Facts and Fictions: Emotional Authenticity and Narrative in Natural History Exhibitions

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Abstract

This article explores the role of narrative in the generation of emotional authenticity, a feeling that something is real or true, arguing that the fictive (the structures of literature) can work to obscure the fictions (what is invented or untrue) at work in all museum displays. By looking at two natural history exhibitions with varying levels of cultural authority, the Natural History Museum in London and the Loch Ness Centre in Scotland, this article argues for the need for literature and science to work together in museums to create an emotionally authentic experience for visitors.

Keywords: Authenticity, Post-Truth, Narrative, Loch Ness Centre, NHM

Public trust in museums is, according to a study by the American Alliance of Museums, largely based on the perception that museums are 'fact-based' and present 'real/original/authentic objects'.[1] The former I will call "factual authenticity", the truth of the information presented, and the latter "material authenticity". Contanze Hampp and Stephan Schwan define a materially authentic object as one that 'has evolved in the real world or has been produced for certain real-world purposes' (Hampp and Schwan 2015: 163). Therefore, Hampp and Schwan use "authentic" and "original" interchangeably. This form of authenticity inheres in material qualities of the object, which should be scientifically or historically verifiable. Indeed, the above study found that the belief that museums are 'research-oriented' further contributed to public trust.[2] Although the Nara Document on Authenticity (1994) notes that authenticity in heritage can manifest in a variety ways, related to 'form and design, materials and substance, use and function, traditions and techniques, location and setting, and spirit and feeling', the above survey suggests that museum visitors expect to encounter materially and factually authentic objects in museums.[3] In fact, Hampp and Schwan found that most museum visitors assume they are viewing a materially authentic or original object *because the object is in a museum*, and thus will overlook a label indicating that an object is a replica (Hampp and Schwan 2015: 170). Visitors assume that objects in museums have been subjected to scientific scrutiny and verified as authentic, in terms of originality or relationship to the real world (Jones 2010: 192). Institutional authority is therefore an important contributor to public trust.

Despite these visitor expectations, all museums employ some degree of artifice in their displays, which are often at least partially the result of conjecture and speculation. For example, a visitor to a natural history museum might assume that the articulated skeletons on display are comprised of the authentic bones (or fossilized bones) of once-living animals. However, display skeletons are often casts and are at times the product of speculation rather than objective fact. Take, for example, the cast of a Titanosaur exhibited at the Natural History Museum in London between 2023 and 2024. No skull from the *Patagotitan mayorum* has yet been found; the skull displayed was therefore a work of scientific speculation, modelled on the skulls of related species like the *Sarmientosaurus* and *Tapuiasaurus* (a fact not mentioned in any of the exhibition's promotional material, although indicated visually on a label within the exhibition).[4] This form of artifice is commonplace, but can seem particularly fraught in natural history or science museums, which promise audiences objective facts (see, for instance, the

Field Museum's 2017 Facts Matter campaign).[5] Yet, as I will argue, exhibits lacking in either material or factual authenticity, such as the Titanosaur exhibition, may still *feel* authentic to visitors due to a combination of factors, including institutional authority, plausibility, personal connection, and – the central focus of this article – underpinning narrative structures. This article, therefore, is part of the wider 'affective turn' in museum studies, putting emotion and its role in shaping visitor experience at the fore (Varutti 2022: 63). I will use an idea of "emotional authenticity" to answer a question posed by Lynn Nyhart: 'which products of art and artifice [are] to be allowed in the name of legitimate verisimilitude, and when was the line crossed into illegitimate artificiality?' (Nyhart 2004: 308). I suggest that in natural history and science museums, artifice becomes 'legitimate' (that is, not at odds with visitor expectations about the authenticity of exhibits) when employed to bolster the overall scientific message of an exhibition. When it fails to do so, artifice appears 'illegitimate'.

In posing this question, Nyhart acknowledges that 'products of art and artifice' are often employed to create a *feeling* or *impression* of 'verisimilitude' that does not stem from either the material or factual authenticity expected by audiences, drawing a distinction between what is deemed to be factually accurate by the 'scientist-producer' of an exhibition, and what is 'felt to be true in the breast of the viewer' (Nyhart 2004: 319). Recent scholarship agrees that visitors to museums and heritage sites may experience a feeling of authenticity that is unrelated to the originality, rarity, or real-world use of an object or site (Smith, 2006; Jones, 2010; Bagnall, 2015; Penrose, 2020). This feeling, which may be generated by a number of different aspects relating to an object, site, or display, is what I will here term "emotional authenticity". Jan Penrose, for instance, attributes this feeling to personal 'connection' or 'engagement' or 'empathy' (Penrose 2020: 1247). Similarly, Siân Jones discusses a form of authenticity experienced as a 'magical, almost numinous aura' which results from 'networks of relationships between people, objects and places' (an individual's 'personal investment in and cultural proximity to' the object), which is unrelated to data derived from authenticating processes such as 'thermo-luminescence and radiocarbon dating, investigation of stratigraphy and archaeological context, and analysis of the physical fractures and modifications evident' (Jones 2010: 190-5). Gaynor Bagnall terms this 'emotional realism', a feeling of authenticity in which 'meaning is achieved through constructing a plausible experience, rather than presenting a series of facts' (Bagnall 2015: 88-90). Each represents a form of what Marzia Varutti terms 'affective curatorship', or 'curatorial approaches specifically aiming to affect visitors emotionally' (Varutti 2022: 61). And yet, while Penrose points to empathy, Jones considers personal connection, and Bagnall looks at plausible experiences, all discuss the material more widely (in the form of reproductions, actors, or the aura of place). I add to this discussion by suggesting that one of the major, under-explored products of art that creates emotional authenticity in science and natural history museums is both immaterial and subtextual: literature, or the structures of fiction. As Gillian Beer argues in her seminal book *Darwin's Plots*, 'most major scientific theories rebuff common sense' and thus require imagination to grapple with and eventually accept (Beer 2000: 1). Beer notes that 'when first advanced, theory is at its most fictive'; this is not to say that it is *fiction*, but that it is 'akin to fiction' in that it asks us to imaginatively bridge the gap between the world 'as it is currently perceived and as it is hypothetically imagined' in the new science (Beer 2000: 1). In order to do so, scientific communication routinely draws upon 'metaphors, myths, and narrative patterns' that are familiar to an audience in order to express new ideas (Beer, 2000: 5). In this article, I will suggest in particular that familiar 'narrative patterns' are employed in most natural history and science museums to help guide visitors' understanding and interpretation of exhibits. Natural history or science museums are thus sites where literature and science inherently entwine.

By exploring the literary devices at work in two very different institutions, with very different relationships to legitimacy – the Natural History Museum in London, and the Loch Ness Centre and Exhibition in Drumnadrochit, Scotland (hereafter the NHM and LNC) – I will demonstrate the ways in which the fictive (relating to the writing of fiction) can help to generate *feelings* of authenticity even when something is fictional (invented or untrue), but also explore how and when the fictive crosses into what Nyhart terms 'illegitimate artificiality'. I will do this through a close reading of both exhibitions, including wall text and labels, audio-visual

material, the placement of objects, and the inclusion and construction of models within the exhibitions. I will additionally consider the reception of both exhibitions. In the case of the LNC, I will make use of reviews of the Centre posted to Trip Advisor and Google. There are no equivalent visitor reviews of the Human Evolution gallery in the NHM (my focus in this article), perhaps due to its small size within the overall exhibition space of the NHM. I have thus focused my analysis on the museum's own promotional material, including curatorial perspectives on visitor response, and the representation of the gallery in the popular press.

Materiality, Authenticity, and Narrative

While emotional authenticity can result from objects and displays that are also materially and factually authentic, each of the above scholars argues that it is possible for a person to experience a similar feeling of authenticity in relation to a reconstruction or replica as they would an original artefact. Thus, Nyhart discusses models of extinct life, which are necessarily 'a product of the artist's imagination' (Nyhart 2003: 318); Jones considers a modern reproduction of a Pictish slab, which was the result of 'artistic license' as the original was known only through fragments (Jones 2010: 196); Bagnall discusses 'real coal in a plastic mine' (Bagnall 2015: 90); while Penrose examines the use of 'facsimiles' in house museums, as well as the incorporation of videos of actors portraying the house's inhabitants (Penrose 2020: 1257, 1262). Models, reproductions, facsimiles, and actors all look like the "real thing" and thus help to generate the *feeling* of authenticity, even though they are not materially authentic (in terms of originality) or factually authentic (as they may be based on guesswork or artistic license). As Gaby Porter suggests, 'much of what we present as knowledge in collections and exhibitions is speculative – yet, when attached to material, physically evident, objects, it "reads" as known, certain, authoritative' (Porter 2012: 65).

Historically, museums have distinguished between 'iconic' and 'indexical' displays, terms coined by the nineteenth-century philosopher Charles Sanders Pierce, in which indexical objects represent 'a material trace of the past', while iconic displays offer a mere likeness, like a portrait (Rieppel 2012: 462-4). Yet this distinction suggests a binary within museum displays that does not actually exist. In reality, many displays blur the line between the indexical and the iconic. In the case of taxidermy, for example, the authenticity of the skin or feathers reads as "the real thing", yet taxidermy is an art form, a type of sculpture, and thus involves both artistic practice and non-biological materials like plaster, wire, glass, and more. Equally, the arrangement of the natural material within taxidermy displays makes certain biological or ecological claims, such as what the animal ate, or how it slept, or the organisation of its family groups (Alberti 2005; Machin 2008; Alberti 2011; Syperek 2015). Santos Casado thus notes that 'truthfulness' as judged by 'material authenticity' (on which taxidermy would score quite well) is different from truthfulness in terms of factual authenticity, or 'accuracy, correspondence, coherence, or other possible criteria', criteria by which any individual taxidermy display may or may not perform well (Casado 2020: 364). The material authenticity of skin or feathers may disguise the factual inauthenticity of the claims a display makes. Moreover, within the galleries of many natural history museums, "real" taxidermy is intermixed with models, like the blue whale or the *Tyrannosaurus rex* displayed at the NHM. Models may be highly realistic – although this depends on artistic skill and the quality of the materials – but they lack material authenticity. For models of extinct animals such as dinosaurs, authenticity is even more problematic. As Lukas Rieppel notes, curators have 'no direct observational access' to these 'strange and long-extinct animals', and thus the construction of both models and articulated skeletons relies on 'a great deal of contested knowledge about the anatomy, life history, and behaviour' of the animals (Rieppel 2012: 461). For this reason, Will Tattersdill argues that all reconstructions of extinct life are themselves a form of science fiction (Naish and Tattersdill 2021). The models used in natural history museums are iconic, lacking in material authenticity, but also potentially lacking in factual authenticity, in 'accuracy, correspondence, coherence', as Casado puts it. Nevertheless, they are capable of generating a feeling of emotional authenticity, e.g. "I am certain this is what a dinosaur looked like", even when the model is scientifically inaccurate or outdated (for instance, models of theropods lacking feathers, as is the case of the *T-rex* displayed at the NHM).

While the materiality of models has received a significant amount of scholarly attention, less attention has been given to the narratives that underpin the display of these materially inauthentic objects, which contribute significantly to the feeling of emotional authenticity. Literary studies demonstrates that our understanding of the world is shaped, in part, by the stories we consume (Turner 1996; Tobin 2018). As Kamila Walker and Antonina Harbus put it, 'our intertextual, plot-oriented, and pattern-obsessed minds prod us to think – and to hypothesize – in terms of pre-established narrative frames' (2023: 79). These pre-existing frames are drawn from both life and fiction and we use them (largely unconsciously) to predict the structure and outcome of any narrative we encounter (Walker and Harbus 2023: 88). As Will Tattersdill and Verity Burke argue, the rhetoric of museums 'invites viewers to deploy their own imaginative processes, building a wider world on the basis of both the material on display and their prior experience with museums and fiction' (Burke and Tattersdill 2022: 314). Museums engage visitors using all three forms of 'immersion' theorized by the scholar of fantasy and science fiction Mark J.P. Wolf. They physically immerse us in the space; sensually immerse us through audio-visual displays; and they also *conceptually* immerse us (Burke and Tattersdill 2022: 320). This latter form, Wolf argues, is the kind of immersion achieved by fiction (Wolf 2012: 48). Importantly, the conceptual immersion that results from recognizing narrative patterns and textual cues and applying them to our understanding of a new narrative 'implicates the reader emotionally as well as cognitively' (Walker and Harbus 2023: 74-5). We do not just anticipate narrative outcomes, we become emotionally invested in those outcomes. For instance, in the case of the roaring animatronic *T-rex* in the NHM, the narrative of the *T-rex* as an apex predator (internalized by most children at a very young age from picture books and films) eclipses the scientific reality that these animals likely did not roar.[6] The roar *feels* authentic, even though it is not. I argue, therefore, that the narrative structures of fiction and the conceptual immersion that results from those structures work to disguise the fictive elements within museum display: a lack of material authenticity, gaps in scientific knowledge, as-of-yet unproven hypotheses or, in the case of the *T-rex*, that which is known to be inaccurate.

The Natural History Museum, London

To consider the ways in which narrative works to create emotional authenticity, even in the face of a lack of material or factual authenticity, I want to turn to the Human Evolution gallery at the NHM. This gallery explicitly tells a chronological story of development. The museum website promises that the gallery will allow visitors to 'embark on a seven-million-year journey, from the first hominins to the last surviving human species: us'.[7] The gallery is structured as a *bildungsroman*: a narrative that follows the development of a hero or heroine from childhood into adulthood, through a troubled quest for identity.[8] Thus, the gallery explores 'what makes us human'.[9] *Homo sapiens* are the hero of this story of development, which is embedded within the larger *bildungsroman* of the 'Earth's past' in the Earth Hall. Again, this exhibition promises a 'journey through Earth's past', a 545-million-year journey 'through time' which culminates in the evolution of man.[10] In this way, the whole of the Earth's history becomes *our* history, forging an emotional connection between visitors and the objects on display. Of course, much of what we "know" about the world 545 million years ago, or even seven million years ago, is speculative. The Human Evolution gallery does not disguise this fact. Many of the wall signs or labels include language of uncertainty: 'no one is certain', 'the precise details…are still uncertain', 'many gaps in our knowledge remain'.[11] Yet as Vera Tobin argues, 'our brains conspire with stories to knit material together and produce an illusion – or perhaps let's say impression – of continuity', which contributes to our sense of plot satisfaction (Tobin 2018: 2). In the Human Evolution gallery, the overall story *appears* cohesive, as the visitor is carried through the space by three large, illuminated signs: 'Meet the Hominins', 'Becoming Human', and 'What Makes us Modern Humans?' These create a clear narrative arc: we are introduced to the "characters" (hominins), who experience a significant narrative change, a *peripeteia* or turning point (becoming human), finally culminating in a "happy ending": humanity's 'modern' traits like bigger brains and sociality have 'made us remarkably successful as a species'.[12] The narrative structure of the *bildungsroman* smooths over any gaps in knowledge, presenting a

cohesive 'journey' through time, while imaginative immersion renders the visitor's experience emotionally authentic even when what they are viewing is really guesswork. The narrative structure of the *bildungsroman* and the emotional connection it creates helps to generate emotional authenticity that bolsters the perceived factual authenticity of the display.

The happy ending of this narrative is reinforced by the cranial models on display in the gallery. Created by Adrie and Alfons Kennis (the brothers behind Kennis & Kennis Reconstructions), these models 'have been reconstructed from fossil skulls, using 3D scans and detailed anatomical knowledge, to give an accurate impression of how they might have looked'.[13] The signage here emphasizes material authenticity, knowledge, and accuracy. However, these are still sculptures, and while they may accurately depict how these species 'might have looked' anatomically, they are also implicated in the wider story of the gallery through the artistic choices that the Kennis brothers have made and the positioning of the heads within the gallery. The reconstructions – which depict *Homo erectus, Homo antecessor, Homo heidelbergensis, Homo neanderthalensis, Homo sapiens*, and *Homo floresiensis* – are arranged in a row, demonstrating the development of the hominin species through time. Yet, *homo floresiensis* is positioned outside this line of descent. Equally, while the majority of the reconstructions are depicted smiling (from the slight smile of *Homo erectus* to the wide grin of *Homo sapiens*, represented by a thirteen-year-old child), *Homo floresiensis* has been sculpted with a sad expression, a slightly furrowed brow, beseeching eyes, and a tightly closed mouth. The signage tells us that '*Homo floresiensis* may have been the last non-modern human species to go extinct', yet 'the skull is more similar to humans living 1.5 million years ago than to modern humans'.[14] *Homo floresiensis* is presented here as the unsuccessful foil of *Homo sapiens*. Living at the same time as us, approximately 100,000–50,000 years ago, these small-brained, diminutive hominins did not achieve *Homo sapiens*' happy ending, and the sculpted expression of the model reflects this narrative.[15]

The labels on the skulls equally use linguistic cues to evoke an emotional connection between the display and the visitor. Each of the hominin species is referred to as 'it', until Neanderthal, our closest relation, who throughout the gallery is referred to as 'he', while the species is referred to as 'they'. Equally, all *Homo sapiens* are referred to with gendered pronouns. The difference is clear when we compare *Homo sapiens* to *Homo floresiensis*. We are told of the former that 'this modern human child was about 13 years old when *he or she* died', while the latter reports, 'mature teeth and the proportions of *its* skull suggest this human was a female who died in early middle age' (emphasis added).[16] While for *Homo neanderthalensis* we are told, 'they had a heavy brow ridge…but their brain was about as big as ours', the *floresiensis* label states that 'it was small, with a brain size similar to that of a chimpanzee. It may have used stone tools to butcher dwarf elephants where it was found'.[17] This language encourages the visitor to identify with the *Homo sapiens* and Neanderthals as 'our' relatives, while those hominins less closely related to us are dehumanized. As Rebecca Machin argues about pronoun use in natural history displays more widely, the use of 'it' converts the 'once living, gendered individual' into 'an object' (Machin 2008: 60). This labelling, alongside the gallery's overall structure of the *bildungsroman*, and the aesthetic choices made in the models, all serve to position *Homo sapiens* (and *Homo neanderthalensis*, whose DNA lives on in some modern humans) as the 'hero' of the gallery's story. This familiar story structure obscures gaps within the narrative, such as why *Homo sapiens* survived when the other hominin species did not.

Other forms of fiction beyond the *bildungsroman* are also at work in the Human Evolution gallery, including the world-building familiar to us from genres like science fiction and fantasy. The gallery makes use of all three of Wolf's forms of immersion: spatial, sensual, and conceptual. The latter, Wolf argues, relates in part to the level of 'detail and description' given; detail makes an imagined world *feel* real and thus allows a reader to vicariously enter into that world (Wolf, 2012: 48). The NHM website emphasizes the factual data underpinning 'the design of the gallery's models, created by the Kennis brothers, declaring that they are among 'the most scientifically accurate reconstructions that exist of a Neanderthal and early modern human', 'based on the very best scientific evidence [the museum researchers] could put together'.[18] Yet, of course, no living person has ever seen a Neanderthal or Cro-Magnon person, and thus, as Nyhart and others note, these sculptures are necessarily 'the product

of imagination' — what the museum website coyly calls 'aesthetic interpretation' (Nyhart, 2004: 318).[19] The word 'interpretation' deftly avoids the implication that the models are the result of invention or imagination, suggesting instead that the 'aesthetic' is both analogous to science (the museum employs a 'blend of scientific and aesthetic interpretation') and a form of analysis itself, grounded in raw data, an idea Adrie Kennis picks up on when he says that 'the scientists bring the knowledge and we make the characters'.[20] Here, he suggests 'character' follows on naturally from scientific data.

Elsewhere, however, the Kennis brothers are more candid about the role of invention in their work. In an interview with *The Guardian*, they admit that 'there are some things the skull can't tell you…you never know how much fat someone had around their eyes, or the thickness of the lips, or the exact position and shape of the nostrils.'[21] Yet, it is these aspects of the face that lend a 'personal quality' to the Kennis' models, as *The Guardian* argues, 'allow[ing] onlookers to glimpse human prehistory with immediacy, even familiarity'.[22] The immediacy and familiarity of the models is essential to the authenticity experienced by the visitor. As Chris Stringer, the research lead on Human Evolution at the NHM, insists: 'when [visitors] come face-to-face with the Neanderthal and Cro-Magnon men, people have as close as they can get to a real encounter. Their faces are really alive'.[23] By using this language, the museum encourages visitors to engage in imaginative time travel, taking themselves back seven million years; this is a form of imaginative engagement that is an inherent part of most natural history or science museums but that also generically aligns with science fiction and fantasy. Just as Wolf argues about science fiction and fantasy narratives, here it is the detail in the faces of the models that allows visitors to the gallery to "enter the imagined world" of a fictional time travel narrative, in which it is possible to meet your ancestors face to face, a plot familiar from popular films like *Back to the Future* and science fiction like Octavia Butler's *Kindred*. Yet, those details are products of the artists' imaginations.

The Guardian argues that it is these invented details that make the models so effective, as they appear to be 'a specific man or woman', rather than a 'generalised early man'.[24] Here we can see the way in which emotional authenticity can obscure gaps in factual accuracy and disguise a lack of material authenticity. While *The Guardian* emphasizes that these models appear to be specific individuals, the Cro-Magnon man is in fact a composite: the model is based on the famous Red Lady of Paviland, a partial skeleton missing a skull. Thus, the Kennis brothers combined the data from these bones with 'a roughly contemporaneous skull from… the Czech Republic'.[25] The "individuality" of their model is pure invention: no single individual in the past ever looked precisely like their Cro-Magnon man. Yet, the familiar narratives of science fiction, in which it is possible to travel through time to meet named individuals from the past, and the *bildungsroman*, which focuses on the development of the individual identity of its hero, alongside the conceptual immersion generated by the many details in the models, work to obscure the fact that these "individuals" are fictional.

The Loch Ness Centre and Exhibition

I turn now to the role of the fictive in a natural history collection that lacks the cultural and institutional authority of the NHM: the Loch Ness Centre, an exhibition which promises to 'explore the mystery and discover the history' of the famous lake and its even more famous (alleged) inhabitant.[26] Here, I will be discussing the LNC as it was until December 2022, under the direction of Adrian Shine (who also runs the Loch Ness Project). The Centre has since been sold to Continuum Attractions and has been redesigned. I was able to speak to Mr Shine in February 2022, to discuss the design of the exhibition under his leadership.

The LNC capitalized on the myth of the monster in order to draw in visitors, using Nessie, as Shine says, as a 'vehicle' to discuss geology, biology, physics, history, and more, under the guise of 'debate' about the monster's existence.[27] Alongside the obvious fiction of the monster, Shine employed some of the most commonly used techniques of modern museology to create an emotionally authentic experience for visitors which, as I have been arguing, are underpinned by the structures of literature and rely on the expectations and understanding of a literate audience. In the case of the LNC, the exhibition made use of dialogic labelling, polyvocality, audio-visual displays, and three-dimensional models, using these techniques in

order to convey the real history and science of the lake and the phenomenon of the "monster". Thus, where the Human Evolution gallery foregrounds science while telling a story, the LNC foregrounded story while communicating science. In this way, the LNC performed a bait and switch, drawing visitors in with the mystery of the monster, and then providing them with factual information about the formation of the lake and its ecology. While this created a positive experience for many visitors, online reviews indicate that a portion of visitors felt tricked by the LNC's marketing, with one complaining that there was 'too much scientific information and not enough excitement and intrigue',[28] and another writing, 'I appreciate the centre has to relay the facts but I did leave feeling quashed'.[29] Here we can see that for some of the LNC's visitors, 'facts' and 'information' are in tension with 'excitement and intrigue'. For another subset of visitors, the LNC's willingness to engage with the phenomenon of the monster undermined the exhibition's overall factual authenticity.

The LNC's use of the Nessie myth is a good example of modern 'edutainment', the incorporation of storytelling, interactivity, and playfulness into the museum (Balloffet et al. 2014: 4-18). Playfulness is often considered an essential part of attracting new audiences and empowering visitors to co-produce their experiences (Komarac et al. 2020: 160-82). Why then did the LNC fail to generate emotional authenticity for some of its visitors, despite Shine's use of the accepted techniques of modern museology? Firstly, "play" suggests a set of rules that all players must understand, while "playfulness" requires one to be in on the joke. Although the Centre tried to playfully capitalize on the media sensation that made the area famous, those who believe (or claim to believe) in the monster (15% of the UK according to a recent YouGov poll) felt attacked by the facts they encountered in the museum, and more importantly, they apparently refused to change their beliefs despite those facts.[30] Even more interesting, from my perspective, are the reactions from those who felt that the idea of the fictional monster undermined the authority of the whole exhibition. I argue that this is because the story of the monster drew attention to itself as *a story*, and thus undermined the suspension of disbelief needed for visitors to experience conceptual immersion in the display. Rather than the integrated literature and science of the Human Evolution gallery, at the LNC fiction and science were presented in opposition. Equally, while narrative structures were used to convey scientific facts, just as they are in the NHM, these structures did not always align with visitors' expectations of the literary forms used, and thus did not always produce the same emotional authenticity as narrative does in the Human Evolution gallery. Close attention to the fictive and literary techniques at work at the LNC can, therefore, help to explain why some visitors were dissatisfied with their experience; furthermore, they raise interesting questions about the similar use of such techniques in other, more culturally authoritative institutions.

Like many museums, the LNC employed narrative structure throughout the exhibition, which was designed around seven rooms or "chapters" in the story of the Loch. Shine himself guides visitors through each "chapter" as an objective and omniscient narrator through audio and video in each room. Concrete statements of fact, such as 'plesiosaurs *did* die out', signal the trustworthiness of the narrator and fulfil the didactic mission of the Centre.[31] This renders the exhibition factually authentic. Shine insists that the Loch Ness Project's sole agenda was 'finding the truth', and that the Centre's purpose was 'to teach [visitors] something'.[32] However, he also wanted 'to give people the feeling they had been given the chance to think for themselves'; he did this by posing questions to the visitor throughout the narration.[33] Here he employed the technique of dialogic labelling, which is designed to engage museum visitors by making them active participants rather than passive recipients of information (Hohenstein and Tran 2007; Hohenstein and Moussouri 2018; Land-Zandstra et al. 2020). The narration in each room follows an identical structure: it introduces a question (such as whether a plesiosaur could be in the loch), then presents factual answers, which refute the existence of the monster. Then the narration poses another question. Shine calls this final question 'the ramp'; that is, the 'ramp up' to the next room.[34] For instance, after conclusively stating that the loch could *not* have a plesiosaur in it, the narration of the first room concluded:

> But Loch Ness is the greatest volume of fresh water in Britain, more water than in all of England and Wales put together. Enough to immerse every human being on earth three times over. Room enough, perhaps, for a few mysteries. But if the

> monster isn't a plesiosaur, why did anyone think it could be? And if Loch Ness is not a Jurassic Park, then what have a thousand eye witnesses actually seen?[35]

As Shine says, these final lines 'reopen the inquiry' and encourage visitors on to the next chapter of the story.[36]

While the Human Evolution gallery was structured as a *bildungsroman*, the LNC's exploration of the "mystery" of the lake employed the structure of detective fiction or the "whodunit", in which the "ramps" can be read as analogous to cliff-hangers at the ends of chapters. Cliff-hangers, or interruptions in narratives at suspenseful moments, increase the desire to read the next chapter or watch the next episode, just as the LNC's "ramps" carry guests on to the next room (Wirz et al. 2023: 186-96). Cliff-hangers increase curiosity, just as museum labels that pose questions are seen to lead to deeper engagement with exhibits and enhanced learning (Hohenstein and Tran 2007: 1557-80). Cliff-hangers, according to Dominique S. Wirz, Alexander Ort, Björn Rasch, and Andreas Fahr, 'motivate the audience to anticipate how the situation will resolve and how the resolution will relate to the narrative as a whole' (2023: 187). In the case of room one at the LNC, visitors might anticipate receiving an answer to the question: what have the thousands of eye witnesses actually seen?

But the LNC cannot provide an answer. As Shine admits, 'we made it sound like we were going to tell them, but we didn't. Because we didn't know!'.[37] Shine can confidently say what the eyewitnesses did *not* see: a plesiosaur or other prehistoric beast. But he cannot provide a singular satisfying answer to what these witnesses *did* see, as they all likely saw different things: a log, a seal, a swimming deer, the wake of a boat, a shadow, etc. The many possible answers to Shine's question, and the impossibility of a definitive answer, disrupt the narrative conventions of the detective story, which as Stephen Knight notes, provides a 'sense of a problem neatly solved' (Knight 2003: 88). This subversion of expectation in turn disrupts the visitor's immersion in the "world" of the exhibit. The narrative no longer generates conceptual immersion. This has two potential outcomes. Firstly, it may invalidate the emotional authenticity felt by the visitor. As Luke Terlaak Poot argues, 'cliffhangers always appear to mark the events they interrupt as significant with respect to the unfolding story, so in cases where such events end up not in fact mattering, the reader will feel manipulated' (2016: 53). As one mystery reader asserts, 'I want to have been fooled or tricked, not cheated. In fact, I *enjoy* being fooled, but not being cheated' (Tobin 2018: 5). Alternatively, visitors may seek to maintain the emotional authenticity of their experience by providing their own definitive answer to the question. Knight demonstrates that in golden age detective fiction, 'the identification of the criminal is usually the end of the story', and argues that in a good detective story, the reader should acknowledge that 'the final coup was the only possible outcome', no matter how far-fetched (Knight 2003: 79, 82). For many visitors seeking a *single* solution to the mystery of the lake, the 'only possible outcome' will be a mythical monster, even if it seems 'far-fetched'. Here, emotional authenticity, the feeling of having solved the puzzle, compromises factual accuracy, and thus the overall authenticity of the exhibition.

Where directed questions are often used to make visitors feel like they are "in dialogue" with the museum, therefore helping to authenticate their experience, polyvocal exhibits create emotional authenticity by opening up the interpretation of objects to include multiple perspectives and multiple forms of "truth". As Andromache Gazi explains, polyvocal display interrupts the '"neutral", supposedly objective' 'institutional voice', and instead reveals the 'human agency' behind all museum text (Gazi 2014: 5). In the same way as curatorial techniques of co-creation, this invites visitors to think for themselves by weighing up the importance of various different perspectives and interpretations. This is a technique used in many natural history displays, like the Canada Goose Arctic Gallery at the Canadian Museum of Nature, which juxtaposes video testimonies of indigenous seal hunters with anti-clubbing activist t-shirts (emblazoned with messages like "Club Sandwiches Not Seals"). Although most of the rooms of the LNC were narrated by the single, omniscient, institutional voice of Shine, the second and seventh rooms included audio recordings of eye-witness accounts. Here, the voices were not just allowed to 'speak for themselves', something that Shine insisted was only 'fair', but were layered over one another, creating the impression of more voices than were actually included.[38] The theatricality of this device operated in contradistinction

to the narrator and, in the second room, drowned him out, delivering the impression through a medley of sounds of a crowd of people and a large body of eye-witness evidence. Where polyvocality is usually intended to suggest that multiple truths are being explored, at the LNC a single voice was implicitly pitted against many in the debate about the monster.

This was repeated to even stronger effect in the final room of the exhibition: the Jury Room and Archive. This room functioned as a coda or an epilogue to the entire exhibition. Where the previous six rooms progressed visitors through the exhibition according to carefully timed intervals (approximately 5 to 7 minutes per room), visitors could linger in the archives as long as they wished. Here further audio eye-witness accounts were accompanied by a vast newspaper collection. If as Mike Cadden suggests 'the epilogue isn't about the hero or any one character…This structural addition is not really even a structural concern; its about the implied reader', then what does the 'epilogue' of the LNC offer to its readers (Cadden 2012: 344)? Cadden argues that epilogues are meant to reassure by moderating readers' emotional response to the closure of a novel. Read in this light, the LNC's epilogue reassures visitors who want to believe, by reiterating the idea that many people over many years have seen *something* in the lake.

Both polyvocal rooms seem to offer an implicit choice: believe the witnesses or believe the science. As a result, polyvocality functions in the opposite way that it was intended. While Gazi argues that polyvocallity interrupts the alleged neutrality of the curatorial voice, I argue that polyvocality can also create a new form of neutrality, one in which the institution appears to present all sides of an issue, without bias, as in the Canada Goose Arctic Gallery, which does not take a stance on the question of seal hunting. Seen this way, we can read polyvocal displays as akin to the multiplot novel, in which, as Elizabeth Deeds Ermarth argues, narrative functions as a 'mediation – some may say "sublimation" – of difference; it embeds every moment into a structure of significance so comprehensive that (hypothetically) nothing and no one is left out' (Ermarth 1997: 80). By representing many different people from many different walks of life, the multiplot novel gives the impression of being neutral and universal. Yet as Peter K. Garrett argues, the multiplot novel often 'articulates radically different and irreconcilable visions of the world' (Garrett 1977: 15). While it is intended to 'transcend the limitations of the individual point of view and envision the life of the whole community', much as the polyvocal display is intended to do, Garrett argues that 'this movement is never completed…the great multiplot novels dramatize but refuse to resolve the tensions between single and plural, individual and social, particular and general perspectives' (Garrett 1977: 17). I suggest that this is the case in the LNC too. The two overlapping plots of the exhibition – the story of the monster and the natural history of the lake – are in conflict with each other and, as Garrett argues about the multiplot novel, never 'resolv[e] into any single, stable pattern or meaning' (Garrett 1977: 6). While polyvocality is intended to create the impression of neutrality, the tension between Shine's narration and the voices of the witnesses is readily apparent. Visitors are asked to choose, and not all visitors chose to accept the real story of the lake that the exhibition offered.

The audio used in these rooms contributed to the spectacular quality of the LNC. As Pierre Balloffet, François H. Courvoisier, and Joelle Lagier define it, the 'spectacular museum is characterized by a preponderance of the image, the event and techniques (including publicity stunts) combined with playfulness' (2014: 8). Shine acknowledges that the LNC was 'not a museum'; although it had 'real objects', it was a 'show'.[39] The design of the exhibition made use of low lighting, audio, video, models, and effects, such as fog descending from the ceiling. These displays were intended to create an immersive world that would help to generate a feeling of emotional authenticity in the visitor. And yet, for some visitors the spectacular contributed to an initial impression that the LNC lacked the material authenticity of the "real thing" present in most natural history collections, like the fossils in the Human Evolution gallery, and the stabilizing categories of "nature" and "science" that ground even the more speculative aspects of the NHM's displays. After all, as Shine wryly notes, the LNC had 'neither hide nor hair nor tooth nor bone of a monster'.[40] However, as Shine argues, the famous photographs of the monster, such as the "Surgeon's photograph" (1934) *are* the monster, so the LNC did display the 'object itself.'[41] Shine makes the point that Nessie *does* exist, as a social construct, the product of a modern media storm. Nonetheless, the presence

and prevalence of images of the monster throughout the exhibition potentially undermined its didactic aims, especially as they were presented in the third chapter, "hoaxes, illusions, and eyewitnesses". Here video footage moved rapidly through the various photographs of Nessie taken since the 1930s, which in some cases consisted of deliberate hoaxes, and in other cases misidentification. However, the speed with which the video moved through the images served to suggest the existence of a massive body of photographic evidence. Here the message of the exhibition (the fallibility of human perception) was potentially in conflict with the spectacular elements of the display. As Enid Schildkrout argues, it is 'risky' to attempt to 'present verbal disclaimers to visual messages'; instead, the verbal and visual should reinforce each other (Schildkrout 1991: 21).

This risk is equally apparent in the LNC's iconography, such as the famous silhouette of Nessie in the LNC's logo, and the exhibition's use of models. The first "chapter" of the exhibition, "From the Beginning", focuses upon why the monster could not be a surviving plesiosaur. Nevertheless, the only two objects in the room are models of a living plesiosaur and its skeletal remains. These models raise the idea of a cretaceous creature in the lake, undermining the primary data point of room one: that the lake was formed 10,000 years ago, long after the dinosaurs became extinct. So why display these models at all? While a cynic might say it's a matter of marketing, this imagery also serves to reinforce the narrative form of the detective novel, which is full of suspects that turn out to be red herrings. The models thus contribute to the physical, sensual, and conceptual immersion in the *mystery* of the lake, and should generate curiosity within the visitor, and a desire to find out the truth. Visitor reviews left on TripAdvisor make it clear that this was successful for many: one visitor in 2022 praised the exhibition for presenting 'a real search for answers yet without taking away the mystery',[42] while another positively reported that it 'leav[es] you wondering'.[43] For others, however, the images worked against the message of the exhibition. As one visitor posted on Google Reviews, 'I think that although there's a lot of information given which tells us there is no Loch Ness Monster, the underwater room having Nessie swimming above brings you right back into the myth and there will always be some hope that it's real'.[44] As with the many voices of the eyewitnesses, here images of the monster overwrite the scientific data, confirming rather than disproving its existence for those who are determined to believe. This makes clear what scholars such as Porter have suggested: the materiality of display models and images means that they read as "the real thing", known and certain, even in cases when they depict something explicitly fictional.

For other visitors, however, the many images of a fictional monster had the opposite effect: rather than buoying belief in Nessie's existence, these images made the fictive elements of the exhibition obvious, and thus rendered the authenticity of the entire exhibition suspect. As a result, while some irate reviewers on TripAdvisor or Google Reviews perhaps expectedly objected to the fact that the exhibition undermined their belief in the monster, complaining that it 'destroys any Nessie magic'[45] or that it 'makes you feel foolish', there were other reviewers who objected to the Centre *as a museum*.[46] One such review lamented that the Centre was 'all just about Nessie. What about facts of the actual Loch??', completely ignoring the abundance of factual information presented in the exhibition.[47] Others commented on the objects exhibited, with one protesting that 'there should be some more real exhibits',[48] while another complained that there were '[n]o actual exhibits or memorabilia. Room is full of plastic rocks.'[49] Yet another insisted that the 'replica of the scientific research ship was made of cheap plywood and even a small child commented on how fake it all seemed'.[50] The objects on display were described as 'props', rendering the whole 'experience akin to a sham'.[51] Despite these complaints, the LNC *did* display authentic objects: archival video footage, the faked photographs, pieces of the Wellington Bomber that crashed into Loch Ness, the Machan, the World's Smallest Submarine, and the John Murray, the world's largest inflatable vessel, were all on display. The John Murray is *both* 'made of plywood' *and* an authentic research ship, the very one used by the Loch Ness Project. As Maralyn Shine, co-designer of the exhibition, wryly noted when we spoke, 'they'll believe in the Loch Ness monster but not the boat.'[52]

As I have demonstrated, fiction and the fictive operate within natural history and science museums in myriad forms, usually on a subtextual level. Yet, when the fiction ceases to be subtextual, it compromises its usefulness in supporting (emotional) authenticity. Penrose

argues that 'historically, societies only became interested in authenticity when the truth is under threat. Paradoxically, then, authenticity is made visible by its absence' (Penrose 2020: 1246). Because the subject of the LNC, the Loch Ness Monster, is not "real", some visitors doubted the rest of the exhibition, no matter how authentic and truthful it was.

Conclusion

We can return, then, to Lynn Nyhart's question: 'which products of art and artifice [are] to be allowed in the name of legitimate verisimilitude, and when was the line crossed into illegitimate artificiality?' (Nyhart 2004: 308). As is made clear by the varying public responses to the LNC, there is not one single line that divides legitimate from illegitimate artifice. For many visitors, the LNC was as legitimate as the NHM, providing factual information in an entertaining format. We can, however, draw some conclusions from this comparative analysis of the NHM and the LNC, and from the visitors who did not find the LNC convincing. The first and most obvious is that public trust aligns with the perceived cultural authority of an institution. The scepticism apparent in many reviews of the LNC demonstrates how much the many fictions at work in all natural history museums are disguised by or legitimated by the cultural authority associated with those institutions, like the NHM. As Gazi argues, 'in interpreting objects and themes, exhibitions create new worlds which are usually perceived by visitors as "true" and "authentic" because of the museum's status and cultural authority' (Gazi 2014: 2). Without public trust in the *institution*, the artifice that is at work in all museums becomes visible.

Recent polls have found that 82% of the British public trust museum curators to tell the truth, making them one of the most trusted professions in the UK.[53] Similarly, a 2021 study conducted in the US found that the public views museums as more trustworthy than researchers and scientists, news organisations, and the government.[54] And yet there are increasing concerns about waning public trust in science, research, and universities, in what has become known as our 'post-truth' world (Law and Le 2023: 393-408). While museums are currently deemed trustworthy, that status is not unassailable. As the American Alliance of Museums found, public trust is largely based on the perceived factual and material authenticity of museum displays.[55] However, as we have seen, at times the information presented in natural history museums is speculation or guesswork, and most displays include inauthentic material alongside the authentic without the line between the two being entirely clear (for instance, the word "model" is used to describe the blue whale in the NHM (an artistic rendering that is based on direct observation), reconstructions of extinct life (artistic renderings based on scientific hypotheses), and at the Kelvingrove Museum in Glasgow, a "haggis" specimen (an artistic rendering of a fictional creature based on local folk tales). I suggest, therefore, that all museums can learn important lessons from the mixed public reception of the Loch Ness Centre.

The exhibition at the LNC was no more fictional or inauthentic than the Human Evolution gallery at the NHM: both include authentic objects and inauthentic models, and both employ the structures of fiction to smooth over or disguise gaps in knowledge, while communicating accurate scientific data. I suggest that when the LNC's didactic message failed to land with some visitors, it was the result not of "the fictive" in general, but the way in which the fictive was employed. When fiction and science were perceived to be in opposition, the overall perception of the authority and authenticity of the exhibition was affected. In many of the LNC's displays, science was used to counter fiction, while in the NHM, fiction is used to bolster the science. The former interrupts conceptual immersion in the display, and thus undermines some visitors' experience of emotional authenticity, while the latter reinforces it. As Donald Preziosi argues, museum narratives must be 'convincingly portrayed as being securely fixed to something unquestionably non-artifactual, such as biology, genetic makeup, divinity, or Nature itself' (Preziosi 2012: 87). Without the authenticity of these categories, 'the mortality and fragility of what is portrayed by that narrative becomes visible and evident – namely, its existence precisely *as* mythology and ideology – in other words, as artifice' (Preziosi 2012: 87). Equally, the fictional structures at play in the NHM, such as the *bildungsroman* in the Human Evolution gallery, meet the expectations of a literate audience. As Burke and Tattersdill argue, 'the relationship between exhibit and viewer is analogous to that between a reader and a new…text: it involves a decoding that is also an act of imaginative collaboration' (Burke and

Tattersdill 2022: 315). This decoding is largely based upon 'both the material on display and [the visitor's] prior experience with museums and fiction' (Burke and Tattersdill 2022: 314). The narrative structures employed in museum displays follow set patterns (for example, the hero's journey of self-discovery in the *bildungsroman*) that audiences instinctively understand from prior experiences with narrative, in the form of novels, films, television, or other museums (Walker and Harbus 2023). Where a display subverts the typical narrative, as in the "detective story" without a suspect in the LNC, visitors will be disappointed and more likely to question the facts and data of the display. Thus, careful attention to the generic expectations that come with specific narrative patterns is essential at the design stage of any exhibition, in order to maintain the audience's experience of emotional authenticity.

The Oxford English Dictionary defines 'post-truth' as 'denoting circumstances in which objective facts are less influential in shaping political debate or public opinion than appeals to emotion and personal belief' (OED, 2023). This highlights the important role that emotions play in the perception of truth, and thus the need for emotional authenticity alongside factual and material authenticity in the museum. I would suggest, therefore, that scientific facts alone are not enough to counter false narratives, such as the Nessie myth, as we have seen in the case of the LNC. Instead, the public needs to be offered an equally compelling and structurally functional narrative, in which science and literature are seamlessly aligned.

Notes

1 American Alliance of Museums, 'Museums and Trust 2021', American Alliance of Museums 2021. https://www.aam-us.org/2021/09/30/museums-and-trust-2021/, accessed 18 July 2024.

2 American Alliance of Museums, 'Museums and Trust 2021', American Alliance of Museums 2021. https://www.aam-us.org/2021/09/30/museums-and-trust-2021/, accessed 18 July 2024.

3 ICOMOS, 'The NARA document on authenticity', ICOMOS 2012, accessed 10 January 2025.

4 Mark Vincent, 'Titanosaur at the NHM', Love in the Time of Chasmosaurs 2024. https://chasmosaurs.com/2024/01/05/titanosaur-at-the-nhm/, accessed 10 January 2025.

5 Field Museum of Natural History, 'Facts Matter at the Field Museum', Field Museum 2017. https://www.fieldmuseum.org/blog/facts-matter-field-museum, accessed 6 December 2024.

6 Richard Gray, 'What did dinosaurs sound like?' BBC 2022. https://www.bbc.com/future/article/20221212-the-mysterious-song-of-the-dinosaurs, accessed 26 July 2024.

7 Natural History Museum, 'Human Evolution', Natural History Museum. https://www.nhm.ac.uk/visit/galleries-and-museum-map/human-evolution.html, accessed 26 July 2024.

8 The *bildungsroman* has been one of the most common narrative structures of the novel since the late eighteenth century. As Fiona McCulloch notes, it is particularly prevalent in children's and young adult fiction (for example, the seven books in the *Harry Potter* series). See Fiona McCulloch (2019: 174-99).

9 Human Evolution', Natural History Museum. https://www.nhm.ac.uk/visit/galleries-and-museum-map/human-evolution.html, accessed 26 July 2024.

10 Wall signs in the From the Beginning gallery in the Earth Hall, Natural History Museum, London, visited 13 July 2024.

11 Walls signs and labels within the Human Evolution gallery, 'Where did we come from?'; 'A diverse bunch'; How do scientists know?' Earth Hall, Natural History Museum, London,

visited 13 July 2024.

[12] Sign within the Human Evolution gallery, 'What makes us modern humans?' Earth Hall, Natural History Museum, London, visited 13 July 2024.

[13] Sign within the Human Evolution gallery, ''The Genus Homo', Earth Hall, Natural History Museum, London, visited 13 July, 2024.

[14] Label, '*Homo floresiensis* adult woman', Human Evolution gallery, Earth Hall, Natural History Museum, London, visited 13 July 2024.

[15] The cranial reconstruction of *Homo heidelbergensis* is also depicted without a smile.

[16] Labels, '*Homo sapiens* child', '*Homo floresiensis* adult woman', Human Evolution gallery, Earth Hall, Natural History Museum, London, visited 13 July, 2024.

[17] Labels, '*Homo neanderthalensis* adult woman', '*Homo floresiensis* adult woman reconstruction', Human Evolution gallery, Earth Hall, Natural History Museum, London, visited 13 July, 2024.

[18] Lisa Hendry, 'Bringing a Neanderthal to life: the making of our model', Natural History Museum. https://www.nhm.ac.uk/discover/bringing-a-neanderthal-to-life-the-making-of-our-model.html, accessed 26 July, 2024.

[19] Lisa Hendry, 'Bringing a Neanderthal to life: the making of our model', Natural History Museum. https://www.nhm.ac.uk/discover/bringing-a-neanderthal-to-life-the-making-of-our-model.html, accessed 26 July, 2024.

[20] Lisa Hendry, 'Bringing a Neanderthal to life: the making of our model', Natural History Museum. https://www.nhm.ac.uk/discover/bringing-a-neanderthal-to-life-the-making-of-our-model.html, accessed 26 July, 2024.

[21] Kit Buchan, 'Meet the ancestors…the two brothers creating lifelike figures of early man', *The Guardian* 2018. https://www.theguardian.com/science/2018/may/05/meet-the-ancestors-two-brothers-lifelike-figures-early-man-adrie-and-alfons-kennis, accessed 6 April 2022.

[22] Kit Buchan, 'Meet the ancestors…the two brothers creating lifelike figures of early man', *The Guardian* 2018. https://www.theguardian.com/science/2018/may/05/meet-the-ancestors-two-brothers-lifelike-figures-early-man-adrie-and-alfons-kennis, accessed 6 April 2022.

[23] Lisa Hendry, 'Bringing a Neanderthal to life: the making of our model', Natural History Museum. https://www.nhm.ac.uk/discover/bringing-a-neanderthal-to-life-the-making-of-our-model.html, accessed 26 July, 2024.

[24] Kit Buchan, Meet the ancestors…the two brothers creating lifelike figures of early man', *The Guardian* 2018. https://www.theguardian.com/science/2018/may/05/meet-the-ancestors-two-brothers-lifelike-figures-early-man-adrie-and-alfons-kennis, accessed 6 April 2022.

[25] Lisa Hendry, 'Bringing a Neanderthal to life: the making of our model', Natural History Museum. https://www.nhm.ac.uk/discover/bringing-a-neanderthal-to-life-the-making-of-our-model.html, accessed 26 July, 2024.

[26] Signage at the Loch Ness Centre, Drumnadrochit, Scotland, visited 26 February 2023.

[27] Adrian Shine, designer of the Loch Ness Centre's exhibition, personal communication, 26 February 2023.

[28] TripAdvisor review, 'Disappointing..', Aug 2022, https://www.tripadvisor.co.uk/Attraction_Review-g551809-d195085-Reviews-The_Loch_Ness_Centre-_Drumnadrochit_Loch_

Ness_Region_Scottish_Highlands_Scotland.html, accessed 28 March 2023. Since the opening of the new exhibition under new ownership in spring 2023, the reviews for the former exhibition have been removed from TripAdvisor's website. The reviews quoted in this essay no longer appear online.

29 TripAdvisor review, 'Glad I went but left feeling disappointed', December 2019, accessed 28 March 2023.

30 YouGov, 'Do you believe in the Loch Ness monster?' YouGov, 6 September 2019. https://yougov.co.uk/topics/travel/survey-results/daily/2019/09/06/72c40/3, accessed 4 April 2023.

31 Transcribed audio in room one of the Loch Ness Centre and Exhibition, narrated by Adrian Shine. Played for me when I visited Shine on 26 February 2023.

32 Shine, pers. comm, 26 February 2023.

33 Shine, pers. comm, 26 February 2023.

34 Shine, pers. comm, 26 February 2023.

35 Transcribed audio in room one of the Loch Ness Centre and Exhibition, narrated by Adrian Shine. Played for me when I visited Shine on 26 February 2023.

36 Shine, pers. comm, 26 February 2023.

37 Shine, pers. comm, 26 February 2023.

38 Shine, pers. comm, 26 February, 2023. This audio was played for me when I visited Shine on 26 February 2023.

39 Shine, pers. comm, 26 February, 2023.

40 Shine, pers. comm, 26 February, 2023.

41 Shine, pers. comm, 26 February, 2023.

42 TripAdvisor review, 'The Monster', July 2022, accessed 28 March 2023.

43 TripAdvisor review, 'Enjoyed,' July 2022, accessed 28 March 2023.

44 Google review, 'Vicky Dunbar', 2022, accessed 6 April 2023. Since the opening of the new exhibition under new ownership in spring 2023, the reviews for the former exhibition have been removed from Google. The reviews quoted in this essay no longer appear online.

45 TripAdvisor review, 'A bit expensive for a short visit', May 2022, accessed 28 March 2023.

46 TripAdvisor review, 'If you want to believe - avoid!', April 2019, accessed 28 March 2023.

47 TripAdvisor review, 'Average', August 2019, accessed 28 March 2023.

48 Google review, 'Tim Taylor', 2022, accessed 6 April 2023.

49 Google review, 'Tony H', April 2022, accessed 6 April 2023.

50 TripAdvisor review, 'Facts not nonsense', [date unknown], accessed 28 March 202.

51 Google review, 'Shock Razor', 2020, accessed 6 April 2023.

52 Maralyn Shine, co-designer of the Loch Ness Centre's exhibition, personal communication,

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55 American Alliance of Museums, 'Museums and Trust 2021', American Alliance of Museums 2021. https://www.aam-us.org/2021/09/30/museums-and-trust-2021/, accessed 18 July 2024.

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