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Where horses run free? Autonomy, temporality and rewilding in the Côa Valley, Portugal

Caitlin DeSilvey D | Nadia Bartolini

Environment and Sustainability Institute, University of Exeter, Penryn, Cornwall, UK

Correspondence Caitlin DeSilvey Email: C.O.Desilvey@exeter.ac.uk

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Centre for Advanced Study, Norwegian Academy of Science and Letters; Arts and Humanities Research Council, Grant/ Award Number: AH/M004376/1 This paper builds on work about rewilding and human–animal relations by focusing inquiry on Portugal's Côa Valley, where a concentration of prehistoric rock art animal figures shares a landscape with a rewilding pilot which seeks to reestablish a population of wild horses. In response to recent geographical debates, the paper offers a sustained, situated analysis of the temporalities of rewilding and related claims to nonhuman autonomy. In the Côa Valley, ancient images of animal others are enrolled in efforts to return "wild" horses to the landscape, but conceptions of wildness and domesticity, and autonomy and temporality, remain fluid and unfixed – even as they are implicated in the production of bounded spaces and invoked in present-day management imperatives. To conclude, we argue for an appreciation of degrees of animal autonomy in rewilding contexts, moving beyond the binaries that often seem to be the focus of rewilding debates. Understanding of these degrees of autonomy, we argue, must be grounded in histories of landscape co-habitation and co-production, and consider the intersection of past cultural tradition and conceptions of desired future natures.

KEYWORDS

cultural geography, heritage, landscape, nature conservation, rewilding, rock art

1 | INTRODUCTION

Rewilding has been the subject of growing critique and analysis across the sciences and the social sciences (Bulkens, Muzaini, & Minca, 2016; Carey, 2016; Cloyd, 2016; Jørgensen, 2015; Lorimer et al., 2015; Marris, 2009; Pellis, 2016; Prior & Ward, 2016; Rubenstein, Rubenstein, Sherman, & Gavin, 2006; Svenning et al., 2016), as well as in public discourse (Barkham, 2017; Cohen, 2016; Monbiot, 2014). Increased attention has highlighted the geographical diversity of rewilding initiatives and the multiplicity of different approaches gathered under the term: in North America, debate often focuses on the reintroduction of keystone species into extended territories (Carey, 2016; Foreman, 2004; Moorhouse & Sandom, 2015), while in mainland Europe, the concept of rewilding is increasingly focused on the goal of (re)establishing naturalistic grazing in disused and abandoned agricultural landscapes (Agnoletti, 2014; Carey, 2016; Ceauşu et al., 2015; Lasanta, Nadal-Romero, & Arnáez, 2015; Navarro & Pereira, 2012). In geography, some analysis has focused on rewilding policy and implementation (Gooden, 2016; Jepson, 2016; Jepson & Schepers, 2016a, 2016b; Lorimer et al., 2015), while others have brought critical perspectives to bear on specific rewilding initiatives (Bulkens et al., 2016; Lorimer & Driessen, 2014, 2016).

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There remains, however, considerable ambiguity about the definition of key terms and concepts associated with rewilding. Research has shown, for example, that different versions of rewilding hinge on subtly different interpretations of critical terms such as "restore", "natural" and "wild" (Deary & Warren, 2017; Havlick & Doyle, 2009; Mansfield et al., 2015; Smith, 2013). Recent attempts to identify unifying characteristics in rewilding discourse and practice have focused on the implied erasure of human history (Jørgensen, 2015) and the pursuit of "autonomy" for nonhuman subjects and processes (Prior & Ward, 2016). In this paper, we subject these claims about temporality and autonomy to critical scrutiny by grounding our analysis in a specific rewilding context. We aim, through close reading of a situated case study, to (1) draw out the complex and contingent processes through which landscape pasts are brought into relation with landscape futures and to (2) explore autonomy as a fluid and negotiated state, expressed through degrees rather than essential attributes.

This paper builds on calls to consider in more depth the productive tensions in human–animal relations, and in rewilding projects specifically (Adams, 2016; Arts, Fischer, & van der Wal, 2016; Buller, 2015; Lorimer, 2006). We locate our analysis in the Côa Valley in north-east Portugal, where a concentration of prehistoric rock art animal imagery shares a land-scape with a rewilding pilot (sponsored by the organisation Rewilding Europe) which seeks to re-establish naturalistic grazing systems on former agricultural lands. In exploring the relationship between autonomy and temporality in this land-scape, we focus on an animal species with a particularly complex association with categories of wildness and domestication: horses. We examine how traces of past human-animal relations are enrolled to support projections of desired landscape futures, and we also consider the emergence of new relations based on acts of care, containment and release. We aim to encourage other researchers to pay more careful attention to the way that concepts of autonomy and temporality are evoked and applied in rewilding contexts, and to contribute to the further development of "a set of concepts and methodologies that addresses what matters for both human and nonhuman animal subjects in their various relational combinations and spaces" (Buller, 2015, p. 376).

This work is informed by ethnographic fieldwork undertaken by the authors in the Côa Valley in October/November 2015, August 2016, October 2016 and October 2017. Semi-structured, informal and group interviews took place with land managers, local residents, business owners, archaeologists and conservationists. Participant observation was conducted in a variety of different sites and at local events in the Côa Valley area, and we also analysed promotional and strategic planning material produced by local and international organisations. By familiarising ourselves with local practices as well as high-level strategic objectives, we gained a detailed understanding of how people and horses share this landscape in the present, and how they may do so in the future. Throughout the paper, we supplement our empirical analysis of rewilding practice and implementation with theoretical reflection on how this particular case study may help frame new understandings of key concepts. Our research suggests that understandings of future "autonomous" wild animals – often invoked in very general terms to assert that animals will be "looking after themselves" (Monbiot, 2014, p. 75) – can be deepened by extending the frame of reference to consider past and present human–animal relations. In this paper, the Côa Valley is approached, after David Matless, as a "landscape emblematic of processes marking the Anthropocene" (2017, p. 363), where the relationship to the past has a critical bearing on what might be possible in the future, and when and where "acts of looking" (2017, p. 364) activate new forms of subjectivity.

2 | **OPENING: A RIVER IN TIME**

The Côa River cuts a northward course from its source in the mountains near Sabugal, Portugal, winding 135 kilometres to meet the Douro River below the town of Vila Nova de Foz Côa (Figure 1). The valley is perhaps best known as the setting for one of the world's most extensive open-air rock art sites, with a concentration of paintings and engravings dated from the Upper Palaeolithic to the middle of the 20th century. The vast majority of the artwork depicts animal subjects, including goats, ibex, aurochs, horses and deer (Luís & García Díez, 2008). New carvings appear to have been created sporadically into the modern period, and images of trains, boats and airplanes appear adjacent to the depictions of extinct fauna (Luís & García Díez, 2008). Despite their abundance, their location in the open air and the apparent continuity of the practice, the carvings were only brought to wide public attention in the early 1990s, when a proposed hydroelectric power plant threat-ened to submerge many of them behind a dam (Lawson, 2012). Public opposition to the dam was fierce and effective – the motto for the campaign, "As gravuras não sabem nadar" (The engravings can't swim), was adopted in a popular hip-hop song (Blot, 2002). The dam project was cancelled in 1995, and the valley was designated a UNESCO World Heritage Site in 1998, with the area containing the densest concentration of rock art (along a 17-km section of the lower river basin) protected within a new archaeological park.

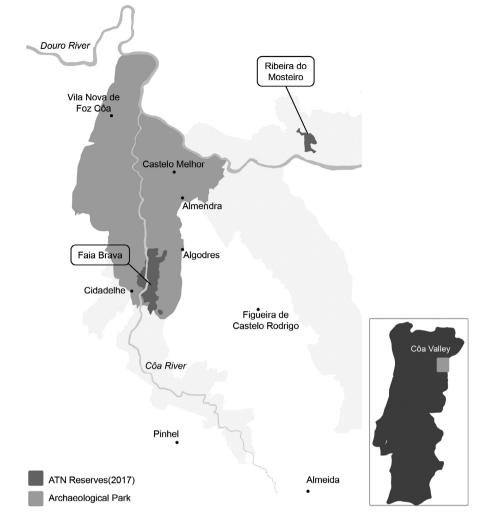


FIGURE 1 Map showing the confluence of the Douro and Côa Rivers, in relation to the Côa Valley Archaeological Park and ATN reserves. *Source:* University of Exeter Design Studio

A couple of years later, in 2000, a group of young Portuguese biologists established a 25-hectare designated area along the Côa, with a mission to "conserve, value, study and promote the natural heritage of northeast Portugal" (ATN, n.d. a; ATN, 2015, p. 2; Interview 1, 5/9/2016). For centuries, the landscape along the river had been intensively cultivated, with irregular fields of rye and wheat interspersed with olive, cork and almond groves, and areas of rough ground used for grazing sheep and goats (Informal interviews, 10–11/2015; Interview 3, 7/9/2016). The slow abandonment of this landscape, and the livelihoods it supported, began in the latter half of the 20th century. Young people left to go to the cities or abroad to find work, and the arable fields and groves grew over in broom and other scrubby pioneer species (Informal interviews, 10–11/2015). The biologists saw opportunity in the abandonment, and a new organisation – Associação Transumância e Natureza (ATN) – was formed to acquire disused agricultural lands and establish what would become the Faia Brava reserve. Early conservation efforts focused on improving habitat for vultures, eagles and other cliff-breeding raptors. As the biologists' work gathered momentum, they were able to purchase additional land along the banks of the Côa (often with support from international donors). In 2010 the reserve was classified by ICNF (Institute for Nature Conservation and Forests) as a "protected area", the first in Portugal to be managed by a private non-governmental organisation (ATN, n.d. b; ATN, 2014, p. 2). The Faia Brava reserve also lies within the boundaries of the archaeological park – a recognition of the combined cultural and natural heritage significance of the landscape (Harrison, 2015).

Since 2012, ATN has been working with the Netherlands-based organisation Rewilding Europe to run a pilot project in Faia Brava, gathering the previous conservation activity under the label of "rewilding" (ATN, 2015, p. 3). One of the key actions supported by Rewilding Europe in Faia Brava has been the release of "semi-wild livestock" – primarily horses and cattle – in the hopes that their grazing activity will "restore the natural mechanisms that maintain the landscape mosaic" (ATN, 2015, p. 10). ATN and Rewilding Europe work closely together, mobilising support at different scales and tailoring

their communication strategies to different audiences and interests. Rewilding Europe has provided some direct financial assistance for rewilding activities in the Côa, but much of the organisation's involvement is focused on strategic promotion and fundraising at an international level; ATN retains full responsibility and oversight for implementation and ongoing management in the rewilding reserve.

The Iberian rewilding pilot is part of a wider initiative by Rewilding Europe to support conservation actions through which a "new wild horse can reclaim his [sic] lost role of grazing landscape manager on Europe's vast areas of abandoned, extensive agricultural lands" (Linnartz & Meissner, 2014, p. 5). On the organisation's website, Rewilding Europe makes an explicit link between the Côa Valley carving tradition and its rewilding agenda:

The Iberian Peninsula has witnessed some of the earliest finds of human settlement in Europe, and already 22,000 years ago, early mankind left behind a strong legacy in this rewilding area, through an amazing series of rock carvings depicting the local wildlife. A heritage written in stone. The Côa valley harbours a huge collection of outdoor rock carvings along the valley sides, and it is seen as one of the world's richest finds of its kind, with over 2,000 carvings found as yet, dated from c. 22,000 years ago and forward. Almost all of them showing the most important local wildlife for the humans at the time: aurochs, wild horse, red deer, ibex and fish. All of which have been gone since centuries, but might now very soon be coming back! (Rewilding Europe, 2017a)

Equine figures make up almost a quarter of the thematic species artistically depicted in the Côa Valley (Luís & García Díez, 2008, p. 155). Dozens of horses are etched into the valley walls on either side of the river, hiding under rock overhangs and appearing on exposed schist slabs (Figure 2). Most of the horse figures appear in profile – showing a long head, compact ears and a standing mane, features shared by three breeds of horse native to Portugal: Garrano, Sorraia and Lusitano (Luís, Juras, Oom, & Cothran, 2007). Rewilding Europe aims to use "current and future scientific knowledge to select and conserve the best descendants of the original European wild horse and to re-adapt them to modern natural environments" (Linnartz & Meissner, 2014, p. 5).

In August 2016, ATN and Rewilding Europe marked a 300-hectare expansion of the Faia Brava reserve with the release of sixteen horses and nine head of cattle into an area on the western banks of the river, adjacent to the village of Cidadelhe. The expansion brought the total area of Faia Brava to 1,000 hectares.¹ The story of the Côa Valley horses – their reintroduction in the landscape as well as their depiction in the rock art – unfolds in this paper to inform our understanding of

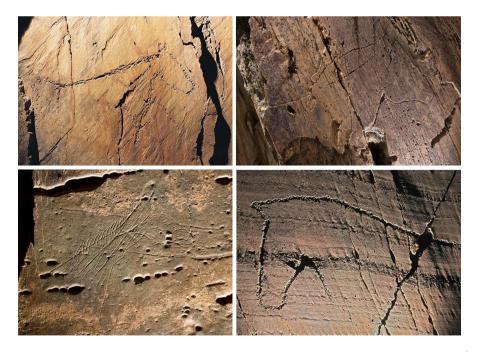


FIGURE 2 Depictions of horses in pecked and incised carvings at Canada do Inferno, Quinta da Barca, Vale de José Esteves and Vale de Moinhos (clockwise from upper left).

Source: www.arte-coa.pt, photographed by Manuel Almeida, Pedro Guimarães, Mário Reis, reproduced with kind permission of the Museu do Côa.

how humans and nonhumans are involved in co-producing natures, and how degrees of autonomy intersect with folded temporalities.

3 | REWILDING: DEGREES OF AUTONOMY

The use of the term "rewilding" has accelerated in the past decade, as it has come to describe a diverse range of different activities intended to restore ecosystem function to formerly cultivated or managed landscapes – or to reintroduce keystone species in environments where they had been absent (Donlan, 2005; Helmer, Saavedra, Sylvén, & Schepers, 2015; Jepson, 2016; Lorimer et al., 2015; Monbiot, 2014; Navarro & Pereira, 2012). In Europe, the term is increasingly used to refer to the passive management of abandoned agricultural lands to encourage regeneration of natural habitats (Navarro & Pereira, 2012). Rewilding activists often explain their work through language that emphasises the experimental accommodation of certain ecological processes – among them predation, naturalistic grazing and plant succession (Jepson, 2016; Lorimer & Driessen, 2014; Robbins & Moore, 2013). A focus on "restoring natural processes and ecological dynamics … creating self-sustaining, resilient ecosystems … [and] working towards the ideal of passive management" is contrasted with intensive conservation management approaches that seek to restore environments to a specific state or conserve populations of priority species (Jepson & Schepers, 2016b, p. 2).

However, the temporalities of rewilding are complex and often contested. In a recent paper, Jørgenson catalogues the different historic baselines that guide goal-setting in rewilding initiatives, with "reference times" identified as beginning 13,000 years before present (in the case of Pleistocene megafauna replacement) and continuing through to the relatively recent past. Such rewilding baselines, she argues, attempt to "erase human history and involvement with the land and flora and fauna" (Jørgensen, 2015, p. 487). Although she acknowledges that rewilding practitioners rarely make this position explicit – and indeed are more likely to claim they are "taking inspiration from the past but not replicating it" (Jepson & Schepers, 2016b, p. 2) – Jørgensen argues that the focus on the reintroduction of animals which have been exterminated by humans "disavows human history and finds value only in historical ecologies prior to human habitation". She concludes, "The rewilding concept has been deployed in a myriad of ways to exclude humans in time and space from nature" (2015, p. 487).

In a response to Jørgensen's paper, Prior and Ward (2016) take issue with her characterisation of rewilding as guided by a flawed, backward-looking historical frame and suggest that what links rewilding efforts is not necessarily their attempt to return to a prehuman past, but rather the desire to grant nonhumans "autonomy". They point out that most rewilding initiatives seek to reach a state in which nature becomes "self-sustaining" – as contrasted with conventional conservation management, which assumes the need for continual intervention (Prior & Ward, 2016, p. 133). In practitioner and activist contexts, this approach is commonly expressed as a desire that nature be allowed to "look after itself" so that human control is reduced (Navarro & Pereira, 2012, p. 904) and landscapes eventually become "self-willed" (Jepson & Schepers, 2016b, p. 5). Prior and Ward argue:

[W]hilst ... human actors may initiate rewilding efforts, the restoration of autonomous biotic and abiotic agents and processes is realised through the (oftentimes gradual) relinquishment of direct human management of the wild organisms or ecological processes in question. (2016, p. 133)

Prior and Ward frame their discussion with reference to the concept of "wildness", defined (after Woods, 2005) as "the autonomy of the more-than-human world where events ... occur largely because of their own internal self-expression" (Prior & Ward, 2016, p. 133). They go on, however, to reject any claim that rewilding entrenches a distinction between humans and nature, and insist that rewilding forces us to acknowledge "that human and nonhuman worlds are inextricably entangled" (2016, p. 135) and implicated in the "co-production of surprising ecological futures" (2016, p. 134).

While we are broadly in agreement with the critical perspectives brought to bear by these scholars, their debate exposes the need for more sustained analysis of the temporalities of rewilding and related claims to nonhuman autonomy. Lorimer and Driessen suggest that more complex notions of spatial history are needed in order to understand rewilding's "dynamic future pasts" (2016, p. 647) and the ways in which "rewildings mobilize the past to govern the present and to anticipate particular futures" (Lorimer & Driessen, 2016, p. 633). They also observe, with others, that rewilding's claims to "self-willed" or "spontaneous" nature need to be further scrutinised (Fisher, 2004; Lorimer & Driessen, 2014, p. 174). This paper makes a contribution to this body of work by considering concepts of temporality and autonomy in relation to each other, in a specific rewilding context.

In order to unpack how these terms are being used, it is necessary to begin by noting the paradoxical relationship between entanglement and autonomy in much of the academic literature. It has become commonplace to make reference to the inextricable entanglement of human and nonhuman worlds. Harman observes that the formula adopted by Latour (and followed by others) assumes a world in which there is ever "more entanglement and relationality [and] less purity and autonomy for supposedly separate actors" (Harman, 2014, p. 40). On the other hand, a desire to grant nonhumans "autonomy" from human control and coercion has also become a common refrain. As some scholars have observed, however, the invocation of "autonomy" for nonhuman others can often seem to be motivated more by a desire to atone for human interference than by an appreciation of "the fullest expression of animal life, including the capacity for movement, for social and familial association, for work and play" (Collard, Dempsey, & Sundberg, 2015, p. 328). Such a focus on self-expression suggests that autonomy might be more productively defined as the freedom to act, rather than the absence of control (Thomas, 2016). There remains a clear need for research that examines how autonomy is pursued and achieved in specific conservation contents, and that investigates the relationship between autonomy and states of relative "wildness" (Castree, 2013, p. 376).

Braverman's (2015) discussion of the distinction between in situ and ex situ conservation practice has some relevance to these questions. In her work, she contrasts in situ conservation, which manages animals in their place of origin, with ex situ approaches, which focus on displacement and captive breeding (2015, p. 32; see also Adams, 2016). (The terms in situ and ex situ are also used in archaeology to refer to preservation "as found" and conservation through containment in museums and archives.) One could argue that rewilding blurs the boundaries of these traditional conservation categories – and indeed, Braverman, and the majority of the practitioners she interviewed, recognise that, "In the increasing fluidity between in situ and ex situ management, the question of "make live" is becoming extremely complex and involves overlapping and contested typologies" (Braverman, 2015, p. 13). Rather than conserving "artefacts" such as archaeological remnants or museum objects, the "thing" being conserved in rewilding is a living being, and its potential to live autonomously in a future environment.

For Thomas while all animals have the capacity to act, the ability to act intentionally (and freely) is, "in general and morally (...) a matter of degree rather than of kind" (2016, p. 34). As such, the consideration given to animal others is about understanding that "just as there are both rich and basic levels of self, so too there are rich and basic levels of autonomy" (2016, p. 77). The respect of the other as a self-aware, autonomous being assumes a moral obligation:

The degree to which a being is autonomous ought to be respected as fully as possible, and the degree to which a being is self-aware indicates how autonomous it is. Specific traits and interests would vary according to species membership. (Thomas, 2016, p. 77)

Thomas argues that the question, therefore, is not about recognition of absolute autonomy, but rather about *degrees of autonomy* granted to particular species in particular contexts. The identification of degrees of autonomous existence aligns with Braverman's observations about variable levels of human intervention and management in nature conservation projects; she ultimately arrives at the conclusion that "conservation and hands-on management cannot be separated" (2015, p. 226). We find Thomas's and Braverman's views useful in gaining a better sense of entanglement and autonomy in relation, when living beings are understood to achieve varying degrees of autonomy in specific environments and contexts.

As Hinchliffe has pointed out, Kant's assertion of human "autonomy" as an achievement related to progress, modernity and the urban – as distinct from "heteronomy", and its association with pre-modernity (Hinchliffe, 2007, p. 42; see also Thomas, 2016; Rasmussen, 2011) – introduces a central temporal orientation to the question of autonomy. In this framework, which is implied in Jørgensen's critique, animal autonomy is a state that existed prior to the assertion of human autonomy – the "wild" is thought to be located in the past, when there were "more animals and less people (or at least, much less intrusive people)" (2015, p. 487; see also Castree, 2013, p. 297). But this interpretation, which sees rewilding as an attempt to reverse a linear historical pattern to reinstate animal autonomy, does not adequately address the complexity and the ambiguity of the practice as it is playing out in the landscape we studied, where deep histories of human–animal relations complicate present conservation practices, and where the temporalities are juxtaposed and interwoven in multiple ways (Bartolini, 2014).

Collard et al. recently argued that the pursuit of "futures with more diverse and autonomous forms of life and ways of living together" (2015, p. 323) must begin with a temporal orientation that reckons with the power of the past to shape (and constrain) possible futures. In the introduction to the special issue in which this paper appeared, Braun argued that the Anthropocene calls for an understanding of time that acknowledges both how the "past haunts the present" (2015, p. 240) and how time flows "toward us, from the future to the present" (2015, p. 239) – rather than a linear conception of time, which assumes that "by understanding the past we might be able to anticipate and shape the future" (2015, p. 239). In this paper, we set out to explore how, in one landscape, the past is enrolled in the present to shape possible futures and particular visions of future landscape have an active role in shaping present-day practice.

4 | **RELEASING: VILLAGE AND VALLEY**

The village of Cidadelhe is the closest settlement to the boundaries of the Faia Brava reserve; its dwellings and shelters are spread out among (and under) granite outcrops, along a high plateau on the western side of the steep, arid valley. Novelist Jose Saramago visited Cidadelhe in 1979, and described it as lying at the "ends of the earth" (2002 [1981], p. 189). "The village is entirely of stone", he wrote. "The houses are of stone, and so are the streets. The landscape is of stone" (2002 [1981], p. 190). He noted that many of the dwellings were empty, their walls collapsed: "Where people used to live, weeds now grow" (2002 [1981], p. 190). In the 1970 census, Cidadelhe's population was recorded at 145, less than half of what it had been 20 years previously (Statistics Portugal). By 1979, when Saramago visited, it had dropped closer to 100, as people left for France and the Portuguese colonies during the Salazar regime (Informal interviews, 8–10/10/2017). Saramago's local guide described the village as "condemned to disappear" (Saramago, 2002, p. 185). The depopulation of the villages in the interior of Portugal led to the widespread abandonment of the surrounding agricultural lands. The most recent census figures record 40 residents in Cidadelhe, but villagers reckon that only 30 people live there year-round, their homes set among the derelict dwellings of those who have left (Statistics Portugal; Informal interviews, 4/10/2016).

However, amid the evidence of widespread abandonment there is a tentative sense of renewal in Cidadelhe. A few years ago a young couple began to buy up the derelict houses in the lower village and restore them as hostel accommodation for travellers hiking through on the Côa Valley Grande Route, occasional visitors to the Faia Brava reserve and off-the-beaten path tourists. The couple took an interest in the local history and the hostel reception became a de facto tourist office, where they organise guided tours to the nearby rock art site and the old boat crossing on the river (Interview 4, 7/9/2016). We were staying in one of the restored houses in the village in August 2016 when ATN released 16 Garrano horses into their new 300-hectare reserve expansion on the outskirts of the village of Cidadelhe.

The event poster promised the "Inauguração da Nova Vedação/Libertação de Cavalos" (New Fenced Area/Liberation of the Horses) and the hostel owners had organised a village celebration, which included a hiking and bird-watching expedition and a community lunch (Figure 3). The day began early, with a crowd gathering in front of the hostel office soon after eight o'clock, before the day's heat set in. A few dozen people assembled for the guided walk – elderly village residents in wide-brimmed hats, stray tourists, families visiting their holiday homes in the village, ATN staff and a film crew accompanying the Rewilding Europe managing director, who was visiting Faia Brava to gather footage for a documentary on the work of the organisation. The walkers followed the old road to the ruined castle at the edge of the village, and then worked their way around to the edge of the steep cliffs, overlooking the river valley. Guides pointed out the recently installed reserve fencing, the vultures circling overhead and the new "safari" camp on the far side of the valley, where rewilding tourists could sleep under the stars.

The walk ended at a stone-walled corral where the horses had been penned in preparation for the release. People and horses sought patches of thin shade, to escape the noonday sun. In a ceremonial ribbon cutting, the Rewilding Europe managing director offered a few words to the assembled group, explaining that Rewilding Europe is about "making more space for wild nature" and "making sure people benefit from that" (Field notes, 20/8/2016). After the ribbon cutting, the crowd assembled above the narrow gate where the horses would emerge. The gate was opened, and the horses were herded towards the gap. The crowd looked on, watching the horses quicken their gait and disappear over the near horizon in a cloud of dust (Figure 4). It was a symbolic moment: for many of the local residents it was the first time that they had engaged directly with the conservation experiment that had been unfolding on their doorstep for over a decade. The hostel owners described the release of the horses in August 2016 as a defining moment for the community; they hoped that the event would help people begin to see the value of deepening the local connection to the Faia Brava reserve and ATN's work (Interview 4, 7/10/2016).

The horse release also exposed some of the apparent paradoxes at the heart of this rewilding project. The semi-wild Garrano horses were "liberated" into a fenced territory, where they will be monitored and managed with the intention that they will, eventually, come to play a part in a revitalised ecosystem, filling a niche once occupied by their equine ancestors (Linnartz & Meissner, 2014, p. 9). The horses' grazing and browsing activity should slow or reverse the spread of broom and other scrub plant species, reducing wildfire risk and recreate a habitat mosaic of clear pasture areas and re-vegetated woodland (known in Portugal as "montado") (Rewilding Europe, 2017b). ATN's management plan articulates a long-term vision of a future in which the horses will be joined by reintroduced deer and ibex – and, hypothetically, wolves that will move in to predate them (ATN, 2015, p. 10). In the short term, however, the newly released horses are subject to intensive management – partly through the fencing of their territory, but also through provision of water and occasionally food. One of ATN's founders observed that one needs to see rewilding in this landscape as a process, where present practices are small steps to reaching future goals (Interview 14, 11/10/2017). Rather than seeing the ongoing relationship between the horses and the people as contradictory to the stated aims of the rewilding project, in the following section we explore how these relations allow us to frame autonomy within a wider temporal context. We discuss the rock art tradition and its connection

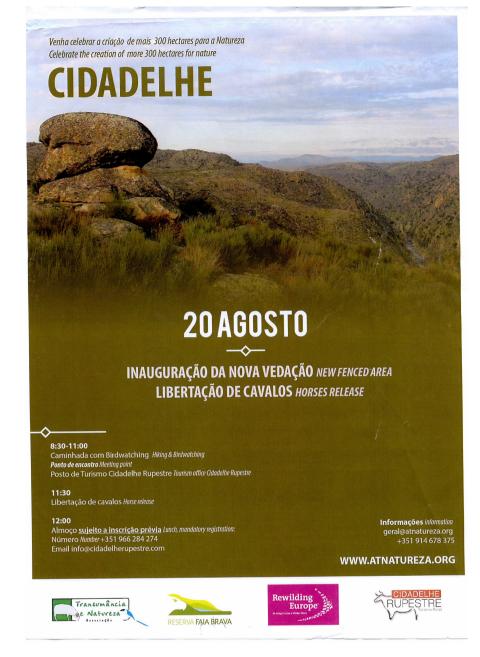


FIGURE 3 Poster advertising the 20 August 2016 Libertação de Cavalos/Horse Release at Cidadelhe, Portugal. Source: ATN

to the imagined future landscape in the Côa Valley, and use it to frame our understanding of the present-day tension between "wild" and "domesticated" states.

5 | ROCK ART REFERENTS AND FUTURE-PASTS

The Upper Palaeolithic engravings in the Côa have been described as "an exceptional illustration of the sudden development of creative genius during the dawn of humans' cultural development" (FCP, 2009, p. 4). Recent research suggests that the engravings were associated with seasonal hunting camps, where dispersed groups of people would come together to "fulfill their economic, social and cultural needs" (Aubry, Luís, & Dimuccio, 2012, p. 543). More than 800 engraved outcrops have been identified since the 1990s, and archaeologists speculate that "engravings were left by nomad tribal hunters while pursuing their prey" (FCP, 2009, p. 2). The idealised animal images could have served a number of different symbolic and spiritual purposes,



FIGURE 4 The horse release event at Cidadelhe, Portugal, August 2016. *Source:* Caitlin DeSilvey

but researchers believe that in a general sense the art was used to construct and maintain identity, produce social cohesion among disparate groups and communicate through the landscape (Luís & Díez, 2007, p. 167; informal interview, 11/10/2017). The meticulous, attentive depiction of the ancient horses in the rock carvings suggests that in their independent, "undomesticated" state the horses nonetheless occupied a central role in human systems of meaning and representation.

Although the majority of the rock art dates to the Upper Palaeolithic, isolated carvings offer a glimpse of human-horse relations as they shifted over time. At one site on a high plateau across the river from Cidadelhe, paintings of stylised human forms are thought to have been created in the transition from the Palaeolithic to the Neolithic, when people began to cultivate small patches of ground (Field notes 26/10/2015). In 2006, an engraved slate was discovered in a field of olive and almond trees near the mouth of the Côa River. Dated to the Iron Age, the image on the slate indexes a time when horses and people had entered into a more intimate relationship. This piece of portable art depicts a group of human and animal figures in finely etched outline (Figure 5), with human figures holding what appear to be spears while riding on the backs of horses. Compared with the static representations from the Upper Palaeolithic, the image depicts a scene of action and fluid movement. Archaeologists at the Côa Museum interpret this as a hunting scene, where horses are associated with status and humans had become dominant (Interviews 16 and 17, 12/10/2017). The image places the creation of the slate after 3500 BC, when evidence from the Eurasian steppes suggests horses began to be used for transportation, labour and warfare. Researchers suggest that there may have been an independent domestication event on the Iberian peninsula during roughly the same period (Lira et al., 2010), although the process of domestication was likely so gradual and incremental that people would have barely been aware of any change in their lifetimes (Erickson, 2006, p. 243).

Recent research suggests that the domestication of horses was not a deterministic, inevitable, linear progression from "wildness" to "domesticity", but a dynamic interspecies interaction that unfolded through what Head describes as a "social process of relations" (2014, p. 119). Domestication was contingent and messy, Head argues, and must be appreciated in its spatial and temporal variability. The Rewilding Europe "wild horse action plan" makes a similar observation, noting that, "In horses, domestication was an erratic history of taming, human selection, breeding, hybridising with wild horses again, living wild for a while and then being re-tamed again when man needed them" (Rewilding Europe, 2013). This recognition of "wildness" as a provisional and relational achievement – negotiated through degrees of relative autonomy – is telling in this context. In other statements, Rewilding Europe draws the distinction more sharply: "Rewilding horses also means moving from domestication towards wildness, from tame to wild, from human care to self-sustainability" (Linnartz & Meissner, 2014, p. 5). As Linnell, Kaczensky, Wotschikowsky, Lescureux, and Boitani (2015) have observed, however, the labels "wild" and "domestic" do not adequately describe the characteristics of the ongoing relationship between people and horses in Europe and the continual interplay between natural and cultural landscape processes.



FIGURE 5 Slate with Iron Age engravings, found at Paço, Vale do Côa. *Source:* www.arte-coa.pt, photographed by Manuel Almeida, reproduced with kind permission of the Museu do Côa.

These issues have a direct bearing on the relationship between the rock art tradition and the rewilding initiative in the Côa. Rewilding Europe uses the art as imaginative provocation and evidence of the existence of the "wild" European horse (although the "wild" remains loosely defined, as noted above). The organisation also refers to the equine images in a more practical sense, to identify modern breeds that are appropriate for reintroduction: "Several of our 21st century horse breeds are amazingly close to the horses that feature in the 15,000–32,000-year-old cave paintings in Chauvet, Altamira and Lascaux or in the rock carvings of the Côa valley. Closer than we might have expected" (Rewilding Europe, 2013). Research carried out by Luís et al. suggests that the Garrano (*Equus ferus caballus*) – which has a straight, sometimes concave, head profile, a bay coat and a very dense mane and tail – may have originated from an ancient lineage distinct from the other two southern Portuguese native breeds (Luís et al., 2007, p. 21). They point out that this general morphological type is also represented in Palaeolithic paintings from north Iberian caves (Luís et al., 2007). Rewilding Europe asserts that the wild horse lineage evidenced in the rock art was never fully extinguished: "The domestication of horses did not change their genes as much as it did with many of our other domestic mammals. The absence of strong human selection and the presence of natural selection has kept some of the wilder and more original breeds quite fit for a natural wild life" (Rewilding Europe, 2013).

ATN's executive-coordinator is more cautious than Rewilding Europe about enrolling the ancient horses in his rewilding aims. He explains that he values the artwork as portrait of the fauna that people saw and valued in the ancient landscape, and a record of the way that humans and animals have coexisted in the Côa Valley for thousands of years (Personal communication, 26/1/2015). His primary interest, though, is in the "landscape behind the engravings" through which the Palaeolithic horses ranged, and which they shaped with their grazing and migration (Personal communication, 26/1/2015). For him, the rock art also provides a window into changes in the landscape, in the transition from the Palaeolithic through the Neolithic to the Iron Age (Interview 15, 12/10/2017). In alignment with Rewilding Europe, he describes what they are doing as allowing the horses to gradually shed their domesticity, and rediscover their "wild" traits:

These are animals that we are used to seeing as tame ... and we are letting them go free ... [T]hese animals are domesticated ... they are for centuries or millennia and generations in a row, used and bred and selected artificially by man, so they are not wild animals. But when you release them back into the wild they have to actually adapt [back] to the wilderness, and ... start this new selection and adaptation process of getting back [the] ecosystem adapted skills and characteristics to develop into a kind of a wild animal. (Interview 5, 8/10/2016)

Yusoff in a discussion of the Lascaux cave paintings and Australian aboriginal *Gwion*, *Gwion* images, suggests that rock art can open up a "space of communication" (2015, p. 399) in which we recognise that we share a "corporeal heritage" with bodies that are not our own (2015, p. 396). She explores rock art as a resource for "thinking an inhuman milieu, both before, after and internal to 'us'" (2015, p. 388), and tracing the formation of human subjectivity as it emerged through "multispecies events" (2015, p. 398). The "sociality of ecological activity produces identity", she argues (2015, p. 398).

Such a sociality is vividly present in the carefully observed realism of the Palaeolithic horse portraits, and in the playful (or aggressive) abandon of the Iron Age carved slate. Critically, however, we would agree with Yusoff's assertion that the aesthetic power of these images inheres not in an awareness of lost continuity and communion, but in "a glimpse of that slippage between, that which is forgotten in our nature and that which is immediate and remote, what belongs to us, but cannot be ours..." (2015, p. 400). In the Côa, a "space of communication" links the Palaeolithic rock art to the present through an understanding of the deep history of human–animal relations in this landscape, and the continuity of cultural expression associated with that relationship as it has transformed over time.

Fast-forward 22,000 years, and it is through this cultural expression that the archaeological park obtained UNESCO World Heritage Site status, ensuring that the cultural legacy of human–animal relations remains in some way preserved. In a curious inversion, just as the landscape begins to undergo a process of "wilding", the rock art itself is subject to a kind of "taming", as it is contained and framed by its heritage designation and subsequent protection. As the wild horses return to this landscape, natural and cultural heritage are becoming ever more tightly stitched together. In the next section, our analysis returns to the present, and to the outcomes of the August 2016 horse release, to further reflect on the stitches in time that bind together the past and the future in this landscape.

6 | **PRACTICE, PERMEABILITY AND MAKING LANDSCAPE**

In the days immediately after the 2016 horse release, residents of the village of Cidadelhe began to look out across the landscape to catch sight of the horses, commenting to each other when they caught a glimpse of the dusty bodies ranging across the scrubby open ground, and sharing advice about the best vantage points from which to spot them. Over a year later, we observed more complex relationships coming into being. In this section we focus on one element of the emerging landscape – fences – as a significant place for the negotiation of new forms of human–animal relation.

ATN's executive-coordinator and board members told us more than once that in an ideal world, their rewilding areas would not be fenced (Interviews 13-15, 11-12/10/2017). But, in the short term, fencing is an essential management tool, one of the "small steps" necessary in the transition between intensive management and future freedom. The transitional phase, and the relation to animal welfare, is articulated in a Rewilding Europe publication:

It is necessary to realise that relocation for rewilding is not simply crossing a line between culture and nature, or between captive and wild animals ... It is a radical transition from an ethical domain of individual care to a concern for the ecological whole, where individual suffering is insignificant ... The duty of care is inversely proportionate to the size of the rewilding area ... [I]n smaller areas, animals are approached at the level of the individual, and in larger areas at the species level, whilst in unlimited wilderness, at the ecosystem level. (Linnartz & Meissner, 2014, pp. 31–32)

Although, Faia Brava now covers over 1,000 hectares of land, according to the formula above it is still a "smaller area", where animals are subject to "an ethical domain of individual care" (Linnartz & Meissner, 2014, p. 31). ATN informed us that there are close to 100 horses roaming throughout their patchwork of properties, and this requires management (Interview 13, 11/10/2017; Interview 15, 12/10/2017). Much more land, and more contiguous land, is needed for ATN to gradually step back from managing the horses.

But fencing at Faia Brava also serves other essential functions in this transitional phase. First, and most obviously, fences delineate properties. In a landscape riddled with private plots, local residents negotiate their everyday practices through seeking permissions from adjacent landowners and offering neighbourly assistance when needed. Although only a few of the remaining older generation in the area continue to farm, the boundaries defining one plot from another are still understood through human – and familial – occupation of the landscape. Parcels of land are identified by their original proprietors, even after land is sold (Informal interview, 10/10/2017). Continued fencing, therefore, enables ATN to be perceived as a landowner, and moreover, to maintain a familiar practice and presence in relation to other landowners in the landscape.

During our fieldwork, we became acquainted with a fourth-generation shepherd and Cidadelhe resident, who (unlike most of his neighbours, who have sold their properties to ATN) has retained ownership of his land in the area surrounding the village. In 2016 he mentioned to us that he had some reservations about the rewilding initiative. He recalled that in his youth the whole landscape around the village had been farmed; now people had lost this connection, he explained, and the landscape had become untended and abandoned. "Nature just takes over", he commented, "I don't really understand why they are spending money to buy lands; I think that rewilding will just happen naturally" (Interview 3, 7/10/2016).

A year later, we accompanied the shepherd on his rounds. We drove on the public road outside the village until we reached a cattle grid, where we stopped. He explained that the cattle grids "keep the horses in" as well as the sheep and cattle roaming in the area, while letting the public access the road up to the cliffs to reach the rock art (Interview 12, 11/ 10/2017). Cattle grids are common in nature conservation and agricultural land management (see, for example, Leyshon & Geoghegan, 2012). In this landscape, they are an essential tool for managing the relationship between the rewilding area (and the containment of the Garrano horses) and ongoing farming practices. The shepherd also pointed out the "upside-down" fencing next to the cattle grid (Figure 6). ATN confirmed that all of their fencing is installed with the wider openings in the mesh at the bottom, to let rabbits and other smaller animals roam between properties (Informal interviews, 13/ 10/2017). ATN staff and local residents refer to these fences as "permeable".

The shepherd then brought us to another area that divides his property from the extended Faia Brava reserve. He explained that since his 30-hectare plot of land is surrounded by ATN's property, they came to an agreement whereby his sheep and ATN's horses could cross between the properties unimpeded by boundary fencing. This is good neighbourly practice; the downside, however, is that sheep and horses have similar grazing patterns. In the scorching hot summer of 2017, which severely reduced feed and water in the area, the horses consumed most of the available forage, leaving the shepherd to seek food for his flock of sheep further afield, at another farmer's property.

The dry conditions of 2017 also threatened the survival of the reintroduced Garrano horses. While ATN's property includes access to the Côa River, the introduced Garrano horses cannot navigate the steep drops and cliffs along the sides of the valley. Future generations of horses may adapt to the landscape and learn to pick their way through the rocky terrain and create new routes to the river, but to remedy the immediate problem, ATN supplies the horses with water. As part of his agreement with ATN, the shepherd monitors the water supply. We accompanied him in the intense heat of an October day as he deftly scaled an old stone wall to check the levels in the water tank and trough. The desire to care for the reintroduced Garrano horses is something that many residents relate to. At a local gathering one evening, a few residents voiced their concerns about the horses, explaining that the area around the village is a harsh environment and the horses cannot survive on their own if they cannot reach the river (Informal interviews, 13/10/2017). One resident mentioned that for as long he can remember, from his childhood and from stories his grandfather told him, they had always had a relationship with all the animals in the surrounding landscape: why would this stop, he wondered out loud.

The interim arrangements in place for fencing and watering the reintroduced horses speak directly to the issue of autonomy. But rather than applying the binary of autonomous/non-autonomous, the fencing and feeding of the Garrano horses is more appropriately understood with the arguments put forth by Thomas (2016) in reference to establishing *degrees* of autonomy, as well as considering how these degrees correlate with Braverman's (2015) discussions of ex situ and in situ conservation. In this circumstance, if the horses are fenced in order to be contained, then would they be considered in the



FIGURE 6 Permeable fencing and cattle grid near Cidadelhe. *Source:* Nadia Bartolini

same vein as ex situ conservation subjects, such as captive animals in zoos? If the goal of rewilding is to aim for management geared towards the opposite end of the conservation spectrum, however, then the presence of the horses would be more accurately described as in situ conservation, which relates to conservation of "free" animals in their place of origin. The gap between the two poles of conservation philosophy can perhaps be understood, as Braverman suggests, through the concept of *inter situ* management (2015) – and the recognition that while the goal of achieving a state of "unlimited wilderness" (Linnartz & Meissner, 2014, p. 31) and unfettered animal freedom may have rhetorical power, the actual practice of rewilding will involve incremental, continual intervention.

By enabling local residents to care for the reintroduced Garrano horses, ATN is establishing a connection with the local community and the traditional farming mentality, reconciling two potentially contradictory outlooks: one that has always cared for animals as domesticated others, and one that wishes for animals to "be able to express their wildness", as articulated by the ATN executive-coordinator (Interview 11, 9/10/2017). The space between these two outlooks is perhaps best expressed through the concept of "stewardship", in which limited assistance is extended to ensure animal livelihood (Braverman, 2013). As one ATN founder told us, during this transitional period they hope to gradually bring about a change in people's practices and ways of perceiving the landscape (Interview 13, 11/10/2017). In this particular rewilding context, care by Cidadelhe residents is a means for the local community to develop a relationship with the newly introduced Garrano horses, and to start to appreciate their presence, even though they continue to be viewed as the property of ATN. In other words, it is through the permeability of the fencing and the continued extension of care that a gradual shift in mentality can develop, one open to varying degrees of animal autonomy in a changing landscape.

7 | CONCLUSION: RECONCILING

In this paper, we have examined the way in which the reintroduction of horses in the Côa Valley landscape complicates taken-for-granted notions of autonomy and temporality. The presence of the rock art as a backdrop in the Côa Valley illustrates an ongoing relationship between humans and nonhumans in the landscape since the Upper Palaeolithic. Rewilding Europe uses the rock art tradition strategically to support its aim of "helping to bring back the wild horse to where it once belonged" and "developing an economy based more on wild nature and wildlife" (Rewilding Europe, 2013). Although Lorimer and Driessen have noted, in other contexts, that "Rewilding Europe imagines a radical form of decoupling" between people and nature, in which "people figure largely as urban, postproductivist observers" (Lorimer & Driessen, 2016, p. 633), close observation of how the Côa Valley rewilding initiative is playing out on the ground and being managed by ATN suggests a slightly different interpretation. The current practice of involving local residents in ensuring the horses' welfare is a recognition of the longstanding relationship between humans and nonhumans in the area. Here, the principles of ATN as a nature conservation organisation are inflected through a landscape where the boundary between nature and culture is porous and permeable, and where present-day practice draws on a deep awareness of past human–animal relations, as well as a respect for centuries of agricultural tradition and land ownership. Rather than seeing the rewilding initiative as an attempt to decouple people and nature, the horse release can perhaps be seen as an act of prospective re-coupling.

Stefan Tanaka has argued that only a "history without chronology" allows us to recognise discontinuous patterns of co-evolutionary change, born out of extended interaction between animals and people over time (LeCain, 2016; Tanaka, p. 175). One might argue that what we are witnessing now can be understood as co-*de*volutionary change, which integrates idealised elements of past human–animal relations into visions of future multi-species landscape relations (Kirksey, 2014). Rewilding Europe has suggested that surviving "wild" horse traits are preserved in contemporary breeds:

All across Europe, several of the local horse breeds have traditionally roamed free in natural areas in a semiwild state. These horses were expected to find their own food and shelter. This turned out to be a guarantee to preserve important wild traits and appearances, enabling horses to stay fit and alive under semi-wild conditions. (Rewilding Europe, 2013)

While we would disagree with the implication that the domesticated horse lacks autonomy as such, the reference to a latent capacity for self-reliance resonates with the ATN coordinator's desire to let the animals "express their wildness" in such a way that they could become capable of an increased degree of autonomy (Interview 11, 9/10/2017). "Wildness", in this case, is held as a reserve, and it is this potential that is indexed in the rock art as a recognition of both radical otherness and mutual coexistence. As with the discussion of "degrees of autonomy", however, the "wild" aspired to in this case is not a pure, asocial

state but a performative representation of multi-species possibility (Castree, 2013, p. 137). It is also, importantly, not necessarily consensual – a point made by Deary and Warren (2017) in their discussion of the "many wilds" of rewilding.

To conclude, we argue for an understanding of rewilding as the management of tensions that play out through time, and an understanding of animal autonomy as a variable, uneven and situated process. The appreciation of degrees of animal autonomy in rewilding contexts shifts the focus away from the entrenched binaries that often seem to be the focus of rewilding debates (wild/not wild; autonomous/non-autonomous). As we have seen in the Côa Valley case, embracing such an understanding involves accepting ongoing tensions between intervention and relinquishment, care and containment. The rewilding initiative highlights how these tensions are not in direct opposition, but are inflected through complex temporal frameworks: to achieve a desired state in an indeterminate future requires present-day implementation which takes into consideration past referents, persistent traditions and consideration for animal welfare. Far from erasing "human history and involvement with the land and flora and fauna" (Jørgensen, 2015, p. 487), the initiative unfolding in the Côa Valley suggest that, in certain contexts, histories of landscape co-habitation and co-production can have direct relevance to rewilding aims.

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DATA ACCESSIBILITY

The research materials supporting this publication can be accessed by contacting C.O.Desilvey@exeter.ac.uk.

ENDNOTE

¹ Beyond Faia Brava, ATN now manages an extended network of scattered reserves, including the Ribeira do Mosteiro reserve north of the Douro.

ORCID

Caitlin DeSilvey D http://orcid.org/0000-0003-1629-8414

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