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NATURALIZING THE ENVIRONMENT

Perceptual Frames, Senses and Resistance

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Abstract

Following the closure of the mines and the crisis in agriculture, an alternative process of cultural and natural 'heritagization' has been taking place in certain areas of Andalusia with a marked tourist focus. Productive spaces have been transformed into post-mining and post-agrarian landscapes. The aim of this article is to analyse representations and perceptions of surroundings in these contexts through the discourse of those who have experienced these changes most acutely: farmers and miners. This interpretation invites reflection regarding the concept of nature in the western world. Nature is one of our most genuine cultural creations, but we cannot ignore that, in addition to its discursive dimension, it also has a perceptive component. Hence, the analysis carried out here seeks to gain a more in-depth understanding of the

perceptive frames through which nature acquires meaning and significance. The dual perceptive and discursive dimension of nature yields a more comprehensive understanding of how landscapes become spaces for resistance and identity.

Key Words ♦ environment ♦ naturalization ♦ nature ♦ perception ♦ resistance

INTRODUCTION

Questioning the idea of nature as cultural universal (Descola, 2005; Descola and Pálsson, 1996) does not erode its value as a discursive category and everyday point of reference in western cultures. Nature is still a 'foundational category' (Escobar, 1999), key to understanding our society and is therefore used as a basis for understanding other societies. From a western perspective, there can be no nature without culture, even though its boundaries and contents might be blurred, contradictory and paradoxical (Latour, 1991). For example, although we may talk of a so-called human essence, defined as 'natural', human experience is understood to be unnatural (Milton, 2002). At the same time, spaces classed as natural become increasingly reminiscent of *non-places* (Augé, 1992), marked by an absence of humanity or tinged by its more 'primitive' versions.

The modern myth of nature (Raffestin, 1996) is incarnated more profoundly than ever in the market, and especially in its most global industry – tourism. Like no other activity, tourism creates natures and animates naturalizations, regardless of whether these natures are emptied out of humanity, as demonstrated to the extreme in the Galapagos Islands (Grenier, 2002; Ospina, 2006). The more evidence we have that nature is not an object, the greater the effect of the market on naturalizing everything it touches. The market plays a significant role in resignifying 'the natural' (Castells, 1996; Urry, 1995; Wilson, 1992). However, it is crucial to understand how these resignification processes are internalized and practised by those who live in a specific environment (Cruces, 1998; Escobar, 1998; Quintero and Coca, 2006); the dimension acquired by nature in accordance with the transformations of the environment and the activities carried out in it (Ellison, 2007; Macnaghten and Urry, 2001); the effects of external discourses on a local discursive crystallization of 'nature'; or how the gaze of others – revealing or concealing parts of the environment – affects local views (Boissevain, 1996; Urry, 1990; Valcuende, 2003, 2007). These issues must be examined if we wish to understand the contemporary sense and meaning of nature, the process of naturalization and denaturalization of the environment.

People perceive the environment differently depending on how they relate to and appropriate it. Therefore, talking about the environment involves talking about ourselves (De Breton, 2006; Ingold, 2000; Merleau-Ponty, 1962). Environment and individual merge through action (Ittelson, 1978) from a 'dwelling perspective' (Ingold, 2000). Human beings are continually exploring, giving rise to a constant process of categorization and subsequent systematization of an operational whole (Ittelson, 1978). This reveals a continuum from perception – in the most physical and sensorial sense – to symbolic and communicational discourse. Through the category 'nature', we train our gaze on certain elements, practices and relationships, whilst particular angles of sensorial perception are developed.

Nature is an ambivalent point of reference. As a categorizer of the environment, it displays a clearly discursive dimension but also implies a perceptive–sensorial anchoring. Only by effectively linking both perspectives (discursive/perceptive) can we approach an understanding of its meaning and significance in our society. Carrier (2003) highlights the perceptive–affective dimension of our relationship with the environment and shows that historical/cultural models cannot fully describe our specific bonds with the environment. The dynamic conceptualization of nature plays a paramount role. Nature is an open concept, much disputed (Pálsson, 1996), an *empty signifier* (Laclau, 1996) which, by occupying a central position in a discursive regime, is subjected to a permanent construction of its meaning. According to Laclau's definition of society, nature, from a discursive point of view, is both *necessary and impossible*. Strang (2005) on the other hand, in an article about water, concludes that the 'anthropological understanding of human–environment relationships should incorporate a greater appreciation of sensory experience and of the part played by natural resources and their characteristics in the generation of meanings' (p. 115). It is from this perspective that we wish to examine in greater depth the *perceptual frame* through which nature acquires meaning and significance.

There is no better place to situate a study of perceptive frames than in Andalusia where we can see the process of naturalization taking place. There, the economic disengagement of mining and the agricultural crisis have been accompanied by the development of tourism. This process has sparked debate about what is and is not natural in accordance with the interests of the market and the views of the locals. Today's post-agrarian and post-industrial spaces, which were once working spaces, have become landscapes for contemplation. The position of the different players and their relationship with the environment has been substantially modified. Hence, such cases are particularly apposite when it comes to analysing the perceptive frames in which processes of naturalization take place. These contexts should enable us to explore the meaning and sense of

nature in our culture, its (increasing?) role in processes of resistance and identity.

MINING LANDSCAPE

The region of Riotinto is in the south west of the Iberian Peninsula and has one of the most long-standing mining traditions in the west (Arenas, 1999; Avery, 1974; Escalera et al., 1995; Ruiz, 1998). The intense, continuous and profound transformation of the environment, following centuries of gold, silver, copper and pyrites mining, has created a peculiar space, often described as 'alien'. Large-scale open-cast mining in the 20th century has shaped today's mining environment. Open pits scattered around the territory (Atalaya, Cerro Colorado, Peña de Hierro) and waste dumps are the distinctive features of this landscape: huge open pits and extraordinary mounds of excavated material. In addition to the alternating open pits and waste dumps, there are also industrial buildings from the different stages of production, water and waste reservoirs, the railway and the Rio Tinto river itself. All these elements make up an environment that is home to a population of around 12,000 people, spread over three municipalities (Nerva, Riotinto and El Campillo).

The mining landscape reveals that which should be hidden: the geological substratum. Rare colours and smells emerge, and whimsically linear forms appear as if they have been sculpted: the symmetrical benches of the open pits, mounds shaped into perfect truncated cones. The orography of the area is the result of design and planning: valleys and mountains have come and gone with the mining work. The geometric profiles and ochre hues give consistency to a landscape that epitomizes human exploitation of the environment. The lack of greenery and shapes softened through erosion make for a very strange landscape; the only other comparable place on Earth is the desert, only in this case, man-made. Plant and animal life find it difficult to fit into this setting due to the noise, dust and frequent explosions. This desert has not emerged through a lack of humanity, but rather through the acidity of the material artificially deposited on the surface, which barely permits the development of plant life.

Desert and contamination are the concepts that usually define Riotinto's mining landscape, encompassing both the image and its cause, and above all placing due emphasis on the role of human beings in its formation. The area is marked out by scenes that overwhelm in both form and colour. Beauty and ugliness are not the most appropriate parameters to understand its significance, but rather radical strangeness and exceptionality. One emigrant from this region told us: 'The Mines are magical, not only for the experiences lived in them, but for the things you can't explain: the smells and colours of the mine.'

DESERT LANDSCAPE

In the south east of the Iberian Peninsula, the Cabo de Gata-Níjar Natural Park offers a striking landscape. This protected space encompasses three municipalities: Almería, Níjar and Carboneras, a territory with a scattered but consistent population of around 2,000 inhabitants.

Although beautiful in its contrasts, this is a harsh, rough terrain, where the thirst of generations hoping to wring a few drops of water out of the relentless sun is palpable. The volcanic hills, severe and dark, stand in stark contrast to the blue of the Mediterranean Sea. An irregular coastline alternates cliffs with sandy coves, intercalating white and black. A rustic and apparently untamed landscape, marked by an inexorable sun and a permanent lack of water.

The lack of water and trees, the harsh climate and peripheral location have traditionally characterized this land as inhospitable and desolate. Historical and literary sources tell of pirate raids, extreme droughts, famine . . . and a fatalistic population, sorrowful and in a permanent state of grief (De Burgos, 1989; Goytisolo, 1983). Volcanic greys and blacks mixed with ochre, the dark and light browns of dried-out land, or the yellows and whites of the sand, a bleak plateau with squalid clumps of vegetation.

The aridity here has influenced human activity in the area. The search for water – or rather the optimum way of making the most of and storing any water that can be found – and the development of subsistence activity has shaped a landscape of esparto grass (*Stipa tenacísima*), fan palm trees (*Chamaerops humilis*), Indian figs (*Opuntia ficus-indica*) and century plants (*agave americana*), hidden allotments and meagre cereal crops. A few squat houses with flat roofs, little space and trapezoid walls make up a scattered settlement of farmhouses (Gil Albarracín, 1992). The systems of wells, waterwheels and cisterns, supplied by closely monitored watercourses, dams and dykes, gave life and water to the system of agroforestry. In more suitable areas, the system of crop rotation was used to grow cereal, corn and vegetables, always leaving fallow land. Most farms exploited the natural resources of the forest – mainly fan palms and esparto grass – and sowed pastureland to graze sheep and goats. Historically, in addition to these agricultural systems, other activities were developed such as mining, salt panning and fishing, mainly inshore (Provansal and Molina, 1991).

NEW PROCESSES, NEW PERSPECTIVES

In the mining basin of Riotinto and the Cabo de Gata Natural Park, major transformations have taken place in recent decades: the agricultural crises of the 1950s and 60s, migratory exodus, integration in the European

Union, deindustrialization, the development of globalized markets . . . these processes contextualize the disengagement, in the last quarter of the 20th century, of the economic systems that have historically characterized these regions. A process of tourist reorientation has taken place in both areas, through which buildings, traditions, machinery, equipment, surroundings and landscapes have acquired a new significance and been converted into new resources.

In Riotinto, the process of 'heritagization' runs parallel to the closure of the mines (Iglesias and Ruiz, 1999). In 1987, the mining company created the Riotinto Foundation (FRT) with a view to protecting the mining heritage and invigorating it as a socioeconomic alternative. In spite of the investments made and attempts at productive reconversion, the progressive demographic decline reveals the social deterioration in this region.¹ Recently planted fruit plantations, which have occupied barren areas previously dedicated to mining works, have not significantly improved the situation, nor has the growth of tourist activity.

In 1987, the Cabo de Gata-Níjar Natural Park was also created, with a view to protecting this area for its ecological value. As a result of this environmental protection initiative, farming and production are strictly limited in the area covered by the Natural Park, and indoor farming has intensified in the municipality of Níjar, on the outskirts of the Natural Park (Provansal, 2003). This agricultural system, industrial in nature, produces major benefits in the short term but the effects of pollution and over-exploitation of the waterways stand in stark contrast to the philosophy brandished of the 'defenders of nature'. The result has been a major economic and demographic boom,² which contrasts with the unemployment and social crisis provoked in Riotinto, following the termination of mining activity.

Both in the Natural Park and the Mining Basin, a significant influx of visitors has developed along with a consolidated tourist destination.³ The 'heritagization' process in Riotinto highlights the human component of the territory, the historical process of mining, industrial techniques and transformations made to the terrain. In Cabo de Gata, on the contrary, the emphasis is placed on the ecological characteristics of the territory: volcanism, endemic species, the maintenance of the marine ecosystem, sub-desert vegetation. In this interpretation, the action of man is minimized, pushed into the background and bound to the past. Therefore, the two new dominant readings of these territories have a common goal: landscape as a tourist attraction. However, the focus is different: whereas in Riotinto the accent is placed on the 'cultural' value of the landscape, in Cabo de Gata its 'natural' character is prioritized.

In Riotinto, mining came to a halt and the landscape has been frozen. The miners have been left without a mine. After a flurry of work activity and toiling in the open pits, this area is now steeped in silence: a still,

paralysed setting. The locals have experienced a radical transformation in their relationship with the environment but, obviously, those who have been most affected have been the miners themselves. Most of them have taken early retirement, and some of the younger ex-miners have found work in the adaptation of the mine for tourists. Following a turbulent period of protest and outcry over the closure of the mines and a search for alternatives (Escalera et al., 1995; Escalera and Ruiz, 1997; Ruiz 1998; Ruiz and Gallego, 1996), today the miners contemplate the landscape they created with greater equanimity and detachment.

Within the Cabo de Gata Park, hardly any farming can take place nowadays. Most of the farmers who worked the lands, looked after livestock and maintained the waterwheels and cisterns, have left or died. In certain areas, even on private property, agriculture and agroforestry are strictly prohibited in order to protect plant and animal species. In other areas, permission must be sought to clear the land, plough and sow crops. For most small landowners, farming under these conditions is simply not profitable. However, in spite of the restrictions placed by environmental authorities, there are still farmers who continue to work the land in the Natural Park. The perceptions, reflections and discourses about nature and the environment of the miners in Riotinto and the farmers in Cabo de Gata provide the basis for analysis in this article.⁴

NATURALIZATION IN RIOTINTO

. . . no matter how often I go past the viewing point at Cerro Colorado, past Corta Atalaya Peña, I always like seeing them . . . I never thought about why . . . I don't know, the views you get from there . . . those heaps that look so made to measure and . . . and you can see those mounds, that pit in the ground . . . in the natural terrain, seeing the open pits, and that huge hole, and then you see all these colours and I think that's what is really striking . . . Nature in one way there in the Sierra, and this way here in the Mining Basin, but nature is the same . . . I see two things, just as natural as each other . . . oak trees sprung up there and rock was brought to the surface here so we could get to the ore, but the nature I think is the same. (Manuel, former miner)

In Riotinto, nature had to be conquered in order to extract its resources, which entailed its destruction and the creation of an area of non-nature. This peculiar form of appropriation of the environment involved eliminating any trace of life. Perceptions of the environment were chiefly tied to the railway, the waste dumps, the open pits, the industrial equipment . . . the results of a human action that is paradoxically more long-lasting than the physical environment in constant transformation. Natural reference points, in contrast, were sought outside this region, in the mountains and *dehesa* (sparse wood pasture) of the nearby Sierra de Aracena.

The dismantling of mining and its subsequent tourist 'heritagization' puts a different process of environmental appropriation into practice. Other forms of relating and perceiving the environment are deployed, of looking at it, seeing, contemplating it, showing it – ultimately, of living and experiencing it. Characteristics and perspectives of the landscape, which were not 'perceptible' before, are starting to be glimpsed. The new way of perceiving the environment implicitly entails a distinctive connotation of it. In contrast to dominant interpretations of a transformed, humanized and even contaminated environment, some miners are beginning to incorporate the signifier 'nature' to describe their landscape, leading to an incipient naturalization of the environment. How does an environment such as a mining area that has been subjected to such large-scale human exploitation become naturalized? This process is neither flat nor mechanical, but rather presents a wealth of different shades and textures.

A defining feature of the mining landscape is its incessantly changing nature, keeping up with the pace of mining activity. However, it is currently paralysed, just like the mining activity. What was once movement – the hills transformed into open pits, the plains into heaps – is now stillness. Silence has replaced demolition; the mountains of materials await the slow erosion of their slopes. The frenetic, incessant activity, replete with sensory stimuli (noise, dust, movement, changing colours) has given way to a mute scene which the miners now look out on. On the fixed image of today rests the stimulus of recollection and memory. Would it have previously been possible to view a waste rock dump or open pit in the same way as now?

[Do you like the waste dumps you can see from Nerva?] Yes, I do like them, yes. After all, I made them, so I should like them! . . . I like them for the colours they have . . . the dominant colours are greys, greens . . . also different shades of blue . . . I go up to the hill that's just over there and some afternoons I go and smoke a cigarette . . . I see the people, I don't see the rock dumps . . . I was there with so-and-so, I was there with what'shisname, that's where so-and-so's truck backed up . . . that's what I see, I don't see the waste rock dump in itself as colourful . . . and sometimes I think, well, yes, it's pretty, what can I say, it's pretty. (Bartolomé, former miner)

I live right up there in the village and you can see everything, and at night I often look at them [the waste dumps] [you look at them at night?] yes . . . often, and my wife could tell you . . . thinking . . . [he becomes emotional and cannot speak]. (Manuel, former miner)

It is this highly emotional perspective that prompts the naturalization (implicit rather than explicit) of the mining environment. These gazes, charged with nostalgia and reminiscences, personal representations and memory, reveal three ways of classifying the landscapes according to the

'degree of naturalization' attributed. There are spaces that are recognized as purely industrial (Cerro Colorado), spaces in the process of naturalization (Corta Atalaya) and naturalized spaces (Zarandas and Peña de Hierro). These classifications are closely linked with the time scale. A greater degree of denaturalization is bestowed on areas that were mined more recently, defining areas that have been without mining activity for longer periods of time as 'more natural'. Coincidentally – or not – it is the more naturalized spaces that also attract greater tourist activity.

Perceptions of the area with the most recent mining past (Cerro Colorado, closed down at the end of the 1990s) are chiefly anchored in anthropic elements (industrial machinery and mining activity). However, perceptions of the most naturalized space (Peña de Hierro, closed down in the late 1960s) seem to move away from the inherent human action and acquire meaning in relation to colours, forms, textures:

When I go to Cerro Colorado . . . I don't exactly look at the landscape, but rather at the industry . . . I've been in Peña de Hierro for a year [working in tourist adaptation] and Peña de Hierro, every day I went there it was a different colour, and I was amazed . . . the landscape, well, it has a real impact, it's impressive, and we're from this area so we're all sick of seeing the mines, but it's got something that . . . (Alberto, former miner)

The miners are looking at the mine again, differently, from another way of interacting with the environment, from another perspective even, which corresponds to a new way of perceiving, accompanied by another gaze, that of the tourist. Two situations, two ways of looking, of which the miners themselves are fully aware. The miners realize the tourist attraction of the mining landscape; their everyday surroundings are now exceptional: outsiders admire them. It is fairly common to hear them say: 'we're used to it, but this landscape is like something from another world' (Gerardo, former miner), or 'visitors to this area are the ones who place greater value on what we have because it's always been right on our doorstep, [now] we have given it the importance it truly deserves' (Roque, former miner).

Yet the vision of the everyday/exceptional nature of the mining landscape is not only the consequence of the inside–outside position of the region; it is also linked with the position of the miners in relation to their own environment. The discourse that describes a certain space can be constructed from within the same (enveloping gaze) or outside (panoramic gaze), depending on the degree of linkage with the environment in question. These gazes become obvious when the last miners employed at Cerro Colorado (their most recent working space) are asked to describe what they see from the tourist viewing point at the edge of this open pit. It is highly significant that many of them are incapable of situating themselves outside the scenario; they continue to live inside, and for that

reason they do not describe it panoramically, but rather from their memories of the activity that created it, from within, enveloped by the mine and its activity. However, when describing Corta Atalaya (closed down in the early 1990s) the gaze becomes panoramic, from outside, as perceived by tourists.

[How would you describe Cerro Colorado?] A huge open pit, a huge hole, where lots of people have worked and impressive production . . . where 300-tonne trucks passed through, back and forth, taking ore up to the crushers, unloading waste rock onto the dumps, and things like that. A huge pit, that pit could be almost 700 or 800 metres . . . [well, that's the work part, but what do you see?] that's the only thing I could tell you, there's an explosion and after the explosion you take out the ore for the heaps, this copper for example is 2 per cent, this other lot is 4 per cent, 5 per cent, and you have to take it and bind it to make it as pure as possible . . . [and what is Corta Atalaya like?] Lots of people go there to take photographs because they can see the land that has been cut into . . . straight up, you can see lots of colours, when the sun's shining on it . . . it's very pretty, lots of colours, sulphur, and things like that, it's like a rainbow . . . the only thing Cerro Colorado has is the coloured earth of the gossan and the white earth . . . I don't think it's attractive for tourists. (José, former miner)

These positions of the gaze are fundamental to understanding the perceptive basis of naturalization, to understand the experiences that have been and are being lived there; where one is, the position from which one is looking, how the surrounding territory is understood and the objects or elements that define it. Corta Atalaya is viewed from outside and is naturalized. Cerro Colorado is viewed from inside and merges with mining activities; nature cannot be attributed to it.

Obviously, naturalization – like any discursive process – is constructed in a contrastive way. The reference points are related (as suggested by the miners in their discourses) with the image of the region before mining, with other areas that are understood as unquestionably natural and with spaces that generate new agricultural–industrial activities recently implemented in the region. Hence, a triple crossing of gazes is established. The miners: (1) see their region from inside (before and after the mine); (2) have seen other environments from outside; and (3) observe others who contemplate the mining landscape as tourists.

There is no real sense of landscape before the mine. The interaction between society and the environment imposed by mining activity has been so intense and profound over time that no discursive traces remain of a previous landscape. Where are contrasting points of reference sought? They must be outside the region itself.

Just like when I went to Galicia and I saw all that greenery and it had a real impact on me, well it must be the same for someone from Galicia who must be sick of all that green and says, so, what's this then? (Alberto, former miner)

It's a semi-desert landscape, with colours that are closer to something you'd find on the Moon or Mars, or the American deserts, or a desert itself. (Gerardo, former miner)

These external points of reference not only have a fundamental role in understanding how others see the mining landscape; they also act as indirect 'educators of attention' (Ingold, 2000, citing Gibson, 1979, emphasis added) for the miners themselves. Yet reference points not only come from outside; new 'green' spaces have been generated: the tentative re-forestation of waste dumps or industrial plantations of fruit trees that also act as reference points for the contrastive process of naturalization of the mining landscape.

The only green here is the orange trees, it's not natural, or rather in inverted commas, the orange trees, it's all a montage because you have to plant them and water them, but in other places the green there is natural, you don't have to water it or do anything at all, it's nature that produces it . . . the mine itself, are you going to regenerate that? By deceiving and covering up the environment, because really the history of this place is the mine . . . and we're the ones who made that history. (Bartolomé, former miner)

[referring to the industrial plantations] . . . it's a stranger kind of nature than this one [pointing to the mining landscape], this is more natural than that, that isn't natural. [Are you saying that the mine is more natural than the orange trees?] Yes, of course, because the mine [the ore] was there and no one created that or put it there, the orange trees have been put there. (Manuel, former miner)

The mines are a legacy for all of us, where our family members have died . . . it's a legacy . . . it's natural landscape . . . it's our legacy. (Gerardo, former miner)

The tourist development of the Mining Basin, part of the 'heritagization' of mining, is fostering among the miners a process of naturalization of the landscape, combining aesthetic, affective and historical elements. Estrangement is a defining element in the construction of the natural. Affectivity, on the other hand, has a clear influence on the consideration of environments, how they are internalized, adding humanity and subtracting nature. In Riotinto, both circumstances are identifiable simultaneously in the miners' discourse, which presents their environment as both humanized (affective) and natural (strange). With naturalization, the miners defend their role in the shaping of the landscape. Hence, they stand against official discourses of tourism in the region that conceptualize mining activity as an alteration that has contaminated the environment.

NATURALIZATION IN CABO DE GATA

Here, everyone who comes here falls in love with the Rodalquilar Valley, they're amazed at the valley surrounded by mountains that sweep down to

the sea . . . because the valley is so rounded, so perfect, carved out of nature . . . In this valley, they have discovered one of the most traditional things in this area, water courses that are around 200 or 300 years old, and whoever made those was intelligent . . . [these water courses] have made this valley . . . and there have been intelligent people here, this has been exploited by humans, it's not that it's just been discovered now, the landscape has been discovered, the tranquillity. (Cecilio, farmer)

The valley described by Cecilio is exceptional insofar as it is made from nature sculpted by man. Why this insistence on human presence in the landscape? For the farmers, human action plays a central role when it comes to explaining their landscape. The official, scientific and technical discourse trains its gaze on the landscape and sees the human presence as an accident. The fundamental aspect, which must be valued, is precisely the substratum (nature) 'prior' to human action (unnatural). The dominant myth of nature demands the search for the 'primitive', the untransformed. The actions of human beings in the Natural Park are interpreted as an adaptive response to the extreme conditions of nature (Guirado et al., 2001; Muñoz, 2001). It is this 'unspoiled nature', barely touched, that they wish to preserve and protect from the industrial, construction and agricultural processes of the 21st century.

Hence, farmers have been progressively distanced from the environment in which they traditionally worked; their access is limited to certain areas, agroforestry has been totally restricted and farming is controlled or completely prohibited. Protectionist regulations seek to promote non-human 'nature' in a process that implies both a new reading of the environment and a change in the structural position of farmers in relation to the environment.

In the future, I see something else . . . I don't think this has much of a future: you have some lands there and they don't let you [work them] . . . I have a little allotment there now, and the other day, chatting to the guard, I said: 'One day I'm going to work this land.' And he said: 'No, you have to look and see if there's any scrub or anything there . . . because they could fine you.' 'And if there's a fire, you'd fine me? I'll have to clear my lands, which I've had all my life . . .' (Antonio, farmer)

The perception of the farmers has historically been forged in the struggle against the desert. Traditional constructions reveal the value of water, a scarce commodity that had to be rationed. But, paradoxically, new protectionist discourses have minimized the natural value of the humanized space and, by the same token, the position of inhabitants in the area. Official and market recognition of the natural value of this arid landscape is incompatible with a farmer's idea of nature.

[Why is this a Natural Park?] I don't know. There aren't any plants or forest land either. Animals, we're seeing . . . the land isn't worked . . . Before we

used to work the land and you had a life and there were animals. Here there used to be birds nesting here . . . all that's gone now. Then the brightly coloured birds, which you can see in some of the fields, but very few and before there were lots. I think that the land, because the Junta [regional government] doesn't want anything to be touched, the little there is dies. I really do. (Manuel, farmer)

Nature has also become an operational category for farmers, who compare, under new parameters, the 'nature' of their activities with the 'nature' of the environmental or tourist authorities. Why is a desert more natural than an orchard or even a greenhouse? From the point of view of the people interviewed, the desert does not help true nature to reproduce; however, crops do generate life. Hence there is a clash between two positions, two wisdoms, two ways of relating to the environment and two ways of representing 'the natural':

There are men who come here [referring to environmental technicians] and they don't even know what they're checking or why they're checking it, because you cut back a thyme bush and they tell you off, when you're supposed to cut back thyme for it to grow again, so that it continues to produce new shoots, but no one knows that. Or you cut back a bush and they report you even though that bush should be cut back, you have to cut back esparto grass for it to produce new shoots again, you know [laughs]. (Ramón, retired farmer)

Views about nature, in this case, just like in Riotinto, are not constructed in a flat way, but rather combine different discourses and compare experiences. The discursive process in relation to naturalization is nourished by different experiences, contrasting past and present, what the area was like before and what it is like today; it is compared with other areas elsewhere that are defined as natural, and the vision 'from within' is compared with that of tourists and other groups that act in the Park. Just as with mining, a triple crossing of gazes can be discerned. The farmers (1) see their land from within (in the past and after its designation as a protected space); (2) see other regions from outside, as visitors or tourists; and (3) observe others who view the landscape at Cabo de Gata-Níjar as tourists.

The image of the Park conveyed by the market and authorities is, from the farmers' point of view, an idealized image that conceals the role they have played, drawing a veil over the harsh conditions in which they struggled against the desert and especially the expertise required to generate life. In the past, when they were younger and even children, their relationship with the land was much more direct and the landscape, experienced from within, displayed the accumulated wisdom of generations, the expertise of working the land, taking care of the water courses and cisterns. Water is the central perceptive element on the basis of which

they define nature, an element they have been monitoring and managing for generations and which is a part of their stories, memories and place names. Today, its absence acts as a contrast, defining the natural.

. . . let's not kid ourselves, this is a desert and it looks very pretty. For me it's not pretty, for me it's much nicer to go to a mountainous area where there are huge mountains and forests, different types of plants, rivers. For me, that would be much prettier. (Antolín, farmer)

Just as in Riotinto, the farmers are aware that their perception does not coincide with that of the tourists, that they experience different realities, which makes them seek out, see, different things:

Tourists like it dry, because they're sick of seeing green, and they like seeing this, and so I'm the complete opposite, I like seeing green because I wish I could see green every day. (Sebastián, farmer)

The perspective of the tourists and new inhabitants in the area allows them to compare experiences and sensations, sharing certain points of view – such as falling in love with the Rodalquilar Valley – and rejecting images they consider idyllic and removed from their everyday lives.

People love dirt tracks, which I hate, I hate them, no, I've had it up to here with dirt tracks, and they go up into the hills and along a really bad road, and they leave the car and grab their rucksack and go off into the hills and I'm up to here with the hills and . . . so we don't really agree on that point, I think; they can't get enough of them and we're sick of them. (Cecilio, farmer)

When exuberant landscape is defended as being truly natural in contrast to the desert, the central role played by farmers in the past is also defended, but this also implies a way of seeing. Positions and representations are inseparably linked with perceptions. The direct link with the land and water shapes a view that is now disappearing as there are no longer lands or waters, but rather one land and one water, governed and channelled by external regulations.

I know this heavy clay, black soil always has heavy clay, there are lots of qualities; there are others that are whiter and might have some clay, but they're not as high quality as the black soils. But to give them a name, a correct name, I don't do that; I'll give them my own names. I drive at around 50 or 60 km an hour along a road and I know the land on each side of the road, I know the land on the way there and on the way back, what kind of agriculture there is, and judging by the kind of plantation I see further off I can tell the quality of the soil, I can calculate the depth, and I can calculate the quality, with the tilling mule, with mules, with tractors, and it's mine. (Cecilio, farmer)

In this extract, action, position and perspective merge. The farmers have lost their position in the environment (they no longer make decisions

about it); their discourse has been weakened (today others have the knowledge) and their perspective is questioned. However, their perceptions and discourses establish an alternative, a different hierarchy from 'the natural'. There are the plants, animals and spaces that are 'really' natural, and those that are less natural, such as the black soils, white soil and, ultimately, the arid land, lifeless, something that is valued by tourism and environmental protection agencies. Within the frame of this conflict, their experiences and everyday spaces are being categorized as natural. Nature tinged with humanity, memories, affections, closeness:

My husband liked his allotment down there [she becomes emotional and cries], he planted aubergines, he had lemons, oranges, medlars, down there, his fig trees, I've got three left, haven't you seen it? Because he loved it. We really like nature, we really do, I swear, I swear on my husband's grave, I really love nature, I see tomatoes that I've grown, potatoes and everything, and I've never sold a kilo to anyone, I give them away. (María, allotment gardener)

From this perspective, farmers construct their nature in an arid environment. Nature that comes up against official nature, which belongs to those who 'know nothing about these lands, or how people do things here'.

THE PERCEPTIVE FRAME OF NATURALIZATION, THE SENSE OF NATURE, SHAPING LANDSCAPES OF RESISTANCE

The positions of the miners and the farmers, their relationship with the land and their working environment have been radically transformed. These changes are linked with new perceptions of the landscape and specific ways of defining 'nature'. Among the miners of Riotinto, an incipient naturalization of the mine can be glimpsed: their defence of the natural quality of the soils, the ore, mining itself. The colours, pits, textures, are put forward as a natural dimension. Nature, usually hidden, becomes visible, palpable through the work carried out by generations, stirring up mountains, showing 'what was hidden', the Earth's innards. The 'desert' that develops from mines is naturalized.

However, the farmers in Cabo de Gata question nature as defined by officials, environmentalists, tourist operators and tourists. Old farmers define nature through its links with their farming activity and that of their ancestors. For them, the 'desert' promoted by the tourist business and environmental protection agencies can never be nature: it is misery and pain. Nature, on the other hand, is associated with water and fertility; it is the result of human sweat and toil. Nature for them is synonymous with life, green, moisture. The desert is denaturalized. Riotinto and Cabo de Gata: two deserts? Two different ways of perceiving? Two natures? To answer these questions, in order to understand the process

experienced in these two regions, one must explore both the perceptive frame of the miners and the farmers, and the meaning they attribute to nature in their discourses.

Miners and farmers are situated in very different environments and have been subjected to very different socioeconomic processes. It seems the only thing they have in common is the recent tourist development of their landscapes. However, careful analysis reveals that the perceptive frame of their gazes is comparable; that the way in which they position themselves in relation to their environments is similar even though they are looking at and seeing very different things. This perceptive frame, through which naturalization occurs, is sustained by six principles:

1. *Delocalization*. Miners and farmers have been removed from their environment. The closure of the mine and the prohibition of farming prevent traditional immersion in the environment, which today is mainly contemplated from outside. Experience rooted in the environment (Macnaghten and Urry, 2001) is necessarily transformed. This delocalization is the basis for the naturalization of the mine and the counter-naturalization of the Natural Park.
2. *Globalization of the gaze*. The naturalizing process cannot be understood without the constant reference outside the regions. The gaze broadens, takes in other references experienced outside, which means that one's own environment is seen and viewed in a different way. We are all tourists (MacCannell, 1976). The panoramic gaze is gaining ground over the enveloping gaze, the globe over the sphere (Ingold, 2000).
3. *Time frame*. In Riotinto, the naturalization of a space is a result of the time passed since the delocalization of the observer. For the farmers in Cabo de Gata, time destroys the nature generated by agricultural labour; the desert advances, helped by time, which erases local nature and spreads the nature of outsiders.
4. *Transformation of activities*. The fact that the environment changes from a 'taskscape' to a landscape (Ingold, 2000) sparks a radical affection in perception. In the two cases studied, the cessation of activity in the environment is correlated with the process of naturalization. The miners and farmers are not only delocalized; they are also 'de-activated', which shapes a new perceptive frame.
5. *The otherness of gazes*. The evidence of others (tourists) looking at your environment has an effect on the transformation of perception and the process of naturalization. Tourism – as the gaze of others – is a clear factor in the 'education of attention' (Ingold, 2000), giving locals pause for reflection in relation to their own view (Boissevain, 1996).
6. *Affectivity*. The development of *engagement* with the environment appears for both the miners and the farmers as a conclusive element in the construction of naturalization. In both cases, nature is justified or at least inescapably associated with human action, and it is from

this perspective that the waste dumps are viewed and perceived in Riotinto or the abandoned allotments in Cabo de Gata. The inscription of memory on the environment endows the perception of the environment with evocation and melancholy, sustaining an engagement with it (Carrier, 2003).

7. *Sensory hierarchies.* The process of naturalization entails a change in sensory hierarchies (De Breton, 2006). Delocalization, the globalization of the gaze, the otherness of gazes, and so on could lead us to assume that perception of the environment is fundamentally anchored in the sense of sight. Whilst it is true that colours and shapes are still prevalent in descriptions, other senses also emerge: sound (its absence) and stronger smells are fundamental in Riotinto; the sensation of dryness and heat associated with a lack of vegetation and water are evoked in descriptions of Cabo de Gata. All of this points to human abandonment or at least the delocalization of the observer. The most patent perceptive details from within the environment are now even sharper for those looking from outside, becoming a bonus that sustains naturalization.

From this perceptive frame, a particular sense of nature is developed. In Riotinto, mining uncovers nature. In Cabo de Gata, farming creates nature. In both cases, this sense of nature goes against current dominant discourses of 'heritagization' and tourist development: in the mining region, because what sells to tourists is the landscape as the antithesis of nature (scenery reminiscent of another planet, exceptional in its strangeness, the result of over-exploitation of the environment); in the Natural Park because nature is commercialized as something from which human presence has been removed. However, nature for the miners of Riotinto and the farmers of Cabo de Gata is inseparable from humanity. In order to understand this, we must contemplate the inseparability of the sensory aspects and affective aspects (and affective and cognitive aspects): the sensory point of reference blurs with the affective frame; they are not two different approaches, but rather the same one. For miners, seeing and contemplating a landscape, describing it as pretty and evoking sensations and memories, all forms part of the same process of naturalization. The perceptive frame described here confounds positional, sensory and affective aspects. Nature is anchored in that context; it is, therefore, a humanized nature, a *cultured nature* (Newton et al., 2002). From here, it is easy to assume that the pronounced nature of these regions displays a contested character which leads to the shaping of landscapes of resistance, where perceptive frame and sense are inextricable. The naturalization of the environment developed here reaffirms the position regarding/within the environment by questioning 'official' nature from local naturalization (Palmer, 2007) and is associated with identity-shaping processes that promote self-esteem (Horowitz, 2001; O'Rourke, 1999; Tilley, 2006).

NATURE AND NATURALIZATION

Naturalization is a two-sided process: one side is discursive (social construction and political response) and the other is perceptive, based on experience and practices in the environment. One is not a consequence of the other, but rather they are two dimensions of the same phenomenon. Analysis of the perceptive frame of naturalization puts us at a crossroads in which identity has a material meaning (environment and body) and a symbolic one (affectivity and aesthetics) whilst at the same time defining presence (esteem and resistance).

'Nature' (as a perceptive frame, meaning and political argument) is a way of being in the environment, of appropriating it, legitimizing oneself in it. Culture and nature are disassociated in a new order through processes of naturalization and denaturalization. The perspective of the gaze is broadened, and this implies that the discursive conceptualization of nature expands. There is a kind of reshuffling through which what is perceived and what is represented shape the signifier 'nature'. The vision of nature is less restrictive, more contested; and, as a result, nature is humanized.

From this approach, perception, affection and politics merge, constructing identity. Nature is linked with resistance, with affection and a particular way of looking. Hence, a recursive relationship is created between perception and representation. Does perception change the way in which the environment is categorized or do different ways of categorizing the environment change the way it is perceived? Both things happen simultaneously: relating-looking-perceiving-categorizing is a simultaneous activity. Hence nature – in its dual perceptive/discursive condition – can perhaps be better understood as a mediator in our relationship with the environment. It is not an attribute of the environment, but rather a position – both physical and symbolic – from which the environment can be viewed and seen.

As we have seen throughout this article, nature, as a category and everyday point of reference, is more alive than ever; not only is it presented as a dominant argument, but also as a rebellious reason. Naturalization is a common strategy in our society, identified in both tourist development and local resistance. Only from the convergence between perception and discourse can we approach its multiple dimensions.

Notes

1. The population in the region fell from around 18,000 inhabitants in 1995 to barely 12,000 in 2006 (Andalusia's Institute of Statistics).
2. In the municipality of Níjar, where 75 per cent of the total surface area covered by the Natural Park is located, the population has risen from 12,500 inhabitants in 1991 to 21,300 in 2004 (Andalusia's Institute of Statistics).

3. The Riotinto Mining Park received around 70,000 visitors in 2007. Tourism in Riotinto is characterized by tours of the mining infrastructures and landscapes, but rarely do tourists stay overnight. According to data provided by the Regional Ministry for the Environment, 21,000 people visited the Amoladeras Visitors' Centre (Gata-Níjar Natural Park) in 2005. However, the number of visitors to the Natural Park over the year is much higher and they often stay overnight.
4. Some of the authors have been conducting ethnographic work in the region of Riotinto for over a decade (see references). For the specific analysis presented here, the team carried out intermittent field work in Riotinto and the Cabo de Gata Natural Park between 2004 and 2007. By means of in-depth interviews and participatory observation, they have studied the perspectives and positions of the farmers and miners in relation to the environment and the transformations in the regions where they live. This project has been funded by the Spanish Government through the R + D project 'Environmental recreation around cultural and natural tourism in Andalusia' (SEJ2004/SOC I06161).

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The importance of naturalizing outdoor learning environments in early childhood is strongly supported by the rapidly growing research literature. NATURALIZATION HAS BECOME INCREASINGLY IMPORTANT because the growth of cities during the industrial era left a legacy of de-naturalized urban neighborhoods, especially in low-income areas. Postindustrial development in the last few decades has seen many encouraging examples of nature restoration to barren urban lands. Human environment is the man-made environment. It has been modified by humans according to their needs. Before technology evolved, human beings would adapt themselves to the natural environment. They led a simple life and fulfilled their requirements from the nature around them. With time, their needs grew and became more varied. All environmental issues affecting our planet are mainly created by the human activity. 1. Pollution. At the same time, genetically modified crops are bad for the environment because it changes the landscape of croplands, is not capable of providing an economic benefit, and can cause allergic reactions and other health issues including deadly diseases such as cancer. 7. A Large Carbon Footprint. View Environmental Anthropology Research Papers on Academia.edu for free. Naturalizing the Environment: Perceptual frames, senses and resistance. Save to Library. Download. by JOSE ANTONIO VAZQUEZ. 6. Archaeology, Anthropology