Translating environmental memory in a natural history museum

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Faced with the environmental crisis, natural history museums have started to redefine their roles and look for new ways to represent natural changes. In exhibitions, this has led to an evolution conceptualized here as a shift from natural *history* to environmental *memory*. The article starts with theoretical reflections from museum and memory studies, and is followed by an analysis anchored in a case study of the Museum of Natural Sciences in Brussels. Central is a display where memories about nature's past and present are shared in the form of fictional audio testimonies in four languages. I contend that the transition from history to memory in representations of the environmental crisis is, in fact, a *translational* problem that manifests itself on multimodal, intralingual, and interlingual levels.

Keywords: environmental memory, museum translation, natural history museums, multimodal translation, slow memory, translation Studies, memory studies

Introduction

In the heart of the Brussels Museum of Natural Sciences, ten audio recordings relay the consequences of climate changes and global warming, from anecdotal to dramatic. Visitors can choose to listen to the accounts in one of four languages. They hear a ranger explain how roe deer's fawns have trouble finding food because of the change in seasonal patterns. In another

recording, a young boy from Pakistan tells how heavy rain destroyed his village and resulted in empty seats at school because many children are either sick or have died. The display is part of the most recent permanent exhibition of the museum, *The Living Planet*, open since 2020. The audio installation is the only part of the exhibition specifically dedicated to the environmental crisis and reflects the museum's latest approach in dealing with the topic.

In this article, I argue that in museums, a distinct shift from natural history to environmental memory has taken place. In the first part, I build on theoretical reflections, drawing on previous research on museums and the environmental crisis, museum translation, and environmental memory. The second part of the article is anchored in the case study of the 'testimonies' display at the Brussels Museum of Natural Sciences. Its analysis shows that *translation* can play an essential part in representations of the environmental crisis, and help us understand the shift in museological practices from history to memory.

Museums, Memory, and Translation Studies: Finding Common Ground

Archives for the future

The Brussels Museum cites the 'Conservation and Management of Scientific and Heritage Collections' as one of its main missions. Yet to what extent does this idea of preservation, which is central to nearly all museum duties, need to be reconfigured in natural history institutions in the light of the environmental crisis? Preserving the past and present is indeed a mission of most museums, including those about natural history. In 2012, professionals in the field reflected on this idea at the *Colloquium on Transforming Natural History Museums in the Twenty-first Century* at the Smithsonian. They wrote the *Declaration of Interdependence*, from which the following excerpt is taken:

PRESERVATION – We are the keepers of the record

We are the places where our culture houses its treasures

We are a bank for information for the future

We are the archives of a changing world (Knutson 2018, 101–102)

While this declaration was only a draft, neither officially nor collectively approved, it was central in the conversations 'about what natural history museums should be' (Watson and Werb 2013, 261). It highlights an evolution in natural history museums: the mission of preservation is evolving in line with 'a changing world'. Faced with the environmental crisis, museums are trying to preserve what is disappearing, keeping track of what will soon be (or already is) impossible to find in nature. In light of imminent and current loss and destruction, the role of preservation in museums is becoming urgent and future-oriented. As banks 'for information for the future', museums aim to make the past and present of nature available to the next generations. At the same time, many museums also seek to play an active role in shaping this future.

Another passage of the *Declaration*, in fact, refers to the need for natural history museums to become catalysts: 'We will be agents of social change and embed people in nature by giving them new eyes with which to see the world and to understand their responsibility' (Knutson 2018, 101–102). For many years, professionals in the field have been discussing the role that museums should play in the face of the environmental crisis. It was over twenty years ago that Leonard Krishtalka and Philip S. Humphrey from the Natural History Museum and Biodiversity Research Center of the University of Kansas called for museums to 'immediately harness' their collections to educate their public on the 'environmental management of the planet' (2000, 611). This tendency is evident across museums of all types. Museums have, in fact, been defined as 'key sites to accelerate climate change education, action, research and partnerships' (McGhie 2018).

This role for museums as agents for the natural future has garnered attention within larger cultural organizations in recent years. This notion was initially broached in the early 2000s, advocating for the acknowledgment of culture as the fourth pillar of sustainability by the UN (Hawkes 2001). More recently, the Sustainable Development Goals have emerged as a widely acknowledged framework, serving as a 'shared language' for museums to implement (McGhie 2020), and they have been adopted by ICOM in their Agenda 2030 (Þórsson 2020). This ambition was further cemented andpromoted with the new ICOM museum definition, affirming that 'museums foster diversity and sustainability' (2022). While this assertion may appear broad, it underscores the paramount importance of environmental concerns in contemporary discussions among museum and heritage professionals.

In the same vein, scholars have been working to define this new role for museums from an academic perspective. Dolly Jørgensen, Libby Robin, and Marie-Theres Fojuth recently argued that 'museums can contribute to reducing extinction' (2022, 2). This statement was part of the introduction to a special issue of *Museums and Society* centred on the contributions that museums could provide in reaction to the phenomenon of extinction. Yet the roles identified in the issue can be broadened to the wider environmental crisis. Indeed, by bringing together specialists and the public around stories on a small and large scale, museums can 'make people think' about environmental issues and 'afford insights on broader concerns'; museums can make stories 'come alive' and provide 'affective spaces' that render events 'palpable' (2022, 3; Searle 2022, 15). The authors thus raise the idea that the use of space and objects makes museums unique platforms to bring major issues to individuals in a significant way. This is a very useful feature, given that the environmental crisis is typically difficult to grasp due to both its abstract nature and its broadness. While this use of space and objects occurs in all museums, natural history museums are especially 'well placed to address the current ecological crisis, providing high-profile platforms to engage audiences with environmental issues through visual

and material culture in events and exhibitions' (Wade 2022, 132, referring to Chicone and Kissel). Museums benefit from the fact that, along with science centres, they 'hold a unique position in the media and political landscape as trusted information sources' (Cameron, Hodge, and Salazar 2013, 9).

Natural history museums lay on various activities with a view to engaging visitors around the environmental crisis. Some scholars argue that collective and participatory activities are the ideal format to motivate environmental action (Allen and Crowley 2016; Knutson 2018). Yet exhibitions remain at the heart of the work of museums. They still attract the most visitors out of all museum activities and are one of the more visible ways for museums to communicate. As Karen Knutson explains, exhibitions are 'public-facing and define the identity of a museum', making them especially interesting, given that museums 'attempt to tackle controversial and complex social issues' (2018, 104). It comes as no surprise, therefore, that natural history museums use exhibitions to invite visitors to learn about the environmental crisis.

In recent years, these exhibitions have not only sought to teach visitors about the scientific processes of environmental crisis, such as the rise of CO_2 levels, global warming and the acidification of the oceans. Reflecting their new roles, museums have, in fact, also tried to raise awareness around environmental protection, or developed displays to memorialize the nature that is being lost.

Memorializing nature in museums

Displays in natural history museums are now using memorial strategies to commemorate the loss of nature due to the environmental crisis. Examples include the use of black mourning veils covering animal specimens from endangered species at the Bristol Museum (see Gladstone and Pearl 2022; Morss 2019), as well as the *Extinctions Roll of Honour* displayed at the Scotland

Museum of Natural History (see Guasco 2020, 1062), which presented a list of extinct species printed on a nineteenth-century photograph of two men on top of a pile of bison skulls. Similarly, the Natural History Museum in Geneva recently exhibited an installation by Gabriel Ruta in the form of a graveyard for lost and endangered species, with small tombstones and candles placed under lists of disappeared species. These uses of memorial strategies for the natural environment in museums were all part of exhibitions that addressed the environmental crisis in greater detail. They echo similar initiatives in public spaces such as *The mourning of a glacier* (see Johnson 2019) and the *Remembrance day for lost species*.

When it comes to the environmental crisis, the new roles and displays of natural history museums mirror those found in memorial museums. Amy Sodaro identifies three primary functions of these museums: their museum function (preserving, history telling, documenting, …), their memorial function (healing and repair), and their moral function ('to morally educate visitors to internalize an ethic of "never again"') (2018, 162–163). While natural history museums have been fulfilling a museum function for a long time, it is in the new context of the environmental crisis that their exhibitions have started to take up memorial and moral functions. According to Sodaro, the memorial function can be an 'attempt at truth telling', a public acknowledgment and recognition of the wrongdoing, in a public space where memory is preserved and honored (2018, 169–70). This is what natural history museums do when they preserve and honor the memory of lost nature or explain the human causes behind this loss.

Furthermore, exhibitions are now also often developed with a view to morally educating visitors on environmental protection. Sodaro details this moral function by explaining that memorial museums 'are intended to translate the suffering of the past into ethical commitments to creating a better future through education and commemoration' (2018, 4). Their focus is thus not only on telling and preserving the past, but also on the present and future. It appears that, when exhibiting the environmental crisis, natural history museums are taking the same route.

Differences can nevertheless be observed between natural history and memorial museums, even in terms of temporalities, since a memorial museum's precondition is precisely the pastness of the past:

> Implicit in the creation of memorial museums, then, is that the past is truly past. In this sense, memorializing through a (state-sponsored and official) museum is a luxury available to those nations and communities that are no longer in conflict and have the political, social, and economic means to put the past behind them. (Sodaro 2018, 172)

The environmental crisis is not an event in the past. Natural history museums work with the past but also with the present and the future of an ongoing crisis. This continuation makes processes more abstract and difficult to define, compared to clearly dated events. It also impacts the moral function defined by Sodaro: where memorial museums rely on learning from the past in the hope of 'never again' in the future, natural history museums turn this hope into 'never', 'never in reality' (Craps 2017, 488), or 'never completely'. This means that where memorial museums aim to motivate the development of ethical *values*, natural history museums can aim to motivate *actions* in the present.

Despite these variations, the changes in the representation of nature in natural history museums can be related to the distinction between history and memory. Pierre Nora differentiated the two concepts by writing, among others, that history is 'a representation of the past' that is 'no longer', binding 'itself strictly to temporal continuities' and that it has a 'claim to universal authority' (1989, 8–9). This seems to apply to the typical representation of natural history in museums, where exhibitions of evolution and other natural processes are traditionally presented in a linear timeline and from an authoritative perspective. On the other hand, still according to Nora, 'memory is a perpetually actual phenomenon, a bond tying us to the eternal present'; it is affective, 'by nature multiple and yet specific; collective, plural, and yet individual' (1989, 8–9). The different consideration of time – linking past, present and future –

together with the subjective and emotional dimensions of memory described by Nora, seems to better fit the representation of nature in displays of the environmental crisis. In many cases, contemporary exhibitions arguably represent environmental *memory* rather than natural *history*. In cases such as the 'testimonies' display analyzed below, plurality is another feature of memory used by museums.

The relationship between the environmental crisis and memory has been studied by several scholars. Dipesh Chakrabarty contends that there is a loss of distinction between natural and human history in the Anthropocene. As we realize that humans are not only biological but also geological agents with an impact on nature in the long term, the '"now" of human history has become entangled with the long "now" of geological and biological timescales', traditionally considered as distinct (2021, 7). While, at his end, Lawrence Buell highlights that there is no set definition for environmental memory (2017, 96), which still holds today, Richard Crownshaw has attempted to define a focus for memory and the Anthropocene. He writes:

> The objects of memory might range from the environments and their ecologies that have been and will be degraded, the life, be it human and non-human, and ways of life, that are no longer sustainable - and the more immediate trauma of sudden environmental catastrophes (the cumulative effects of longer-term causes) and their social impacts. (2016)

The theoretical development of environmental memory thus encompasses both the memory found *in* natural elements and physical environments, and memory, human and cultural, *about* environmental changes. In the latter category, several authors have invoked Halbwach's (1992) concept of collective memory, elucidating how processes of remembering and forgetting can shape environmental politics (Jørgensen 2019) and shedding light on the intricacies of collective remembrance across cultural identities (Hellman 2022). Research on environmental memory is thus emerging, with much still in progress. This is parallel to recent developments in memory studies, as part of what Stef Craps has called the 'fourth phase in memory studies',

characterized among others by a 'growing consciousness of the Anthropocene' (Craps et al. 2018, 500). Olli Hellmann (2022) has further defined these developments as a 'nonhuman turn' (cf. Grusin 2015) in memory studies. In this 'fourth phase' and 'nonhuman turn', traditional concepts from (collective) memory studies undergo a redefinition, acquiring novel implications and interpretations. One exampleis the inclusion of long-term ongoing processes, such as, but not limited to, the environmental crisis, as specific topics of research within the concept of 'slow memory' (Wüstenberg 2023). Conceptual developments in memory studies are thus proving to be very relevant to the study of natural history museums.

Translating the environmental crisis

Along with its continued duration, two other characteristics of the environmental crisis are its global size and the urgency of protective action. Together, they have galvanized museums into creating displays that express a sense of emergency, trigger emotions in their local and international visitors and encourage reflection or action. By creating memorial displays specifically, museums hope that these messages will reach a wide audience. Memorials are indeed a type of display that many visitors are familiar with, either from memory museums or from the public space. By using memorial displays, museums are thus using codes that many visitors, on a global scale, will be able to instantly understand the messages, including emotional responses such as sadness and grief. At the same time, the unexpectedness of this form being present at all in a natural history museum invites visitors to question its use and reflect on it.

I argue that the curatorial and scenographic strategies the museums resort to in these cases can be described as *translational* processes. Translation in the museum refers not only to the linguistic, but also to the various curatorial strategies that museums use to convey their

discourse to a wide and diverse audience. This idea is central to museum translation research, which is presented below and shown to be of particular relevance to the analysis of museum displays about the environmental crisis.

Museum translation research builds on the idea found in Translation Studies and Museum Studies that museums use a 'language of display'. Comparing museums to text is not without issue (Macdonald 1998, 5), yet the comparison can be built upon. Helen Coxall invites us to think about the 'museum as mediated text' to study the ideological stance and values embedded in the discourse produced in a museum (1999, 216). Mieke Bal further develops 'specifically the idea that exhibitions are a form of translation. Translation: to conduct through, beyond, to the other side of a division or difference', with the idea of transfer to the public (2006, 536). This idea of museums as translations is what researchers, including Kate Sturge (2007), Robert Neather (2008; 2022) and Min-Hsiu Liao (2016; 2019) have defined in more detail. Sturge argued that it invites us to think of museums as a type of cultural translation that 'constructs its source text as well as transferring it into a different language', in 'a process strongly constrained by the context of institutional power' (2007, 6). Defining museums as translation can thus be used to critically analyze the construction, presentation and transmission of knowledge in museum contexts.

Museum translation scholarship thus relies on a broad understanding of translation to account for the various 'layers' of translation happening in the museum. Scholars have often been inspired by Jakobson's tripartite definition of translation as interlingual (between languages), intralingual (within a language, for instance for different levels of understanding), and intersemiotic (between different modes of meaning) (2021 [1959], for example used by Neather 2022). Moreover, the concept of multimodality has been useful, describing a situation in which meaning is deduced from several semiotic modes, creating a complete, multimodal whole (Boria and Tomalin 2019, 12). In the museum, the concept of multimodal translation

allows us to go beyond the tripartite definition to consider the various modes of translation as working together as a whole, namely the exhibition.

We can consider that stories are translated through the selection of objects, sounds, visual elements and more, in combination with various scenographic strategies, such as the organization of space, lighting and color. Furthermore, museum professionals translate scientific information into a museum language that needs to be close to the vernacular used by visitors, to be easily accessible and resonate with them, as well as for different levels of understanding. In addition, due to the global dimension of the crisis as well as the fact that museums are tourist destinations, museums share their messages not only with their local communities but also with international visitors. As such, they often offer experiences in multiple languages. All of these curatorial strategies are used to translate the messages of the museum into different modes of communication in the hope of reaching maximum visitor numbers.

Over the years, museum translation has expanded. It has been dedicated to studying, among others, the cultural adaptation of translated museums texts (Cranmer 2013; Guillot 2014), the processes of translation in museums (Deane-Cox and Côme 2022, Neather 2012), and the relationship between translations and the museum space (Liao and Bartie 2021; Spiessens and Decroupet 2023). Yet, despite the increase in museum translation research, and attention from the press and scholars alike for recent exhibitions on the environmental crisis, no attention has yet been paid to the way natural history museums translate the environmental crisis.

However, museum translation proves especially relevant to the study of natural history museums. Indeed, Fiona Cameron (2011) highlighted a key challenge encountered by museums, namely, addressing the heterogeneous and unequal impact of the environmental crisis, which affects communities (both human and non-human) across diverse locations in

varied manners, thereby assuming distinct importance for different people (Þórsson 2020, 10). This variability is echoed in the concept of dissonant heritage, which denotes heritage shared among several communities or groups with their own, sometimes conflicting, discourse (Tunbridge & Ashworth 1996). Dissonant heritage underscores the imperative of consciously 'building a critical memory' that respects local populations and stimulates reflection among international visitors (Battilani, Bernini & Mariotti 2018, 1432). When dissonant heritage extends global scale, as is the case with the environmental crisis, it inherently becomes a translational endeavor.

In natural history museums, the new multimodal choices currently made stem from an attempt to reach international audiences to communicate the emergency and globality of the environmental crisis. This reveals their processes as translational in many ways. Building on the existing research in museum translation and environmental memory summarized above, this article thus extends the idea that museums translate culture (Sturge 2007) and memory (Neather 2022) to the notion that natural history museums translate nature and the environmental crisis for their visitors.

I will explore this form of translation of the environmental crisis through the analysis of the Brussels Museum in the next section. The Brussels Museum of Natural Sciences is part of the Royal Belgian Institute of Natural Sciences (RBINS). Its permanent exhibitions are typical of natural history museums, with a focus on natural historical processes. They include a central gallery, showcasing large dinosaur specimens and another on evolution. Even though this is not explicitly included in the museum's mission statement – which only broadly aims to 'promote a respectful approach to nature' (RBINS 2022) –, the museum also seems dedicated, specifically, to raising awareness about the environmental crisis. This is mainly evident in the 'testimonies' display, which will be the main focus of the analysis.

The analysis is structured around three translational 'layers': the language of display (focused on the scenography and multimodal choices), language use (on choices made in the texts), and interlingual translation (on translations between languages). As part of a multimodal whole, these 'layers' of displays are not separate: they work together as one single experience for visitors. They are only made distinct here to give structure to the analysis. For each 'layer', the translational analysis asks how the display and the museum in general can be said to represent environmental memory.

The Brussels Museum of Natural Sciences and the 'Testimonies' Display

The 'language of display'

Before zooming in on the testimonial display, it is important to know that information about the environmental crisis is part of all ten permanent exhibitions in this museum. An example is the frequent use of an indicator (symbol or text) showing the degree of concern for species (such as 'endangered') directly on the label accompanying specimens throughout the museum. Another example of the pervasiveness of the topic is the reference to the role of politics in the protection of nature in the city in the exhibition *biodiverCITY*. Integrating references to the environmental crisis within variously themed exhibitions is useful, as the information will reach visitors not specifically looking for it. Fiona Cameron, Bob Hodge, and Juan Francisco Salazar noticed that information about climate change was 'woven' into different exhibitions at the Liberty Science Center in Jersey City in a similar way. They noted that this strategy could help 'make relevant connections' between the topic and situations close to visitors, and that 'it allows the pervasiveness of the subject to be seen' (2013, 11).

Multimodal translation: connections and disconnections?

However, the fragmented presentation of the critical message, which is never the main focus of an exhibition, could prevent an in-depth understanding or active engagement on the part of the visitor. Not only is information about the environmental crisis scattered over various rooms in the museum, it is not structurally communicated across semiotic modes either. Indeed, much of the discourse about the crisis is conveyed only in text panels or labels, without being translated into the 'language of display' (positioning and selection of specimens, display composition, general scenography). Yet this contradicts key principles of museum interpretation. For example, Alexander and Alexander have underscored that sensory perception should supplement verbalization to allow the visitor to correctly interpret information and experience their visit as 'a powerful learning process' (2008, 159). In the Brussels museum, the discourse about the environmental crisis is easy to miss, and only accessible if visitors read texts in detail and combine pieces of information from across different galleries. The exhibition *The Living Planet*, which addresses biodiversity and the importance of preserving it (RBINS 2020), is a case in point. Here, a specimen of a tree pangolin is accompanied by a wall text indicating that the animal's scales protect it against animal predators, but that they are 'no match for poachers, who threaten the survival of this species'.[i] Yet the display of the specimen does not illustrate any form of danger (figure 1). The absence of multimodal translation – i.e. a visual expression of the threat to biodiversity – severely weakens the museum's message.

Figure 1. The display of the tree pangolin in The Living Planet.

The 'testimonies' display, which is part of the exhibition *The Living Planet*, is, in fact, one of the rare multimodal translation of the environmental crisis in this museum. The combined use of space, specimens, and visual and audio resources create a strong display to convey the message of the crisis. Unfortunately, the museum misses the opportunity to highlight the display both spatially and visually. First, the display comes at the end of the exhibition, a stage at which visitors are likely to be tired and discouraged. Additionally, visitors are not steered in the direction of the display but can choose either one of two suggested routes to reach the end of the exhibition. The route on which you will find the display is, in fact, the smaller one and is almost hidden behind a curved all (Figures 2 and 3). Interestingly, the museum has since added arrows to the floor of the exhibition space to encourage visitors to follow a specific route. The arrows point to the right of the curved wall first, but circle back later on to include a

walk through the 'testimonies' display. This will certainly be helpful in leading visitors to the display. However, other elements play a role in the attractiveness of the display. The specific design of the installation undermines its visual power: it is mainly grey, less colorful, and thus quite at odds with the rest of this exhibition where a lot of white, blue, and red is used. Scenographically, then, the display lacks focus. It presents a cityscape on a large canvas, a small text, and two series of audio headsets – one placed next to seats and the other in front of labels (figure 4). Taxidermy specimens are placed behind the canvas; they are only lit up, becoming visible, when visitors pick up a set of headphones and activate the audio recordings. The variety of elements does not provide a distinct theme for visitors, making it unclear what the display is actually about.

Figure 2. The two routes separated by a curved wall. The 'testimonies' display is located behind.

Figure 3. The 'testimonies' display, at the back, from the other end of the exhibition.

The tentative curatorial choices, both in the testimonial display and in the overall museum, can partly be explained by the strenuous transition from explaining natural history to representing environmental memory. Since the environmental crisis is not in the past, but impacts our present and future, it is challenging to address such a complex and emotional topic through an exhibition display. The choices made in Brussels, and which generally shy away from translating the crisis multimodally, could be seen as an attempt to avoid poignant or shocking visuals. Curator Cécile Gerin described the dilemma as follows: the museum wants to bring the message of crisis forward, while keeping the experience pleasant (*convivial*) for visitors and avoiding the creation of a 'dramatic' space (conversation in French on February 2, 2023).

Figure 4. The 'testimonies' display.

As a result of the multimodal disconnection in the overall exhibition and the lack of visual focus in the specific testimonial display, visitors mainly rely on verbal information: they need to read text panels and pick up headphones. Whereas, in the overall exhibition, scattered textual information is at risk of not being picked up by all visitors, the discrete scenography of the 'testimonies' display has one major advantage: it provides a somewhat quiet and separate space for visitors to experience emotions and use their imagination when listening to the accounts without being distracted by visuals.

The testimonial genre as memorial strategy

Quite significantly, the dilemma raised by Brussels curator Cécile Gerin – the ethical need to represent a topic but the emotional difficulty to do so – is not generally an issue that museums face when dealing with natural history themes. Rather, this is typical of the 'attempt at truth telling' Sodaro observes in *memorial* museums. It is not a coincidence, then, that the museum resorts to testimonies, a genre typical of memorial museums, to share the message of the

environmental crisis with its visitors. By using audio testimonies, the museum avoided the need for dramatic or shocking visuals.

The display features a series of short (under 75 s) fictional testimonies. The stories, based on real events, are told by witnesses who were imagined by the museum and who give a first-hand account. They introduce the environmental crisis as a personal and emotional experience. The focus is on the lived consequences of the crisis: visitors hear stories about the destruction of homes, the death of people, and the disappearance of animals. During my conversation with curator Cécile Gerin, she confirmed that the audio mode was selected because voices were seen to better 'carry the emotions' of the environmental crisis. The first-person narration and subjectivity characteristic of the testimonial genre allows the museum to include voices in the exhibition other than the curatorial voice expressed in the written text panels listing scientific facts. The testimonies are thus an opportunity not only for emotion but for plurality and subjectivity, three characteristics of memory that were identified by Nora in his distinction between memory and history (1989, 8–9, see p.8 of this article).

Yet again, the specificity of the environmental crisis – the fact that it is ongoing, that it is a slow and unequal process – requires that the museum reconsider the testimonial practice. Traditionally, testimonial accounts rely on the temporality of a crisis. After all, experiences have to be in the past in order to be recounted and shared. Some dramatic environmental events have already happened and can be told, of course. But the crisis is not distant enough in the past for there to be a myriad of testimonies readily available for the museum to draw on in the making of this display. Nor are the teams of natural history museums used to working with this genre of texts. The reason why the museum created fictional testimonies was that it would still be able to share the stories in a personal and meaningful way, and to show that the consequences of the crisis are already happening. Based on real events, the press they generated and scientific information, the museum team imagined first person stories. The stories are thus real, but the

witnesses and the narrative perspective are fictional. In this way, the museum makes an attempt to tell the stories from the victims' perspectives, a practice used in the hope "to enable visitors to acknowledge the individual's fate" (Arnold-de Simine 2013, 98). It is in this sense that the environmental crisis can be conceptualized as slow memory in a relevant way. While this crisis is not over, the memorialization of some past and present experiences, here in the form of fictional testimonies, can be a source of learning in the hope of achieving a 'never completely' or 'never here'.

Language use

As explained above, the 'language of display' of the museum shows new tentative curatorial choices for the translation of the environmental crisis. Further choices are made in the language use and in the interlingual translation. Indeed, museums make specific language choices for their messages to reach visitors. It is about finding the right words, through a process of intralingual translation, to relay the results of scientific research on climate change to a wide audience, to raise awareness and to convey a sense of urgency. Two of the choices made at the Brussels Museum in this process merit attention: the evolution of the language used by the museum and the perspective from which the testimonies are told.

Verbalizing climate changes

The museum addresses changes in the natural environment differently depending on when the changes took place, either in the remote past (the discourse of natural history) or in the present time (the discourse of environmental *memory*).

In the museum, natural changes in earlier history, from millions of years ago, are described for their effects, in a purely factual manner, so neither positive nor negative. For example, a text in the *Evolution Gallery* mentions that in the Cambrian era, 'Changes in the climate and the composition of the oceans allowed organisms to develop hard parts'. Similarly, the panel introducing the section on the Jurassic era writes that 'Suddenly, 252 million years ago, 95% of species disappeared' and that 'The survivors gave birth to new forms of animal life'. When referring to a past that is long gone, the museum thus introduces environmental changes, specifically climate changes and extinction in these examples, neutrally. Changes are mentioned as the cause for species evolution and are not seen as being the outcome of something themselves. The loss of biodiversity ('95% of species disappeared') is presented in a detached fashion and is associated with a positive outcome ('new forms of animal life').

By comparison, environmental changes in the present time are addressed differently. A panel for instance reads:

> Today, the earth is home to almost 1.6 million species of animals and plants. The richness of life helps to ensure the stability and survival of ecosystems. But for how much longer? Excessive urbanisation, climate change, and the destruction of wild areas have drastically affected and even destroyed primary ecosystems, threatening many species.

The text of this panel attests to a shift. In terms of vocabulary, the earlier 'changes in the climate' have become 'climate change', designating a specific terminology with which visitors are assumed to be familiar. The consequences of these changes are no longer neutral, but they are 'threatening', causing 'destruction' of ecosystems and endangering the 'richness of life' which is biodiversity. Moreover, the cause of the deteriorating situation is hinted at here – human action in the form of urbanization and destruction of wild areas – and is even explicitly mentioned in other text panels in the *Evolution Gallery*.

Again, *The Living Planet* exhibition is a fascinating case, this time to study the evolution of text writing in the museum. Here, biodiversity becomes a matter of life and death:

> BIODIVERSITY: A MATTER OF LIFE AND DEATH.
>
> Biodiversity benefits every living organism. Especially humans. Masters of all we survey, we still depend on other life and on the fruits of that life, even the very tiny. The microscopic algae in the oceans, for example. They provide much of the oxygen in our atmosphere. Without them we'd barely be able to breathe.

Because it was written more recently, this text reflects evolutions in museum writing practices in addition to the shift in vocabulary. The language becomes more familiar and dynamic, with the text writer using a dramatic effect and addressing visitors directly in order to elicit emotions. Indeed, when discussing human-induced environmental changes, the museum uses personal deixis ('you' and 'we') to implicate visitors and invite a personal reflection on our place within ecosystems. Placing the visitors within the text is also a way to involve them in all aspects of nature, a useful strategy if the exhibition wants to galvanize people into environmental action.

The shift that these selected examples illustrate is one from 'neutrality' (or its claim) to emotion. When considering the environmental crisis today, visitors are not only invited to learn about the changes, but they are also invited to feel concerned and to have an emotional, personal connection.

Narrative perspective

The testimonies, part of *The Living Planet* exhibition, further illustrate this shift. Using humans as witnesses for the natural world provides a gate for visitors to connect and empathize with the stories. The voices talk collectively, about '**our** village' and that 'Perhaps **we**'ll be the first climate refugees'. This 'us' invites the visitor to understand the stories as both personal and

collective. The deixis used in the recordings also creates a feeling of proximity: the voices talk about how 'our village' is 'here', inviting the visitors to imagine themselves in these various places. At the same time, it works as a projection: events happening 'there' in the present could very quickly happen 'here'. But a critical analysis of the testimonies reveals that the perspective used to tell the stories is not without consequences.

Indeed, all the testimonies are told from a human point of view; the stories about the impact of the crisis on animals are turned into stories about how humans witness them. As such, people share what they have seen, heard, or learned about what is happening to animals, in addition to what they have witnessed in their own lives. This choice of perspective was partially dictated by the reality of museum practices. The curator shared that this was seen as the only way to avoid anthropomorphism. Indeed, for a human to voice animals would raise its own share of questions. However, placing humans as witnesses of the environmental crisis (in addition to 'masters of all we survey') can be considered a form of anthropocentrism: the voices of animals are erased. Michael Cronin, who dedicated a chapter of his book *Eco-Translation* to the idea of 'Translating Animals', asks us to consider that translating animals is about talking *to*, instead of about, animals (2017, 67). The idea of translating animals invites us to consider the limits of translation.

In addition, the perspective raises a question of responsibility. As humans, we are presented as the same victims of the environmental crisis as other animals. 'Climate change' and 'global warming' are clearly named as the causes underlying the events, but they are presented as an ominous catastrophe in which human responsibility is not addressed. This lack of explanation might prevent visitors from being critical about the human role in the crisis. It also makes biodiversity protection, a central message of the exhibition, difficult to address because the dangers are not spelled out. Yet, this silence on the human responsibility is telling of the display's memorial format. It does not reflect Sodaro's idea of 'truth telling' as memorial

mission for museums, but Silke Arnold-de Simine writes that, in memorial museums, it is sometimes easier to align with victims rather than focusing on implications and responsibility, that way accessing the redemptive power of empathy (2013, 201). The same is done in the 'testimonies' display, where aligning with victims, whether humans or other animals, is used to invite empathy without reflecting on responsibility.

The testimonies also replicate a division that is typically found in museums. The division of nature and culture 'is sometimes discussed as a cultural particular connected to climate change skepticism', and 'climate educators might proceed by encouraging a more holistic view of nature and society, stressing their tangled interconnections' (Rudiak-Gould 2013: 1708,1711). Unfortunately, this division is pervasive in museums. It is visible in their structure (museums dedicated to culture are typically distinct from the ones dedicated to nature), as well as in their displays. In the Brussels Museum, humans are represented in a separate gallery from other animals, the *Gallery of Humankind*. There is no visual or material representation of humans in other exhibitions, even in *The Living Planet*. In the 'testimonies' display, this division continues: with the four human testimonies on one side, next to the seats, and the six testimonies about animals on the other, in front of the canvas hiding the specimens. Simultaneously, the display is an attempt to bring stories of humans and nature together. It is one of the rare places in the museum where humans are addressed together with other animals, placed in interaction. To bring together humans and other animals was one of the goals of the exhibition (RBINS 2020). It was similarly included in the *Declaration of Interdependence* (see p.3 of this article) as the aim to 'embed people in nature', and it reflects Chakrabarty's ideas that the Anthropocene creates a collision between natural and human history (see p.8 of this article). The geological and the human timescales, reflected in the museum in the *Evolution Gallery* and the *Gallery of Humankind* respectively, meet in the 'testimonies' display, in the 'now' of the environmental crisis.

When it comes to presenting the environmental crisis, the language used in the museum is thus a form of intralingual translation: scientific and news discourse are transformed into testimonies in the hope of establishing a personal connection with the visitors. To establish a personal connection between the visitors and the testimonies, a final 'layer' of translation is applied: interlingual translation, used to make the stories accessible to different language communities.

Interlingual translation

Interlingual translation has played a central part in the making of the display and its role as a memorial for environmental loss. When the events unfolded initially, translation allowed the authentic stories to travel from different places in the world and various languages to a worldwide audience of press and researchers. In the second stage, translation allowed the making of the display based on press and scientific discourse in multiple languages: the museum team gathered international information and prepared texts in French. Now, in the museum, translation makes the stories accessible to multiple groups, locals and tourists alike. This role for translation, allowing memories to be shared and remembered, has been studied across various forms of memory practices (Brownlie 2016; Deane-Cox and Spiessens 2022; Jünke and Schyns 2023), as well as specifically for memorial museum displays (Deane-Cox 2014; Neather 2022).

The witnesses of the testimonies speak in French, Dutch, German, or English. The first three are Belgium's official languages, French and Dutch are the main languages spoken in Brussels, and English is provided as a lingua franca for tourists and other communities. The use of the first person in the testimonies means that a young boy from Pakistan and a man from Tuvalu are indirectly presented as native speakers of all of the four museum's working

languages. For visitors, hearing the stories in their own language gives an illusion of proximity: the translation creates a linguistic familiarity that counteracts the geographic distance and the speaker's physical absence. Global and local boundaries become blurred. Translation helps the museum in its goal to instil a feeling of proximity and empathy.

The use of interlingual translations, however, has several pitfalls. One of them is the difficulty – or impossibility – of retracing the 'original' account in the source language. The accounts are fictional, which means that the museum has *imagined* the witness perspective. There is no original testimony available. In fact, the source language of the communities who have experienced the events is also absent from the exhibition. Considering that some of the witnesses are people from Pakistan or Polynesia, for example, their 'original' testimonies would have been delivered in a language other than one of the museum's four working languages. Both the source voice and language are erased in these cases, and remain completely absent from the exhibition. Translation, in other words, erases the languages of people that are already threatened and it obscures power imbalances, namely the fact that the consequences of the environmental crisis often build on pre-existing inequalities.

If translation thus reduces the difference between the witness and the visitor, it also prevents critical stances on global inequalities in relation to the environmental crisis. While the lives of the communities who have experienced the events are forever changed, visitors in Belgium have the luxury of learning about them in a museum.

Discussion

This analysis of the Brussels museum builds on research in memory studies to argue that the choices made in the museum, and the testimonies display more specifically, can be said to represent environmental *memory* rather than natural *history*. The museum seeks to elicit an

emotional reaction in the visitor, bring past, present and future together, as well as offer multiple accounts. These choices are illustrative of memory as described by Nora: it is 'affective' and 'plural' yet 'individual', 'tying us to the eternal present' (1989, 8–9). At the same time, the museum aligns with memorial museums by fulfilling memorial and moral functions as in the framework developed by Sodaro. The practices in the natural history museum are thus evolving towards a memorialization of the environmental crisis, a transition to help us deal with the events in their complexity.

For the display to reach visitors, translation is key as it brings stories together, connecting the local to the global. As the crisis is a phenomenon that concerns everyone, any representation of it requires translational choices on multimodal, intralingual, and interlingual levels. It is thus not only translation practice that is necessary in our memorialization of the environmental crisis, but also translation theory. By using translation studies tools, such as translations in the museums and museums as translation (Sturge, Neather, Liao) and the translation of animals (Cronin), the study of the display reveals the global inequalities of the crisis.

This case study thus offers an initial exploration that converges translation studies and environmental memory. Further research is necessary to elucidate how the translation and memorialization of the environmental crisis in exhibitions can help visitors grieve, learn, and act towards the protection of nature. Alongside additional case studies, future investigations into the evolution of the memory studies concepts referenced, such as environmental memory and slow memory, will prove invaluable in advancing this inquiry. Moreover, heightened attention from Translation Studies to narratives of the environmental crisis will be essential.

The 'testimonies' display is an invitation for museums to continue experimenting with their exhibitions on the topic, to translate more and differently to what they traditionally do. An

awareness of translation practice and theory in this process will be essential in providing memorial displays in which nature and human communities are truly connected.

Note

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i Unless otherwise mentioned, the cited text is taken from the English text of the museum labels.

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Sophie Decroupet is a PhD fellow at the Department of Translation, Interpretation, and Communication of Ghent University, with a background in Museum Studies. Her research focuses on translation and museums, and combines an analysis of translated texts with a broad perspective of the museum as translation. Her project proposes a multiple case studies analysis of natural history museums, examining their transition towards the memorialization of the environmental crisis.

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