advancements in computation capacity and improved resolution remote sensing data has allowed fine-grained tools to be developed to inform regional land-use planning (Ekim et al. 2021), but what satellites do not see is time-depth, and a high density of human structures does not necessarily mean reduced naturalness⁹⁸. Naturalness indices offer a useful tool to explore human modification of landscapes at a larger scale and may assist in selecting new areas for designation (Ibid.) but applying these to Natural Beauty measurement at a more local scale requires different considerations to be acknowledged.

A vast array of scholarship is dedicated to assessing ecological condition and the health of natural systems, although Bailey et al.’s comments in 2022 that no existing datasets exist to

⁹⁷ In light of the growing scholarship in this area it is perhaps surprising that these techniques have not yet been adopted to assist assessment of ‘Relative naturalness’ one of Natural England’s 6 factors for evaluating Natural Beauty for designation purposes (2011).

⁹⁸ For most of the anciently enclosed dispersed settlement landscapes in England deemed to be relatively unspoilt and possessing great Natural Beauty in 1949, their configuration of settlement and interconnecting routeways will have been established for hundreds of years. The High Weald AONB has particularly high densities of both, with historic map regression demonstrating that this configuration has remained largely unchanged for the last 700 years (Harris 2003). The density of dispersed settlement and routeways in these landscapes may be high, but the features associated with them (ancient ditch and bank systems, unploughed verges, veteran trees) can support assemblages of species that may not have survived in, for example, more recently enclosed landscapes which may exhibit lower densities of settlement and roads.

demonstrate the state of nature in AONBs suggests that considerable gaps in the knowledge base remain. Enhanced computational power, machine learning and increased access to fine-grained satellite imagery has facilitated the development of a wide range of landscape-scale environmental condition indices which can be enriched by field-based monitoring (Brice, Halabisky & Ray 2022; Sparrow et al. 2020), but deriving them at the specific scales needed for public policy and applying them consistently to enable longitudinal monitoring requires sustained public funding, which has not been available to date. Assessing ecological condition at a field scale is still resource heavy and dependent upon field survey, with the lack of a standard definition of indicator species and the need to be clear about the functional relationship between a goal and its indicator, continuing to create challenges (Tucker et al. 2017; Fleishman & Murphy 2009). A raft of new indices, including classifying geospatial data using single or combined vegetation indices (see e.g., Văjâială-Tomici, Filip and Pop 2020; Schultz et al. 2016), aggregating ecological variables (see e.g., Evans et al. 2019), or using individual species to indicate landscape change (see e.g., Mora, Wilby & Menéndez 2022), have the potential to provide useful information on the condition of the biophysical aspects of Natural Beauty. However, the need remains to understand and critically examine what ‘good ecological status’ is and what data is needed to support such ascertains (Grizetti et al. 2019; Josefsson 2015). In the face of these ongoing challenges, some researchers are looking at the problem differently. For example, Guth et al. (2022) demonstrate that small farms tend to use less pesticides and fertilizers favouring higher biodiversity and healthier natural processes than larger ones, suggesting that the simple measure of farm size might provide meaningful information on both ecological and cultural health. Similarly, the extent of adoption of nature-friendly land management such as agroecology or regenerative farming might provide a cost-effective and adequate proxy measure for the condition of nature (Monbiot 2022; Massey 2018).

In the future, computational techniques are likely to offer additional cost-effective and consistent monitoring at a landscape scale which can be supplemented by field-based citizen science (see e.g., Johnston, Matechou & Dennis 2022). What is interesting about the pure computation approaches exploring pattern relationships is that fewer assumptions tend to be made at the start about what the category of units to be measured represents. More responsibility is put on the decision-maker to work with researchers and understand the data and what it might mean for policy. With the creation of a new national landscape partnership by Defra⁹⁹ with funds to develop data science capabilities we may see a more fruitful engagement between scholarship and policy in the adoption of Natural Beauty condition measures.

5.3.5 Establishing a baseline or reference state for Natural Beauty

The preservation and enhancement purpose of the 1949 Act implies doing no harm to what is there and restoring what is degraded to a better condition. Unfortunately, the failure of the responsible bodies at the time to implement Huxley's recommendation to survey and identify the features of scientific interest at designation (WCSC 1947), has left AONBs without a historic baseline for any aspect of Natural Beauty, a common problem in landscape conservation (Guerrero-Gatica, Aliste & Simonetti 2019). What that baseline should be has not been examined in policy or scholarship. The baseline problem is compounded by assumptions made by the architects of the 1949 Act that biodiversity would remain high and inevitably be part of the beauty experience. However, research suggests that species richness does not necessarily correlate with aesthetic appreciation today indicating that the current biodiversity

⁹⁹ Discussed at Natural England's Landscape Advisory Panel meeting, 8 February 2023.

crisis may not be reflected in changed aesthetic appreciation more generally (Graves, Pearson & Turner 2017).

The idea of Shifting Baseline Syndrome encapsulates the challenge this lack of a historic baseline poses for decision-makers (Jones et al. 2020; Muldrow, Parsons & Jonas 2020; Soga & Gaston 2018), with Pauly (1995) describing how the creeping disappearance of species has allowed each cohort of decision-makers to accept their own diminished experience as the baseline, creating a gradual shift in expectations of what policy can achieve. A similar observation could be made about the cultural landscape, and the problem is exacerbated in Natural Beauty policy by the normative perception of countryside as static or unchanging (Sideway 1990; Yapp 1984).

Perceptions of what an optimal state for landscape might be are often inconsistent (Chappell, Parkins & Sherren 2020), but the debate about rewilding National Parks (Fisher & Carver 2018; Harrison 2016) suggests an alternative approach that considers what a desired or reference state might be (see Yapp & Thackway 2015), with an opportunity to adopt new terms to describe steps on an ecological succession pathway (see Allaby 2015) associated with the possibility of new categories of aesthetic appreciation (Prior & Brady 2017). Although AONBs are not wild landscapes, they do tend to contain pockets of land which exhibit a similar condition to their historic baseline (albeit in vegetation terms only) and these could be used as reference states.

5.3.6 Assessing individual experiences of Natural Beauty

The singular choice of *Natural Beauty* in the 1949 Act in relation to AONBs suggests that its ambition to increase the health and happiness the nation was not seen to arise simply from better facilities for recreation but from the pleasure associated with experiencing beauty in

nature. Part of any assessment of Natural Beauty must therefore be a consideration of individual experiences of outdoor nature and associated emotions.

While philosophy is the main discipline in which aesthetics is debated (Ramsay 2017), neuroscience is deepening our understanding of an aesthetic experience (Jacques 2021). Neuroscience explains the experience of beauty as an emergent mental state arising from the interaction of three neural systems – Sensory-Motor (sensation, perception, motor system); Emotion-Valuation (reward, emotion, wanting/ liking) and Knowledge-Meaning (expertise, context, and culture) (Chatterjee & Vartanian 2016). Like all perception-based experiences, it typically starts with the senses delivering raw information to associated parts of the brain. Initial processing can be autonomous but, as we become more conscious of it, emotions direct our attention with meaning derived from memory and associations combining and recombining to form more complex messages (Jacques 2021, Scarantino & de Sousa 2021; Chatterjee 2014).

Philosophical inquiry suggests that a feeling of pleasure is a necessary condition of a beauty experience (Brady 2015). The Circumplex Model of Affect (see Russell 1980; Russell & Pratt 1980) has been used in scholarship to investigate secondary emotions associated with pleasure¹⁰⁰ (Hoyle, Hitchmough & Jorgensen 2017). The model, which can be presented graphically (Figures 10 & 11, p. 145), has been used to understand our emotional responses to nature/landscape (see e.g., Yuan et al. 2023; Hijazi et al. 2016). Emotions that relate specifically to beauty have not been categorised, although some studies have theorised that ‘attractiveness’ (a term related to beauty) is closely associated with intense pleasant feelings (Hoyle, Hitchmough & Jorgensen’s 2017) while for others the association is with both mild and intense pleasant feelings (Yuan et al. 2023).

¹⁰⁰ The idea of secondary emotions offers more nuanced descriptions of feelings beyond fundamental emotional states such as happiness, which is recognised across cultures through facial expression (Stangor & Walinga 2014).

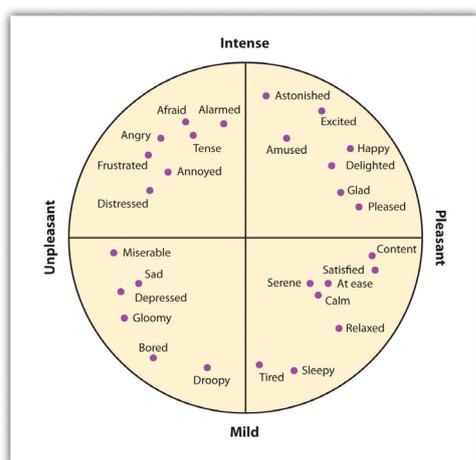


Figure 10. The secondary emotions.
Source: Stangor & Walinga (2014, p. 468)

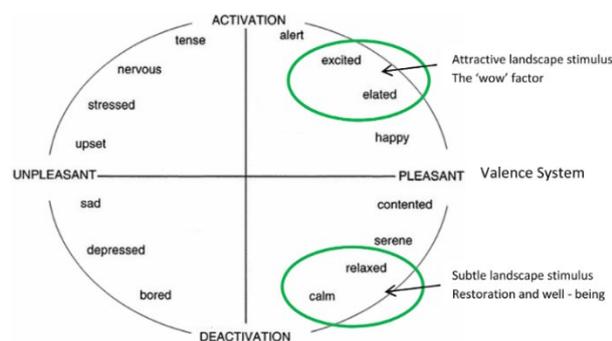


Figure 11. Interpretation of the secondary emotion model by Hoyle, Hitchmough & Jorgensen (2017, p. 110)

An alternative assessment of the emotional component of a Natural Beauty experience is provided by Diessner et al. (2008) whose self-report measure – the Engagement with Beauty Scale (EBS), draws on psychology to identify three different types of feeling that might be associated with a natural beauty experience (Figure 12). Secondary emotions and Diessner et al.’s feeling types are investigated further in chapter 7.

Statements 1–4 below refer to experiences with nature and the physical world, including, mountains, rocks rivers, lakes, oceans, deserts, plants, flowers, trees, animals, etc. (but NOT the human body).

___1. I **notice beauty** in one or more aspects of nature.

___2. When **perceiving beauty** in nature I **feel** changes in my body, such as a lump in my throat, an expansion in my chest, faster heart beat, or other bodily responses.

___3. When **perceiving beauty** in nature I **feel** emotional, it “moves me,” such as feeling a sense of awe, or wonder or excitement or admiration or upliftment.

___4. When **perceiving beauty** in nature I **feel** something like a spiritual experience, perhaps a sense of oneness, or being united with the universe, or a love of the entire world.

Figure 12. Engagement with beauty scale (Diessner et al. 2008, p. 329)

Philosophical inquiry suggests that the study of emotions associated with beauty should be restricted to pleasurable emotions that are the by-product of directing attention outwards towards an object for its own sake, rather than pleasure being the motivational force i.e.,

emotions are ‘disinterested’ (Brady 2003; Kant 1951). This suggests that any investigation of beauty needs to be careful to avoid activities where pleasure is a motivational force rather than a by-product. The non-instrumental value of beauty changes if it is commodified which makes assessing beauty in natural capital assessments by substituting, for example, income generated by recreation as a proxy, problematic (see e.g., White et al. 2015).

Although pleasure is a necessary condition for a beauty experience, Sharma’s (1996) work demonstrates that immediate sense-based responses can be mediated by memory such that feelings of beauty and pain can co-exist in the same nature/landscape experience. These memories can be our own, passed down from previous generations or held culturally as social memories, with motifs and myths related to art, music, or literature able to evoke further meaning and add yet more layers of interpretation to our experiences of beauty (Stephenson 2010; Sharma 1996). In nature, these experiences can be both contemplative and immersive, although as Ingold observes, ‘we swim in an ocean of materials’ (2011, p. 104) and even a contemplative aesthetic experience involves a degree of immersion. The complexity of these processes makes the understanding of an individual’s aesthetic experience in nature extremely challenging. It suggests that simple preference studies might be inadequate and lends weight to the contribution of ethnographic observation and inquiry rooted in exploring people’s lived experiences and their cultural context.

Nettleton’s (2015) study of fell runners in the Lake District National Park is a seminal ethnographic account of aesthetic experiences fully immersed in nature. Nettleton describes a deeply personal ‘thoroughly situated enjoyment’ (2015, p. 777) where movement is central to the aesthetic experience, and runners shape and are shaped by the land and weather. Her runners

illustrate Shusterman's (1999) proposition that movement, sensed through proprioception¹⁰¹, enables the more prolonged aesthetic experiences often described in nature. Unlike the five conventional senses which give us information about the outside world, proprioception involves a complex set of signals which provide knowledge about the body's interaction with the environment (Taylor 2009). According to Ingold, 'the path, and not the place, is the primary condition of being ...' (2011, p. 71), suggesting that movement is fundamental to perception (Shusterman 1999). This can lead to vivid aesthetic experiences outside the flow of ordinary experience which are prolonged or experienced as a series of events (Seel 2008). Gibson (1979) observes that the boundary of what we see moves with us as the body senses changes in the environment through the skin and constantly adjusts and re-adjusts the image received by the eye (rather than stitching together a series of snapshots). Using 2-D images as a basis to explore aesthetic appreciation in nature removes information from proprioception and other non-visual senses as well as fixing rigid visual boundaries, which limits the amount of visual information available to the brain.

The interaction between subject and object central to a beauty experience in nature allows many forms of knowledge to be drawn upon (Brady 2003). This knowledge might be cultural, e.g., through traditional practices and rituals (Stephenson 2010), or scientific, e.g., through an understanding of natural processes. Temporal changes in light, seasons and weather may be perceptible to most people but other long-term changes may be imperceptible without specific types of knowledge. In addition, our knowledge of the environment can be altered by how we move and interact with nature (e.g., bare feet rather than boots). Landscape scholarship tends to avoid theorisation that might undermine the dominance of experts in landscape

¹⁰¹ Proprioception is the sense that allows us to detect where parts of the body are in relation to one another and provides a perception of muscle force and effort (Taylor 2009).

decisions (Calderon & Butler 2020). However, the idea that objective assessment of Natural Beauty is possible and only requires competent assessors presupposes that judgements about beauty can be objective, standardised, and replicable (Jacques 2021; Brady 2003). In a beauty experience, the necessary role of emotion and the complex interplay with cognition and knowledge suggests there is no such thing as an objective assessor (Jacques 2021; Terkenli, Gkolysiou & Kavroudakis 2021). Knowledge and a deeper understanding gained from expertise and formal training may produce a richer aesthetic experience, but this is not necessarily the case (Chatterjee and Vartanian 2016). Experts and lay people may pay attention to different aspects of the object, as found in the different maps of wilderness produced by experts and lay people (Zoderer et al. 2020), suggesting that a combination of approaches may be helpful.

Beauty is a difficult state to study in an individual. Due to the complexity of beauty experiences and the multiplicity of sense perception involved, many forms of information may need to be drawn upon to understand individual beauty experiences. Traditional methods of exploring aesthetic appreciation tend to utilise quantitative approaches involving surveys, questionnaires, and ratings scales but the language of forced-choice questions can obscure different mental models, particularly of complex concepts such as Natural Beauty where certain words can cue very different types of knowledge (Muhr 2020; Shepardson et al. 2007). The artistic or linguistic vocabulary of natural beauty can be culturally specific (Naukkarinen 2017), as can the emotion words associated with it, often representing quite complex feelings about connections to the natural world (Burkitt 2002). People can provide rich descriptions of their experiences of beauty without necessarily ascribing them to a sense or mentioning *beauty* (Crane & French 2015). These descriptions might involve words such as harmonious, tranquil, balanced, uniform, and elegant used as metaphors (Sibley 1959). It is tempting to see beauty as a sum of these features, but these are arbitrarily selected and named categories and a landscape

bolted together from such features will not guarantee a judgement of beauty (Ibid.). Meanwhile, other forms of expression that demonstrate aesthetic qualities or emotions associated with Natural Beauty – ritual and traditional practices, dance, music, and art – are often overlooked, potentially further narrowing the true picture of beauty experiences.

Scholarship in non-traditional landscape disciplines is beginning to offer ideas of how visual image-based aesthetic assessment might be deepened and enriched. Agnoletti et al. (2018) embrace the role of traditional practices, food, and biodiversity in perceptions of landscape quality, while Stephenson's (2010) work with Māori communities situates landscape qualities in people rather than space. Relationships with landscape/natural beauty are described through narrative (stories and myths), pictures and song, interweaving physical things with practices (activities and events), relationships and belonging (Ibid.). A deepening of understanding of beauty experiences has also been aided by computational advances in linguistic and corpus analysis. Large data sets of first-person nature/landscape experiences reported through online texts can now be mined and analysed, allowing descriptions of sounds, smells, and feelings to compliment visual expression and provide richer insights (see e.g., Koblet & Purves 2020; Davies 2013). The newly emerging field of arts-based research is exploring opportunities to tap into pre-verbal and multi-sensory relationships with nature through drawing, dance, film, poetry and music through which emotion and affection can be expressed (see e.g., Muhr 2020; Saratsi et al. 2019; Profice 2018; Gray & Birrell 2015). It may be that creative endeavour has a particular capability to express the aesthetic qualities of nature which can provide a useful corollary to empirical study. Nature/landscape drawing in particular has been used to explore what children notice in nature and the emotions associated with this experience (see e.g., Ahi & Atasoy 2019; Profice 2018).

5.3.7 Natural Beauty, wellbeing, and nature connectedness

The Covid-19 pandemic prompted an upswing in large-scale population studies looking at the role of the natural environment in mental health and wellbeing, adding to the mounting body of evidence that nature has a positive effect, albeit dependent on many variables including the type and qualities of natural features, and the exposure and quality of the experience (Browning et al. 2022; Bratman et al. 2019; Wheeler et al. 2015; Zelenski & Nisbet 2014; Fish 2011). The ‘biophilia hypothesis’ is often cited as the rationale for this positive effect either through exposure to nature restoring a person’s capacity to direct attention or by activating the parasympathetic nervous system to reduce stress and foster positive emotions (Jiménez-Fernández, Sánchez & Ortega-Pérez 2022). However, the link between wellbeing and aesthetic experience in nature is less well studied, although recent research suggests that engaging with natural beauty is a key pathway to experiencing the well-being associated with nature-connectedness (Richardson et al. 2020; Richardson & McEwan 2018; Zhang, Howell & Iyer 2014).

Wellbeing is often associated with happiness (hedonic wellbeing) but happiness and access to nature are not necessarily rated highly for wellbeing (ONS 2022; Bass et al.2016; Stewart-Brown & Janmohamed 2008). This makes the use of wellbeing studies to provide insights into Natural Beauty, problematic. However, some studies have found surprising correlations. For example, that experiences of natural beauty may play a greater role in wellbeing than the extent of easily accessible greenspace (Seresinhe, Preis & Moat 2015; Harvey and Julian 2015). This suggests that in planning decisions more emphasis is needed on the potential for finer-grained experiences of natural beauty in the real world as people move through spaces alongside the requirement for excellent spatial design, however, for the former no recognised assessment approach exists. Other studies point to the importance of feeling connected to nature for wellbeing and tuning in to it through simple daily acts (Richardson et

al. 2021; Wolf et al. 2020) with several indices developed to assess peoples' relationship with nature, such as Connection to Nature Index (CNI) (Cheng & Monroe 2012) and Nature Relatedness (NR) (Zelinski & Nisbet 2014). Zelinski and Nisbet's (2014) study suggests that nature relatedness is a significant predictor of happiness (2014). However, the challenge of applying these studies to Natural Beauty research is that the relationship with beauty and the mechanisms that deliver wellbeing benefits are not clear. What motivates engagement with nature continues to elude measurement (Jones et al. 2021), and in wellbeing studies, the relationship between natural beauty and wellbeing is difficult to unpick from a more general desire to experience a landscape that makes you feel good.

5.4 Chapter conclusions

Although there is virtually no literature on the measurement of Natural Beauty per se, there is a vast array of scholarship on related topics which addresses aesthetic appreciation of nature/landscape. No single approach, however, adequately captures the breadth and holistic nature of what was intended to be encompassed by the term. Despite the considerable body of scholarship concerned with landscape preference, inconsistent conceptualisation of the relationship between preference and aesthetic appreciation limits its utility for Natural Beauty measurement. Emotional associations are specifically factored out and personal experiences are not addressed (Bourassa 1991), which means landscape preference is an inadequate model for Natural Beauty in policy. Relating beauty to vegetation patterns is similarly problematic. The theoretical challenges identified by Born in the 1970s, such as the relationship between subject and object, questions of scale, and privileging visual over other senses, have still not been systematically addressed, but some progress has been made. For example, Sowińska-Świerkosz and Michalik-Śnieżek's (2020) study which sets out a four-component model for landscape quality which blends structural, ecological, cultural, and visual factors together to represent beauty.

The as yet unproven nature of biological theory as an origin for aesthetic preferences in nature suggests that exploring assessment of Natural Beauty from a subject perspective requires engagement with individual experiences. However, the complexity of individual interactions with nature/landscape – with beauty an emergent response involving emotions interacting with sense perception at multiple scales simultaneously mediated by individual dispositions and culture – suggests that understanding will only be partial and descriptive, rather than measurable. Here the research techniques necessarily become more resource intensive, and scholarship appears patchy. In terms of the object component of Natural Beauty, information on three main factors is needed – the state of fixed physical features (natural/cultural), ecological condition and landscape-scale land cover pattern (to inform a description of landscape character). Extensive scholarship is available, although in practice spatial information is patchy and inconsistent. The absence of a baseline for the state of biophysical features or land cover pattern in 1949 suggests the efficacy of AONB conservation and enhancement policy cannot be meaningfully monitored, but progress towards a desired or reference state could be.

Challenges in combining the measurement of different biophysical things with the subjective component of Natural Beauty, which is currently effectively unmeasurable, suggests composite measures will not be meaningful. Aesthetic theories place varying emphasis on the role of the object and its relationship with a perceiver (the subject) in the experience of beauty, but both remain important and need to be addressed (Zangwill 2014). A dashboard of measures for the state of nature/landscape may be useful but the subject component will need to be represented differently. In addition, any simplified representational model to support Natural Beauty measurement will need to acknowledge and explain gaps and communicate uncertainties to decision-makers (MacLeod & Nersessian 2018; Boccara 2010). Currently however, uncertainty – which includes error in how well models fit reality; estimation error;

degrees of belief in the propositions made, and fundamental uncertainty – is an overlooked principle in public policy (Thompson 2022; Aldred 2019; Foley 2009; Huber 2009).

Recognising that measurement approaches alone are insufficient for Natural Beauty shifts the argument to the question of who should judge beauty to meet policy requirements. Issues of democratic representation and unheard voices come to the fore along with practical concerns about how participative engagement is developed and operationalised in decisions (see e.g., Brites et al. 2021), and how knowledge is gained and shared (Amara 2021). Expert and lay-person perspectives are both important (Lee 2017). Involving citizens does not mean that lay-perspectives should necessarily drive policy. The 1949 Act did not consider that designation for Natural Beauty was a popularity contest. It balanced ambitions for individual enjoyment of Natural Beauty with a wider societal aim to hold these areas in trust for future generations. Democratic engagement requires equal access to knowledge and experience of Natural Beauty, so participatory methods need to be mindful of fair access and different ways of seeing. Further research is needed on how to mediate between expert judgement which tends to take an outsider/contemplative perspective and the immersed experiences of lay people and combine these in a structured framework with data (see e.g., Torres et al. 2018).

Drawing these conclusions together with the model of Natural Beauty derived in chapter 3, I propose below a set of principles for Natural Beauty measurement in public policy below:

- Composite measures are likely to be adequately to represent the holistic nature of Natural Beauty. Any dashboard of indicators should represent the object and subject components of Natural Beauty through the three main dimensions identified in chapter 3 – landscape character, features of interest (natural/cultural) and aesthetic experiences, with equal weight given to each. Not all dimensions will be measurable and alternative perspectives will need to be accommodated.

- The multi-scaler nature of Natural Beauty should be acknowledged and represented.
- Privileging the visual should be avoided.
- Since emotional responses and multisensory engagement are necessary conditions for Natural Beauty, the citizen (subject/perceiver of Natural Beauty) has a critical role to play in its assessment, with representative democracy an essential part of the process.
- A multi-disciplinary and mixed-methods approach will be most appropriate to cover the range of things to be measured, with quantitative measures used for physical features and land cover patterns, and qualitative techniques providing a richer understanding of individual aesthetic experiences and emotional responses to nature/landscape.
- Baselines for the biophysical (natural and cultural) aspects of Natural Beauty would ideally be set either reflecting the situation prior to industrialisation of land management (first half of the 20th century) or a future restored and ecologically healthy reference state.

These principles are used to assist analysis of Natural Beauty measurement in practice in chapters 6 and 7. Chapter 6 examines measurement and monitoring approaches currently used in Natural Beauty decision-making, while chapter 7 explores the dispositions of individual decision-makers towards Natural Beauty in more detail.

Chapter 6 Exploring the efficacy of Natural Beauty measurement in practice

6.1 Introduction

Natural Beauty is under unprecedented pressure. Nature is declining at an alarming rate worldwide with most of the Convention on Biological Diversity 2020 targets unmet (IPBES 2019). Of the G7 countries, the UK has the lowest level of biodiversity remaining with 41% of UK species continuing to decline in abundance (HoC Environmental Audit Committee 2021; Møller 2019; Haylow et al. 2019). Meanwhile, an immensely powerful finance-housebuilding lobby and weak and ambiguous planning policies undermine protection of Natural Beauty in AONBs (CPRE 2021; Colenutt 2020). In addition, access to nature in England's most beautiful landscapes is becoming more unequal as austerity and the appropriation of public land combine to limit travel options and erode the ability of public bodies to deliver improvements (Christophers 2019; Glover 2019).

The current policy response is largely focused on setting new targets for the natural environment facilitated by the UK Government's Environment Act 2021. In 2020, the UK Prime Minister signed the United Nations leader's pledge for nature and committed to protect 30% of the UK's land by 2030 (Prime Minister's Office 2020). The intention was to include AONBs and National Parks in this target, leaving only 4% to achieve through new designations (Ibid.). This was challenged by eNGO's and others who pointed out that AONB and National Park designation provides inadequate protection for nature and no existing data sets are

currently available to indicate otherwise (see e.g., Bailey et al. 2022). New targets and monitoring activity were offered by Government as the solution¹⁰².

As part of the target driven armoury, a new ‘Protected Landscape Targets and Outcomes Framework’ is being developed allocating a share of national targets to AONBs and supplementing these with further AONB specific targets¹⁰³. In addition, from 2023, development in AONBs will, as in the rest of the country, be subject to another target – a mandatory 10% gain in biodiversity as evidenced by a metric approved by the Secretary of State (Environment Act, Schedule 14, Part 1, (4)1). This reinvigorated target culture is predicated on the New Public Management (NPM) belief that targets and measured accountability drive better policy outcomes (see chapter 4). Over the last few decades remarkable quantities of resources have been dedicated to metric production with the idea that the ‘facts’ generated will provide evidence to fine-tune policy implementation (Saltelli & Giampietro 2017; Rinne, Lyytimäki & Kautto 2013; Hezri 2004). Defra’s statement that new targets would ‘ensure protected landscapes deliver more for nature, climate, people and place’¹⁰⁴, indicates that these are not about the supply of contextual information to inform policy. Rather, a direct and linear relationship is assumed between the metric and intended outcome. The history of target setting and monitoring in AONBs policy, however, is not a promising one. As previous chapters explain, Natural Beauty in policy remains inadequately conceptualised, and the dominance of some disciplines at the expense of others has limited the range of trusted professionals and narrowed the scope of knowledge brought to bear on Natural Beauty problems.

¹⁰² NE presentation to NE’s Landscape Advisory Panel members, 13th June 2023.

¹⁰³ NE presentation to AONB Lead officers, 18th October 2022, and Defra (2023)

¹⁰⁴ Defra presentation to AONB Lead officers, 6th December 2022.

6.1.1 History and context for Natural Beauty measurement

Natural Beauty monitoring has evolved from general state of the countryside reporting (in the form of a composite countryside quality measure) to monitoring discrete environmental factors. In the process Natural Beauty has been reframed as landscape quality/condition. One of the first measures, Countryside Quality Counts (CQC) was developed in response to the 1999 Rural White Paper (CA 2004; Haines-Young, Tantrum & Swanwick 2004). Initially, two indicators were proposed representing ‘countryside character’ and ‘countryside quality’ but the decision was made to combine these into a single measure (CA 2004, p. 2), in line with the Government’s intended national framework of standards and accountability (Walker & Boyne 2006). Each parcel of land was assigned one of four ranked condition categories – maintained, enhancing, neglected, or diverging – based on expert judgment informed by a mixture of existing quantitative and qualitative data (CA 2004; Haines-Young, Tantrum and Swanwick 2004).

Despite years of development, CQC as a long-term national project was abandoned when Natural England replaced Countryside Agency in 2006. In 2008, Natural England confirmed to the House of Lords that there was no national-level programme specifically for monitoring the ‘landscape condition’ of AONBs and National Parks (HL 2008). The following year, the first review of statutory AONB management plans revealed the paucity of AONB wide environmental data with small poorly funded AONB teams struggling to fill the gap. At the same time, the Coalition Government’s *Open Public Services White Paper* (HM Government 2011a) was in preparation which sought to publish information ‘about how services perform’ in order to ‘reform’ them (Ibid., p.5). Anyone challenging the argument that more measurement improved policy performance was ‘conspiring to keep our society less free, less fair and less united’ (Ibid.). The political direction was clear, and in an alignment of drivers, Defra and Natural England (NE) were incentivised to reinvigorate monitoring at an AONB level. A small team was set up led by NE to investigate monitoring what were termed

environmental outcomes. It was clear from a briefing note supplied to the first workshop that, like CQC, the scope was limited to ‘us[ing] existing data more effectively’¹⁰⁵, with the same datasets being considered for the task, but unlike CQC these were not to be aggregated into a single composite measure and the public were not to be consulted.

Monitoring Environmental Outcomes in Protected Landscapes (MEOPL) was published by Natural England (NE) in 2014 (Bingham 2014). Drawing on NE’s *Evaluation Framework for Natural Beauty* (2011) hereafter called the Evaluation Framework (see chapter 2), MEOPL proposed indicators for some of the Evaluation Framework’s Natural Beauty factors and assigned existing datasets to them. From 2013, a small number of datasets were made regularly available to AONBs, and MEOPL became a standard component of most AONB management plans or supplementary ‘state of’ reports (LUC 2021) alongside local AONB indicators. The latter had proliferated following AONB Management Plan guidance which recommended a dashboard of bespoke indicators for important aspects of Natural Beauty (CA 2006 and 2001a).

Monitoring programmes have tended to sit separately from more general AONB reviews and have an unclear relationship with them. The first major review of AONBs at the end of the 1970s (Himsworth 1980) focused hardly at all on beauty, and certainly not on data. His review was a qualitative one, interviewing key actors and commenting on whether the policy instruments put in place, such as development control, were sufficiently finely tuned to deliver the desired outcomes (Ibid.). MacEwan and MacEwan took a similar approach in their seminal review of National Parks in 1983. Despite the instrumentalising of measured accountability in public policy in the late 20th century, the Government’s *Landscapes Review: National Parks and AONBs* launched in 2018, also eschewed data. It referred to one set of

¹⁰⁵ Natural England (internal) briefing note 2012, p.1.

environmental monitoring data only, SSSI condition, reported through the MEOPL programme (Glover 2019). None of the local condition indicators contained in AONB management plans at the time, found by Horswill, Martin & Guy (2020) to number over 600, were considered. It is difficult to know whether this reflected increasing distrust of experts in public policy (Beunen & Opdam 2011) encapsulated by Gove's (2016) infamous soundbite that people have 'had enough of experts', lack of knowledge about local data sets in Defra, or genuine concern about the relevance of the monitoring data available. Like Himsworth and MacEwan previously, the Review panel choose to focus on qualitative information, interviewing social agents and supplementing this with wider consultation and discussion. This approach might suggest government agencies had reviewed and discounted measurement approaches, but this is not the case.

6.1.2 Divergent methods for different purposes

Alongside work on a targets and outcomes monitoring framework, a parallel approach was being developed by NE to produce a spatial metric for Natural Beauty. The Natural Beauty map was launched in 2022 by NE as part of its 'All England Strategic Landscape Mapping Tool' with a stated purpose to assist decisions on new designations (LUC 2022a). For the first time a single Natural Beauty score was provided for every 5km² hexagon in the country with 55 datasets aggregated into a single composite score (Ibid.). Separate to these approaches and sitting primarily within planning decision-making is Landscape and Visual Impact Assessment (LVIA), a technique developed in the landscape discipline and used to inform day-to-day decisions related to delivering AONB purpose through predicting and assessing the effects of change on Natural Beauty. Both the Natural Beauty map and MEOPL rely on NE's Evaluation Framework to guide indicator selection, but LVIA has its own history and associated knowledge which identifies different things to be assessed based on its particular interpretation of landscape (see LI and IEMA 2013).

Currently, Natural Beauty is measured using these different techniques to support three main decision-making tasks. These are to:

1. Assess whether an area (or parcel) of land has ‘sufficient natural beauty’ to justify designation or boundary change (NE 2011, p. 6).
2. Monitor change in Natural Beauty over time to enable policy makers to assess policy effectiveness and re-tune policy instruments (e.g., AONB management plans).
3. Predict the likely effect of proposed actions or external drivers on Natural Beauty, estimating increases (enhancement/benefit) or decreases (spoilation/harm) in order to inform decision-making or assess compliance with legal duties.

A fourth task – natural capital assessment – was recommended by the Government’s Landscapes Review (Glover 2019) but is not currently a requirement of AONB policy and only referred to tangentially in this study.

Natural Beauty measurement and monitoring methods used in practice have never been brought together and considered as a whole, neither have these techniques been investigated and validated to ensure that they are fit for purpose i.e., they plausibly represent Natural Beauty. A review of MEOPL has recently been carried out for NE (LUC 2021) but focused on the extent to which it has been used by designated landscape teams in their plans and strategies, rather than on its efficacy.

This chapter deals with Research Question 3 – How has policy success in terms of preservation of Natural Beauty been measured and monitored?

It focuses on reviewing existing methods and checking their functionality through two thematic studies:

Thematic Study I – examines NE’s Evaluation framework for Natural Beauty (2011) and its role in underpinning the MEOPPL programme and the recently published Natural Beauty metric and map (LUC 2022a).

Thematic Study II – reviews how effects on Natural Beauty are predicted and assessed using Landscape and Visual Impact Assessment (LVIA), and the role of Landscape Character Assessment (LCA) in providing a baseline.

The methods and materials used to do this are explained in each thematic study.

The decision processes around determining sufficiency of Natural Beauty to support new AONB designations or boundary review (task 1) is not critically examined in these studies. Such decisions are made by a small team within NE. While I have held limited discussions with some individuals from this team to better understand how Natural Beauty is interpreted for this purpose, a robust review of this process would require access to non-public information and more in-depth interviews with individuals than was possible within this study.

6.2 Thematic study 1: Analysis of methods currently used to measure and monitor Natural Beauty

6.2.1 Methods and materials

This study examines Natural England (NE)'s Evaluation Framework for Natural Beauty (2011) and its role in underpinning the MEOPL programme and the recently published Natural Beauty metric and map (LUC 2022a). I approach this by exploring the underlying logic of the methods used and indicators chosen through studying and re-reading the relevant guidance, excel spreadsheets and metadata – for example the MEOPL report (Bingham 2014) – and considering the extent to which they reflect the 1949 Act's interpretation of Natural Beauty as set out in chapter 3 and the principles for Natural Beauty measurement proposed in chapter 5.

6.2.2 The role of Natural England's Evaluation Framework

The *Monitoring Environmental Outcomes in Protected Landscapes* (MEOPL) programme makes an ambitious claim, '[to] demonstrate the effectiveness of the conservation and enhancement of the outstanding natural beauty of England's protected landscapes' (Bingham 2014, p.3) and to justify this, it uses NE's Evaluation Framework (2011, p. 24) as a model to identify the factors that represent Natural Beauty (Figure. 13, p. 163). The Evaluation Framework is similarly utilised in the Natural Beauty map (LUC 2022a). The origins of the Evaluation Framework in landscape assessment literature and how it diverges from the 1949 Act's intended scope of Natural Beauty, is discussed in chapters 2 and 4. Here, I examine how it is operationalised in measurement and if, despite its divergence in meaning, it nevertheless allows Natural Beauty to be adequately represented¹⁰⁶.

¹⁰⁶ Applying the counterfactual – if it did adequately represent Natural Beauty, what would it tell us? (Tetlock 2001).

To test how the Evaluation Framework’s model of Natural Beauty is represented in MEOPL and the Natural Beauty map I compared the scope and weighting of indicators/measures for each study (Figure 13).

Evaluation Framework for Natural Beauty Criterion*			MEOPL ‘measures’ provided in annual data release**	Natural Beauty map (NE and LUC 2022) ***
Factors	Sub-factors (no. of)	Indicators (no. of)	Measure/Statistics (no. of)	Indicators (no. of)
Landscape quality	Intactness of the landscape in visual, functional, and ecological perspectives	1	None	1
	The condition of the landscape’s features and elements	Landscape elements are in a good condition	Area in Environmental Stewardship schemes (ha) and cost (£) Scheduled Ancient Monuments at risk (%) Listed buildings at risk (%) Actively managed woodland (%) Rivers meeting Water Framework Directive ‘good’ or ‘high’ status (%) SSSIs and Geological SSSI’s in favourable condition (%)	7
	The influence of incongruous features or elements (whether man-made or natural) on the perceived natural beauty of the area	1	None	None
Scenic quality	4	7	None	14
Relative wildness	5	7	None	3
Relative tranquillity	2	2	None	2
Natural heritage features	2	4	None	11
Cultural heritage features	6	8	None	9
Access, Diversity & Inclusion				5
Democratic landscape value				2
Education				1
Totals (indicators)		31	6	55

Perception-based quality
 Depends on interpretation
 Physical feature

* Source: Guidance for assessing landscapes for designation (Natural England 2011, p. 24-26)

** Source: Datasets comprising the 2020 MEOPL data release (Natural England 2020) and provided as a dashboard by Plymouth University.

*** Source: Natural England’s All England Landscape Strategic Mapping Assessment Report (LUC 2022a). Three additional indicators added. Datasets provided for each indicator

Figure 13. MEOPL ‘measures’ in relation to Natural England’s Natural Beauty indicators.

Figure 13 shows that despite the Evaluation Framework being cited as the model, neither MEOPL (nor the Natural Beauty map) adequately reflect the scope of factors proposed. Nor

are the weightings given to the factors consistent. Of the six factors in the Evaluation Framework some are clearly perceptual qualities, while others appear to be physical, although in the document itself they are expressed as perceptual qualities, for example, ‘presence of [physical feature] that provides a sense of place ...’ (NE 2011, p. 25). Landscape character is not specifically included, nor are process or people, although the Natural Beauty map has added people-related factors (LUC 2022a). It might be expected that qualitative research involving people would be drawn on particularly for perception-based aspects, but such thinking is at an early stage¹⁰⁷. The lack of clarity about whether Natural Beauty is primarily a perceptual quality reflects divisions in the interpretation of *landscape* (see chapters 4 and 5) which leaves plenty of room for heated debate in decision-making¹⁰⁸. In a perception-based interpretation of Natural Beauty, which the Evaluation Framework arguably endorses, loss of biodiversity or cultural imprint might appear to be unimportant if they are not noticed by the perceiver – an illustration of the degree to which categorisation and naming can mis-represent meaning.

MEOPL provides metrics against only one of the Evaluation Framework’s six factors. The reason appears to be that, like its predecessor CQC, it relies on existing datasets with no remit or funding to commission new data (Bingham 2014). It might be expected that MEOPL’s annual data release is heavily caveated to recognise this skewing which, arguable, by itself invalidates any claim that it represents Natural Beauty, but this is not the case¹⁰⁹. Grouping these metrics under the factor ‘landscape quality’ allows for some fluidity in presentation. Not

¹⁰⁷ Social scientists employed by Natural England were asked to explore beauty questions in the MENE (Monitor of Engagement with the Natural Environment) survey (2019a) but such an approach was not raised in relation to MEOPL until a NE Landscape Advisory Panel meeting, 7th February 2023.

¹⁰⁸ For example, in a recent nationally significant planning inquiry an appellant’s QC and landscape witness argued that ‘landscape [and thus Natural beauty] is 9/10th perception’ such that a medieval fieldscape cannot be substantially harmed by housing development if it is not visible from a public viewpoint (HWJAC 2021)

¹⁰⁹ For example, MEOPL’s data release guidance explains in relation to Environmental Stewardship data that it is ‘the best nationally available information relating to the management of the wide range of landscape features and elements. Bringing these under management can, in theory, contribute to their good condition and to an area’s landscape character, which are both indicators of natural beauty’ (NE 2017a).

only did the Countryside Commission (CoCo) state publicly that *Natural Beauty* can be equated with *landscape quality* (CoCo 1985), but research commissioned by Defra to inform monitoring of beauty explicitly connects the two (see Davoudi and Brooks 2019). The idea that landscape quality represents Natural Beauty has become such a normative idea in the sector that scholarship reviewing landscape monitoring in AONBs does not question its validity and MEOPL's narrow list of indicators are accepted as representing the whole of Natural Beauty (see Horswill, Martin & Guy 2020). The lack of any clearly labelled caveats or uncertainty statements concerning the theoretical challenges of measurement compounds the sense that this is an accepted and unchallenged model.

MEOPL does not discuss the idea of a baseline or reference state for Natural Beauty and NE's Evaluation Framework avoids the terms, opting for a 'sufficiency of Natural Beauty' threshold necessary for designation (2011). It appears that improving environmental outcomes are to be assumed from a positive trajectory in the data. It also does not attempt to engage citizens in Natural Beauty monitoring. However, recent work on the Surrey Hills boundary review has sought to explore how people might be involved in applying the Evaluation Framework. A Story Map was employed asking people to locate and describe their perceptions of places under one of the six Natural Beauty factors (Natural England 2022). The comments posted illustrate the difficulties associated with public engagement approaches. Most comments relate to the factor 'Landscape quality' described in the call for evidence as 'landscape condition, e.g., state of hedgerows, presence of litter' (Resources for Change 2022, p. 2). From the responses, it is clear that interpretations differ considerably despite the definition provided. Landscape professionals tend to use a technical lexicon focusing on visual detractors, for example, 'no incongruous elements are present to detract from the high landscape quality of the area' (Tony Fullwood Associates 2022, p. 4). In contrast, local people use everyday language and focus on ecological health, for example, 'the trees are healthy and varied';

‘meadow already diverse with butterflies’; ‘extremely well-managed hedgerows’ (Natural England 2022, EA1: Greensands). Perhaps surprisingly, in view of the wealth of scholarship about landscape preference (see chapter 5), such techniques appear not to have been considered for the task. It is unclear how this disparate evidence will be assessed in the decision process, although the Evaluation Framework advises that it is for Natural England to ‘make a judgement as to whether people are likely to perceive a landscape as having sufficient natural beauty’ (2011, p. 11).

Below, I examine individual MEOPL datasets and the Natural Beauty metric and map in more detail.

6.2.3 The efficacy of individual MEOPL metrics

Where no linear relationship exists between the metric and the thing to be measured, indicators can nevertheless provide meaningful information (Rinne, Lyytimäki & Kautto 2013; Hezri & Dovers 2006). Adopting this principle, I reviewed selected individual indicators and supporting data sets.

i) SSSIs in favourable condition – a symbolic indicator?

‘SSSIs in favourable condition’ was the only MEOPL Natural Beauty indicator included in the Government’s review of designated landscapes (Glover 2019). The *All-England Strategic Mapping Assessment* report confirmed that ‘SSSI condition is used as a proxy for wider landscape condition’ (LUC 2022a, p. 28). It was presented in the Review as a graph (Figure 14, p. 167) which shows that AONBs appear to mirror the decline in ‘All England’ within $\pm 1\%$. However, there are no error bars to indicate whether this is significant, and the vertical axis has been truncated giving an accentuated perception of the steepness of the decline.

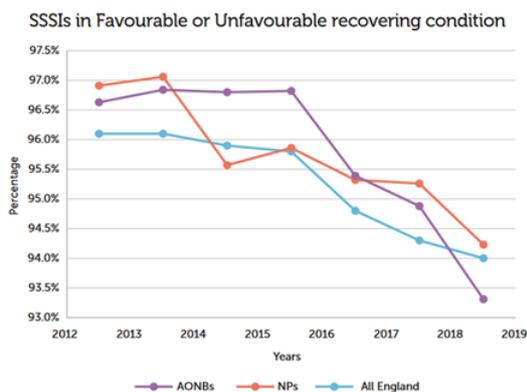


Figure 14. Percentage of SSSIs in English National Parks and AONBs that are in Favourable or Unfavourable recovering condition.

Source: Landscapes Review (Glover 2019, p. 29).

SSSI's are used as a proxy for condition of the wider landscape because there is so little information on the condition of habitats and species outside of SSSI's (Bailey et al. 2022; Lake District National Park Partnership 2018; Anderson 2016). However, it is difficult to argue that SSSI's are representative of the AONBs within which they sit – 50% of England's SSSIs lie in designated landscapes (Glover 2019, p. 34) but SSSI's occupy only 13% of AONBs (NE 2017b) and no analysis has been undertaken of the extent to which they adequately reflect their Natural Beauty. In addition, SSSI condition assessments are not necessarily reliable. In response to a question from Caroline Lucas MP in 2018, Defra confirmed that 47% of SSSI's had not been condition assessed in the last 6 years (HC 2018). Up-to-date information is often missing, with species abundance not routinely assessed and limited information provided about priority species (Bailey et al. 2022). Condition categories are assigned by specialists aggregating data and opinion derived from many different operators (JNCC 2019; NE 2019b), suggesting that consistency may be an issue.

The narrative juxtaposed with the graph in the Landscapes Review explains that designated landscapes are 'currently unable to fulfil their statutory purpose to "conserve and enhance natural beauty, wildlife ..."' (Glover 2019, p. 29). Based on this narrative, strong recommendations were made by the Review – that designated landscapes should be 'held to account for delivery' and that the state of nature 'should be regularly and robustly assessed'

(Glover 2019, p. 35), ambitions which are currently being translated into a revised targets and monitoring framework to justify funding. However, an alternative reading of the graph might be as follows: in 2013 nearly 100% of SSSIs were in a good condition with only a 4% decline estimated (to unknown confidence levels) over the subsequent decade. Such an interpretation might suggest that only minimal policy adjustments are needed to return to 2013 biodiversity levels. This is clearly not the case (see e.g., HC Environmental Audit Committee 2021; RSPB 2020; Haylow et al. 2019; IPBES 2019). It seems that SSSI condition is being used in the Review as a symbolic indicator to frame a problem and bolster a political choice of direction which is to focus on targets rather than regulation and enforcement (see e.g., Rinne, Lyytimäki & Kautto 2013; Bauler 2012). Arguably, the information it provides in terms of Natural Beauty is unclear and may even misrepresent the degree of decline in the wider landscape.

The power of conceptual information such as SSSI condition to frame problems, contribute to collective norms and influence collaborative behaviour (Bauler 2012), is demonstrated by the inclusion of an SSSI target in the AONB's Colchester Declaration (NAAONB 2019). Despite owning no land and possessing no powers to direct SSSI management, AONBs signed a declaration in 2019 committed to achieving favourable condition for 200,000 ha of SSSIs by 2030 (Ibid.)¹¹⁰.

Like SSSI condition, the remaining five MEOPL datasets are largely symbolic. In practice they neither drive action, nor inform policy adjustment. Rather, as annual data is received from NE by teams it is translated into reports as needed to meet the requirement to

¹¹⁰ At the time of the Colchester Declaration in 2019, Defra was preparing *Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services* which set a target of 'at least 50% of SSSIs in favourable condition, while maintaining at least 95% in favourable or recovering condition' as a key Defra metric. The Colchester Declaration signalled to Defra that AONBs were onboard with that target and ready to help. The commitment was received positively and, arguably, smoothed the path for additional nature recovery funding for AONBs. Anyone voicing concern against this approach was deemed 'not to live in the real world' (NAAONB discussions July 2019).

provide monitoring data back to Defra¹¹¹, raising questions about the weight of resource expended on the programme over the last decade. Two additional issues highlighted by interrogating the data are worth mentioning here:

ii) The dangers of over-simplification

‘Managed woodland’ data provided as part of MEOPL by the Forestry Commission aggregates annual statistics on woodland where there has been ‘grant or felling licence activity in the previous 5 to 10 years’ (Bingham 2014, p. 38). The data suggests that the proportion of woodland managed in AONBs has remained stable or undergone a slight increase since 2013 (Figure 15). This tells us very little about environmental condition because grants schemes included in the metric have changed over the period, along with their aims, target audiences,

monitoring requirements and funding rates¹¹².

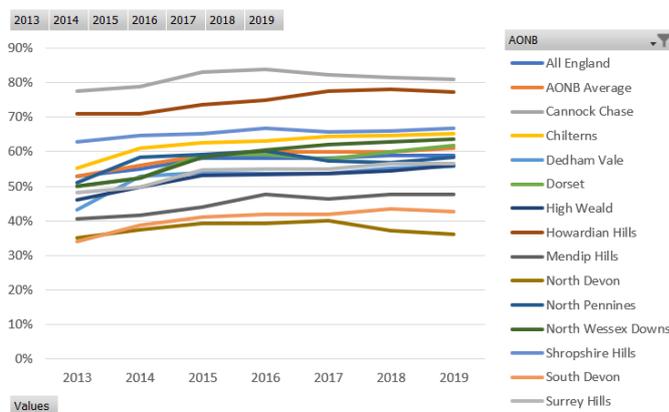


Figure 15. Proportion of Managed Woodland in AONBs

Source: University of Plymouth MEOPL dashboard (nd).

Including the metric in MEOPL suggests that ‘woodland management’ is universally positive for Natural Beauty, but management is a contested activity with varied outcomes depending on the form it takes and the character of the woodland. The history of woodlands in England is

¹¹¹ Discussions between AONB Lead officers and with National Park Lead officers in relation to proposed management plan guidance and national monitoring targets (Oct 2022-March 2023)

¹¹² Information in legacy grants EWGS, Woodland Planning Grant, and Woodland Assessment Grant (HM Government 2023).

one of long term, often cyclical management under human-scale traditional coppice systems producing material mostly for local markets, and as a by-product favouring certain species rich habitats (Rackham 2006). However, from the 1960s onwards smaller, hard to reach farm woods were often abandoned while woodland management elsewhere became increasingly mechanised and industrial in scale (Raum 2020; Silversides 1984). What might be more helpful, therefore, is monitoring the surviving extent of traditional small-scale management operations and the associated rural skills required (see e.g., Mölder et al. 2015).

The almost horizontal nature of the graph is at odds with what we know about the state of woodlands in England more generally. Studies show a decline of 27% in woodland birds since 1970 with the trajectory continuing downwards (RSPB 2020b). In addition, tree pest and disease introductions have risen rapidly since 2000 (Defra 2018). Many studies highlight issues other than lack of management as critical to the decline of woodland specialist species, citing the main culprits as increased pollution, climate heating, invasive species, pests and diseases, changes in grazing pressure and habitat fragmentation (Neumann et al. 2015; Hopkins & Kirby 2007; Gill & Beardall 2001). These tend to be national or international drivers which require government regulation and enforcement, suggesting that condition can decline even while day-to-day management is maintained. Management can play a critical role particularly in restoring traditional coppice rotations (Buckley 2020; Kirby, Buckley & Mills 2017; Rackham 2006), but where the range of woodland specialists has shrunk due to climate heating (Sharkey, Jones & Bourke 2007) or pests and diseases; or management has been abandoned for long periods and woods have naturally transformed to high forest, intervention may not achieve the desired improvements in ecological condition (Kirby, Buckley & Mills 2017). Other interventions may be needed, and tracking ‘active management’ may give a false and misleading picture.

iii) The need for theory and transparency

Logic models, used extensively in public health policy (see e.g., Public Health England 2018) are not common in landscape policy and no ‘backwards mapping’ of the logic chain of hypothesized causes and effects is evident in the MEOPL report. However, one metric is popular amongst AONB teams because it seems self-evident that it does indicate improved environmental condition¹¹³. The guidance accompanying the Environmental Stewardship (ES) dataset appears to confirm this assumption, explaining that,

‘ES data has been collected as it is the best nationally available information relating to the management of the wide range of landscape features and elements. Bringing these under management can, in theory, contribute to their good condition and to an area’s landscape character, which are both indicators of natural beauty.’ (Natural England 2017a).

Investigating the data suggests that this confidence may be misplaced. For example, comparing the number, area, and cost of schemes for all AONBs between 2017 and 2020, shows that the number and area of schemes has halved (Figure 16, p. 172). This may indicate that less land needed farm support in 2020, or it could be related to factors such as scheme design, availability of farm advisors, or landowner attitudes and commodity pricing. Without further information and a set of hypothesized relationships, it is unclear what the data is telling us. For all AONBs, 23% land was covered by ES in 2020 at a cost of £550m (NE 2020). While it may have secured beneficial outcomes (such as temporary biodiversity improvements or support for struggling family farmers), we simply do not know to what extent this policy intervention has conserved Natural Beauty.

¹¹³ Discussion on AONB message boards prompted by NE delay in issuing MEOPL data (March 2023).

Total for all AONBs in England

Scheme year	No. of schemes	Area covered (ha)	% of AONB area under ES	Cost of schemes (£)
2017	6,385	870,327	45	£67m
2020	2,630	472,631	23	£550m*

Figure 16. Environmental Stewardship summary data for all England AONBs 2017 and 2020.

Source: Natural England 2017 and 2020.

* The advent of Brexit and withdrawal of EU farming support funding means cost figures cannot be compared.

Scholarship into the role of ES in improving condition, while limited, has generated mixed results suggesting there is no guarantee that condition outcomes are met, with particularly high rates of failure (>30%) accompanying some grassland and heathland options (Mountford & Cooke 2013) and the absence of a linked counterfactual undermining confidence in condition outcomes attributed to ES (Staley et al. 2018).

6.2.4 A single rating score for Natural Beauty – does it plausibly measure what it sets out to measure?

Unlike MEOPL which provides a dashboard of measures, the Natural Beauty map offers a single composite score for Natural Beauty. Composite measures have become increasingly common as policy makers seek to simplify complex problems into single scores to assist public reporting and performance monitoring, but there is growing recognition of their associated problems (Jiménez-Fernández, Sánchez & Ortega-Pérez 2022; Barclay, Dixon-Woods & Lyrtzopoulos 2019; Saisana 2004). While close connections between science and policy are central to the idea of metrics (Hezri 2004), it seems that reduced scientific capabilities in Government agencies has led to the outsourcing of metric development work (see e.g., LUC 2022a) complicating scrutiny and obscuring accountability. This practice appears to be linked

with a reluctance to engage in debate about the scientific principles underpinning metrics exacerbated by a rush to publish to meet performance deadlines¹¹⁴.

The Natural Beauty map visualises a single composite Natural Beauty rating score for every 5 km² hexagon in the country derived from indicators representing NE's Evaluation Framework. It was conceived as a response from Natural England to the Landscapes Review (Glover 2019) and when published in 2022 was hailed as 'reflecting the spirit of the Hobhouse map which led to the establishment of the first National Parks 70 years ago' (NE & LUC 2022b). It is yet to be used in decision-making, but concerns have been expressed about a range of problems associated with composite indicators which have not been addressed. NE's Evaluation Framework recognised that combining scores might be an issue, stressing that no 'scoring' involving accumulations of indicators' should be carried out (NE 2011, p. 24), but the principle was abandoned for the Natural Beauty map. While caveats are included in the method report, for example the 'coast fares poorly due to lack of data' and some key themes are 'difficult to map with available data' (LUC 2022a, p. 193), transparency and understanding of the data are inevitably compromised when uncertainty statements are buried deep in reports.

Selection of indicators and choice of weights is critical in composite measures with best practice recommending that weightings used are justified and sensitivity analysis employed to check their effects (Jiménez-Fernández, Sánchez & Ortega-Pérez 2022; Barclay, Dixon-Woods & Lyratzopoulos 2019). It appears that in the Natural Beauty map, weighting issues have been ignored, with no explanation for the variation in the number of indicators applied to each factor. Since each of the 55 indicators are treated equally in the aggregation process, factors with more

¹¹⁴ Ongoing discussions with NE officers Jan-Mar 2023.

indicators, such as Scenic quality with 14 indicators as opposed to Relative Tranquillity with 2 (Figure 13, p. 163), exert a disproportionate influence on the final score¹¹⁵.

Weighting decisions are also at play in the standardising and re-profiling of data which has no common meaningful unit of measurement (Saisana 2004). To deliver a Natural Beauty score, data was re-profiled using 5 km² hexagons as the spatial framework and banded, with most (but not all) datasets divided into quintile classes and assigned a score of 1-5 (other weightings included 0,3,5, or 0,4,5 or 0,1,3,5). Visualisation of the Natural Beauty map shows the quintile score for each dataset, but arguably, the loss of information (e.g., about how data is skewed) resulting from banding the data reduces its usefulness to decision-makers. Similarly, the aggregation of scores for each dataset can obscure serious failings in the data (Saisana 2004). Too many different datasets can create ‘noise’ – meaningless information and cumulative error which makes it difficult to interpret the data. Without a theoretical model to guide data set selection it is unclear why these 55 different datasets were required, and interrogation of the method report suggests that the rationale for including some datasets is weaker than for others. For example, there is a ‘shortage of data’ to support the factor ‘Democratic landscape Value’ but nevertheless a proxy – ‘Tourism spend’ – is proposed without explaining the relationship between the two (LUC 2022a, p. 37).

Like many policy metrics rushed to publication to meet performance deadlines, verification tests on the output are limited. The test reported in the method finds that most hexagons with the highest scores (5) for Natural Beauty are concentrated in already designated landscapes (LUC 2022a, p. 52-53). What the report fails to mention is that the test also shows that many AONBs lie almost wholly within areas that score 3 out of 5, or below, for Natural

¹¹⁵ Discussions (6th April 2023) with NE officers who commissioned the metric/ map confirmed that weighting issues were not considered at the development stage.

Beauty (when smoothed to NCAs), e.g., Suffolk Coast and Heaths, North Wessex Downs, Solway Coast, and Northumberland Coast AONBs. In addition, Lincolnshire Wolds, Dedham Vale and the Isles of Scilly AONBs score lower than London for Natural Beauty. Perhaps more concerning for a metric promoted as identifying additional beautiful areas to be considered for further designations, the majority of the Central Province of England, characterised by plentiful remains of medieval villages and associated cultivation-related earthworks (Historic England 2018), scores the lowest (1 out of 5) for Natural Beauty, along with the coast and estuaries of the South East and East, areas well known for their plentiful birdlife and beautiful and haunting landscapes (Figure 17).

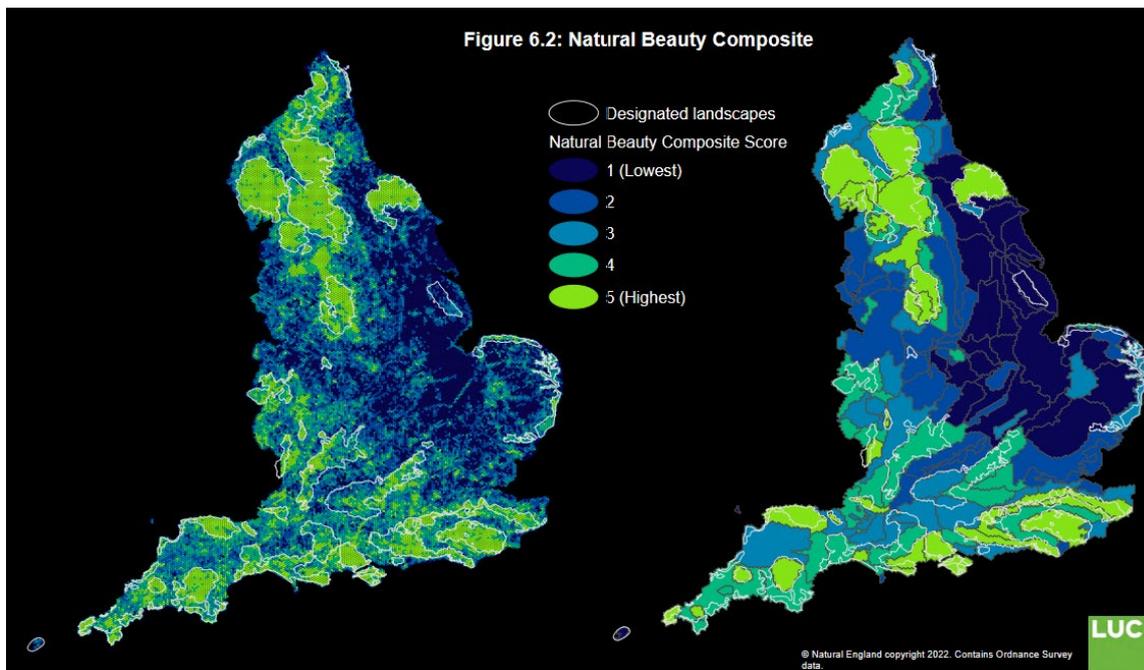


Figure 17. Verification test included in the method report which maps existing designations against Natural beauty scores (LUC 2022a, p. 52).

In the absence of a sensitivity analysis, it is difficult to say what is driving the final scores. Height appears to be a factor with all upland National Parks registering high scores, but this

does not explain the discrepancy between the North and South Downs which score mostly 5, and the North Wessex Downs which has a more variable score.

How the scores are to be used in decision-making is yet to be seen but the failure to clearly set out the theory underlying the composite metric and demonstrate that it plausibly measures what it sets out to measure undermines its usefulness (see e.g., Barclay, Dixon-Woods & Lyratzopoulos 2019). A similar obscuring of what happens in the black box beneath the hood, and a lack of demonstrating plausibility in measuring what it sets out to measure, is found in the Biodiversity Net Gain (BNG) Metric (NE 2023), a composite metric also introduced to simplify development decision-making (Ibid.). Analysis of Metric outputs from early adopter councils suggests that BNG outcomes can be the opposite of what was intended, with absolute losses in total habitat area and real-world biodiversity traded for promises of gains in habitat quality in the future, usually over much smaller areas (zu Ermgassen et al. 2021). Concerns have been expressed by designated landscape teams that, like the BNG metric, the Natural Beauty score might be used to downplay Natural Beauty and favour development in those areas where the scores are low. In addition, similar to the BNG metric, the use of a number confers authority on the composite score even when that number is representative of fuzzy categories rather than a true quantity (Aldred 2019), allowing the item – Natural Beauty – to be ranked and traded.

Joseph Stiglitz observed that ‘if we measure the wrong thing, we will do the wrong thing’ and identified a crucial weakness with composite measures (Stiglitz, Fitoussi & Durand 2019, p. xiv). His central message is that if things are not measured or their absence is hidden or inadequately represented in composite measures, they will be neglected in policy (Ibid.). The danger with simple composite scores is that they are removed from their context and inserted as ‘facts’ into summary reports prepared by others (see e.g., Slatford 2021). Numbers are powerful in policy decision-making; their reliability depending on the reputation of the teller

and their perceived legitimacy (Aldred 2019; Hezri & Dovers 2006). Metrics promoted by government agencies are likely to gain considerable traction for this reason. In complex policy decisions where there is divided or contrasting positions and where political or financial incentives may be involved, it is easy for decision-makers to use simple composite metrics symbolically or conceptually to frame problems and influence values (Bauler 2012). To minimise the problems of composite indicators, Stiglitz, Fitoussi and Durand recommend a dashboard of individual indicators representing the most important dimensions of complex concepts (2019).

6.2.5 Thematic study conclusions

Despite challenge to the Evaluation Framework when it was first proposed (see chapter 1), it remains the only model representing Natural Beauty in policy and its usefulness in a time-poor and financially constrained public sector environment has facilitated its embedding in a range of measurement tools.

Comparing the Evaluation Framework with the understanding of Natural Beauty in the 1949 Act from chapter 3 (Figure 18, p. 178), it is clear that there are gaps in the former. Since it does not adequately reflect the three dimensions of Natural Beauty derived in chapter 3, neither do the tools relying on it, with the unequal weighting of factors compounding the problem. Perceptual qualities are included but are not supported by data arising from citizen engagement. Assessment of aesthetic experiences and the positive emotions associated with them is missing. The majority of indicators are concerned with physical things and expressed through condition measures which can themselves be composite indicators. Considerable inconsistency is evident in the approach to indicator choice, aggregation method, and choice of scale. Baselines are not considered.

Components of Natural Beauty as intended by the 1949 Act (see chapter 3, s 3.6)		Natural Beauty Evaluation Framework (NE 2011) (Indicator description)	MEOPL (Data release, NE 2020) (Datasets)	Natural Beauty Map metric (LUC 2022) (Datasets used)	LVIA (LI and IEMA 2013) (landscape receptors)
Symbolic landscape character	Landscape character/ land cover pattern	2**	X	X	√
	Perception-based qualities*	12	X	X	√
	Cultural associations	4	X	1 [‡]	X
Features of general and scientific interest	Physical features (natural and cultural)	13***	5	44 [‡]	√
	Natural processes	X	1	2 [‡]	X
Pleasurable aesthetic experiences		X	X	8 ^{‡‡}	X

* Primarily involves a perception-based judgement.

** Related to character but condition indices rather than pattern metrics.

*** Albeit, expressed as a perceptual quality (e.g., ‘presence of ... that provides a sense of place’) but with a physical component capable of being mapped or counted.

[‡] Related to perceptual or non-perceptual factors but expressed as physical features that can be mapped.

^{‡‡} Related to access and engagement factors that can be mapped or tourism spend.

Figure 18. Allocation of indicators/ datasets to Natural Beauty components intended by the 1949 Act as derived in chapter 3, Figure 8.

The desire to use existing datasets rather than seek to configure data collection to meet a need compounds the problem and has mitigated against exploring new computational approaches and qualitative studies engaging people. Scholarship on land cover change metrics, for example, has exploded (see chapter 5) but to date no land use change metric has made it into national AONB monitoring programmes, despite land cover pattern being central to Natural Beauty to describe symbolic landscape character. It is not that they are considered

inappropriate, do not work, are not replicable or are too costly. Rather no review of their applicability to AONB monitoring has been undertaken¹¹⁶.

Not explored here are the myriad additional indicators adopted by individual AONB management plans. These have been recently reviewed by Horswill, Martin, and Guy (2020). In their study, 158 existing management plan indicators are selected as candidates for monitoring, already a considerable number, yet none relate to perception-based qualities, and all continue to sit under the same single Natural Beauty factor – landscape quality (Ibid). In the absence of any other conceptualisation of Natural Beauty, perhaps it is not surprising that the Evaluation framework is universally employed, but this does not explain why some factors are preferentially selected over others.

Only a limited number of individual indicators have been examined in this study, but those that have appear to be being used primarily for political and symbolic purposes to legitimise and justify policies already in place. The challenges and inconsistencies evident in Natural Beauty measurement and monitoring approaches leave policymakers without meaningful information to gauge the extent to which policy is working, or to test and refine implementation mechanisms. Yet, recent research into the state of nature more generally clearly points to a collapse in wild species and the condition of air, soil, and water across England with pollution and agricultural intensification the main culprits and stronger regulation by Government required (see e.g., Fox et al. 2023). Whether Natural Beauty polices alone can reverse this decline is not something that the currently inadequately conceptualised AONB monitoring programmes can determine.

¹¹⁶ At a Natural England working group for revising management plan guidance on 25th July 2022, a proposal to review landscape monitoring approaches was rejected due to insufficient resources and tight deadlines. A business-as-usual approach with minor alterations to the existing (but failing) metrics was deemed acceptable.

6.3 Thematic study II: Analysing the role of Landscape and Visual Impact Assessment (LVIA) in predicting effects on Natural Beauty

6.3.1 Applying LVIA to Natural Beauty forecasting

Public bodies do not provide guidance on how to measure and predict changes to Natural (or scenic) Beauty. In planning policy this need is currently met by Landscape and Visual Impact Assessment (LVIA), the industry standard tool designed for assessing effects of development on landscape (DLUHC & MHCLG 2019, para. 037). As a forecasting tool (Ortolano and Shepherd 1995), LVIA is used to predict and quantify effects to meet the requirement of national policy that ‘great weight [is] given to conserving and enhancing landscape and scenic beauty in ... AONBs’ and that ‘the detrimental effect on the environment, the landscape ...’ of a proposed development is assessed (MHCLG 2021a, p. 50-51). LVIA guidance requires two distinct components to be examined and given equal weight in the assessment, ‘Landscape as a resource in its own right’, and ‘specific views and ... general visual amenity experienced by people’ (LI and IEMA 2013, p. 21, para. 2.21). These are not easy tasks to tackle. Both are abstract ideas with contested meanings. The guidance attempts to define both but provides more prescriptive recommendations for how visual impact is assessed (for reasons see chapters 4 and 5) than it does for the physical landscape resource. No independent review of the efficacy of LVIA in assessing effects on Natural Beauty has been carried out so whether these two distinct components of LVIA sufficiently represent the scope of Natural Beauty is open to question. LVIA are also not subject to any quality control mechanism, as exists for Environmental Impact Assessment (EIA) under IEMA (the professional body for EIA) to ensure they reflect guidance¹¹⁷. This thematic study contributes to these gaps, reviewing how LVIA performs in

¹¹⁷ Discussions at the LI’s GLVIA Panel meetings, 18 January and 2 May 2023.

practice in relation to the principles for measuring Natural Beauty set out in chapter 5. It empirically evaluates a representative sample of LVIA and examines the narratives used by decision-makers to connect landscape and visual impact with effects on Natural Beauty. The results are used to understand if LVIA can be used to predict and quantify effects on Natural Beauty or whether Natural Beauty is sufficiently different a concept that a separate body of theory and practice is needed.

6.3.1.1 About LVIA

LVIA examines the effects on landscape as a resource and visual amenity separately. From a baseline study it identifies receptors that are likely to be affected by the proposed development and assesses the effects on each through a series of steps (Figure 19). For each factor the effects

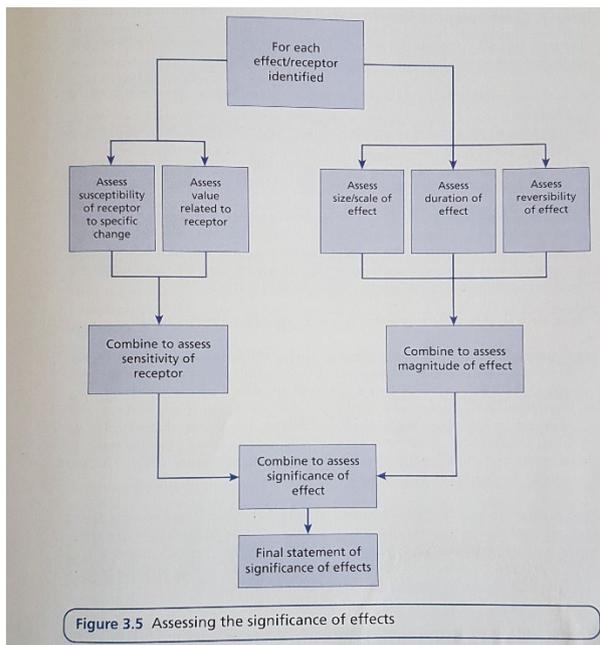


Figure 19. Summary of LVIA method (LI & IEMA 2013, p.39).

are ordered into categories which are given word labels, with a suggested maximum of 5 rating categories per scale (LI & IEMA, p. 38). Scores are then aggregated to provide a final statement of significance of effects [Final Effects].

LVIA are usually submitted as stand-alone documents prepared for applicants by a landscape practice and include a report and appendices setting out the method and findings, or they can be included as chapters in

Environmental Statements collated by planning agents. They are required to follow industry guidance (LI & IEMA 2013) and to be prepared by ‘competent experts’, usually considered to

be chartered members of the Landscape Institute (LI) (LI 2020, TGN). LVIA relies on professional judgement at each stage of the process (LI & IEMA 2013), so individual LVIAAs cannot be independently verified. However, judgements at each stage are required to be ‘transparent and understandable so that the underlying assumptions and reasoning can be examined by others’ (LI & IEMA 2013, p. 46).

6.3.2 Methods and materials

6.3.2.1 Sampling approach

The 34 English AONBs differ considerably in size, population, and administrative complexity. Development pressure is most acute in the southern AONBs with the High Weald, Cotswolds, Dorset, and the Chilterns accounting for 52% of all greenfield development in AONBs (CPRE 2021). Each AONB has its own tailored Natural Beauty policies contained in a statutory AONB management plan which LVIA practitioners need to take account of. While district and boroughs in an AONB will have their own local plans, the joint AONB management plan represents their shared policy in relation to all their functions concerned with the conservation and enhancement of Natural Beauty. To ensure that the LVIAAs studied were being prepared against consistent Natural Beauty policies, sufficient LVIAAs would need to be gathered from a single AONB. The High Weald has faced the highest sustained pressure over the preceding 3 years (CPRE 2021), with proposed development spread across many sites rather than concentrated in a few. To secure a sufficient sample of LVIAAs for scrutiny, the High Weald was selected as the sample area.

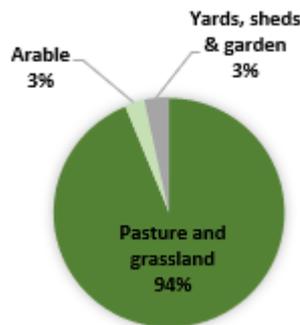
I collected all LVIAAs accompanying planning applications submitted for three years - 2018, 2019 and 2020 - from four adjacent district and boroughs which cover 75.80% of the AONB in total. Each district’s public planning portal was searched to identify planning applications accompanied by LVIAAs. These included full and outline applications and reserved

matters. LVIAs provided for wholly brownfield sites within towns and villages that were not required to consider Natural Beauty were not included.

A total of 25 LVIAs were collected, and none were rejected. My sample covers 103.37 ha of proposed development on greenfield sites and spans applications for between 2 and 417 residential units, totalling 1405 units. Each LVIA was given a project ID and dataset properties were recorded (Figure 20).

Total number of LVIAs in sample	25
Total site area of sample	103.37 ha.
Total number of dwellings in sample	1405
Number of landscape practices supplying LVIAs	16
Number of clients commissioning LVIAs	19
LVIA reports: total word count	482,630

Existing land use as a proportion of total area for all developments



Distribution of dwelling numbers per site

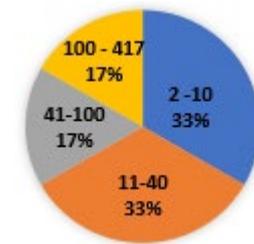


Figure 20. Data properties from 25 LVIAs.

6.3.2.2. Procedures

For this study, the requirements for scrutinising LVIAs (LI 2020) and principles for Natural Beauty measurement from chapter 5 were used to create testable queries. Using Excel, a spreadsheet of values was developed for each query based on a binary no/ yes (0/1) response against each project ID. Descriptive statistics expressed as simple charts were produced to show

the distribution of values present for each query. By the 15th LVIA a consistent pattern was clear, with the further ten LVIAs confirming the pattern. The narrative component of decisions was also examined. I used grounded theory to discover common themes in the texts. To maintain a reflexive distance from texts and avoid imposing my own categories, I manually highlighted sections of text within the reports which provide a rationale or explanation for the rating scores given and grouped these into common themes, developed through an iterative process of read and review.

6.3.2.3 Observations and issues

The study focuses on assessment of Natural Beauty effects and was not intended as a comprehensive review of the method against current guidance or of judgements made concerning impact on local landscape character or features. It was sometimes unclear what was considered as a receptor. Receptor tallies include all items labelled as receptors and those treated as receptors (in that weighting factors are applied, and a Final Effect judgement provided). The word-based rating scales were not always consistent (as allowed by the guidance) with some using 'moderate' while others used 'medium', or 'low' where others used 'minor'. My visualizations use the most common scale. Judgement of whether rating scales are weighted lower or higher was determined by what lies either side of the scales' mid-point (if linear), or the area either side of the mid-line of a table (if an aggregated score).

6.3.3 Results and discussion

6.3.3.1 Summary of LVIA conclusions

Twenty-four (96%) of LVIAs rated the Final Effects of development on the AONB’s Natural Beauty as either, ‘Minor Adverse’, ‘Negligible’, ‘Neutral’ or ‘Beneficial’ (Figure 21) ¹¹⁸. None of the LVIAs found that developments would have a Major adverse effect on Natural Beauty. One LVIA avoided a single conclusion with a narrative statement suggesting that while the effects on a single receptor (fields) were ‘Major/ Moderate Adverse’, ‘all other aspects were unaffected’ (ID17). No LVIAs included caveats to explain that these were predictive scores and therefore subject to a degree of uncertainty.

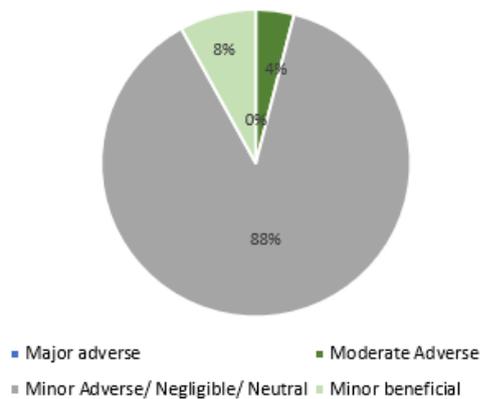


Figure 21. Final Effects rating scores for Natural Beauty*

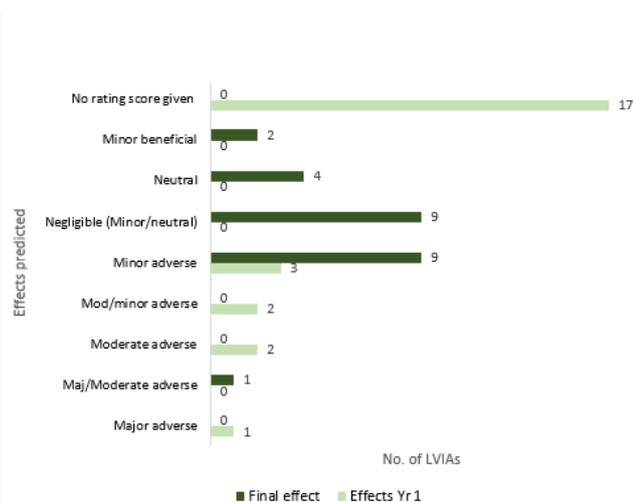


Figure 22. Distribution of rating scores for Natural Beauty effects – Year 1 and Final Effects *

* Note: based on LVIAs where these address AONB impacts directly (n= 23) or officers’ interpretation where they do not (n=2). Time to target is not always specified. Where it is, this is either 5-10yrs or 15yrs.

¹¹⁸ This study confirms my experience in practice over 15 years during which time only one LVIA crossed my desk suggesting that effects on Natural beauty were greater than Minor adverse.

Sixty-eight percent (n=17) provided only a Final Effect score, with successful mitigation being assumed within the score (Figure 22, p. 185). Three LVIAAs considered that effects on Natural Beauty at Year 1 were ‘Moderate’ or ‘Major Adverse’ but mitigation (mainly tree planting) reduced these to ‘Minor’. Listing only a Final Effects score benefits developers because only this score is lifted out from the LVIA by planning officers in their decision reports, with potential discussion about the type of mitigation and its efficacy thereby lessened. No LVIAAs listed their assumptions about the sequence of operational decisions and actions that would need to be completed in an effective and timely manner for mitigation to be successful.

A null hypothesis for this study would be that at least some, probably the larger developments, would be found to have a significant Final Effect on Natural Beauty. The absence of any scores greater than Minor adverse (except where single receptor scores were included in the concluding narrative) is unexpected. Such a result would only occur if Natural Beauty was unaffected by visual intrusion, physical damage, noise, or disturbance. In which case the costs associated with the production of LVIA is, arguably, unjustified. To understand the results better, both the method and how it has been employed in practice were investigated further.

6.3.3.2 Theoretical challenges

The LVIA methodology does not provide an explanation of the relationship between what is assessed and Natural Beauty. Although the national planning policy term *scenic beauty* is not mentioned in LVIAAs, it may be that the visual amenity component of the tool is being used as a substitute. The ‘landscape receptors’ against which effects are assessed – landscape character (assessed as parcels of land); individual elements (assessed as physical features), and aesthetic or perceptual qualities – broadly map to Natural Beauty, although emotional responses are not considered (LI and IEMA 2013, p. 86.).

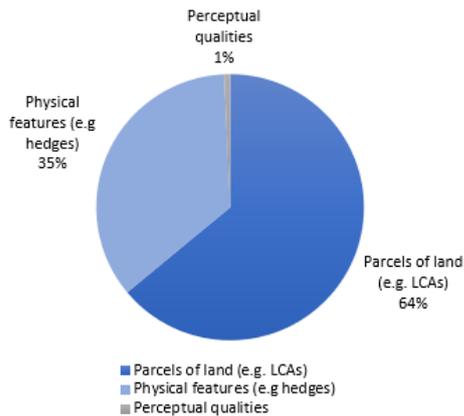


Figure 23. Types of landscape receptor used (Total n=136)

Results shows that in practice *landscape* is interpreted mainly as perceived character with 64% of all landscape receptors being parcels of land (mostly local landscape character areas or the site itself) where the effects are assessed on its character described in words. Physical features account for 35% of receptors and perceptual qualities only 1% (Figure 23). Effects on landscape as a physical resource is therefore poorly served. For example, only 9 out of a total of 136 landscape receptors represent grassland or fields despite 97% of the land proposed for development being physical fields/grassland (see Figure 20, p. 183).

Replacement of fields with modern, generic housing development is likely to have negative effects on Natural Beauty. Indeed, ‘despoilation’ from urbanisation was one of the main concerns of the architects of the 1949 Act (see chapter 3). It might be expected that the inevitable destruction of grassland habitat and soil sterilisation wrought by concrete and tarmac would be assessed as ‘Major Adverse’. In fact, as this study demonstrates, Final Effects ratings for landscape receptors in LVIA are overwhelmingly assessed as Minor adverse, Negligible, Neutral (69%) or Beneficial (10%) (Figure 25, p. 188). Only 6% of individual landscape receptors were judged to suffer Major or Major/ Moderate Adverse effects. While it may not be inevitable that Final Effect ratings are lowered by having fewer physical landscape receptors, this study demonstrates that in practice they are. In addition, selecting landscape character areas covering a greater extent than the site as receptors permits operators to argue that the relative scale of the damage is small, allowing a lower rating score for Magnitude to be applied (Figure

24). Low Magnitude ratings can then be used to ‘balance’ any higher ratings for Sensitivity, giving the low Final Effects scores seen in Figure 25.

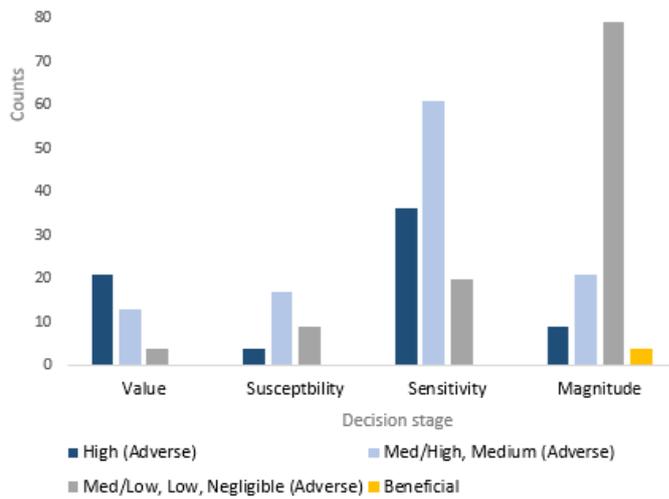


Figure 24. Rating at each decision stage prior to Final effects score for landscape receptors

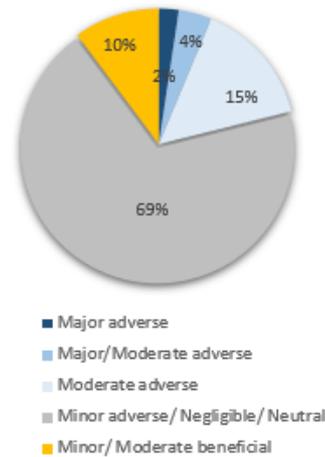


Figure 25. Final effects ratings for landscape receptors

LVIA ID17 illustrates how lower Magnitude ratings (and hence lower Final Effects) are justified by narrative concerning extent,

‘Significant effects would arise as a result of replacing fields with housing. However ... those effects that do occur would be localised. In the context of the AONB as a whole, effects ... would be of Negligible magnitude ... (LVIA ID17, p. 40)

ID22 offers a related approach suggesting that Magnitude is low because the duration of the effects will be short and over the long term there will be ‘no perceptible change’, while ID1 justifies lowering the Sensitivity rating by explaining that ‘development is largely in keeping with adjacent residential land’.

6.3.3.3 Privileging the visual

Combining landscape effects ratings with those for visual amenity, common when LVIA is used for assessing effects on Natural Beauty¹¹⁹, further dilutes any recognition of the adverse effects on the physical landscape. The recommendation to give equal consideration to the effects on ‘landscape as a resource in its own right’ and on views/ visual amenity (LI & IEMA 2013, p. 46) grants prominence to visual concerns. However, this study demonstrates that, in practice, Final Effects ratings are skewed even more to visual concerns by the imbalance in the number of receptors for each factor. Overall, the total number of visual receptors was 299, twice that for landscape receptors at 136 (Figure 27), with the median count of receptors for visual amenity (12) greater than that for landscape (5) (Figure 26). LVIA consistently assess more visual receptors than landscape ones with (ID18) being the only exception.

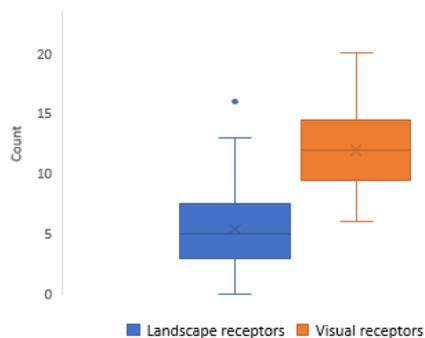


Figure 26. Distribution of landscape and visual receptor counts for all LVIA -median and quartile values

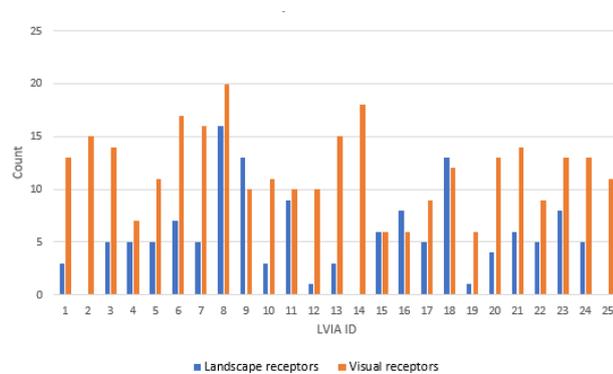


Figure 27. Comparison between number of landscape and visual receptors for each LVIA. Total count for landscape = 136, and visual = 299.

¹¹⁹ But arguably not advocated by the LVIA Guidance according to the LI’s GLVIA panel discussion on 3rd April 2023.

The proposition underpinning LVIA is that the landscape is appreciated predominantly by sight but as chapter 5 explains, combining information from all senses is important for aesthetic experience, and perceivers respond differently to sense stimuli as they move through a landscape with visual information at multiple scales being assimilated simultaneously.

6.3.3.4 Reliance on expert judgement

The importance of perceivers' experience of landscape is recognised by LVIA guidance which states that, '[Visual] baseline studies must identify the people within the area who will be affected by the changes in views and visual amenity – usually referred to as 'visual receptors'' (LI & IEMA 2013, p. 116-118). The technique 'places' these perceivers at pre-selected viewpoints and affords them a single view across the site. The effects of the development on each view are then judged, and an overall significance score derived from aggregated viewpoint scores. Evidence for visual effects is more proscribed than for landscape, typically relying on photomontages and zones of theoretical visibility mapping generated by recognised software packages (LI & IEMA 2013). Results from this study suggests that in practice 60% of visual receptors are identified as views or viewpoints rather than the people who use them (Figure 28, p. 191), allowing LVIA operators to judge effects without reference to perceivers. All choices relating to receptors – where to locate viewpoints; height assumed for eye level; distance, direction, and field of view – are made by experts.

Final Effects for visual receptors mirror those for landscape, with the overwhelming number of visual receptors scoring Minor, Low, Negligible or None (n=228) for Final Effects (Figure 29, p. 191), with low ratings being driven primarily by low Magnitude scores.

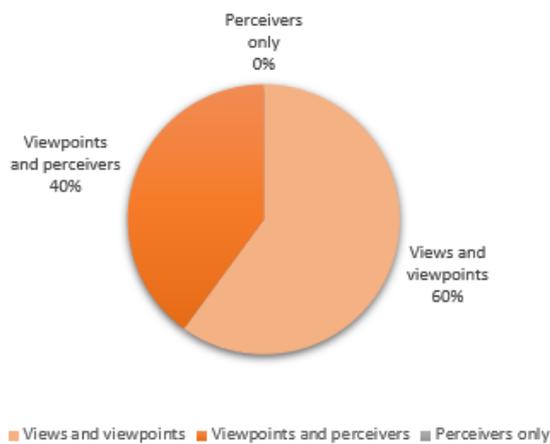


Figure 28. Types of visual receptor used in LVIA (Total n=299)

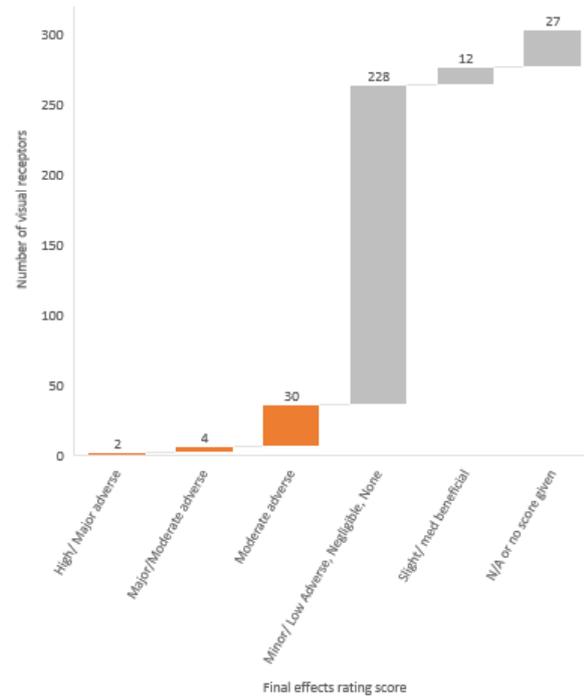


Figure 29. Distribution of Final effects ratings scores for visual receptors.

ID10 makes 16 individual statements justifying its Final Effects rating for visual amenity as low. The majority relate to visual matters e.g. 'The site is visually contained from all directions'; 'The site is visually separated from the HW AONB ...'; 'Tree planting ... will further reduce the visibility of the development', illustrating how visual privileging and lack of perceiver involvement in the assessment process undermines the capacity of LVIA to adequately represent citizens' emotional or sensory engagement with Natural Beauty.

6.3.3.5 Baseline studies and the power of narrative

Landscape character assessment (LCA) is recommended by LVIA guidance as the key tool to inform landscape assessment baseline studies with landscape character areas the main landscape resource assessed by LVIA (LI & IEMA 2013). In LCA, landscape is described primarily through narrative. Proponents of LCA see it as non-evaluative, providing a 'neutral baseline' for assessing change (Tudor 2014, p. 17) and a 'relatively value-free process'

(Swanwick 2002, p. 9), but all decisions made as part of the LCA process are evaluative, from selecting the scale to the style of descriptive discourse used and its selection of features to include/emphasise or ignore/diminish (Terkenli, Gkolyiou & Kavroudakis 2021; Butler 2016). The LCAs used as a baseline to inform the LVIA in this study illustrate a typical negative narrative, with one site comprising permanent pasture in a complex of medieval fields described as, ‘derelict horse paddocks and has an appearance of dereliction given the former horse-riding paraphernalia which is now in a poor state of repair’ (ID17).

Another baseline study described a site as presenting a ‘poor quality southern edge to [the village]’ and being ‘visually separated from the AONB’ (ID10). Where existing county or district landscape character areas are used, descriptions such as ‘[The village is] nestled in the landscape ... set within a picturesque framework of trees ... hidden from view (LUC 2017, p. 51) sit alongside statements such as, ‘feels contained and to some extent separated from the wider AONB landscape’ (ID17), which are used to justify downgrading Final Effects ratings for Natural Beauty.

The results of this study indicate that visual containment or screening by trees is the most common reason given for low Final Effects ratings (Figure 30).

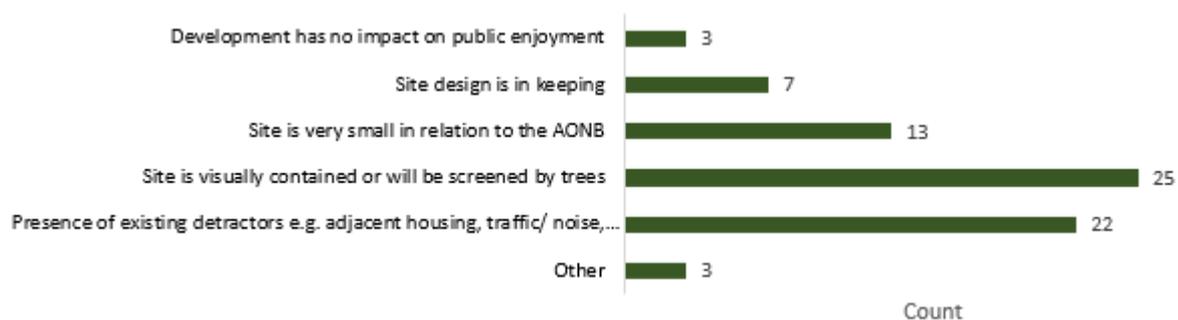


Figure 30. Reasons given for Final effects ratings

The presence of detractors (noise and visual ones), and the small size of the site compared with the larger AONB are also common reasons. A further ‘site is in keeping’ explanation is a reverse way of articulating the detracting presence of adjacent housing areas.

Seemingly innocuous phrases, such as ‘visually- (or self-) contained’, can acquire powerful meaning and associated values in a planning context where both developers and decision-makers share a particular interpretation. *Contained* is a signal to decision-makers, relying on a shared assumption that beauty is mainly a visual quality. Not being seen removes the likelihood of significant adverse impacts from a proposed development being identified thus smoothing its path through the planning process. Visual detractors are often used to suggest that the site is less beautiful and therefore less sensitive to a particular development.

The formal nature of LCA and LVIA lends weight to their conclusions in decision-making, but the descriptions of landscape are neither objective nor neutral. So much of the character is missed or ignored. Reports rarely comment on whether habitats’ function or retain their characteristic species; whether the historic landscape pattern is still readable; or to what extent the mewing of buzzards and sense of remoteness experienced along public footpaths bring the pleasure of Natural Beauty to people. Even with richer descriptions, the limitations of language can contain and alter public perceptions (Butler & Berglund 2014), and subtly shift the focus of decision-makers onto visual concerns at the expense of other aspects of landscape. The findings from this study confirm Butler’s (2016) limited review of 10 landscape character assessments which concluded that they tend to treat landscape as a static scene: privileging visual values over ecological, cultural, or socio-economic values and providing primarily an ‘objective’ outsider perspective while hiding or ignoring other perspectives.

6.3.3.6 Gaming and the problem of composite ratings and ordinal scales

Analysis in this study shows that many of the factor scales, particularly those applied at the later stages of the process, are weighted towards negative scores which creates smaller distances between choices at the lower end of the scale (Figure 31). Overall, 49% of the landscape scales and 47% of the visual scales are weighted towards lower scores.

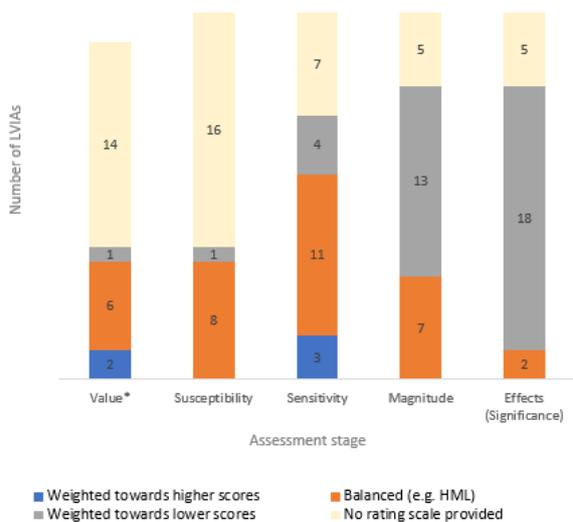


Figure 31. Analysis of weighting scales in method statements for assessing landscape effects

(Scales for visual effects show a similar distribution)

* not all LVIA's considered 'Value'

distances between categories on a scale in landscape assessment as an 'inescapable problem' (2017, p. 85), requiring an independent means of calibrating intervals which is currently missing (see e.g., Vanek, Sóskuthy and Majid 2021).

There is a proven tendency for responses to tend to the midpoint in unipolar scales, often as a way of minimising cognitive effort (Höhne, Krebs & Kühnel 2022; Wang & Krosnick

ID6 illustrated the problems. Its scale for Magnitude – Large, Medium, Small, Very small, None - confuses what could have been equivalent terms (Large, Medium, and Small), presenting 'Small' as the middle value and violating the criterion of equidistance (Höhne, Krebs & Kühnel 2022; Bishop and Herron 2015). Its ratings scale for significance is similarly weighted to lower scores – Major, Moderate, Minor, Negligible, Neutral – presenting the middle as 'Minor'. Price describes unequal

2020). LVIA operators, often based at a distance from the site, relying on images and desk-based data, and working to a budget, may well opt for a midpoint that they can justify more easily if challenged. Lower final effects scores are therefore likely from rating scales weighted towards lower scores even while operators believe the decisions they make are neutral and objective.

This study has not investigated the opinions or dispositions of LVIA operators, so it is not known whether LVIA operators are being consciously gamed or whether the unlikely results arise from weighted ratings scales and inconsistent selection of receptors.

6.3.3.7 Cumulative effects and the Sorites paradox

The Sorites Paradox described in chapter 4 (Aldred 2019; Hyde & Raffman 2018) suggests that finding the threshold for cumulative harm to a complex concept such as Natural Beauty is difficult. If we know, for example, that many developments spoil Natural Beauty, and ‘many developments minus one’ also spoil Natural Beauty, then it follows that all developments will have some spoilation effect. Considering cumulative impacts is therefore an important consideration for Natural Beauty and LVIA guidance requires this ((LI & IEMA 2013, p. 132). In this study, no assessment of cumulative effects was carried out by any LVIA. Only six LVIAAs mentioned cumulative effects. Four of these included a single sentence stating that any developments considered were ‘not significant’, so cumulative effects were not relevant (e.g., LVIAAs ID3 & ID 24). Neither of the remaining two carried out a cumulative assessment, suggesting that either adjacent development proposals were included in the baseline (ID17), or their impact would reduce over time (ID8).

There is no doubt that complex issues such as cumulative effects with their vagueness and a lack of certitude are challenging for decision-makers in time poor decision-environments. However, the lack of engagement with these problems suggests other issues are at play. It seems

that, as in many other aspects of public policy decision-making, uncertainty is ignored and unacknowledged (Manski 2019).

6.3.4 Thematic study conclusions

Landscape assessment has been challenged for its weakness in addressing aesthetic and perception theory (Ward Thompson & Travlou 2009), and for its reliance on the ‘objective’ outsider perspective rather than the lived experience of lay-people (Lee 2017, Butler & Berglund 2016; Butler 2016; Rippon 2013). This study draws on empirical evidence to substantiate these challenges and finds additional weaknesses in practice which further undermine its ability to provide meaningful information about effects on Natural Beauty.

No substantive effects from development on Natural Beauty were identified by any of the LVIAs studied. Investigations into the method and its practical operation suggest that it is not only the lack of theory connecting landscape with Natural beauty which is undermining the efficacy of the approach. Important perspectives are overlooked, especially the experiences of local people. All LVIAs failed to place people central to the understanding of landscape, and the aesthetic qualities assigned to them, which limits their ability to represent Natural Beauty.

Methodological inconsistencies, both in the guidance and in practice, further allow operators consciously or subconsciously to minimise effects. The strong visual bias, baked into the guidance and universally applied in practice, results in an undervaluing of the biophysical landscape with inconsistencies in choice of landscape typologies and scale, especially in relation to scales that reflect ecosystem character and functioning, further compromising efficacy (see also, Warnock & Griffiths 2015). This matters in relation to Natural Beauty because of its multi-scaler nature and because the 1949 Act’s landscape character, although in many ways symbolic, relied on land cover elements that were rich in characteristic wildlife. Butler observed that,

‘If planners fail to address landscape as more than just a surface as viewed by outsiders then the nature of what is represented in assessments, and consequently what will inform decision-making, goes unquestioned.’ (2016, p. 249).

The results of this study might add a further cautionary note to Butler’s observation. Not only does visual privileging skew what is focused on in decisions, it also shifts power to those claiming expertise in aesthetic appreciation of landscape rather than, for example, landscape ecologists, citizens or those working the land. In the absence of a theory relating Natural Beauty to landscape, it appears that landscape assessment has become, as Olwig et al. (2016) suggests, a means of defining the scope of the thing to be assessed. However, although there are overlaps, the model offered by LVIA is narrower than the idea of Natural Beauty intended by the 1949 Act and a different approach is now needed.

6.4 Chapter conclusions

It is axiomatic that appropriate information is key to better decision-making (Hezri 2004), but these studies suggest that the information available to decision makers about Natural Beauty is neither reliable nor adequate. All Natural Beauty measurement techniques used today have their origins in a single branch of landscape assessment developed in the 1980s, although they use subtly different landscape models. Association with a professional landscape discipline has given these approaches a respected and authoritative foundation, but the subject is landscape not Natural Beauty. In addition, the approaches do not share a common conceptualisation of landscape with each bringing different principles and knowledge to bear. While both physical features and perception-based qualities are addressed to some extent by the techniques, the scales at which these come into play remain unspecified; people and process are largely absent, and emotions play no role. Underlying values and assumptions behind the methods remain hidden and unacknowledged, while the language of uncertainty is absent from the discourse.

The inconsistencies, challenges, and frequent failures of Natural Beauty measurement techniques to date, lends support to Judge's (2019) challenge to Lothian – why measure beauty? Arguable, any description or representation of landscape is inherently non-aesthetic and Naukkarinen (2010) proposes beauty judgements should be discussed not measured. However, the need for measurement in public policy is unlikely to disappear entirely. Fortunately, Natural Beauty in the 1949 Act is not wholly an abstract philosophical concept, and physical components can be defined (see chapter 3). Improved computation methods, participatory techniques (such as Citizens Jury, Charrettes, and Consensus Conference), and citizen science may be able to provide meaningful information to decision-makers on some of these aspects, however, it is unlikely that data can fully represent the complex subject/object interaction and multi-scaler nature of Natural Beauty, making policy success difficult to 'measure'.

An alternative approach can be deduced from the intent and terminology of those who laid the groundwork for the 1949 Act. *Preserve* is interpreted by the OED (2022) as ‘to protect or save from ... injury ... harm ... destruction ...’, and *conserve*, the term it was changed to in 1968, has a similar meaning. This intent reflects the age-old physician’s Hippocratic oath summed up as ‘first do no harm’ (Kriebel et al. 2001). In environmental policy the approach of anticipating and avoiding hazards, especially those with a high degree of uncertainty attached or where full scientific knowledge is lacking, is termed the ‘precautionary principle’ (Pinto Bazurco 2020; Read & O’Riordan 2017; Ahteensuu & Sandin 2012; Dolzer 2001). In view of the complexity and vulnerability of Natural Beauty, preventing harm is likely to be more efficient than remedying its effects, although this does not necessarily foreground the need for enhancement to restore Natural Beauty to its historic baseline or move it towards a preferred, ecologically healthy and climate secure, state. For this purpose, an additional predictive tool may be useful.

For the precautionary principle to work, those designing and implementing policy need to understand policy meaning and intent in order to weigh and choose actions that ‘do no harm’ (Zokaei 2010). Operationalising the precautionary principle for Natural Beauty is challenging, particularly because the approach runs contrary to the prevailing political hegemony, but there are signs that the dominance of measured accountability is wavering. For example, Michael Barber’s report for HM Treasury *Delivering better outcomes for citizens: practical steps for unlocking public value* (2017) acknowledges that measuring public policy outcomes is unreliable since cause-effect processes are unclear (a challenge common to wicked policy problems). It also recognises that the non-tradable nature of many public service outputs mitigates against easy comparable measurement and notes that targets, while assisting with the focus on desired outcomes, can skew activities away from outcomes less easily defined and provide short-cuts to avoid hard thinking about where resources should be allocated (Ibid.).

The Report makes a critical point, tracking performance data might help understand the trajectory of change but provides no indication of what might happen next, with the author observing that ‘we might be looking at the problem the wrong way’ (Barber 2017, p. 23).

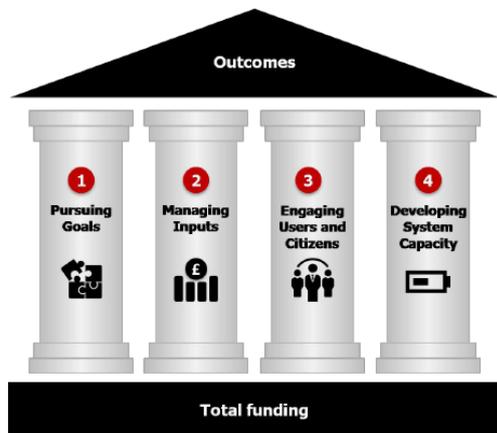


Figure 32. The Public Value Framework. Illustrating the four pillars – pursuing goals; managing inputs; engaging users and citizens; and developing system capacity – which contribute to more effective delivery of outcomes. Together these provide a set of criteria against which effectiveness can be judged (Barber 2017, p. 6).

Barber suggests that empowering public sector actors and ensuring they understand policy intent and are ambitious about its goals may be a sufficient indication that the desired policy outcomes are likely to be achieved. This is only one pillar of the ‘Public Value Framework’ proposed in the Report (Figure 32), but it can help underpin the precautionary principle. Such an approach presupposes that policy can be delivered by public sector decision-makers alone. In the case of Natural Beauty

preservation, land managers and individuals have a critical role to play but implementing the necessary regulatory framework and guidance effectively will help prevent harm and promote behaviour which protects Natural Beauty. Individual decision-makers, wherever they sit in the organisational hierarchy, have a responsibility for understanding policy intent and for taking appropriate actions. In terms of Natural Beauty, this provides a mechanism by which the preservation purpose to do no harm can start to be considered in day-to-day decision-making. Drawing on the precautionary principle and associated ideas, chapter 7 investigates the extent to which decision-makers understand the legal term Natural Beauty and its preservation intent and considers how this understanding might influence policy success.

Chapter 7 Natural Beauty and the dispositions of decision-makers

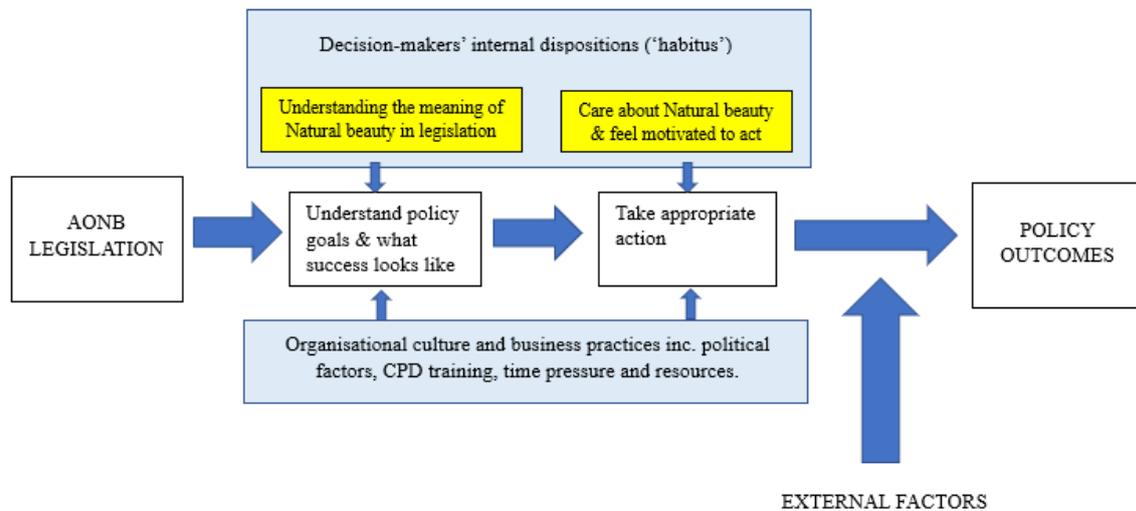
7.1 Introduction

The thematic studies in chapter 6 illustrate the difficulties inherent in current Natural Beauty measurement and monitoring approaches. Although much of the data discussed in chapter 5 or utilised in existing measurement approaches (chapter 6) can provide contextual information for Natural Beauty decisions, the mental models employed to underpin these measurement techniques are currently unable to offer an adequate structure to think through policy problems and support good decision-making about Natural Beauty. In addition, they contribute to conviction narratives about Natural Beauty as a static scene only manifesting if it can be viewed, a proposition which is at odds with the intentions of the 1949 Act.

This chapter explores a different perspective on achieving Natural Beauty policy outcomes and judging policy success. It investigates whether decision-makers' personal understanding of Natural Beauty, and sympathy with it, is sufficient to ensure that decisions taken are consistent with policy goals. In doing so it draws on the proposition at the core of the Public Value Framework (PVF) – that a proper understanding of policy goals by individual actors can itself be a measure of policy success (Barber 2017).

Decision-making in public policy is a highly value-laden process with information supplied as evidence vying with political and institutional attitudes and behaviours which have been deposited in individuals (Cairney 2019; Strydom et al. 2010), alongside each individuals' dispositions, or 'habitus' (Wacquant 1992; Bourdieu 1977). Achieving the ambitions of the 1949 Act involves individuals in a range of public sector organisations with different cultures and professional practices sharing a common understanding of Natural Beauty and bringing

sympathetic dispositions to bear on decisions affecting its conservation. Investigating individual actors is not intended to suggest that political and organisational factors are not important in Natural Beauty decision-making – these would merit a separate study. The focus on individual dispositions merely illuminates these issues from a different angle¹²⁰. The operational factors investigated in this study are illustrated in Figure 33 through a simplified logic model.



 Factors investigated in this thematic study

Figure 33. The factors investigated in this thematic study illustrated through a simplified logic model of decision pathways (derived from Nobel 2019)

This study assesses decision-makers’ understanding of policy goals (Pillar 1 of the Public Value Framework¹²¹). Drawing on the literature review from chapter 5, it employs mixed-methods combining quantitative and qualitative data collection and applies grounded

¹²⁰ In local authorities, political aspirations are closely intertwined with organisational ones, but in my experience, beauty - unlike landscape, ecology or design - sits outside the usual office discourse suggesting that personal dispositions towards it may play a greater role.

¹²¹ All four pillars of the PVF are not considered in this study for two reasons. Firstly, that AONB policy does not have clearly defined service users or significant budgets. Secondly, the focus of this thesis is on Natural Beauty, rather than the overall performance of AONB policy.

theory-based analysis (Glaser and Strauss 1967) to investigate individual dispositions and behaviours in relation to Natural Beauty in policy decisions. To consider the relationship between individuals' interpretation of beauty and their understanding of the technical *Natural Beauty* in the workplace, it delves deeper into their personal experiences of beauty in the countryside.

7.2 Methods and materials

This study focuses on Research Question 4 – How do present day decision-makers understand Natural Beauty, and how might their interpretation of it effect policy success?

It seeks to explore the dispositions individual decision-makers bring to bear on their decisions about Natural Beauty, including their individual experiences of beauty in the countryside. Analytical procedures used to explore these factors are drawn from both empirical inquiry and practice-orientated activities developed to encourage participatory decision-making (Berghöfer et al. 2022; Brown 2022; Kindon, Pain & Kesby 2007). Absolute objectivity is not achievable when dealing with complex human-nature relationships such as beauty, so mixed methods are employed to triangulate emerging ideas and help reveal different perspectives and values, along with potential dichotomies (Berghöfer et al. 2022). The techniques include survey, diaries and workshops with individual and group activities using discourse, images and art (see e.g., Brown 2022; Profice 2018; Quinn 2018; De Vaus 2014; Ipsos MORI 2010). Grounded theory which enables me to explore individual behaviours in relation to complex situations is used to decode and analyse the data (Charmaz 2006; Glaser and Strauss 1967).

7.2.1 Participants and sampling process

Purposive sampling was used in this study focusing on the public sector actors who make decisions about Natural Beauty policy. Recognising that organisational cultures and professional practices have a bearing on individual dispositions (Hilgers & Mangez 2015;

Wacquant 1992), I group actors into Communities of Practice (CoP) (Lesser & Stock 2001; Wenger 1998) to investigate differences. These divisions are based on shared community traits such as the degree to which community members cooperate and collectively learn; the distinct competencies they hold related to practice, and their specific repertoires of knowledge (Wenger-Trayner 2015). Drawing on 30 years' experience in the sector, I illustrate in Figure 34 the field of Natural Beauty policy in relation to AONBs together with the sectors acting upon it and the decision-making communities of practice selected for this thematic study.

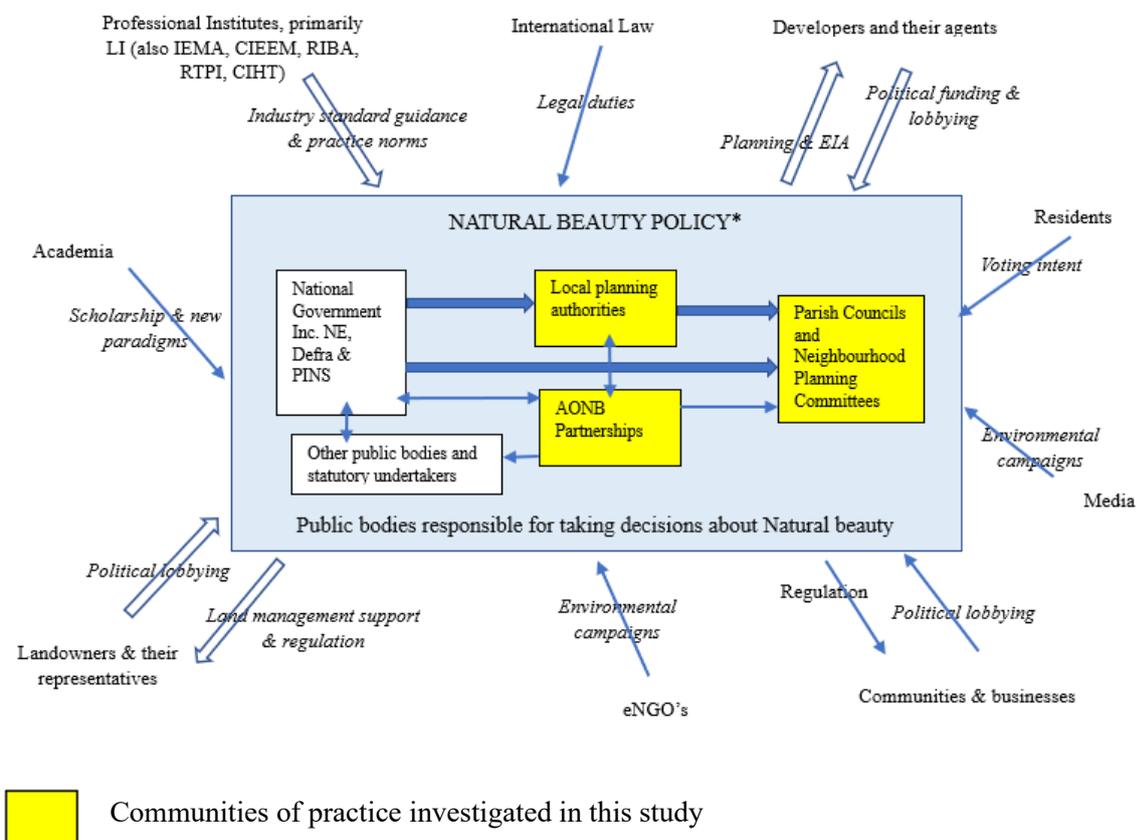


Figure 34. The Natural Beauty policy field in relation to AONBs, showing the communities of practice operating within it and external sectors acting upon it (the width and direction of arrows indicates the weight and direction of influence on Natural Beauty decisions).

* Within the Natural Beauty policy field, the influence of AONB Partnerships is through production of an AONB Management Plan and scrutiny of s85 duty. Remaining arrows represent influence through policy, regulation, guidance, and political/ organisational factors.

Two main communities of practice (CoP) whose participants make decisions about Natural Beauty on a routine day-to-day basis form the focus of this investigation – an ‘AONB CoP’ which includes Lead officers, staff, and partnership members, and a ‘Planning CoP’, which includes local authority planning officers and members of planning committees (councillors). A further community of practice – ‘Parish CoP’, which covers parish council planning committee members and neighbourhood plan representatives, was included in the survey to gain a broader picture of the field and probe, where feasible, responses from those who might be expected to have less collective learning, environmental competencies and specific knowledge related to Natural Beauty. Community of Practice membership and geographical scope involved in the study are shown in Figure 35.

Communities of Practice

AONB CoP	AONB Lead Officers, senior staff and AONB Partnership members ¹²² . National scope - English AONBs.
Planning CoP	Planning officers (policy and development control) and members (councillors) of planning and planning scrutiny committees. Regional scope – county and district authorities (n=15) which intersect with the High Weald AONB
Parish CoP	Parish councillors on parish planning or neighbourhood plan committees Regional scope – parishes intersecting with the High Weald AONB

Figure 35. Description of communities of practice investigated in this thematic study

Different approaches were taken to sampling each CoP because of the practical difficulties in reaching some of these groups. The AONB CoP is national but relatively small

¹²² Partnership members can also be local authority elected councillors who may sit on planning committees. They are included in this CoP because they are likely to have a deeper and more engaged understanding of Natural beauty policy than their non-Partnership local authority colleagues since they will meet with AONB staff regularly to oversee AONB Management Plans and other Natural Beauty decisions.

and, as a community member, I have access to individual contact details (for survey purposes) and was able to piggy-back workshop activities for this study onto pre-planned Lead Officer meetings. For the Planning CoP, access is more challenging. Contact details for individual planning officers are not made publicly available and those for elected councillors need to be scraped from individual local authority websites where their association with planning committees is not always evident. To gain a more consistent sample of the Planning CoP population, I chose to contain the sample to adjacent local planning authorities which operate under a common local AONB policy and where I was able, through existing relationships, to obtain individual planning officer contact details and set up well-attended workshops. Councillor contact details for survey purposes were obtained through searching local authority websites for planning and planning-related committees. The selection of Parish CoP participants mirrored this approach.

As can be seen from Figure 34 (p. 204) some groups hold influential knowledge or exert influence but do not make day-to-day decisions about Natural Beauty. For example, chartered members of the Landscape Institute, technically an epistemic community (Haas 2021 & 1992), who are considered the trusted experts in relation to landscape (see chapters 4 and 6). Other communities of practice formulate or advise on Natural Beauty policy directly or indirectly (e.g., government departments and government agencies, in particular Natural England) but the small numbers of individuals involved, rapid staff turnover and difficulties in engagement means this group have also not been included in this study¹²³. A similar rationale excluded members of the Planning Inspectorate and planning barristers. These groups, many of whom would not regard themselves as part of a Natural Beauty policy ‘field’ yet maintain considerable

¹²³ I undertook two in-depth discussions with individuals in this community during Autumn 2022 to gain an understanding of their interpretation of Natural beauty in the designation process.

influence on it, are not investigated in this study but could usefully be the subject of further research.

7.2.2. Procedures

Two main approaches were used – workshops and survey. Activities were dictated by what was possible and acceptable to different groups and, as a consequence, not all results can be compared across groups (Figure 36).

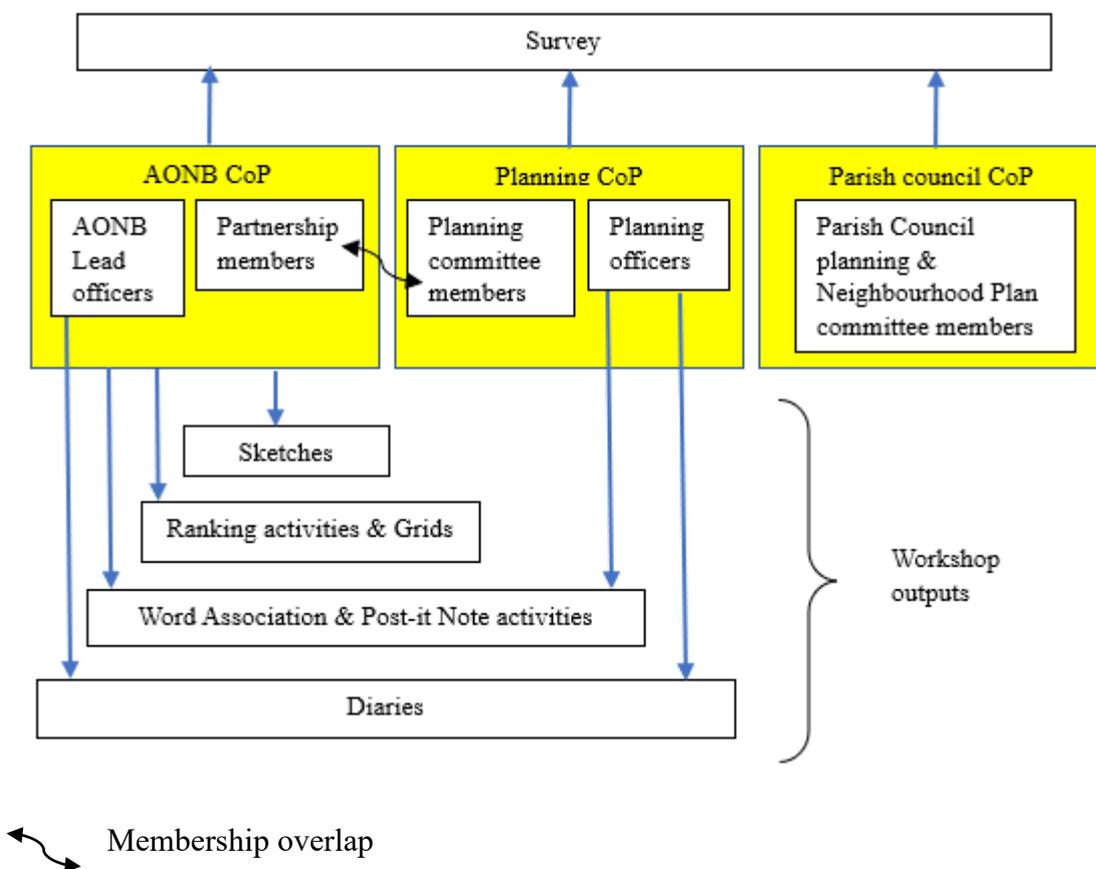


Figure 36. Investigative activities (workshops and survey) undertaken by the Study communities (CoP)

Ethics approval was obtained for the methods from University of Kent in April 2018. A range of workshops with different groups from the two main CoPs were held¹²⁴ during 2018-2019 to explore ideas, engagement and language used around Natural beauty¹²⁵. Eight events were held - 2 with AONB Lead officers, 2 with AONB Partnership members and 4 with local authority planning officers. Techniques were adapted from practical tools developed to support participative research and arts-based creative engagement activities (see e.g., Brown 2022; Featherstone & Black 2014; Kindon, Pain & Kesby 2007; Institute of Development Studies nd). A textured understanding of each communities' interpretation of Natural Beauty was gathered from different techniques designed to tackle engagement with beauty from different angles and triangulate observations. Some activities involved individual responses while for others, participants worked in groups. Opportunities were provided for participants to analyse and reflect on the information generated and observations were recorded contemporaneously. Questions emerging were then incorporated into a survey sent to a wider sample of the AONB and Planning CoPs, and the Parish CoP. A further check on language and shared dispositions towards Natural Beauty was made using corpus software to analyse a sample of AONB Management Plans prepared jointly by the CoPs.

The procedures for each activity are summarised in Figure 37 below.

WORKSHOP ACTIVITIES

Sketches (undertaken individually)	Designed to explore what individuals notice when they experience Natural Beauty (Diessner et al. 2008) rather than what is in the 'scene' where the experience takes place. The use of sketches drew on work focused on children-nature interactions which derived qualitative and
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¹²⁴ Workshops were incorporated into other regular events held by the communities, such as CPD training, to maximise engagement. I scheduled activities for the start of events as a warm-up to avoid confusion with the main agenda and reduce time pressure. Officers involved in workshops were undertaking these activities in their workplace with colleagues and in work time.

¹²⁵ The term 'Natural Beauty' was not used in the procedures to avoid cueing any particular form of deposited knowledge, unless the question related specifically to the 1949 Act interpretation. Beauty of the countryside/landscape or just beauty was used instead, following informal testing with selected individuals.

<p>82 sketches by 41 participants from AONB CoP (28 Lead officers and 13 Partnership members)</p>	<p>quantitative data from drawings supplemented by structured questions (see e.g., Parikh 2020; Profice 2018).</p> <p>Participants were asked to imagine they were transported to one of the most beautiful landscapes they had experienced (10/10 on their personal scale for beauty) and sketch what they noticed, annotating features if drawing was difficult. Supplementary questions were then asked about the season, weather, sounds, what activity they were undertaking, and what they were feeling (emotions) with answers provided in writing. The activity was then repeated asking about meaningful places rather than outstandingly beautiful ones. Each sketch was given a unique identifier and assigned to a sub-community, either AONB Lead officer or AONB Partnership member, to enable comparison. A spreadsheet of the features (drawn or labelled) was built iteratively by grouping and regrouping features into broad themes (codes). A single count was awarded for each theme appearing in a sketch. The written responses for weather, season, sounds and activity at the time were similarly coded into themes generated from the data and a single count per theme awarded. Feeling (emotion) words were grouped according to Russell’s model for affective qualities (see e.g., Hijazi et al. 2016).</p>
<p>Word association and Post-it Note activities</p> <p>(undertaken individually)</p> <p>56 participants from Planning CoP and 18 from AONB CoP</p>	<p>Designed to capture individuals’ immediate and subconscious associations with <i>Natural Beauty</i> before knowledge is consciously brought to bear.</p> <p>Participants were either shown a slide stating the purpose of AONBs – to conserve and enhance Natural Beauty – then asked to write on a Post-it Note ‘What comes immediately to mind when you hear the phrase ‘Natural Beauty’? or given a word related to natural beauty and asked to write down another word they associate with it. Free text answers were coded to understand common themes and terms (see e.g., Quinn 2918) with themes generated in an iterative process from the data drawing on codes developed earlier from the sketch activity. High level themes were compared between sketches and word association outputs.</p>
<p>Beauty diaries</p> <p>(undertaken individually)</p> <p>17 diaries returned from 58 taken by participants (15 from Lead officers and 2 from Planning officers)</p>	<p>Designed to capture richer and more textured descriptions of beauty-related experiences in the countryside (rather than recall at a distance from the event).</p> <p>Beauty diaries were offered to all AONB Lead officers (28 were taken) and LA planning officers (30 were taken) participating in workshops. Participants were asked to briefly record their experiences of beauty each day for a week, writing nothing if they did not experience beauty on any day. Recognising that individuals can describe an aesthetic experience in landscape without mentioning beauty and without necessarily ascribing descriptions to senses (see e.g., Nettleton 2015; Brady 2003), prompts were included. A stamped address envelope was provided with the diary for their return. All diaries were anonymous but return envelopes coded to each community of practice. Diaries were transcribed by hand.</p>

Ranking and Grid activities

(undertaken in small groups of 2-4 participants)

41 participants from AONB CoP (28 from Lead officers and 15 from Partnership members)

Designed to explore the nature of decisions made when individuals take time to discuss issues with colleagues (see e.g., Brown 2022; Kindon, Pain and Kesby 2007). Activities focused on a deeper investigation into how Natural Beauty is interpreted and the cause-effect relationships leading to the policy outcome of conserving and enhancing Natural Beauty.

Ranking activities were used to understand how aspects of Natural Beauty were rated or prioritised. Cards were either pre-prepared with statements drawn from Natural England’s Evaluation Framework for Natural Beauty (2011) and placed on a Diamond 9 template, or groups were first asked to write the aspects they considered important on blank cards before ranking them on a line of most-least important. Diamond 9 responses were given a relevant ranking and collated. Photographs were taken to record responses of free-text ranking activity.

To prompt discussion about what conservation of Natural Beauty looks like and the relationship between landscape quality and beauty, participants were either:

1. provided with a set of prepared images and asked to place them on a grid. Prepared images represented a range of landscapes/ habitats in various states of ecological health and management. Photographs were taken and analysis focused on the correlation suggested by the visual arrangement of images on the axes together with explanations provided on Post-it Notes, or
2. asked to write on Post-It Notes, statements in response to questions about actions that might increase beauty or provide a barrier to success. Whole group discussions then categorised the statements which were recorded through photographs.

SURVEY

Survey

170 responses from 500 circulated to the three CoPs.

Designed to probe and test inferences arising from the workshop activities with a wider cohort from across the AONB policy field, involving the Parish CoP and well as AONB and Planning CoP’s.

A 31-question online survey was designed using JISC software in line with the principles for survey in social science research (De Vaus 2014) and drawing on the experiences of other beauty-related studies (e.g., Diessner et al. 2008; Ipsos MORI 2010; NE 2019a). The questions were constructed to explore interpretations of Natural Beauty and individual experiences of beauty, test the role of associated emotions, and examine aspects of Natural England’s Evaluation framework (2011). A range of personal information was also sought including indications of early exposure to the countryside, current disposition towards spending time in the countryside and professional expertise related to the environment. Free text questions were used where assumptions and pre-judgements needed to be avoided. The survey was circulated to a pre-prepared database of contacts (n=500) with an introductory email and link to the online questionnaire.

Responses (n=170) were extracted as a zero-indexed spreadsheet and free-text answers. The data was cleaned to remove null responses

	<p>(n=1); restructured to assign participants to communities of practice (CoP) based on responses to Q15, and reformatted where needed e.g., to separate multiple text responses. A group (n=12) who belong to both the AONB and Planning CoP were considered too small a group to analyse separately but have been included in the ‘All’ results. Similarly, a group (n=7) who did not answer Q15, or whose answers were unclear, were excluded from CoP analysis but included in ‘All’ results. Descriptive statistics were used to analyse results, exploring these by CoP where differences were noticeable.</p> <p>Free text responses were coded into themes using the principles of grounded theory (Charmaz 2006). Where possible these themes were in turn grouped under higher level themes. Descriptive statistics were used as the primary tool for analysis with extracts from free text questions used to provide a richer narrative, where possible supplemented by Jaccard’s Similarity Index if appropriate. Since this is a descriptive study as much information as possible has been retained with two levels of themes shown in most cases rather than being simplified and classified into a smaller number of categories.</p>
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CORPUS

<p>Simple corpus analysis of AONB Management Plans</p>	<p>Designed to perform a simple check on the language used by the CoPs in relation to Natural Beauty when they collaborate on a statutory document.</p> <p>A sample of 21 plans AONB management plans current at March 2020 were randomly selected out of a total of 33 wholly in England and uploaded to Sketchengine (corpus software). A simple key word search was carried out using a Phrase/ Word query with titles, contents pages and image titles excluded. Word searches used were based on queries arising from the workshops such as the words used in relation to the emotions associated with beauty or used interchangeably with Natural Beauty.</p>
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Figure 37. Summary of workshop and survey activities undertaken by participants

All participants drawn were from the AONB policy field and in post during 2018-21.

Questions about individual’s experiences of Natural Beauty in the survey, sketches and diaries were phrased as questions about the beauty of the countryside or landscape to prevent the subconscious association of ‘Natural’ with non-human made structures.

7.2.3 Thematic coding principles

Free-text responses and sketches were coded applying grounded theory principles (Charmaz 2006). NVivo was explored as a tool to collate and analyse data but I choose to code manually.

Working with items such as drawings and post-it notes, I found the visual and tactile process of sorting physical outputs to be helpful in deciding and reviewing categories. All coding was developed in an iterative fashion from the data up but was informed by other studies. The coding of perception-based qualities drew on a list of aesthetic qualities offered by Brady (2003, p. 16-17). Coding of emotion words drew on the ‘circumplex model of affect’ proposed by Russell (1980) and adapted to the affective qualities of person-place interactions (Russell and Pratt 1980) with categories added to reflect connectedness (Diessner et al. 2008), self-evaluation e.g. (Berenbaum 2002), and curiosity/ discovery (Levine 2012). Coded responses to Natural Beauty/beauty questions were grouped into higher tier themes reflecting the three main dimensions of Natural Beauty as intended by the 1949 Act set out in chapter 3.

Some words are difficult to classify. For example, ‘views’ can be both a physical feature which can be conserved and represent the idea of being able to see an expanse of land (a sense of openness) which in turn may indicate a symbolic quality related to the idea of ‘freedom’. Similarly, ‘greenery’ suggests greenness but can also be used to describe a physical feature - vegetation. The choice of higher-level theme for such words was based on considering the common context and then applying higher codes consistently.

7.2.4 Observations and issues

Confidence and data reliability: In view of the turnover of staff in the different CoPs, the results represent a picture of the CoPs at a particular point in time and are not necessarily precisely replicable. However, the validity of findings has been enhanced through triangulation and the iterative testing of results using different data collection approaches. These include participants working reflectively as individuals and more actively in groups; and employing different activities such as art, diarying, and questionnaires. Data collection techniques were designed consciously and systematically with a data management plan prepared, and comments

incorporated from an external reviewer - the Social Sciences Librarian at the University of Kent. To assist reliability, all procedures and outputs were documented, and attendance records for workshops kept where appropriate.

Section 7.2.1 (p. 203) explains how the reliability of workshop data from the CoPs has been improved by piggybacking on existing events held by the CoPs for all of their members, thus avoiding self-selection and non-response bias. To maintain consistency, I facilitated all workshops, and these were held prior to the main event to avoid cueing up ideas which might affect results. Coding of the data was designed to build a more generalised picture of the attitudes and behaviours of each CoP with as much information retained as possible by including first and second level categories in the data visuals. Further depth and understanding were provided in the analysis by direct quotes from the participants rather than summarising or interpreting what was said in my own words.

This study juxtaposes a national AONB CoP with a regional Planning and Parish CoPs. Inevitably, there will be differences in the physical attributes of landscape that are experienced on a day-to-day basis across the AONB CoP, and between the AONB CoP and the other CoPs. Although I record physical features noticed by individuals in their beauty experiences, I do not compare in detail the type of physical features noted by CoPs for this reason.

Similar questions were put to all CoPs, but the way questions were phrased, and the activities used to gather information were not necessarily the same. This was deliberate with activities designed to secure maximum engagement from different communities and approach questions from alternate perspectives. Where results are not directly comparable, they are used to build up a picture of the CoPs and field as a whole. Tailoring activities in the workshops to each communities' requirements allows me to make meaningful comments about the communities sampled but limits comparisons, which are inevitably heavily caveated. The survey collects more consistent data from each of the three CoPs, but the categorical nature of

the data generated – either a Likert rating or coding of free text - restricts the use of inferential statistics for comparisons. Coding information based on words will involve some error due to interpretation and compress what can be broad and overlapping meanings into fewer discrete categories. Error is therefore difficult to quantify.

Reflexivity and minimising bias: While I have been a member of the AONB field for over 25 years, my relationships with the two main CoPs are subtly different. I sit as an insider in the AONB CoP but will be viewed as an outsider by the Planning CoP (and the Parish council CoP) despite being employed by a local authority within a department that includes planning. To guard against the possible inclination of workshop participants to provide socially acceptable opinions, the lead up to and style of the workshops were designed to establish trust and create a non-judgemental environment encouraging honest sharing of individual views, rather than what might be the organisation's normative position. Since CoP numbers are small, the workshops sought to include all members of, for example, AONB Lead Officers or a particular local authority's planning officers rather than select a sample. The CoPs exhibit age and ethnicity properties skewed towards older and less ethnically diverse individuals but these issues are not the subject of this study.

Data collection techniques were designed to be inclusive, and the use of technical jargon avoided. This also helped to avoid cuing particular ideas. For example, the use of 'beauty of the countryside' rather than 'Natural Beauty' in the first part of the survey was tested with non-participants to confirm that the former phrase did not have the excluding effect on farm buildings and villages common to the latter. Researcher bias in the analysis phase was minimised by including sufficient opportunities for free-text and non-written responses in data collection, maintaining an open mind about the data, and using grounded theory to work from the data up. Free text answers and Post-it Notes offer opportunities for some individuals to record longer responses than others, potentially incorporating several themes. Weighting issues

in PEWs were minimised by time limits on activities and requests for brief single statements where appropriate. In addition, a variety of approaches were employed to coding data to avoid subconsciously allocating previous codes. For some responses the dominant theme only was coded, for others all themes were coded and where this approach has been used, graphs show total counts rather than numbers of participants recording each theme. The intention is to provide a rich narrative with graphs describing trends.

7.3 Results and discussion

7.3.1 Interpreting Natural Beauty in relation to legislation

In survey responses, the language used about Natural Beauty in relation to legislation was highly variable but fell into a relatively narrow range of coding themes. The most common response related to the absence, or perceived absence, of human activity, expressed either as a perceptual quality (untouched/unspoiled) or as a list of non-human features (e.g., trees, wildlife) (Figure 38).

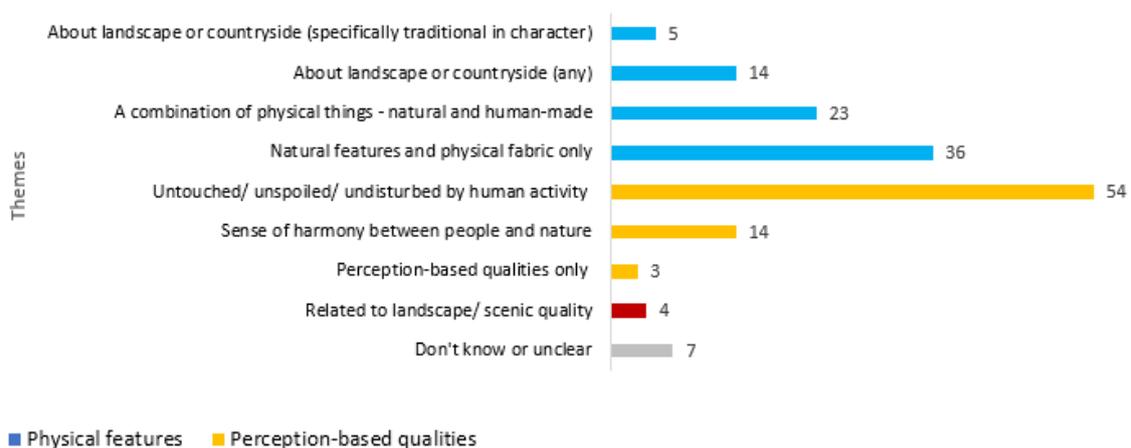


Figure 38. Interpretation of the meaning of 'Natural Beauty' in relation to the legislative purpose of conserve and enhance.

Survey Q15: What in your opinion is meant by the term 'natural beauty'? All participants (n=160). Free text responses provided as a sentence or list of features and coded to themes (one theme per response).

To the 1949 Act's social agents, *unspoiled* referred to the absence of specific activities, primarily urbanisation, mineral working, or commercial forestry. Today it appears to be used more generally to suggest naturalness. The second most common response sits seemingly in opposition to this, emphasising the interlinking of people and nature either through a perceived sense of harmony between them or a combination of natural and human-made physical features. There is a clear demarcation between those expressing this aspect as a perceptual quality and those who see it in purely physical terms. Inevitably these contrasting assumptions will affect how Natural Beauty is judged in decisions (see section 6.3).

The universal use of more general statements and fuzzy language to describe Natural Beauty is perhaps surprising coming from decision-makers for whom Natural Beauty is a daily consideration. For example, Natural Beauty is – ‘proper countryside’ (SR47); ‘untouched by humans’ (SR141), and ‘natural landscape (SR74). One of the respondents, who did not attempt an answer noted ‘that's the problem – it's rather an outdated concept in terms of conservation management’ (SR4). When a similar question was asked about *Landscape* in a workshop for AONB Lead Officers many referred to the Council for Europe Landscape Convention (2000) even if they could not remember the exact wording of the definition. The survey responses demonstrate that there is no equivalent trusted source for Natural Beauty. Natural England's Evaluation Framework was not referred to and only 5% of respondents mentioned three or more of the Framework's six factors.

Notably, no survey responses referred to cultural associations (e.g., with art or literature). The only reference to emotion, was by a participant who related Natural Beauty to being ‘spirituality uplifted’ (SR149), although the state of tranquillity (as a descriptor attributed to a place) was considered important by 3% of respondents. ‘Wildness’, a necessary condition of land to be considered as a National Park (1945), and one of the six factors in NE's Evaluation Framework, was mentioned by only 3% of respondents. It seems that almost all of these

decision-makers draw on very few and mostly vague considerations when thinking about Natural Beauty in the workplace.

When asked whether specific human-made features could be considered to have Natural Beauty some participants agreed they could (Figure 39), ranging from 40% for a village high street to 63% for traditional farmsteads, and 68/69% for orchards/cottage gardens (which feature in Wordsworth’s poems about Natural Beauty). However, this implies that, depending on the feature, between 30% and 60% of decision-makers do not think these human-made artefacts can have Natural Beauty, suggesting that a substantial number of decisions are made without considering features which the 1949 Act intended to be encompassed by the term.

The survey results suggest that decision-makers across the AONB policy field today

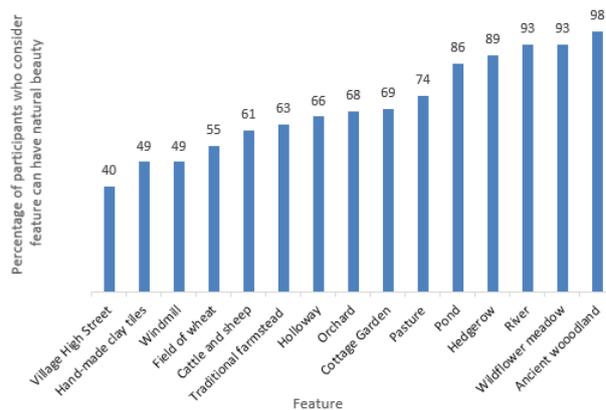


Figure 39. The extent to which Natural Beauty is attributed to countryside features.

Survey Q12: All participants (n=166). Asked to tick from a pre-selected list all features those which could be described as having Natural Beauty.

find *natural* a difficult term to navigate. A hint to why that might be is given by the five survey respondents who qualified their interpretation of Natural Beauty as about landscape or countryside by adding that this should be ‘traditional’ in character (Figure 38, p. 215).

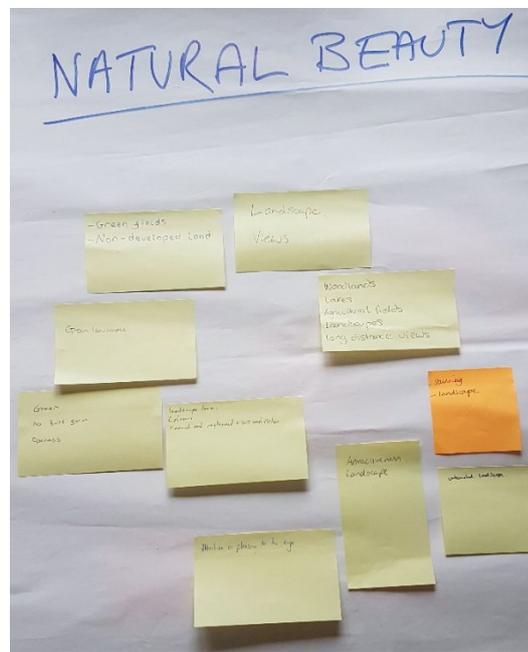
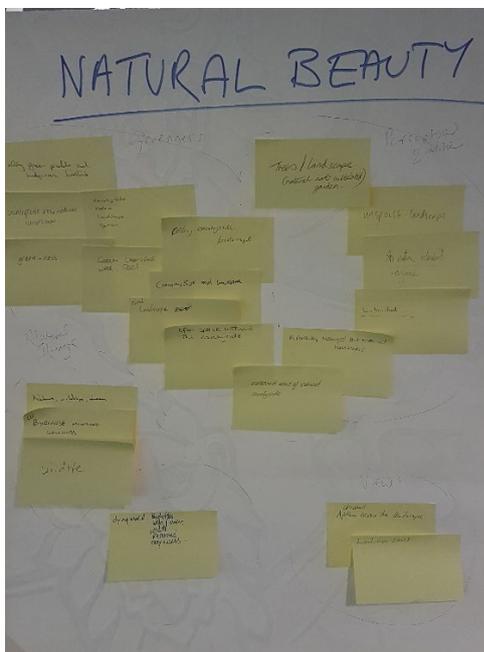
Tieskens et al. defines *traditional* in this context as,

‘those landscapes having a distinct and recognizable structure which reflects clear relations between the composing elements and having significance for natural, cultural, or aesthetical values’ (2017, p. 30).

In these landscapes, the cultural imprint of generations of interaction between people and nature is visible and valued. For the architects of the 1949 Act, the landscapes they sought to protect met this definition, even if they didn't tend to use the term, and it was the best examples of these that they considered possessed outstanding Natural Beauty and sought to protect.

The planning community

A deeper dive into how the Planning CoP interpret Natural Beauty was undertaken in workshops with participants asked to respond individually (Figure 40).



What first comes to mind when you hear the phrase 'Natural Beauty'

Write on yellow post-it notes

Figure 40. Example of outputs from planning officer workshops.

The outputs confirm that, in the workplace, human-made structures are not automatically brought to mind by planning officers in Natural Beauty decisions (Figure 41, p. 219). A range of physical features and perception-based qualities are considered but again described mostly

in fuzzy terms. In general, the perceptual qualities are applied as descriptors of physical features, for example, *unspoilt/attractive/green/managed* used to describe landscape. Qualities such as tranquillity or wildness and cultural associations are completely absent. Four themes only dominate – unspoiled; green(ness); natural features (mainly vegetation), and place (landscape or countryside). All planning officers questioned work in the High Weald, an anciently enclosed ‘traditional’ landscape with one of the highest densities of pre-1750 timber-framed farm buildings in England (Edwards & Lake 2008). Why these did not come to mind is unclear. On prompting, one individual remarked ‘ah yes, and buildings’¹²⁶.

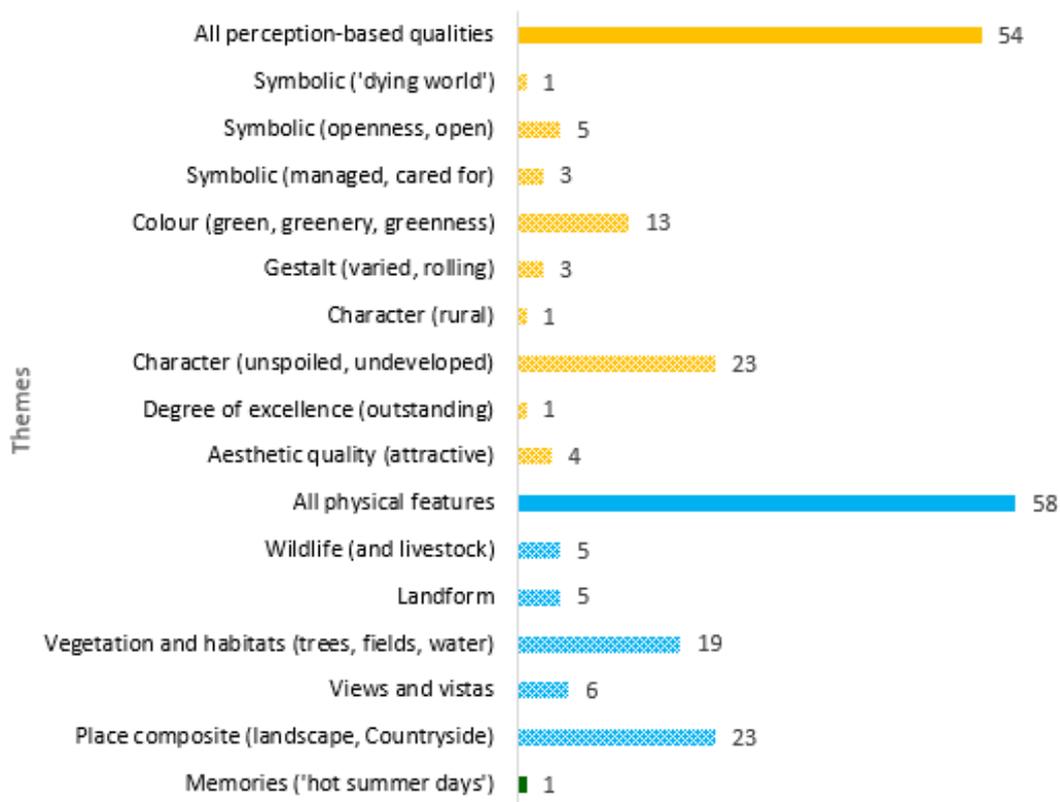


Figure 41. Frequency of themes associated with *Natural Beauty* as used in legislation.

Workshops: Planning officers from four local authorities (n=48). Word association – what immediately comes to mind when you hear the phrase *Natural Beauty*? Activity undertaken individually. Responses provided as a sentence or list of features and coded to themes. All features mentioned were coded.

¹²⁶ Follow up semi-structured interviews would have been helpful to explore this issue.

A single individual brought immediately to mind an emotional response, 'hot summer days' (LPA33). During the discussion, the individual concerned was somewhat apologetic explaining it away with reference to memories of a pleasurable summer holiday. Such an exchange is perhaps to be expected from a profession that is required to justify with evidence planning decisions involving complex judgements across multiple land use objectives. Even the question about beauty was unexpected. Many were unsure or non-plussed and required prompting to answer, suggesting beauty is not a topic of workplace discussions. Emotion is evidently distrusted, but bringing to mind fuzzy concepts in relation to Natural Beauty which is a legal term points to emotional responses being in play in planning decisions more frequently than is acknowledged.

What comes across from these activities is the hesitancy of decision-makers around Natural Beauty. It's interpretation in vague terms as an unspoiled landscape consisting predominantly of non-human living things suggests that threats are likely to be viewed in similarly vague terms. To probe this further, planning officers were asked what actions might improve conservation and enhancement of Natural Beauty, and what any barriers to success might be. For this task, participants worked in groups to prompt wider discussion. The results (Figure 42, p. 221), suggest that planning officers see development pressure (urbanisation) as the main threat with development control being the key to prevention.

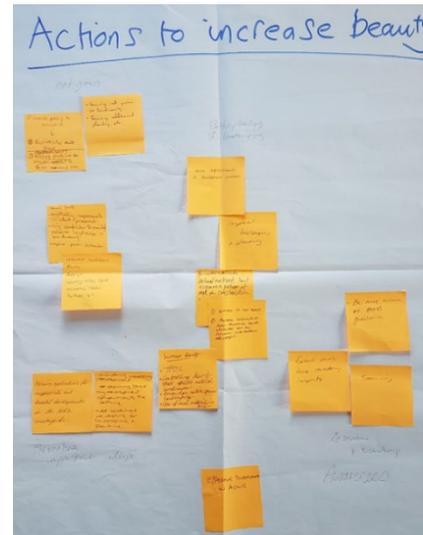


Figure 42. Frequency of themes relating to enhancement of Natural Beauty and barriers to success.

Workshop: Planning officers from four local authorities (n=45). Working in groups. Group responses coded.

Talking to the person next to you



1. What actions could you take in your current role that might increase beauty in the countryside?

Write on ORANGE post-it notes

2. What, if anything, prevents your actions to increase beauty from being successful?

Write on PINK post-it notes

Despoilation resulting from urbanisation was considered one of the main threats to the beauty of a harmonious ‘natural’ countryside by the Addison Committee (NPCe 1931) with planning control seen as an effective tool to prevent harm. Planning officers appear to recognise that stronger planning policies are essential to success but discussions occurring between officers during the task suggest confidence that this can be achieved is low, with most citing national government housing targets as the limiting factor.

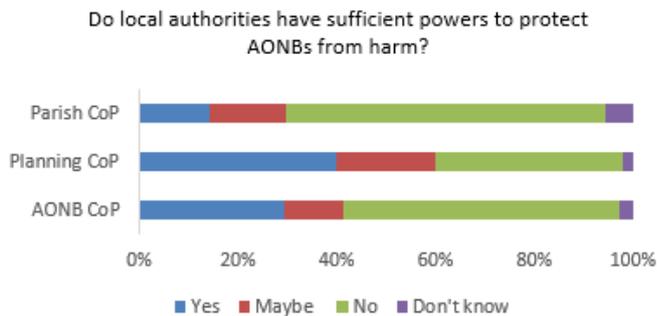


Figure 43. CoP views on the powers of local authorities to protect AONBs

Survey Q16: All participants (n-166)

The survey tested the view of the wider AONB policy field on this issue (Figure 43). Over 50% of the AONB and Parish CoP's consider that local authorities do not have sufficient powers to protect Natural Beauty, suggesting that responsibility for the stronger policies needed lies with Government.

Most planning officers do not see themselves as taking action to restore nature (see Figure 42, p. 221). Perhaps this is to be expected since few local authorities own or manage land directly, and the 1949 Act did not anticipate that this would be necessary. The virtual absence of any discussion about landscape character or land cover pattern in the planning officer workshops, however, is surprising. This is a key factor in designation and is used as a baseline for LVIA, a technique all planning officers will be familiar with. It appears that development is not connected to change in the broad symbolic landscape character of AONBs, perhaps because buildings are not consistently viewed as part of Natural Beauty (Figure 41, p. 219).

Arguable, the main threats to Natural Beauty today – the onslaught of chemical fertilizers and pesticides; highly mechanised and intensive land management, and climate heating – are not ones that the current planning regime alone can easily solve. Nevertheless, as Daniel and Boster noted (1976), the 'view' is important to people's perception of Natural Beauty and is affected by planning decisions. Airbrushing of buildings from the mental models of Natural Beauty used by planning officers inevitably effects the quality of these decisions.

The AONB community: AONB Partnership members

A different activity was used to probe AONB Partnership members mental models of Natural Beauty since their role in decisions about Natural Beauty is primarily directive and affirmative.

A Diamond 9 sorting and ranking activity was used drawing on NE's Evaluation Framework (2011) to create pre-selected factors which included built features (Figure 44).

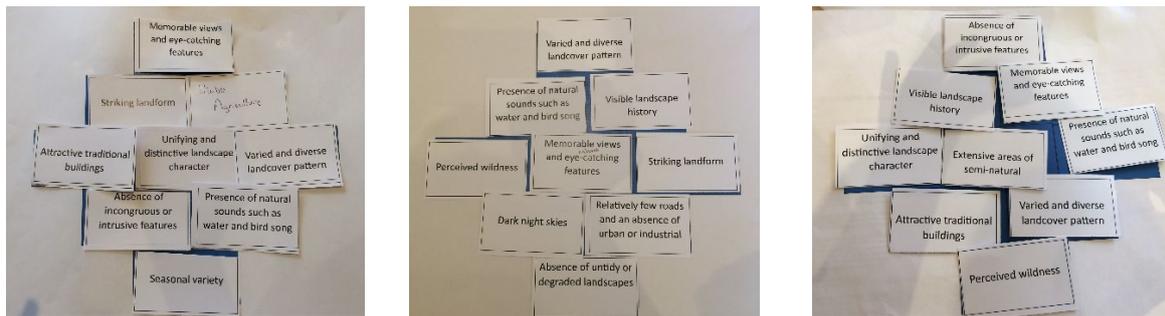


Figure 44. Sample of Diamond 9 outputs (Groups 4,5,6).

Workshop: AONB partnership members (n=15) divided into 6 groups

The results are set out in Figure 45 (p. 224). Five out of the six groups ranked 'traditional buildings' as of middling importance. Other factors such as natural sounds/ dark night skies/agriculture/wildness which had not been mentioned in the survey (Q15, Figure 38, p, 215) or planning officer workshops (where participants were asked free text questions) were also ranked as important to some degree. Landscape character, which was barely mentioned in free text answers, scored the highest important factor in Natural Beauty. The results suggest readily available information on Natural Beauty is helpful to decision-makers and improves the quality of decision-making, bypassing a reliance on what are fairly simple and partial mental models. However, what is also notable is the inconsistency in group responses, illustrated by the varying number of groups selecting each factor and the different rankings given by groups to factors even in a situation where individuals could freely converse with at least one other decision-

maker. Responses for the factor ‘absence of incongruous or intrusive features’ is indicative of the problem, with a spread of scores at every rank between 1 and 5, and one group who considered it did not even merit a score. This suggests that decision-makers need additional information and support in decision-making beyond a simple list of factors.

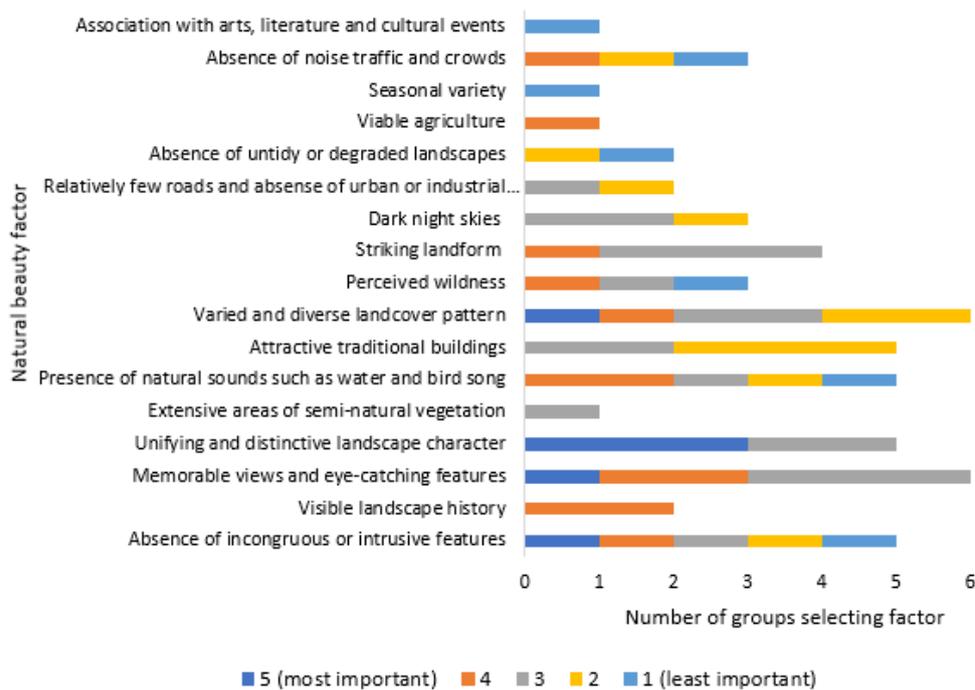


Figure 45 Ranking of Natural Beauty sub-factors.

Workshop: AONB partnership members (n=15) divided into 6 groups. Diamond 9 ranking activity. 16 factors were offered, drawn from NE’s evaluation criteria for Natural Beauty (2011).

Two factors which were ranked particularly low are worth noting. ‘Association with arts and literature’, and ‘extensive areas of semi-natural vegetation’ were only selected by one group each and afforded low scores, yet these were key attributes of the areas selected for designation in the foundational reports (see chapter 3). This activity was only undertaken with one AONB partnership and it could be that the mix of factors selected is Partnership dependent. If, for example, this activity was replicated with the Dedham Vale AONB Partnership, the

association with John Constable would likely score more highly. The low score for semi-natural vegetation is less easy to explain, although it could be that as natural environment non-specialists, partnership members may not connect this term with the ancient woodlands and wildflower meadows which they scored so highly for Natural Beauty in the survey (see Figure 39, p. 217), further suggesting that trusted information and consistent use of terminology would be helpful to good decision-making.

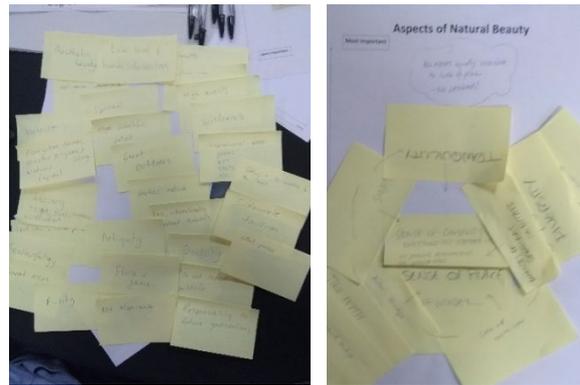
The AONB community: AONB Lead officers

A similar activity with AONB Lead officers was also carried out. Since they are individually responsible for scoping Natural Beauty for their area without necessarily referencing any standard, they were asked to generate factors they felt represented Natural Beauty rather than using Natural England's pre-selected ones. The exercise produced over 100 individual factors, illustrating the complexity of the concept (Figure 46, p. 226). The factors could mostly be mapped to the three main dimensions of the 1949 Act's Natural Beauty (see section 3.6), although these were not equally represented. Factors included human-made structures but focused overwhelmingly on non-human physical features. Few factors could be attributed to landscape quality or wildness, both important in NE's Evaluation Framework (2011), with others (such as those relating to natural processes or responsibility to future generations) lying outside the Framework. Most groups had difficulty ranking the factors, preferring to indicate pictorially or in words that it is the combination of these factors that creates Natural Beauty (Figure 46). The sheer volume and variety of factors generated illustrates the problem with categorising the components of Natural Beauty in a form that can be easily measured or assessed.



Figure 46. Generation and ranking of Natural Beauty sub-factors by AONB Lead officers.

Workshops: AONB Lead officers (n=26) working in 8 groups. Total of 100+ factors generated with each group ranking on an axis most-least important. Factors coded to themes.



AONB Management Plan

The coming together of AONB and Planning communities to produce an agreed statutory document – an AONB Management Plan – is usually led by Lead officers and represents the combined output of their thinking for each area. An analysis of the Plans using the corpus software SketchEngine suggests that the dispositions of community members towards Natural Beauty expressed in the survey and workshops do not necessarily manifest in written discourse. Cultural heritage and history, not mentioned at all by planning officers in the workshops feature strongly in Plans, although less so than biodiversity and scientific interest (Figure 47, p. 227). The balance between nature and culture in Plans is more closely aligned with the 1949 Act, but the minimal acknowledgement of culture in the wider survey and workplace workshops suggests that Plan principles are not embedded in decision-makers minds.

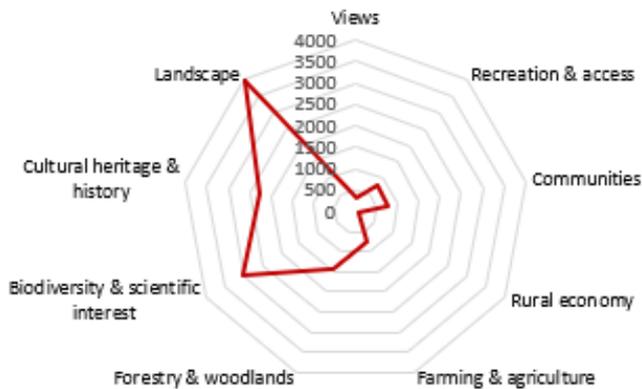


Figure 47. Word counts of different Natural Beauty themes in AONB Management Plans.

SketchEngine: 21/33 AONB Management Plans (entirely in England). Total corpus word count = 521397.

Although rarely mentioned in workshops, *wildness* is present in Plans more frequently than *unspoiled* (150:36 mentions). The use of *wildness* may be being prompted by the application of NE’s Evaluation Framework (2011), but again it is not being recalled by decision-makers in the workplace. Rather, it is *unspoiled*, the term favoured by the 1949 Act’s foundational reports that is in common usage.

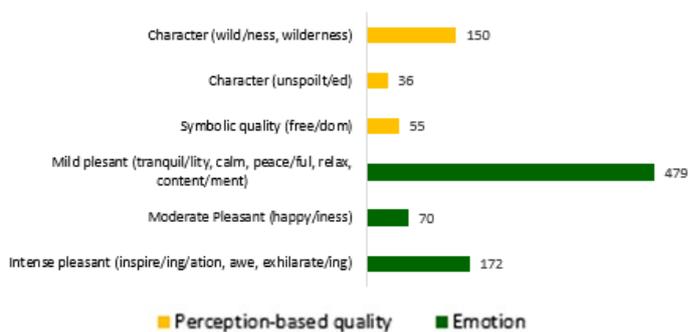


Figure 48. Count of selected emotion and perception-based words used in AONB Management Plans

SketchEngine: 21/33 AONB Management Plans (entirely in England). Total corpus word count = 521397.

Corpus analysis is also helpful in illustrating the extent of emotion-related words used in Plans to describe the experience of Natural Beauty or assigned as a quality descriptor to places (Figure 48). Emotion words are more common in Plans than in workplace discussions. The overwhelming dominance of ‘mild pleasant’ emotion words is

consistent with Dower’s interest in quietude but is perhaps surprising given the 1949 Act’s ambition of health and happiness for all (moderate pleasant emotion) and the Romantic movement’s quest for the sublime (intense pleasant emotion). This may reflect a nod to NE’s Evaluation Framework which includes tranquillity as one of its factors (2011). In the Plans, emotion-related words tend to be used either to engage readers or in thematic chapters on public access and recreation which in AONB Plans often sit uneasily with an idea of Natural Beauty which is often related to predominantly physical features.

7.3.2 Interpreting related terms – special qualities and landscape/landscape quality

Chapters 2 and 4 describe the mental switch decision-makers employ which sees *landscape* as synonymous with *Natural Beauty*, albeit with some additional qualities attached. The survey and workshop results confirm this tendency. Exploring this with a sub-group of local authority officers including both landscape and planning professions indicates that interpretations of *landscape* are more consistent and more specific than those of *Natural Beauty* (Figure 49). Responses illustrate how landscape is associated with a combination of natural and human-

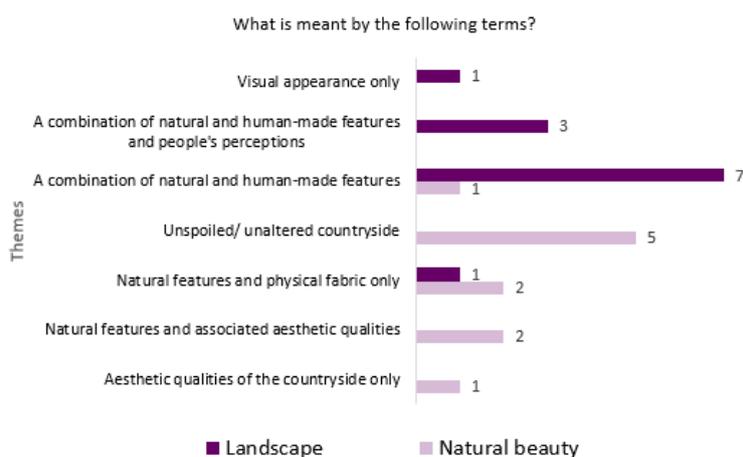


Figure 49. Comparison between themes associated with Natural Beauty and landscape.

Workshop: Local authority officers (8 planners, 3 landscape architects, 1 landscape archaeologist). Responses were provided as a sentence or list of features and coded to themes (one theme per response).

made features, but Natural Beauty tends not to be, with its interpretation focused on the fuzzier quality summed up by *unspoiled*.

In a separate activity with AONB staff and partnership members, when asked to write a single word they associate with ‘landscape’, the majority wrote ‘beauty’ (Figure 50). The results indicate the closeness of the two concepts in the minds of this community.

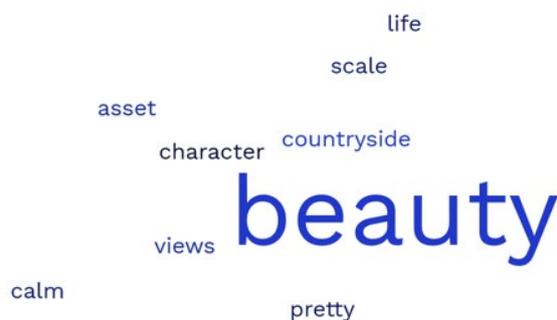


Figure 50. Words associated with ‘landscape’

Workshop: AONB staff and partnership members (n=18). Quick-fire word association: single word associated with ‘landscape’.

A different activity was utilised with AONB Lead officers to explore the relationship between Natural Beauty and landscape quality (Figure 51, p. 230). The results demonstrate the difficulties in using the terms interchangeably as proposed by the Countryside Commission (see chapters 4 & 5). If they correlated precisely, it would be expected that Lead officers with decades of experience would find it straightforward to place images of different landscapes along a 45° gradient. However, uncertainty about what constitutes landscape and confusion over whether *quality* should be interpreted as a degree of excellence or as condition (and if so, if this is the same as ecological condition), created challenges. These were articulated on Post-it Notes, with images particularly difficult to place including an iconic view of the Malvern Hills AONB which was considered to be outstandingly beautiful but of low landscape quality (eroded); and heather moorland in the North Pennines AONB considered of high Natural

Beauty but low landscape quality (managed for gamebirds). Although *quality* is regularly used in AONB management plans, it tends to be applied to the condition of specific features (e.g., air/water quality) rather than necessarily as a substitute for Natural Beauty.

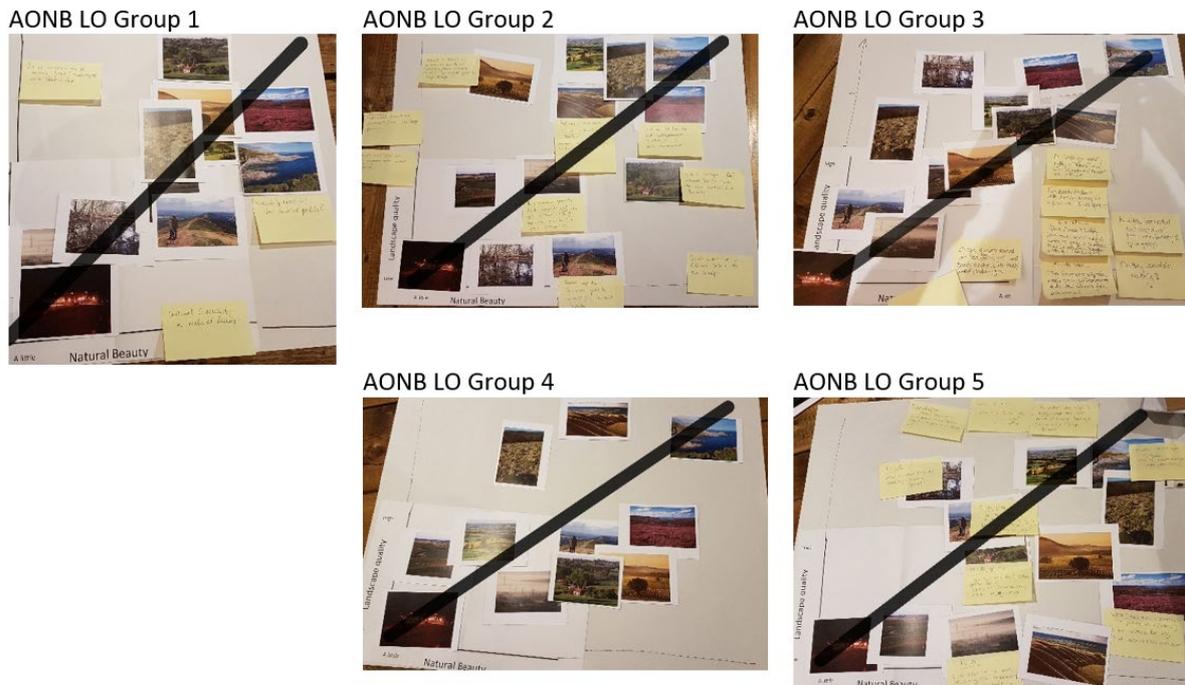


Figure 51. Perceived relationship between Natural Beauty and landscape quality.

Workshop: AONB Lead officers (LO) in 5 groups. Discussing add explanations for choices on post-it notes. Black line represents position images would be expected to lie in if natural beauty and landscape quality were interpreted as the same

Many AONB Management Plans avoid defining *Natural Beauty* by substituting *special qualities* instead (see e.g., Arnside and Silverdale 2019, p. 14, Chichester Harbour 2019, p. 10; Cotswolds 2018, p. 18). Special qualities are sometimes derived from landscape character assessment reports (e.g., Howardian Hills 2019, p. 16) although the origin of most is unreferenced. For some plans, landscape character itself may be a special quality (e.g., Dorset 2019, p. 36).

The term ‘special qualities’ was barely mentioned by survey respondents or in workshops, yet in statutory Plans the term is common (Figure 52). Its meaning is summed up

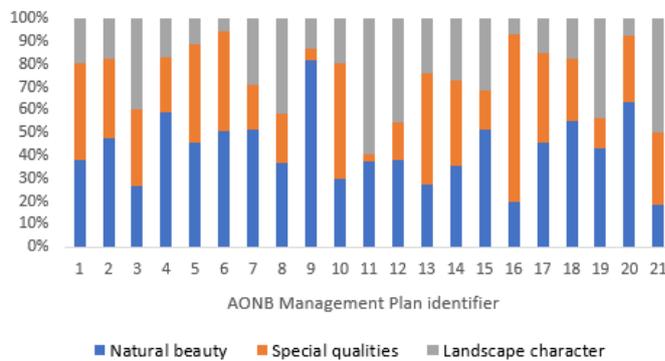


Figure 52. Relative proportion of key terms used in AONB Management Plans.

SketchEngine: 21/33 AONB Management Plans (entirely in England) (Total corpus word count = 521397).

as, ‘together, the special qualities define what ‘natural beauty’ means [for the AONB]’ (Arnside and Silverdale 2019, p. 14), although others define it as a subset of Natural Beauty (South Devon 2019, p. 10). *Special qualities* is not a legal term in relation to the AONBs purpose (although it is the

subject of a duty on the two AONB conservation boards¹²⁷). Discussion with AONB Lead officers suggests that it is considered easier to explain, a point illustrated by the fact that only two Plans pointedly avoid the term (Plans 9 and 11). Arguably it is narrower than the 1949 Act’s intended scope of Natural Beauty and its use, in the absence of an accepted definition, adds a further fuzzy concept to the those already in play in the minds of decision-makers.

7.3.3. Individual relationships with beauty

Activities investigating individual’s relationships with beauty suggests that once the questions are stripped of the term ‘Natural Beauty’, decision-makers’ reactions are far closer to the idea of Natural Beauty intended by the 1949 Act, suggesting that the contested concept of ‘natural’ is one of the problems. Several different activities were designed to test this relationship.

¹²⁷ ‘To increase public understanding and enjoyment of the special qualities of the AONB’ (CROW Act, s87).

The survey

Results suggest that the idea of beauty on its own, as understood by participants as a group, encompasses themes consistent with the idea of Natural Beauty in the 1949 Act i.e., perception-based qualities, physical objects (or environments) and emotion responses in three relatively equal dimensions (Figure 53). *Unspoiled* appears again as the most common quality associated with beauty in the countryside. Interestingly, emotion clearly plays an equal role to perception-based qualities and the physical environment in decision-makers' understanding of 'beauty', unlike Natural Beauty where it is completely absent (see Figure 38, p. 215).

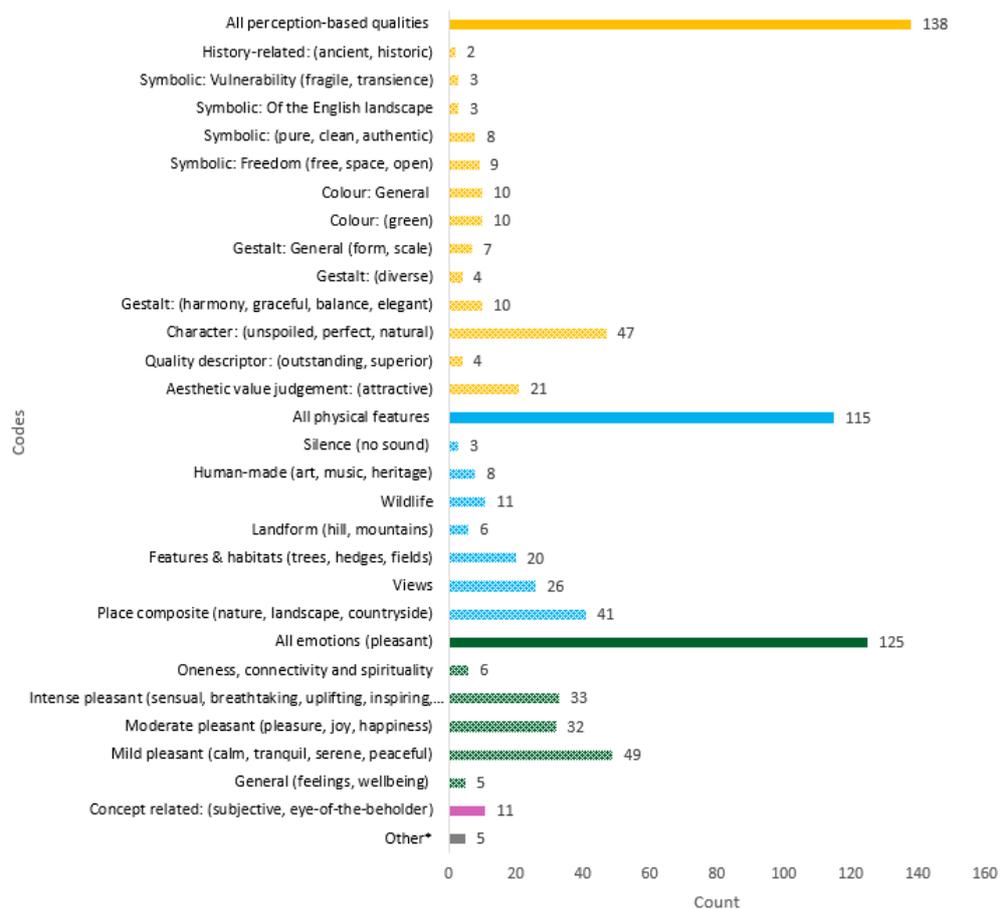


Figure 53. Distribution of themes (level 1 and 2) associated with the term 'beauty'.

Survey Q2. All participants (n=168). Asked to list two or three words most closely associated with beauty. All words coded to themes.

Other* - themes with single counts

A range of positive pleasant emotions, from mild-intense arousal are associated with

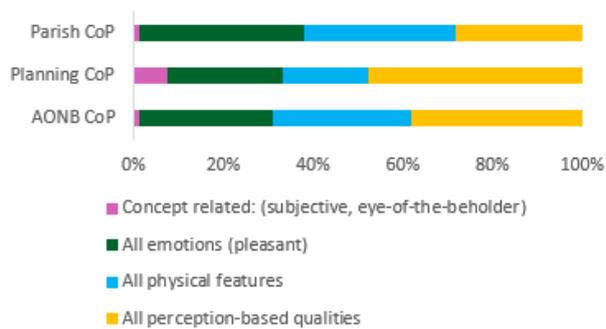


Figure 54. Distribution of themes (level 1) associated with beauty by community of practice.

Survey Q2. Words most closed associated with beauty. All participants (n=168).

beauty, along with, but to a far lesser degree, feelings of connectivity and oneness with the world identified by Diessner et al. (2008). The planning community use less emotion related words than the other communities and focus more on perception-based qualities (Figure 54), reinforcing workshop findings.

Respondents were asked in Question 6 to recall in free text their most recent experience of beauty in the countryside. Their responses mirror the themes associated with beauty found in Question 2 (Figure 53, p. 232) but, as might be expected when recalling a specific countryside experience, temporal factors such as light levels and season are mentioned more frequently (15% of comments). For example, ‘sunlight on the tree tops against a dark sky’ (SR64) and ‘the way the light caught their [damsel]flies] azure bodies was stunning’ (SR121). In addition, it was notable that, like Wordsworth and Cornish previously, experiences of beauty emerged from engagement with nature/landscape at multiple scales. For example, comments range from ‘a barn owl hunting over a corn field during the ‘golden hour’’ (SR100); ‘the complexity and detail of the grass and flowers with the invertebrates’ (SR26); ‘the structure of an oak tree’ (SR9) to ‘the vast greenness’ (SR141) and ‘patterns in a ploughed field (SR161). As soon as participants are asked about their own experiences their language becomes more elaborate and descriptive.

A follow-up question about the importance of different senses to participants own beauty experiences suggests that while visual impressions appear dominant in descriptions,

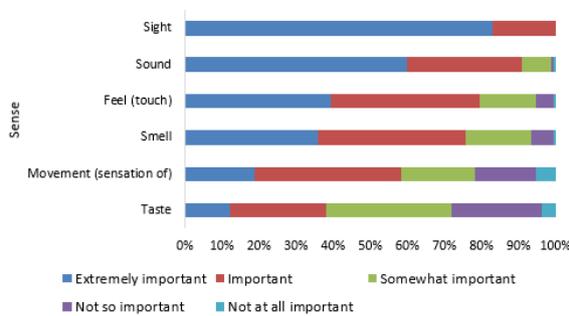


Figure 55. The role of different senses in an experience of Natural Beauty.

Survey Q8: All participants (n=166). The proportion of participants reporting importance of each sense.

other senses also play a vital role (Figure 55). While sight and sound were deemed to be the most important sense in an experience of Natural Beauty, less than 10% of participants considered that touch and smell were not important. Those who considered movement and taste were not important were also in a minority at less than 30%, with over 70% of participants considering that all senses play an

important role to a greater or lesser degree. An indication of the multisensory aspect of Natural Beauty which distinguishes it as an immersive experience (Berleant 2012).

The proportion of participants who rated the sense of movement as important to some extent to a Natural Beauty experience (78%) corresponds closely to the proportion who answered in Question 6b that they were walking or active at the time they last noticed beauty in the countryside (73%) (Figure 56), suggesting that although proprioception (movement) is

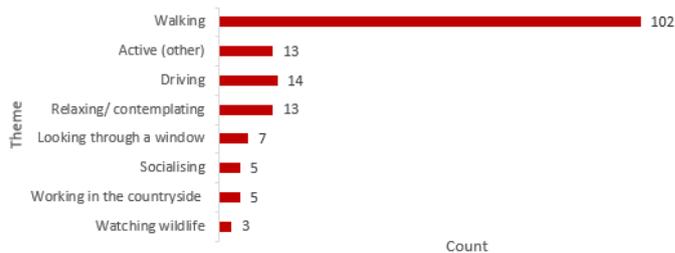


Figure 56. Activity engaged in when last experiencing Natural Beauty

Survey Q8: All participants (n=166).

not commonly understood as a sense, there may be a general awareness that activity in the countryside either creates opportunities for, or directly facilitates, aesthetic experiences.

Asked what they were feeling when they last experienced beauty in the countryside, participants expressed a similar range of feelings to those associated with beauty more generally (Figure 57). Responses were skewed towards ‘Mild pleasant’ feelings such as contentment, calm, peace, and tranquillity, which were mentioned more often than ‘Moderate pleasant’ and

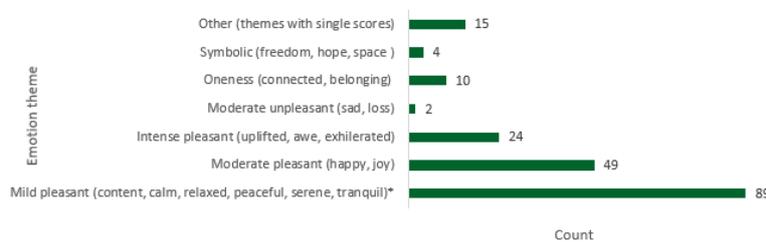


Figure 57. Feelings associated with an experience of beauty in the countryside

Survey Q6a: All participants (n=166).

‘Intense pleasant’ combined. The dominance of mild positive emotions in relation to Natural Beauty suggests that Diessner et al.’s proposition that the emotions associated with Natural Beauty can be summed up by ‘it moves me’ (representing moderate or intense pleasant emotions), may need to be reconsidered (2008, p. 329). However, some participants (n=22) identified that they felt both Mild pleasant and Moderate pleasant emotions during the beauty experience. A sense of oneness (or spiritual connection to the world) identified by Diessner et al. (2008) as one of the four factors present in people’s engagement with, and appreciation of, Natural Beauty constituted only 6% of the feelings mentioned by participants. In view of high nature relatedness scores demonstrated by all three communities (Figure 58, p. 236), this appears to be low, and might change if the question was asked differently.

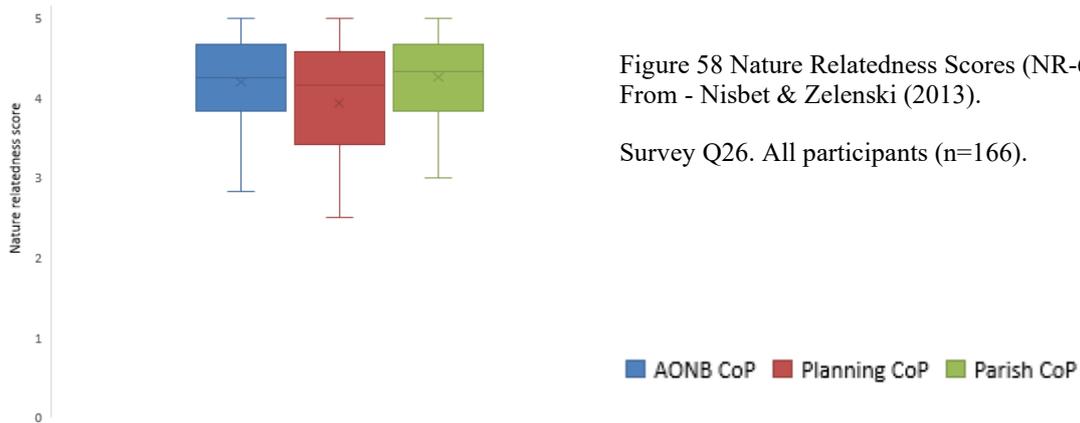


Figure 58 Nature Relatedness Scores (NR-6).
From - Nisbet & Zelenski (2013).

Survey Q26. All participants (n=166).

To test responses to degrees of naturalness, participants were asked if there was anything in their countryside experiences that gave them a real sense of wildness or naturalness. Responses to this question were particularly revealing about the role of wild species in Natural Beauty (Figure 59). The perception of wildness amongst all participants appears largely about

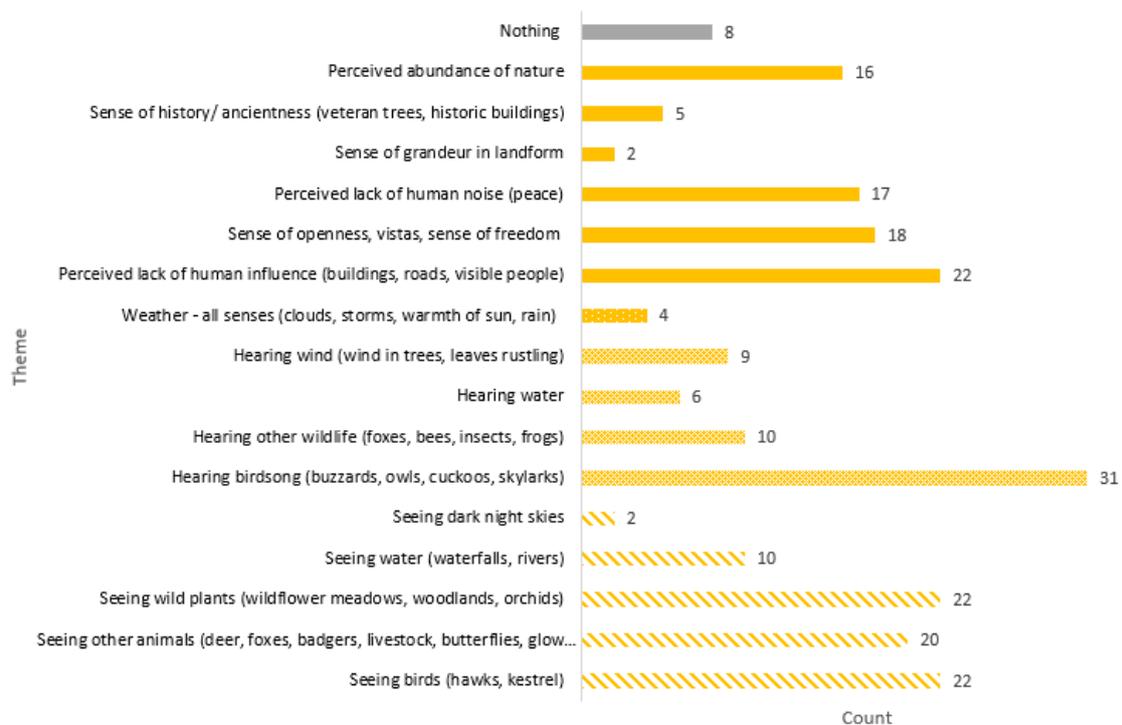


Figure 59. Features which prompt a real sense of wildness or naturalness in the countryside.

Survey Q11: All participants (n=166). Colour gradation reflects different senses/perceptions)

the sensory experience of wildlife. Hearing birdsong is the single most reported sense experience, with hearing and seeing water, wild plants, and other animals also important. Perceived lack of human influence (in terms of noise and intrusion) is also mentioned.

Dower's requirement for wildness in the land to be considered for designation (of national parks specifically) has been operationalised as a relative lack of roads and buildings (human influence) in NE's Evaluation Framework (2011). However, this study suggest that these factors are less important than coming into close contact with wild species. Today, wildness is associated with what would have been relatively common wildlife in the 1940s, prompting a question – is this a recent phenomenon?¹²⁸ Wildness, as NE suggests (2011) is relative. Whether or not wild birds were indicators of wildness in the past, sight and sound of them would have been integral to any experience of Natural Beauty. If these findings hold for the wider population, they suggest, as the 1949 Act assumed, that wildlife – and birds in particular – are important to the experience of Natural Beauty. It is notable that landscaping proposals, and landscape and ecology management plans which accompany development proposals in AONBs are not assessed for their ability to provide food, shelter and nesting sites for birds (or other animals), nor is the full effect of disturbance (e.g. noise, lighting, trampling, dogs, cats) on birds arising from development considered as part of an assessment of effects on Natural Beauty (see chapter 6).

¹²⁸ . Boyd Alexander's collection of British birds in the Cranbrook Museum from before the Second World War illustrates the variety of birds and their abundance existing in what are now relatively silent landscapes.

Sketches

Individual experiences of beauty were explored in more detail with sub-groups from the AONB community who craft the interpretation of the Natural Beauty for individual AONB's in local management plan policy. This deeper dive activity involved recalling and sketching beauty experiences (Figure 60). Sketching required more time commitment than could be achieved working with the Planning community. Nevertheless, the results provide an indication of factors that might merit further study across the CoPs.

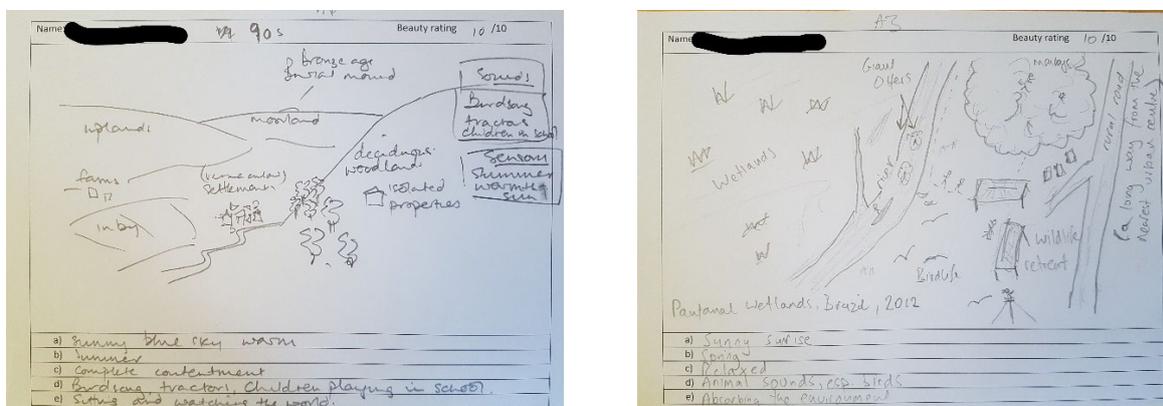


Figure 60. Examples of participant sketches.

Figure 61 (p. 239) shows that AONB Lead officers consistently notice and recall twice the number of features from a particular beauty experience than Partnership members (who are generally non-specialists in relation to the environment). This holds whether outstandingly beautiful places are being recalled or meaningful places, which individuals may score lower for beauty. The differences between the number of features recorded for AONB Lead officers and Partnership members for the same question, and the difference between outstanding and meaningful places for each group are highly significant. The result appears to support the contention that expertise plays a pre-cueing role in cognition, allowing experts to assimilate more information than non-experts for a given exposure (Montemayor & Haladjian 2017).

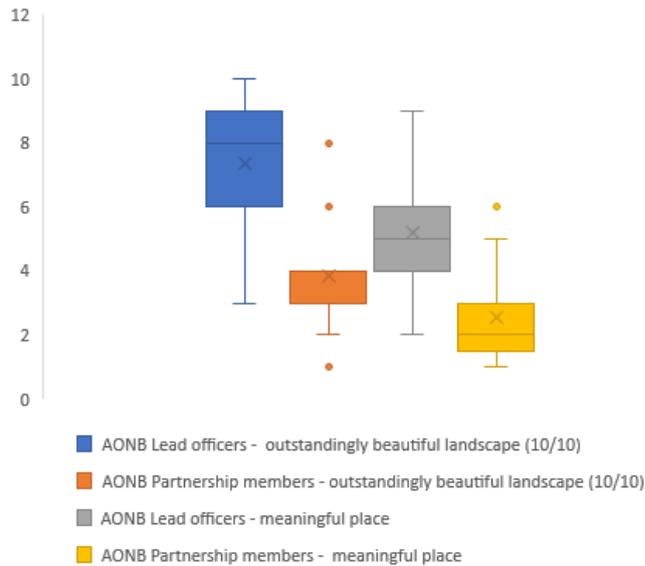


Figure 61. Number of features recorded in sketches per subgroup – median, spread and skewness

Sketches: Recalling experiences of outstandingly beautiful places

AONB Lead officers (n=28); AONB Partnership members (n=13)

Differences are significant e.g.,

t-test P value (two-tail) for Lead officers and Partnership members outstandingly beautiful landscapes is $2.4 \cdot 10^{-6}$

(Jaccard Similarity coefficient)

Recall of this detail could be because Lead officers are more interested in it. Noticing more does not necessarily mean that more is considered in decision-making, but it does suggest that knowledge associated with these features could be brought to bear, whereas if features are not noticed it is less likely that relevant knowledge is cued. This finding lends weight to the need for better guidance for all decision-makers, to alert and prompt consideration of all Natural Beauty features and prevent some, such as human-crafted features, being excluded

The sketch activity results illustrate that in a memorable experience of Natural Beauty, this community notice non-human features – mainly landform and vegetation – most, but human structures (e.g., boats, bridges, buildings) and people themselves are far from absent (Figure 62, p. 240). In common with the survey results for beauty experiences, walking is what most people are doing when they notice beauty, with natural sounds (birds, wind, and water) most likely to be what they are hearing, although the presence of other people and silence are also mentioned (Figure 63, p. 240). This activity allowed me to inquire directly about temporal

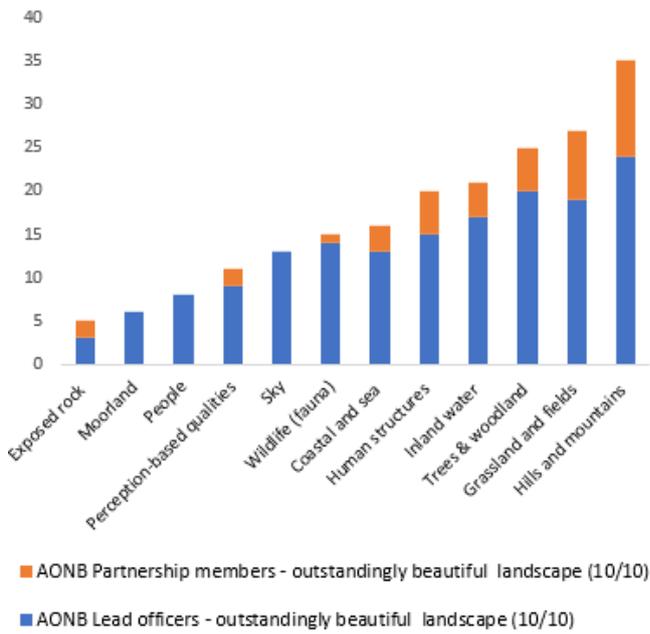


Figure 62. Types of features recorded in sketches.

Sketches: Number of participants recording feature when recalling experiences of outstandingly beautiful landscapes.

AONB Lead officers (n=28) AONB Partnership members (n=13)

qualities and it seems that, for this community, outstanding beauty can be experienced in all seasons and all weathers, although sunny and fine in the Spring or Summer were most popular. In the workshops exploring landscape quality, landscape images taken in Autumn or Winter tended to score low for Natural Beauty (see Figure 51, p. 230), and further research could usefully explore whether decisions about Natural Beauty taken by experts in LVIA differ depending upon the season in

which they visit or photograph the site.

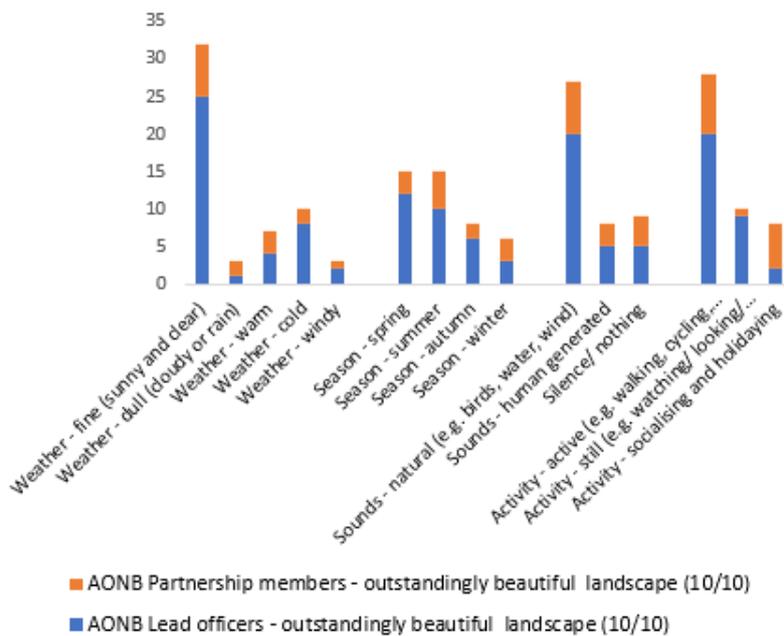


Figure 63. Factors associated with an experience of outstanding beauty

Sketches: Recalling experiences of outstandingly beautiful landscapes Number of participants recording them.

AONB Lead officers (n=28) AONB Partnership members (n=13)

The range of emotion words used by AONB Lead officers and Partnership members to describe experiences of outstanding Natural Beauty (10/10 of their personal scale) mirror those reported in the survey, but surprisingly Moderate Pleasant words were used less than Mild or Intense Pleasant ones by both groups (Figure 64). Comparing the range of emotion themes reported by AONB Lead officers in association with a 10/10 beauty experience or one involving a meaningful place (average beauty score 8.2/10) shows a shift from Intense pleasant emotions to Mild and Moderate ones (Figure 65). It is difficult to draw any firm conclusions, but discussions after the activity pointed to meaningful places being visited more regularly for relaxation and contemplation rather than 10/10 landscapes which were remembered because the experience (often a holiday one) was a jolt out of the everyday (see Shusterman 1997).

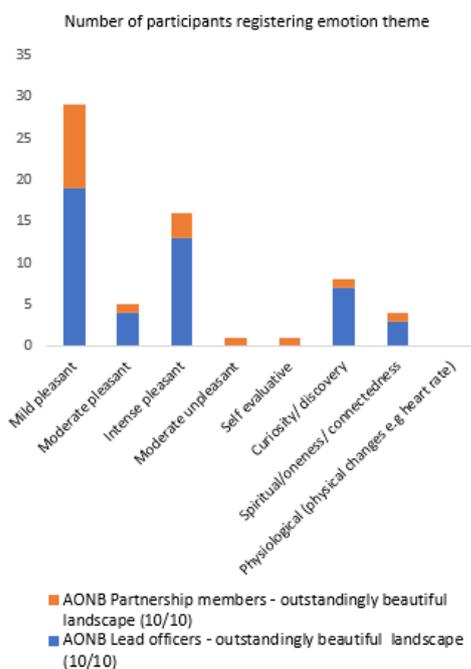


Figure 64. Emotions reported in an experience of outstanding Natural Beauty (10/10)

Sketches: Number of participants recording theme.

AONB Lead officers (n=28) AONB Partnership members (n=13)

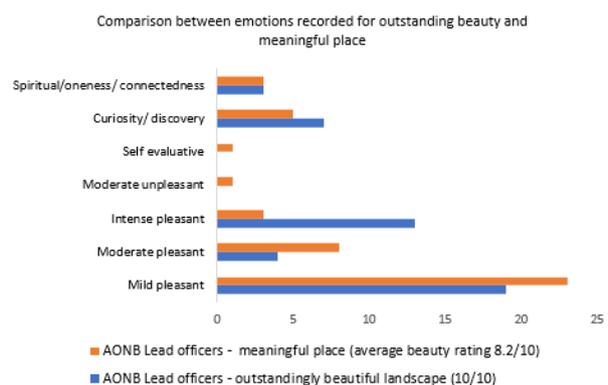


Figure 65. Comparison between emotions reported for outstanding beauty and meaningful place

Sketches: Number of participants recording theme.

AONB Lead officers (n=28) AONB Partnership members (n=13)

Diaries

The return of over half the diaries (15) taken voluntarily by AONB Lead officers (28) but only 2 of those voluntarily taken by Planning officers (30) suggest that beauty is of more interest to the former. The paucity of Planning officers' responses limits how useful this approach has been for investigating individual dispositions in this group and comparing communities. Semi-structured interviews, ideally undertaken while walking, may have been more productive for gathering information from the planning community but the timing of the Covid pandemic made these difficult to arrange. For AONB Lead officers, however, the diaries allow a richer narrative about this group's relationship with Natural Beauty to emerge (Figure 66).

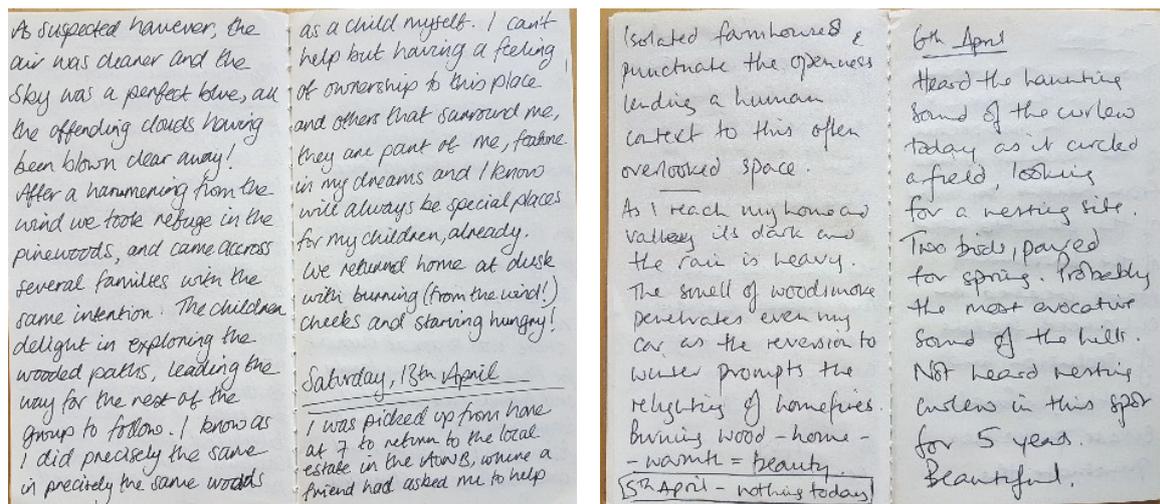


Figure 66. Example of participants' diaries.

While every decision taken by AONB Lead officers must be related at least in part to Natural Beauty, Planning officers work with many other policies which are not beauty related. Despite the overarching significance of beauty to all aspects of AONB activity, it is not a theme discussed at much length in the AONB community and some of the additional comments returned with the diaries indicate that more attention should perhaps be given to it. For example,

LO15 provided a separate note saying, ‘fascinating exercise – realised how rarely I get out into the AONB! Also not good writing about feelings!’ and LO7 added ‘Thanks for the opportunity to write down some of my thoughts and reflections on natural beauty day-to-day. I enjoyed it!’

In terms of content, AONB Lead officer diaries confirm the extent to which this group appreciate immersed experiences in Nature and seek that engagement when they can. To encourage as many returns as possible, the diary instructions made it clear that entries only needed to be in note form, but many participants when given permission to write about beauty, seized the opportunity to write more poetically. For example,

‘Running in Sallow Coppice, at lunch time from work, alone. A beautiful bluebell wood – a complete carpet. It’s raining – not used to seeing bluebells in the rain. Fragrance wafts through powerfully along with the earthy smells from the rain. After a while I notice the occasional white bluebell standing out from the crowd. It’s not a beautiful day, but I have had a snatch of something wonderful, and in an unusual mood (with the rain).’ (LO14)

‘the new beech and oak leaves above them were illuminated like thousands of tiny lime-green stained glass pieces’ (LO1).

Like Huxley in 1947, and Cornish and Marr before him, Natural Beauty experiences for these participants draw on information from a range of senses, with the descriptive aesthetic discourse infused with a technical understanding of nature (in these cases, species names and management states). Berleant’s immersive and engaged conditions for Natural Beauty are clearly exhibited (2012, 2007). The poetic language used in the dairies is at odds with the technocratic tone used by the same officers in their Management Plans, suggesting that it is external expectations that drive the tone of Management Plan discourse¹²⁹.

¹²⁹ Plans are strategic documents whose main role is influencing the actions of others (CA 2006), and it is debateable which mode of discourse may be most effective in this task.

What is noticeable across all responses is the way knowledge about the natural environment is woven through descriptions of beauty experiences. For example, living things tend to be described through their species name rather than generic feature term,

‘I notice a hare by the roadside. Enjoy its effortless leap over the drystone wall to escape my approaching car.’ (LO7)

‘We saw a kestrel hovering above a meadow beside the river. It had to flap its wings energetically to remain stationery but its sheer concentration was wonderful.’ (LO1)

Knowledge is also expressed in a similar fashion to the sketches through the sheer number of features noticed. For example,

‘birdsong, violet flowers, fresh cool air, buds, honeysuckle winding through trees, robin, view over reedbed, sounds in distance of ducks and wildflowl. Hawthorn leaves emerging, limestone, trees hanging over paths to create a tunnel, great tit, blackbird, wren chirping. Then got a closeup view, clearing in the woodland where primroses grow, buzzard overhead, view far reaching toward [Place name] fells, view over farmland, dry stone walls, cattle grazing, blackthorn blossom, celandines, wild garlic coming through. Peace and tranquillity. Felt connected and ready for the day, time of peace before busy day ahead.’ (LO9)

Both human and natural features are noticed but they are often indivisible, For example,

‘rising sun bathing in gold light straw bales stacked on a flat bed lorry’ (LO4)

‘The early evening sunlight was just catching the arches and gables of the ruined [Place name] Church, while Hebridean sheep grazed the species rich church-yard, with the backdrop of ancient woodland [Place name] and tall limestone cliffs’ (LO6).

As proposed by the architects of the 1949 Act, it is the total surrounding of a working countryside that fuels Natural Beauty. Visual aesthetic cues relevant to colour, harmony, and form, all highlighted as important by the early campaigners, are common. However, the diaries,

like the survey results, indicate how nature facilitates an immersive experience which harnesses all of the senses. Sound, primarily for this group birdsong, was noticed in most diaries. For example,

‘The sound of the birds was so beautiful and uplifting. It took me out of my worries about the day and reminded me of the bigger picture of nature. I was much calmer after the experience.’
(LO2)

‘Unmistakable calls from rising skylarks and the more allusive yellow hammer’ (LO3)

‘Heard the first Chiffchaff of the spring. Elated!!!’ (LO7)

‘Heard the haunting sound of the curlew today as it circled a field, looking for a nesting site. Two birds, paired for spring. Probably the most evocative sound of the hills. Not heard nesting curlews in this spot for 5 years. Beautiful.’ (LO10)

Confirming the survey results about perceptions of wildness (Figure 59, p. 236), the diaries also indicate that birds appear to be a totemic symbol of wild nature. As noted by one participant, birdsong is not restricted to the countryside, suggesting a focus on getting birds back into urban parks and greenspaces might help offer a deeper experience of Natural Beauty to urban populations, along with the wellbeing benefits this might bring.

‘I opened the curtains and saw the sunrise. The glare across the park brings a smile to my face. Despite living in an urban environment, we have a good variety of garden birds and as always it is lovely to hear them chirping.’ (LO13)

Water was the second most mentioned sound that contributed to Natural Beauty experiences,

‘The gentle burble of the water over the river bed and the interplay of shadow and bright sunlight on the river catch my eye.’ (LO7)

‘Opening the back door on frosty blue sky and birdsong ... Woodland and fields, some in shade, some in golden light. The sound of cockerels crowing over the valley and the continuous rush

of the river, so familiar its noise has to be singled out to recognise. It's loud, ever present but never intrusive.' (LO10)

Again, the idea of being surrounded by, and engaged with, nature/landscape as an immersive aesthetic object is evident, allowing all the senses to be employed simultaneously. Several entries mentioned the overlooked sense of smell – fragrance. For example,

'pungent aromas of wild garlic on the woodland banks' (LO3)

'earthy smell after rain' (LO9)

'Slight frost and the air smells of spring. Geese calling in the distance. No vehicles, just birds.

I have this landscape to myself' (LO10)

Aromas can be seasonal and change with the weather and time of day. Very little has been written about fragrance in relation to Natural Beauty since Cornish's explorations in the 1920s and 30s, but these comments suggest fragrance merits further investigation.

Touch-related sense experiences were also described in diary entries and indicate how being outdoors and feeling the effect of weather on your skin can add to a beauty experience,

'Warm sun on my face' (LO9)

'We return home at dusk with burning (from the wind) cheeks and starving hungry!' (LO12)

'enjoying the rawness of the untamed sea and the wind and rain in my face' (LO14)

The range of non-visual sense perception contributing to experiences of Natural Beauty highlights the limitations of the visually orientated assessment techniques discussed in chapters 5 and 6. It helps explain why Landscape and Visual Impact Assessment (LVIA) methods which overlook people's individual experiences of beauty in the landscape fails to adequately capture effects of development on Natural Beauty.

In addition, the diaries demonstrate the important role weather and temporal change plays, confirming Ingold's (2000) concern that overlooking its influence diminishes our understanding of Natural Beauty. Because weather and temporal changes happen in real time as the perceiver is moving through nature/landscape they are prominent in more prolonged aesthetic experiences, similar to those of Nettleton's fell-runners (2015).

'At the beginning of the walk it was cloudy and the woods looked dormant and a bit tatty. Then the sun came out and the wood anemones opened up and it was suddenly full of life and promise of Spring. It made me feel happy, relaxed, optimistic.' (LO2)

'an uplifting interruption from the leaden skies' (LO3)

The heightened sensory experience involved can prompt memories,

'Wind suddenly gusting and rustling through the trees, memories of pirate treasure hunt here when my son was little, sunlight sparkling off rain puddles on limestone, fresh air, peace – only me and one other person. Felt restored, energised, fitter, better.' (LO9)

The change in light and atmospherics can divert our attention and elevate an everyday event to an out of the ordinary aesthetic one (see Seel 2008),

'the views of the fells have an uncanny clarity that comes after rain.' (LO7)

'Morning light picking out the strip lynchets, cattle grazing. Grounding. Happy. Calmer.' (LO8)

'The setting sun added a warmth of colour to what seems a fairly flat and uninteresting landscape' (LO10)

'Low angled sunlight from the west picks out trees with long shadows and highlights folds and bumps in the land' (LO14)

As might be predicted from a classical understanding of beauty, colour plays a large role in Natural Beauty as it does in other forms of beauty (see Eco 2010).

‘On the scrubby chalk hill above the valley, bleached grassland made me feel unsettled but the vivid bluey purple of the milkwort dotted about were a dramatic contrast, together with small timid-looking cowslips emerging. The valley bottom as a complete contrast, green lushness with comfortable brick- and-flint houses and a range of greens. Greys, browns, silvers, pinks, whites and coppers where fields and ornamental trees showed their spring shades. The variety of colour in a wood in spring or early summer always makes me marvel. On a bad day, its vigorous beauty then leads to thinking on impending maturity, sultry summer days and woodland gloom, autumn, decay ...’ (LO1)

‘A hanging garden of mosses and plants where a stream trickled down the cliff face. The vibrancy of the colours – so many shades of green – and the seeping dripping water and little white and yellow flowers.’ (LO6)

‘Blocks of colour – browns, greens and vivid line green of beech hedges’ (LO15)

Form is less overtly referred to, although there are exceptions,

‘There is a low mist over the [River name] which has an incredible S shape set of bends – its geography!’ (LO11),

Movement by the individual perceiving beauty was evident in most diary entries, although not all (with driving and looking out of windows also mentioned),

‘moving makes me feel part of the landscape’ (LOX)

‘Despite being one of fifteen runners, the sense of wildness parts of this run gave me was fantastic. I felt refreshed, having being given the freedom to immerse myself in nature. Exhilarating!’ (LO12)

All the diary entries exhibit the engaged and immersive state of being described by scholars such as Berleant (2012, 2007) and Ingold (2000), reflecting the all-encompassing immersive form of nature/landscape as an aesthetic object. The wide-ranging nature of the beauty diary

entries and duration of the experiences are consistent with Hepburn's (1984, 1966) idea of unbounded nature and Shusterman's (1999) suggestion that movement can extend an aesthetic experience. Although the architects of the 1949 Act did not discuss movement as a means of extending aesthetic experiences directly, they were not proposing to protect a scene to be contemplated at a distance but an area of land of sufficient extent for a day's walk (Dower 1945). Kant's positive emotions and reflective tuning into nature is also evident. The range of descriptive phrases contained in the diaries related to emotions and feelings provide a deeper context to the single word emotions gathered in the survey. Like the survey, emotions associated with Natural Beauty were almost universally positive, but one expressed melancholy illustrating Sharma's (1996) exploration about the uneven effects of memory on aesthetic experience,

'Felt at home but also a hint of sadness – spent six consecutive summers here from age 11-17 and would give up almost anything to go back to those days' (LO4)

Connectedness to place was a common theme which warrants further investigation,

'The children delight in exploring the wooded paths leading the way for the rest of the group to follow/ I know as I did precisely the same in precisely the same woods as a child myself. I can't help but having a feeling of ownership to this place and others that surround me, they are part of me, feature in my dreams and I know will already be special places for my children already,' (LO12)

'Surrounded by dead relatives gives a perspective like no other. Burial cairns, grave stones and blue sky n'hiraeth in Welsh Roots means everything and nothing. This landscape is neither AONB nor National Park, but it feels like mine and has value like no other. A place for reflection and realisation.' (LO10)

Most emotions, however, were simple positive ones spanning the range from low intensity calm to a more intense 'inspired',

‘Felt lucky’ (LO9)

‘I felt a sense of healing well-being after the tedium of a day in front of my computer’ (LO1)

‘happy to see orchids again. Uplifted, Inspired’ (LO15).

‘Relaxing, calming.’ (LO8)

The 1949 Act assumed that the pleasure arising from Natural Beauty experiences would help foster health and wellbeing. This study confirms that for these participants, Natural Beauty is associated overwhelmingly with positive emotions, but it is difficult to infer any further relationships. Other types of feelings were mentioned – connectedness to (or oneness with) the world (Diessner et al. 2008) and behavioural (Levine 2012). For example,

‘a sense of connectedness to the unfurling spring and to the family for sharing it together’.
(LO8)

‘Glimpse of long view of [Place name] (from relative height). Made me want to stop the car and go and explore’ (LO5).

However, these were not common in this particular group. More common were reflections and a sense of self-awareness or self-evaluation,

‘I was struck by the sheer wholesomeness of the view, the ‘fat of the land’ before my eyes’
(LO1).

‘Burning wood – home – warmth = beauty.’ (LO10)

‘I was thinking a lot about work at the time but I feel that the exercise and environment helped equally, enabling me to “sort out” a few issues and find a way forward.’ (LO8)

‘I have been giving some thought to the difference between ‘beautiful’ and ‘naturally beautiful’.
For instance, in my AONB, at this time of year the flat estuary landscape is dominated by boats that are moored or tied to jetties or pontoons. Although boats are not natural features, because

sailing has been part of the heritage of the area for generations, much longer than the AONB designation, they have become part of the landscape. It would almost be unnatural if I arrived for work and they weren't there, if that makes sense. 'Natural does not just derive from 'nature'.'
(LO13)

These longer-form comments provide a richer picture of beauty experiences and illustrate the usefulness of using diaries to explore emotions. Berebaum (2002) touches on self- and nonself-evaluative feelings as a component of positive emotions. The diaries suggest that further investigation is warranted into the more complex feelings and thought processes associated with Natural Beauty, and how such experiences may change dispositions towards nature.

It is evident that this group described beauty experiences more in terms of physical features and emotions than perceptual qualities but that could be explained by their confidence in describing landscapes in more technical terms. While the diaries reflect the experiences of a specific sub-group of the AONB community, the sheer complexity of beauty experiences expressed indicate the difficulty in simplifying Natural Beauty as an idea into something that can be easily measured.

7.3.4 Attitudes towards beauty in public policy

There is strong and consistent agreement amongst decision-makers that beauty is important; that it makes people feel happier and everyone should have an equal right to it (Figure 67, p. 252). There is similar agreement that public policy should concern itself with beauty. At the same time a majority consider beauty is in the eye-of-the-beholder which, arguably, makes it difficult to deliver through public policy interventions and suggests that whatever mechanism is used, it needs to actively engage a wider public. Such enthusiasm for beauty is not evident in the LVIAs investigated in chapter 6, nor in the local authority planning decisions issued for

the developments they supported. It may be that sympathy for beauty is a latent disposition which the current public policy environment does not encourage.

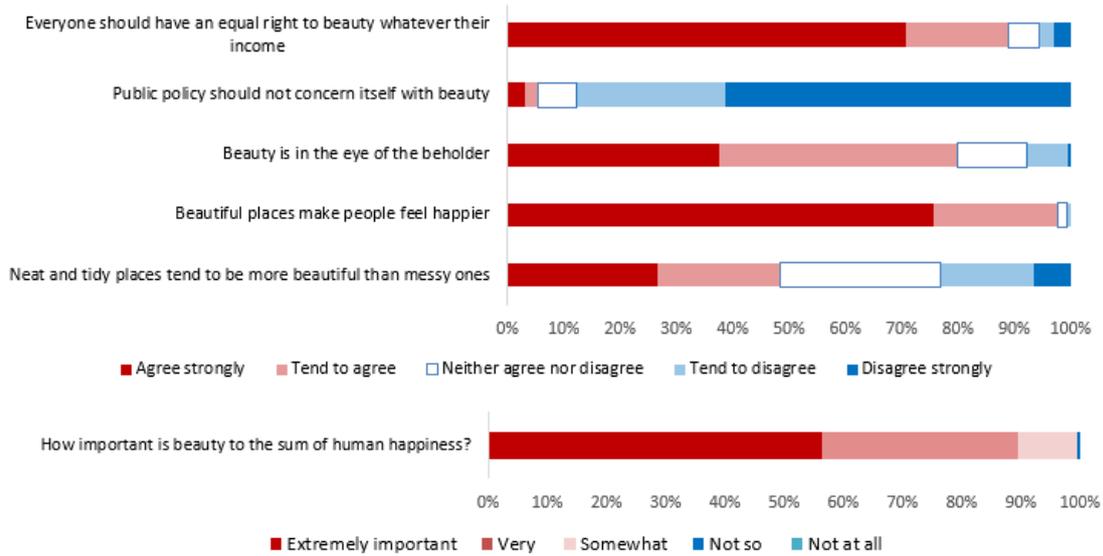


Figure 67. Responses to questions about beauty in public policy.
 Survey Q3 & 5b: All participants (n=166).

7.4. Conclusions

The survey and workshops undertaken with decision-makers demonstrate that there is no shared or structured thinking around Natural Beauty despite NE’s publication of an Evaluation Framework in 2011 (albeit currently limited to selecting land for designation). Given the overwhelming endorsement for beauty that the responses to these questions represent, and the centrality of beauty to AONB policy, it seems odd that the responsible public bodies have not sought to establish effective mechanisms to take account of beauty in decision-making. Perhaps

it is unsurprising, therefore, that the consistent suite of guidance documents developed in the landscape discipline are employed in practice to fill the gap. However, as this study demonstrates, beauty relies on a particular set of conditions which landscape does not entirely meet.

Two issues stand out from analysis of the study results in relation to how decision-makers' understand *Natural Beauty* – confusion about the meaning of *Natural* and the silence of 'beauty' as an idea in decisions.

Natural is a difficult term. The OED defines it as a thing having 'a natural, unaltered, or unrefined quality or attribute' (2022), a description consistent with the idea of 'unspoiled' (unaltered or undeveloped) which is the most common response from participants in this study. In AONB policy, this description tends to be applied to 'landscape' or 'countryside', all of which in England has been modified to varying extents by people. The pattern of land cover is the most obviously modified component of landscape, but at a more fine-grained scale modification is also evident in the form and design of buildings and boundary features (with place-specific styles arising from differences in natural materials, tools, and skills); the morphology of individual plants (and livestock breeds), and the extent and orientation of views created by the positioning of routeways and vegetation management. Time-depth tends to be what differentiates the degree of apparent modification, a concept not readily acknowledged in landscape or Natural Beauty policy (Fairclough & Herring 2016). There is a paucity of vocabulary to describe the different intensities and time-depth of human intervention; hence we find *natural* being used in common language for all of these situations, and confusion about where more obviously human-made structures such as buildings fit in.

The architects of the 1949 Act were less exercised by *natural*. Today we can draw on the term 'cultural landscapes' defined by UNESCO's World Heritage Committee to describe

landscapes representing the ‘combined works of nature and man’ (UNESCO 2023a), but this term has only been operational in policy since the 1990s and mostly used in relation to a historic landscape perspective (Fairclough 2002). In the first half of the 20th century what we might now term ‘cultural landscapes’ were considered as ‘natural’, a situation elegantly summed up by one survey respondent as being ‘a form of landscape that has been culturally accepted as natural’ (SR135). Confusion today about the term ‘natural’ in the context of the legislation has allowed fuzzy concepts such as ‘unspoiled’ to persist in decision making as mental short-cuts. This creates challenges for Natural Beauty assessment - at what point does ‘despoilation’ of natural beauty occur? Chapter 3 looked at the Sorites paradox and the difficulties in assessing the cumulative effects of development. The lack of policy guidance on this matter suggests that decisions in which ‘despoilation’ is brought to mind will subconsciously be governed by individual dispositions on the issue.

Despite beauty being the noun in *Natural Beauty*, when decision-makers are asked direct questions about it, the idea of beauty as an aesthetic experience tends to be absent. However, when the same individuals are asked to describe their own experience of beauty in the countryside, rich descriptions ensue. In these descriptions, positive emotions of pleasure are acknowledged, and equal weight is given to them alongside the physical object of beauty and the aesthetic or perception-based qualities attributed to it.

Lack of clear guidance about the aesthetic object involved in Natural Beauty combined with the mental shift which replaces *Natural Beauty* in the designation purpose with conserving and enhancing *the landscape*, tends to cue knowledge related to the concept of place or a scene at a distance from the observer rather than the multisensory immersive perspective of the engaged insider. The idea of Natural Beauty is therefore flattened, and Ingold’s acute observation that we are ‘swimming in an ocean of materials’ is obscured (2002). The focus shifts from consideration of nature/landscape as a complex and multi-scaler system consisting

of biophysical components in which we are enmeshed, and from which the experience of beauty emerges, to the idea that beauty is an aesthetic judgement of landscape perceived as a broad patterned cloth draped over landform.

In terms of decision-makers understanding of policy goals and their ambitious for achieving them, this study suggests that there are fundamental weaknesses in the AONB policy field. When asked a direct question about the interpretation of Natural Beauty in relation to the legislation, answers across the policy field tend to be non-specific and rely on fuzzy terms. Such generalisations might be expected in 1949 before the policy had been applied and tested in practice but after 70 years of policy, lack of specificity is surprising. Although the small cohort of NE officers responsible for designating AONBs have not be separately questioned in this study, a recent national steering group meeting to support the preparation of joint AONB and National Park management plan guidance spent time discussing the meaning of Natural Beauty from first principles indicating that what Natural Beauty is, or isn't, in policy terms is still unclear¹³⁰.

It appears that within the AONB policy field at a conceptual level, *beauty* is a more analogous term to the 1949 Act's *Natural Beauty* than *landscape*, being interpreted as three interrelated and equally important components – a physical object(s), perception-based qualities and emotion responses, yet 'beauty' is a term rarely used in the field and only recently resurrected in national policy. The idea of landscape or landscape quality is preferred, and this allows decision-makers to draw on a consistent suite of guidance (see e.g., Davoudi and Brooks 2017; Bingham 2014; NE 2011). Although my sample is small, it suggests that *landscape best* describes one dimension (albeit an important one) of the aesthetic object involved in Natural Beauty i.e., the place created by the harmonious interaction of people and nature where beauty

¹³⁰ NE Designated Landscape Management Plan Steering Group meeting 10th February 2023.

is experienced. While *landscape* can encompass the physical detail of environments (see e.g., Tudor 2014; Swanwick 2002), the danger of limiting consideration of Natural Beauty to this term is that ecological quality, the richness of cultural heritage and associations which infuse immersive experiences of Natural Beauty at a human scale, are overlooked. Equally problematic with using *landscape* instead of *Natural Beauty* is the excising of emotion that ensues, making it easy for lay-people and their complex relationship with land to be excluded from Natural Beauty decision-making. If making decisions about Natural Beauty is just about categorising biophysical things and assigning perception-based qualities to them, then ‘experts’ can reasonably lay claim to a more objective perspective. However, if Natural Beauty has a necessary multisensory and emotion dimension, involving lay-people becomes imperative, a need further strengthened by the universalist and social justice principles associated with the philosophical idea of beauty. The importance of involving of citizens in policy is widely acknowledged (Barber 2017; Davoudi & Brooks 2017; LI & IEMA 2013) but as Haines-Young et al., argue, engaging with people is difficult, time-consuming, and costly (2004), although imperative if Natural Beauty is to be properly considered.

The conclusions from this thematic study point to the potential value of guidance on the meaning and measurement of Natural Beauty which can foster the use of consistent terminology and provide definitions rooted in an evidence-based understanding of the 1949 Act’s intentions. The Public Value Framework proposes that if decision-makers understand and are ambitious for policy goals then policy implementation is likely to be more effective (Barber 2017). The implication of this approach for Natural Beauty policy is fundamental. With the climate and biodiversity crises requiring immediate remedial action, flawed monitoring programmes and symbolic targets are unlikely to bring success on their own (see chapter 6). However, if decision-makers share an understanding of, and sympathy for, the breadth of Natural Beauty

and are ambitious for its conservation and enhancement, day-to-day decisions are more likely to contribute to the enhancement of Natural Beauty, and at the very least, do not harm to it.

8. Discussion and conclusions

8.1 Overview

Seventy years on from the 1949 Act, Natural Beauty remains part of the legislative framework for land use policy across nearly a quarter of England, but the Act's intent to put Natural Beauty at the centre of land use decisions in AONBs (and National Parks) has not happened and the meaning of the term remains unclear. Instead, its reframing as a flattened version of landscape has seen it side-lined as just another factor to take account of when balancing competing demands on land. I argue, however, that Natural Beauty offers us a different way of seeing as we recognise the failure of current policy to arrest the decline in the state of the natural environment. Refocusing on Natural Beauty offers us the opportunity to put the restoration of a harmonious relationship between people and nature at the forefront of policy thinking in designated landscapes. Approaching difficult land use decisions through the lens of Natural Beauty encourages us to acknowledge our emotional connections to nature, forcing us to step away from a detached 'outsider' perspective and situate ourselves immersed in, and part of, nature.

While natural beauty as a general concept remains the province of philosophy, with neuroscience and psychology continuing to explore the brain's engagement with nature, Natural Beauty in terms of the 1949 Act is more contained idea. This study brings together a consideration of the meaning of Natural Beauty in legislation with the models used in policy for its measurement. For the first time, it critically and systematically reviews the discourse prior to the Act with the intention of understanding the meaning of Natural Beauty as intended by the architects of the Act themselves, rather than through the lens of later interpretations. Differences are explored in meaning between its use in relation to selecting areas for designation and as the aesthetic object of preservation, and how categorising Natural Beauty

for measurement affects interpretation. I find that we have lost sight of the holistic approach of the early 20th century social agents towards Natural Beauty and their confidence that the actions of public bodies would protect it. These individuals recognised that Natural Beauty cannot be categorised, ranked, quantified, or measured and did not attempt to do so. The reframing of Natural Beauty as landscape in the 1970s did not solve the problem of its meaning or measurement and both *Natural Beauty* and *landscape* remain contested terms.

8.2 Why this study was needed and its contribution to the field

Although it was a rational choice at the time of the 1949 Act not to define Natural Beauty (Holdaway 2007), such vague concepts do not sit comfortably in our more siloed public sector policy environment. It has been argued (Kuuliala 2017; Mc Morran, Price & Warren 2008) that it is difficult in public policy to pursue a strategy for something which is ill-defined and as a result it becomes side-lined. This is amply illustrated by the inconsistent approach to Natural Beauty in public policy today. In planning, Natural Beauty is treated as mostly perception-based ‘landscape’, meanwhile, in relation to land management policy the focus is almost entirely on biodiversity and environmental condition. Revised national management plan guidance for AONBs and National Parks, currently in draft¹³¹, suggests Natural Beauty should be interpreted mostly in perceptual terms as ‘special qualities’ which are valued by people (although whose voices should be heard and how disagreement is resolved is unclear), yet mandatory outcome targets are skewed towards environmental condition. At the root of the problem is a lack of theory together with a necessary set of clearly defined terms and relationships.

¹³¹ Draft circulated by NE to steering group and Lead officers, 6th September 2023.

While much has been written about the National Park movement generally, and considerable legal energy has been expended on arguments about Natural Beauty and designation boundaries, few studies have addressed the meaning of *Natural Beauty* directly. This thesis builds on Selman and Swanwick's (2010) 'modern' understanding of Natural Beauty to explore how the term was understood at the time the legislation was enacted. As such it addresses a gap in the field that has persisted since 1949. Recognising, as Jenkins (2020) suggests, that the starting point should be an interrogation of Natural Beauty as an aesthetic concept, it builds a theoretical framework of understanding reflecting the intentions of the 1949 Act and presents this as a simplified model which can form the basis of democratic and transparent regulation and provide support for policy implementation. In doing so it addresses the concerns of earlier authors (e.g., Kemal and Gaskell 1993; Born 1974) about the poor conceptualisation of Natural Beauty and lack of theory underpinning its measurement.

8.3 The implications for theory, policy, and practice

As the thinking about Natural Beauty became solidified in the latter part of the 20th century within the relatively narrow discipline of landscape, the holistic and non-instrumental perspectives associated with beauty were lost. Reformulating the interpretation of Natural Beauty to reinstate these perspectives may encourage a myriad of other disciplines which intersect with Natural Beauty such as philosophy, landscape ecology, social science, and archaeology to re-engage with the idea of Natural Beauty and bring new thinking and different perspectives to bear on its conservation and enhancement.

The theoretical model for Natural Beauty proposed in this study (see chapter 3) demonstrates key differences from the models currently used in policy and practice which originate in landscape assessment. The new model's landscape/countryside is dynamic, and its character is totemic and symbolic – more personality than portrait – and not intended to be

systematically deconstructed into visual units as it is today in landscape assessment (see chapter 6). In 1949, this character was perceived as ‘natural’ but was understood as being crafted over centuries by invisible human hands, creating a harmonious whole from the combined work of nature and people. These were recognised as cultural landscapes with buildings and settlement, people and their traditional interactions with land/water, also seen as integral to Natural Beauty. Preservation of species, habitats and the processes which support them are fundamental principles of designation, and the setting up of a separate body for their conservation does not negate their role in Natural Beauty. All these factors combine at multiple scales and are not to be weighted separately and balanced against each other as they frequently are in planning decisions today.

Perhaps the most fundamental challenge to current norms in public policy emerging from this study is that *Natural Beauty* requires decision-makers to embrace the emotional aspect of aesthetic experience in an equal fashion to the consideration of physical attributes (see chapters 3 and 5). Peoples’ enjoyment of nature tends to be overlooked in AONB decision tools and where it is, for example LVIAAs, the focus is on visual issues and expert interpretation (see chapter 6). It is viewed as central to the National Parks second purpose and desirable for AONBs, yet in current policy it does not sit comfortably within the Natural Beauty purpose itself. I argue that this is incorrect. If the Act’s intent had been purely preservation and enhancement of physical attributes, other terms such as *landscape* or *countryside* were available within the foundational reports. However, it was *Natural Beauty*, with its associated ideas of disinterested pleasure and moral good, that was chosen. The architects of the 1949 Act did not expect citizens to be directly involved in selecting areas for designation as we might today. They did consider that people’s enjoyment and the ability of areas to facilitate fair access to nature were part and parcel of Natural Beauty, and even that the experience of Natural Beauty might be conducive to a richer more meaningful life (see Scriptor 2023).

Critical to maintaining a focus on Natural Beauty in policy is continued use of the term in legislation. This study demonstrates that the 1949 Act's interpretation of Natural Beauty was a broad one encompassing everything that the Landscapes Review sought to add to the purpose through extending it to read 'recover, conserve and enhance natural beauty, biodiversity and natural capital, and cultural heritage'¹³² (Glover 2019, p. 38). An alternative to amending the purpose (which would require primary legislation) is the production of government guidance (e.g., a Circular¹³³) on the scope of the term and its application in land use policy across 24.5% of England. This study provides the evidence to underpin such guidance.

While the theoretical model proposed in chapter 3 will need further validating against real world AONBs¹³⁴, it also has the potential to provide the theoretical underpinning for new guidance and assessment approaches for planning and policy. As Campbell (2002) explains, normative ideas such as the mental switch that replaces Natural Beauty with landscape, along with the related programmes that have embedded this in policy (see chapter 4), are unlikely to be easily shifted. For a new model of Natural Beauty to be adopted, many different players across the AONB policy field will need to be persuaded to change (see chapter 7). Individual academics and policy actors who claim expertise in the field will need to promote the language of beauty, coalitions of support will need to be built and 'strategically disobedient' practitioners will need to embrace a Natural Beauty perspective and demonstrate its benefits. The study suggests that much energy and enthusiasm in the sector may have been dissipated through lack of theory and the consequential re-inventions of the wheel in practice. However, a more consistent theoretical underpinning may be welcomed. Chapter 7 illustrates that in terms of practice, the language of beauty is a latent force in decision-makers, but organisational cultures

¹³² Arguably, 'recover' is also not required since Huxley's confirmation of an intended 1940s baseline suggests that enhance – to a 1940s baseline – could do just as well.

¹³³ A written statement of government policy including guidance, rules and background information.

¹³⁴ For example, by testing its use to define Natural Beauty as a basis for management prescriptions.

do not currently foster its use. Engaging with citizens to bring their experiences of beauty to bear on decisions, acknowledging the emotional dimension of Natural Beauty, and being comfortable with uncertainty will require guidance and tools tailored to the needs of decision-makers, and cognizant of their time and resource constraints. Government, the National AONB team and scholarly interests have a role to play here.

Decades of targets and monitoring has produced little discernible improvement in the state of nature and the legacy of environmental damage likely to be left to future generations (see e.g., Rigal et al. 2023) despite clear warnings provided as early as the 1980s¹³⁵. Government continues to argue that the problem is targets which are not ambitious enough, although others point to Government failure to legislate, regulate, and enforce (Monbiot 2022). An amendment to the Levelling Up and Regeneration Bill, agreed by the House of Lords on 13th September 2023¹³⁶, would – if implemented – add new duties on management plans to include national net zero and nature targets, although the Bill also appears to accept that targets alone cannot drive success, proposing that stronger regulation is needed to ensure compliance by public bodies (although how that might work and be enforced remains unspecified). It is clear from chapter 7 that decision-makers have an instinctive sympathy for the beauty of the natural world but need clear guidance and regulations to operationalise this. The 1949 Act's ambition is predicated on the modern precautionary principle of 'do no harm' which requires informed decision-making. This study provides the evidence and information to underpin Barber's (2017) suggestion that improving knowledge and understanding of the policy purpose amongst decision-makers is likely to have a more positive effect on policy success than new targets.

¹³⁵ see e.g., Brundtland Report, Our Common Future 1987.

¹³⁶ <https://bills.parliament.uk/publications/49859/documents/2958> (Amendment 387).

Today the Landscapes Review's (Glover 2019) recommendation that AONBs are renamed as 'National Landscapes' have been accepted by Defra and the body representing AONBs (NAAONB). Landscape has now become the 'raw material' for designation, previously identified by Hobhouse as 'the countryside' (NPCe 1947). Perhaps with *landscape* now firmly anchored to the idea of place, Natural Beauty as the quality emerging from people's interaction with it can finally become the focus of policy attention.

8.4 Opportunities for future research

The paucity of scholarship related to Natural Beauty in particular and AONB policy more generally suggests that the scope of further scholarship is considerable. Four issues in particular merit further study. Firstly, the role of beauty in people's experience of nature/landscape. This study illustrates that participative engagement techniques work well to capture information about people's aesthetic experiences. Further study could widen and refine the range of techniques employed, extend these to outdoor aesthetic experiences, building on Nettleton's (2015) work with fell-runners, and expand the communities studied, in particular to land managers and residents. Refocusing Natural Beauty on land rather than landscape has helped recognise the importance of engaging with certain hard-to-reach groups whose traditional and indigenous knowledge about land management practices and the effects of interventions are critical to its conservation (Slatto et al. 2021). A wider understanding of different user groups' aesthetic experiences in nature/landscape could help improve planning and policy assessment techniques which seek to take citizens views into account.

Secondly, harnessing new technologies and new ways of working to support the establishment of a baseline and Natural Beauty outcomes framework to assess the effectiveness of the designation purpose. Chapter 5 recognises that we are at an inflexion point in relation to information about the state of the natural world. A transformation in computing power, remote

sensing, AI, and citizen science is likely to provide more rapid information to decision-makers and enable more consistent longitudinal studies to help refine policy. While this study recommends that hard thinking, informed and knowledgeable decision makers and participatory decision-making are critical for preserving and enhancing Natural Beauty, information on the state of the natural world is also necessary and outcome targets will remain a part of public policy in the foreseeable future¹³⁷. The theoretical model for Natural Beauty proposed in this study offers a structure for considering the scope and conditions for Natural Beauty outcomes separately from those considered for nature or landscape. Baselines assessment could include spatial analysis using historic map regression and aerial images to build a picture of the time depth of land cover pattern up to the point of designation, and this could be enriched by environmental data and first-person experience gleaned from literature and archive material. Reference states could be explored through surveys of sample sites where traditional interactions have been maintained.

Thirdly, the use of language in landscape policy and assessment could be interrogated with a view to building an agreed vocabulary and set of definitions. An interdisciplinary study exploring how pattern and form in the natural world are described linguistically and mathematically would be particularly useful in assessment and monitoring of land cover patterns at multiple scales.

The current focus on the poor state of nature and access to it in designated landscapes prompts a question – whether the elevation of designated landscapes as desirable places to experience Natural Beauty has helped to conceal the failure of town planning more generally

¹³⁷ The Levelling Up and Regeneration Bill currently going through parliament will mandate a form of environmental outcome reporting. See DLUHC – Consultation on Environmental Outcomes Report: a new approach to environmental assessment, 17 March 2023, and Consultation on implementation of plan-making reforms, 25 July 2023 (www.gov.uk).

to secure accessible Natural Beauty in urban areas. The fourth issue that would merit further study involves exploring the conservation of Natural Beauty in relation to the application of planning and urban design policies. Closely associated with this challenge is the idea of creating new Natural Beauty in the countryside, a proposition Dower and William-Ellis associated with good design. Analysing how and why traditional buildings and settlement patterns (components of place specific character) tend to foster Natural Beauty while current approaches mostly fail, would be invaluable to inform good design and assist designated landscapes respond to the future needs of society while meeting societies' ambition to preserve Natural Beauty.

8.5 Natural Beauty – a term fit for the 21st century

Remarkably *Natural Beauty* has persisted in legislation for 70 years surviving major societal changes. Despite its longevity, it continues to be relevant to land use decisions today across nearly 25% of England. Consideration of Natural Beauty forces us to employ all of our senses to engage with the natural world – to ‘tune in’ to nature. The emotional and cognitive dimensions of Natural Beauty prompt us to delve more deeply into our connectedness to land and reflect on our cultural ties with it, severed for most people during the 20th century. Areas preserved for their Natural Beauty retain a strong cultural imprint from a time before the Anthropocene when people's interaction with nature in the countryside could still be characterised by Bourne's term ‘human fauna’ (1956, p. 71). Landscapes were shaped by human labour rather than fossil fuels. Interventions by their very human scale created small-scale heterogeneity and often stable temporal patterns of change. Contemplating what was, at that point, the baseline for the 1949 Act's Natural Beauty reminds us of what an ecologically healthy, zero carbon environment might look like.

While data can provide vital information about the state of the natural world, no amount of measurement or accounting will restore Natural Beauty. This requires us to break our habit

of over-simplifying and systemising policy implementation mechanisms and collaborate more actively with nature in the decisions we make. Bringing beauty to the fore prompts a different approach to decision-making. In the absence of easy measures, Brady (2003) suggests that beauty forces hard thinking, and this is what tackling the interlinked biodiversity, climate and inequality crises requires. The integrative nature of Natural Beauty also encompasses multiple perspectives – insider/outsider; citizen/expert; urban/rural; nature/people; current generations and future ones – and bringing these together requires public sector actors to work more creatively to deliver representational engagement of citizens, and nature itself, in decisions. This opens the door for new techniques suitable for the task to be developed which recognise that Natural Beauty is a complex system and long-term thinking is required (see e.g., Burks & Saltmarshe 2020). Head and Xiang (2016) advocate an APT approach (Adaptive, Participatory and Transdisciplinary) which encourages building social capital and trust through engagement with communities to allow innovative and experimental solutions to emerge.

The main theme of this study is eloquently summed up by Aldo Leopold who considered that it was the Abrahamic concept of land as a commodity belonging to us that explained why ‘conservation was going nowhere’ (1949, p. viii). He was blunt about the solution, ‘quit thinking about decent land use as solely an economic problem’ (1949 p. 224). For Leopold, beauty stood alongside economics and ethics as founding principles of society and he suggested an alternative approach,

‘Examine each question in terms of what is ethically and aesthetically right, as well as what is economically expedient. A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise’ (1949, p. 224).

Re-engaging with the idea of Natural Beauty at the centre of AONB policy goes some way towards meeting Leopold’s challenge.

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Appendix 1: Survey Questionnaire



Planning policy and countryside beauty survey

Page 1: About the survey

Welcome to the planning policy and countryside beauty survey. This survey is aimed at local authority planning officers and members, parish councillors, government agencies, community groups, residents and anyone else involved in planning decisions that affect the countryside and the beauty of nature.

With your participation we hope to build up a more detailed picture of how people respond to beauty in the countryside and the effectiveness of the AONB designation in protecting it. The results gathered will be used to inform reports and strategies concerning public policy and beauty in the countryside.

The survey takes about 15 minutes to complete. Every response really counts, and your assistance would be greatly appreciated. Please complete your response by Monday 13th July.

This is an anonymous survey and no personal information is collected. Individually identifiable data will not be used or published. You can withdraw at any point while completing the survey by exiting or logging out.

The survey is being conducted as part of a PhD research project. It is funded by the lead researcher and has been ethically approved by the University of Kent.

If you require further information please do not hesitate to contact Sally Marsh: Sem50@kent.ac.uk

Thank you for taking part in this study.

1. Please tick the box to confirm that you are happy to participate in the survey * Required

I am happy to participate in the survey. I am taking part voluntarily and I understand I can withdraw at any point until I submit the survey

1 / 14

- Extremely important
- Very important
- Somewhat important
- Not so important
- Not at all important

5.b. To what extent do you agree or disagree with the following statements?

Please don't select more than 1 answer(s) per row.

	Agree strongly	Tend to agree	Neither agree nor disagree	Tend to disagree	Disagree strongly
Neat and tidy places tend to be more beautiful than messy ones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beautiful places make people feel happier	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beauty is in the eye of the beholder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public policy should not concern itself with beauty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Everyone should have an equal right to beauty whatever their income	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Thinking about the last time you noticed beauty in any aspect of the UK countryside, what was it that struck you as beautiful?

6.a. What did you feel when you noticed this beauty?

3 / 14

Page 2: Beauty and the countryside

2. What TWO or THREE words do you most closely associate with beauty?

3. In your opinion, how important is beauty to the sum of human happiness?

- Extremely important
- Very important
- Somewhat important
- Not so important
- Not at all important

4. Thinking about your own experiences, in which TWO of the following do you notice beauty most often? Rank in order of importance where 1 is 'most likely' and 2 is 'second most likely'.

Please don't select more than 1 answer(s) per row.

	1	2
Visual art, performance art or music	<input type="checkbox"/>	<input type="checkbox"/>
Nature and the environment	<input type="checkbox"/>	<input type="checkbox"/>
Fashion or designed products	<input type="checkbox"/>	<input type="checkbox"/>
Other people	<input type="checkbox"/>	<input type="checkbox"/>
Buildings and architecture	<input type="checkbox"/>	<input type="checkbox"/>
Poetry, ideas or philosophies	<input type="checkbox"/>	<input type="checkbox"/>

5. Where in the world is the most beautiful place (or places) that you have experienced?

5.a. How important is it to your wellbeing to be able to experience beautiful places?

2 / 14

6.b. What were you doing at the time?

7. How often do you notice beauty in the countryside?

- Multiple times per day
- Most days
- Weekly
- Occasionally
- Rarely
- Not at all

8. How important are the different senses to your experience of beauty in the countryside?

Please don't select more than 1 answer(s) per row.

	Extremely important	Important	Somewhat important	Not so important	Not at all important
Feel (e.g. of sun, rain or wind on your skin)	<input type="checkbox"/>				
Sound (e.g. of birdsong, water, wind)	<input type="checkbox"/>				
Sight	<input type="checkbox"/>				
Smell (e.g. of flower scent)	<input type="checkbox"/>				
Taste (e.g. of hedgerow blackberries)	<input type="checkbox"/>				
The sensation of movement in your limbs or body	<input type="checkbox"/>				

9. How, in your opinion, could your local countryside be made more beautiful?

4 / 14

9.a. What would spoil the beauty of your local countryside for you?

10. Who, in your opinion, has most influence on the beauty of your local countryside?

11. Is there anything that you see, hear or experience in the countryside that gives you a real sense of wildness or naturalness?

12. Which of these features *could* you describe as having 'natural beauty'? Please tick ALL that apply.

- | | | |
|---|--|--|
| <input type="checkbox"/> Ancient woodland | <input type="checkbox"/> Field of wheat | <input type="checkbox"/> Hedgerows |
| <input type="checkbox"/> Hand-made clay tiles | <input type="checkbox"/> Orchard | <input type="checkbox"/> Cottage garden |
| <input type="checkbox"/> Pond | <input type="checkbox"/> River | <input type="checkbox"/> Windmill |
| <input type="checkbox"/> Village High Street | <input type="checkbox"/> Holloway or sunken footpath | <input type="checkbox"/> Wildflower meadow |
| <input type="checkbox"/> Pasture (a field of grass) | <input type="checkbox"/> Cattle and sheep | <input type="checkbox"/> Traditional farmstead |

5 / 14

- Slightly effective
 Not at all effective
 Don't know

15.a.i. Why? Please explain briefly.

16. Do you believe that local planning authorities have sufficient powers to protect AONB countryside from harm?

- Yes
 No
 Maybe
 Don't know

16.a. What, if anything, would improve local authorities' ability to protect AONB countryside from harm?

17. In your opinion, which of these interests should take priority in land-use planning decisions that affect an AONB? Please rank in order of importance where 1 is most important, and 5 is least important.

Please don't select more than 1 answer(s) per row.

	1	2	3	4	5
Local communities	<input type="checkbox"/>				
Farmers and landowners	<input type="checkbox"/>				

7 / 14

Page 3: Planning and Areas of Outstanding Natural Beauty (AONBs)

13. What is your current relationship with AONBs? Please tick ALL that apply.

- | | | |
|---|---|--|
| <input type="checkbox"/> AONB resident | <input type="checkbox"/> AONB visitor | <input type="checkbox"/> Local authority member |
| <input type="checkbox"/> Local authority officer – planning | <input type="checkbox"/> Local authority officer – other | <input type="checkbox"/> Parish council member |
| <input type="checkbox"/> Neighbourhood Plan Committee member | <input type="checkbox"/> AONB partnership member | <input type="checkbox"/> AONB partnership staff |
| <input type="checkbox"/> Farmer or land manager working in an AONB | <input type="checkbox"/> Tourism business located in an AONB | <input type="checkbox"/> Charity or third sector organisation dealing with AONBs |
| <input type="checkbox"/> Government department or agency dealing with AONBs | <input type="checkbox"/> Planning or other specialist consultant dealing with AONBs | <input type="checkbox"/> AONB supporter |
| <input type="checkbox"/> None | | |

14. Do you currently live in an AONB?

- Yes
 No
 Don't know

15. The purpose of AONB designation is to conserve and enhance natural beauty. What in your opinion, is meant by the term 'natural beauty'?

15.a. In your opinion, how effective has the designation been in achieving its purpose?

- Extremely effective
 Very effective
 Moderately effective

6 / 14

Visitors	<input type="checkbox"/>				
Future generations	<input type="checkbox"/>				
Society as a whole	<input type="checkbox"/>				

18. To what extent do you agree or disagree with the following statements?

Please don't select more than 1 answer(s) per row.

	Agree strongly	Tend to agree	Neither agree nor disagree	Tend to disagree	Disagree strongly
In an AONB, the environment should take priority over housing development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beauty is given appropriate weight in planning decisions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If development is hidden by trees it can't harm natural beauty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The design of new development is generally better within AONBs than outside of them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

19. Local government functions are wide-ranging and include social care, planning, environment, waste, education and children's services. In which of these local government functions should AONB issues be considered?

20. To what extent, in your opinion, do the following policies or documents influence AONB decision-making in planning?

Please don't select more than 1 answer(s) per row.

8 / 14

	A great deal	A lot	A moderate amount	A little	Not at all	Don't know
AONB Management Plans	<input type="checkbox"/>					
National Character Assessments	<input type="checkbox"/>					
National Planning Policy Framework	<input type="checkbox"/>					
Landscape Assessments and sensitivity studies	<input type="checkbox"/>					
Defra 25-Year Environment Plan	<input type="checkbox"/>					
Defra guidance on Section 85 of the Countryside and Rights of Way Act	<input type="checkbox"/>					

21. To what extent do you agree or disagree with the following statements?

Please don't select more than 1 answer(s) per row.

	Agree strongly	Tend to agree	Neither agree nor disagree	Tend to disagree	Disagree strongly
I am confident that I understand AONB issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have little or no influence on decisions affecting AONBs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Through my everyday actions I can help enhance natural beauty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Planning policies are inadequate to protect beauty in the countryside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9 / 14

Creative activities in a countryside setting e.g. painting	<input type="checkbox"/>				
Visiting countryside sites or historic gardens	<input type="checkbox"/>				
Land management tasks or growing food	<input type="checkbox"/>				
Fieldsports	<input type="checkbox"/>				
Recoding or observing wildlife	<input type="checkbox"/>				
Job-related outdoor activities or site visits	<input type="checkbox"/>				
Golf	<input type="checkbox"/>				

26. To what extent do you agree or disagree with the following statements?

Please don't select more than 1 answer(s) per row.

	Agree strongly	Tend to agree	Neither agree nor disagree	Tend to disagree	Disagree strongly
My ideal vacation spot would be a remote, wilderness area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I always think about how my actions affect the environment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My connection to nature and the environment is a part of my spirituality (either in a religious or non-religious sense).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I take notice of wildlife wherever I am.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My relationship to nature is an important part of who I am.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11 / 14

Page 4: About you

22. Age

- 18-30 31-40 41-50
 51-60 61-70 70+

23. Gender

- Female Male Prefer not to say
 Other

24. How would you describe your ethnicity?

25. How often do you spend time in the countryside engaged in the following activities?

Please don't select more than 1 answer(s) per row.

	3-7 times a week	Once or twice a week	At least once a month	Occasionally (less than once a month)	Never
Dog walking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walking or hiking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Travelling through the countryside by car, bus or train	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Active sports such as running, cycling, climbing, horse-riding or watersports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10 / 14

I feel very connected to all living things and the earth.	<input type="checkbox"/>				
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27. Please indicate your level of completed studies

	Yes?	Please specify subjects
Vocational qualifications	<input type="checkbox"/>	<input type="text"/>
University	<input type="checkbox"/>	<input type="text"/>
Masters/ Doctorate	<input type="checkbox"/>	<input type="text"/>
Other	<input type="checkbox"/>	<input type="text"/>

28. Membership of a professional body? Please tick all that apply.

- Landscape Institute
 RTPI
 CIEEM
 Other

28.a. If you selected Other, please specify: *Optional*

29. Where is your home now and where did you grow up?

Please don't select more than 1 answer(s) per row.

	City	Town	Suburbs	Village	Farm or open countryside	Remote rural	Coastal	Prefer not to say
Now	<input type="checkbox"/>							
Growing up	<input type="checkbox"/>							

12 / 14

30. Has your experience of the Coronavirus pandemic changed how you view any aspect of beauty in the countryside?

30.a. In your opinion, will the Coronavirus pandemic effect public attitudes to beauty and the countryside in the future?

31. Are there any other comments you would like to make about any subjects covered in this survey?

Page 5: Final page

Thank you for completing this survey. Your help is much appreciated.
