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Transforming landscapes and identities in the south Wales valleys

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ABSTRACT

In contrast to the declining socio-economic legacy of the loss of coalmining and heavy industry, the landscapes of the south Wales valleys have witnessed a remarkable environmental transformation within living memory. Yet an apparent paradox exists between reported community pride in these landscapes with emerging community-led economic initiatives, and seeming indifference towards or disconnection from them. In this paper, we draw upon analysis of qualitative material from two pieces of research in different Valleys' localities to explore landscape relationships with respect to radical landscape changes, reported disconnections and emergent community-led countryside activities. We consider these in the context of emerging models and notions of landscape identities. We conclude that the changed landscape character in the Valleys is impacting on landscape perceptions, valuation and uses with new existential identities emerging amongst some. Greater insights into evolving landscape identities might inform better land use policy and natural resource management to bring about socio-economic and environmental benefits.

KEYWORDS

Landscape transformation;
landscape identity; rural;
urban; community;
landscape disconnection

Introduction

Landscapes change through dynamic interactions between natural and cultural forces (Antrop, 2005) such as urbanisation, energy usage, forestation and 'greening' (Plieninger & Bieling, 2012). Such inevitable change affects people's perceptions and values with profound implications for the ways in which landscapes are used and shaped (Antrop, 2005).

In this paper, using the valleys of south Wales (henceforth 'the Valleys') as a case study, we explore the role of landscape change in evolving community identities. The Valleys are a prime example of major landscape change through human agency, primarily due to changing energy needs. Essentially unspoilt until the early nineteenth century, the Valleys' landscapes were subsequently ravaged by mineral exploitation and heavy industry with 'coal-tips ... spread about the floors of the valleys and on nearby hillsides ... (and) once fair valleys, with woodlands, pure streams and pastoral scenery, widely despoiled' (Lloyd & Jackson, 1949). Pasqualetti (2012) described this transformation of coalmining locations globally, including the Valleys, as one into 'sordid, unsafe, and pathetic energy landscapes ... (with) scars, pits, shafts, piles of debris, and dismal assemblages of squalid housing'.

Over the last 50 years, catalysed predominantly by the terrible calamity at Aberfan in 1966 when a coal waste tip slipped and engulfed a school killing 144 people, 116 of them children (Miller, 1974),

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extensive remediation measures to redress the impacts of previous mining and heavy industrial activity have drastically changed the environment. Since then, around 800 reclamation projects were carried out, aimed primarily at bringing land back into light industrial use together with some new recreational areas. Additionally, substantial conifer planting has impacted considerably on the Valleys' landscapes. Allocated to rough hill grazing areas, state afforestation was rapid in response to the 1943 *Post-War Forest Policy* and disproportionately borne by areas in Scotland and Wales (Mather, 1978), particularly in the Valleys where land was purchased or leased to produce pit props. The collective upshot of land remediation and afforestation are radically resculpted landscapes that, visually at least, might be construed by some as re-ruralisation.

In contrast to the environmental transformation, protracted industrial demise has left a legacy of socio-economic decline, particularly in the earliest-industrialised areas, with enduring high incidences of long-term ill health and economic inactivity (Llewellyn, 2014). In 2013, the GDP per head rating in the Valleys was the UK's worst, equivalent to just 70% of the EU average (EuroStat 2013). Bennett, Beynon, and Hudson (2000) reported that many Valleys' areas suffer a duality of deprivation; social problems associated with urban areas coupled with rural isolation of communities. Recently, the Valleys were described as part of an 'important tract wedged in the no-man's land between "rural" and "big city": the depressed, post-industrial, peri-urban, small town and semi-rural areas' (Bevan, 2015). This encapsulates their predicament; location-wise, with respect to prevailing circumstances, and whether issues and opportunities are viewed as urban or rural.

Strategic recognition of the regeneration potential of the Valleys' landscapes came through the 1998 *Greening the Valleys* initiative which, with the *City of the Valleys* concept (Tanner, 2002), triggered the idea of a Valleys Regional Park (VRP) aimed at maximising the socio-economic potential of the natural environment. Devising a VRP vision, Parkin, Ledbury, Matthews, and Young (2006) indicated 'a significant proportion of people in the Valleys do not recognise, or use, the countryside on their doorstep ... (highlighted) by pilot projects currently being undertaken in specific communities'. Moreover, recognising both internal and external negative perceptions of the area, they highlighted issues of arson and 'on-going abuse and disrespect for the countryside'. Kitchen, Milbourne, Marsden, and Bishop (2002) indicated estrangement from their environment of 'significant elements' within some forested Valleys communities, whilst a Forest Research report (Jollands, Morris, & Moffat, 2011) highlighted the costly and dangerous issue of widespread, persistent wildfires in south Wales with recorded grass and forest fires between 2000 and 2008 eight times higher per unit area than the UK as a whole. There are continued recent instances of arson and fly-tipping in the Valleys (Natural Resources Wales, 2015a). In contrast, a 2013 survey indicated Valleys' citizens are most proud of their 're-greened' countryside (EAW, 2013). Furthermore, community organisations across the Valleys are increasingly recognising new opportunities for sustainable tourism, renewable energy production and local food growing, activities considered more akin to those in 'new rural spaces' (Frantal & Martinat, 2013).

In view of these apparent paradoxes, we draw upon analysis of qualitative material from two pieces of research in different Valleys' localities to explore landscape relationships in the context of radical landscape changes, reported disconnections and emergent community-led countryside activities, and consider these with respect to evolving landscape identities and implications for future land use and management.

Landscape identity and disconnection

Landscape change impacts on the 'ongoing formulation of social life' (Schein, 1997). Drawing particularly on Bender's work on landscape, place, heritage and identity (e.g. Bender, 2002), Tilley (2006) asserted that landscapes are 'always in process, rather than static, being and becoming' and contested by people in line with individual, social or political circumstances.

Despite a plethora of studies and papers over recent decades, consensual definition of landscape identity has been elusive and consequently challenging (Dossche, Rogge, & Van Eetvelde, 2016; Egoz, 2013; Ramos, Bernardo, Ribeiro, & Van Eetvelde, 2016; Stobbelaar & Pedroli, 2011). This is crucial from

an academic perspective, but also its centrality in policy contexts where landscapes are recognised as a foundation of people's identity, for example, the European Landscape Convention, with Ramos et al. (2016) claiming that landscape identity 'lacks an operationalised framework for policymaking'. Seeking clarity in literature and academic studies, Egoz (2013), whilst recognising their interwoven nature, differentiated between the notions of 'landscape identity'—the spatial and physical features of the landscape, or landscape character, and 'landscape and identity'—the relationships and engagement between people and landscapes.

Many factors and pressures drive changes in landscape character (e.g. Wood & Handley, 2001), ranging from land use modifications, for example, through urbanisation, to more indirect drivers such as economic and demographic changes (Selman, 2012). Dependent on the forces, rates of landscape change can differ with new ones emerging and displacing traditional landscapes (Van Eetvelde & Antrop, 2004). As Dossche et al. (2016) indicate, such 'shifting dynamics' affect people's identification and interaction with their landscapes, emphasising the contentions of Saugeres (2002) and Stobbelaar and Pedroli (2011), among others, that landscape identity is shaped by past achievements and changes in response to future aspirations and altered contexts.

Focusing on a people-oriented perspective, Stobbelaar and Pedroli (2011) proposed a comprehensive meaning of landscape identity as 'the unique psycho-sociological perception of a place defined in a spatial-cultural space', after conceptualising a framework through a Landscape Identity Circle. Based on two proposed guiding principles of human–environment interaction and personal–cultural identification, they contend this provides a basis for understanding different dimensions of landscape identity comprising Personal–Existential, Cultural–Existential, Cultural–Spatial and Personal–Spatial landscape identities, which facilitates structured knowledge exchange between them. Personal–Existential identity is akin to place identity (e.g. Hull, Lam, & Vigo, 1994 and Twigger-Ross & Uzzell, 1996), and relates to personal attachment comprising aspects of distinctiveness, self and personal history. Cultural–Existential identity arises from shared social spaces and co-operation that affirm collective identities. Cultural–Spatial identity is focused on commonly perceived spatial characteristics and can distinguish regions based on the specific make-up and use of the land, whilst Personal–Spatial identity relates to individuals' identification with commonly perceived structural features, which is important in how they comprehend their landscapes.

Ramos et al. (2016) recently devised a dynamic 'transactional model' of landscape identity of the 'mutual interaction of people and landscape at two distinct levels—a sphere of perception and a sphere of action'. This, they propose, provides an understanding conducive to influencing and informing land use policy and action. Grounding this through an exploratory workshop, they contend transdisciplinary approaches are key to greater understanding of landscape identity, proposing research directions concerned with thresholds that affect landscape identity, including landscape or societal change. As such, there may be tipping points for the bonds between people and landscapes that affect how the landscapes are valued and used.

The idea of tipping points in landscape identity has also been addressed by Dossche et al. (2016). Based on empiric study in the northern Apennines in Italy, they propose that significant landscape changes due to land abandonment over recent decades have triggered a crisis in landscape identity. Consequently, some inhabitants still identify with landscapes and connected practices that have disappeared, whilst others associate themselves with potential future landscapes and different uses. In considering spatial and existential identities to be inseparable and interdependent, they argue multiple individual and collective identities exist within a community that can change. However, a dominant collective landscape identity can assert itself which influences a sense of common responsibility and engagement with the locality. Moreover, crossing a tipping point can only be considered within the context of a collective identity.

Changing demographics, particularly an influx of newcomers, can affect attachments to landscapes and their subsequent use. Halfacree and Rivera (2012) indicated that whilst the process of 'pro-rural' migration itself is well studied, less focus has been placed on the activities and engagements of migrants in their new locations. In the study by Dossche et al. (2016), incomers seeking different lifestyles adopted

'rural' activities, such as agricultural tourism, which contribute to increasingly diverse degrees of landscape identification, intensified by increasing numbers of tourists with varied interests.

Notions of landscape disconnection are also multifaceted (Table 1). Consequently, they are understood and used differently by diverse disciplines. Ecologists are concerned with habitat fragmentation, for example, physical connectivity is vital for sustainability and resilience with urban and transport development causing habitat loss, ecosystems deterioration and even species extinction (Stanners & Bourdeau, 1995). Cultural geographers focus on social dislocations. Selman (2012) described an 'erosion of bonds between people and place', but called for greater critical examination of the damaging environmental and social impacts attributed to such disconnections, particularly in consideration of essentialist claims.

Specifically, in our study, we are concerned with what we consider to be connection or disconnection in the ways that people value and use their landscapes, which might equate, respectively, to the perception and action spheres in the transactional landscape identity model (Ramos et al., 2016). As such, we focus on relationships between people in Valleys' communities and their surrounding landscapes. Consequently, in this respect, people who are highly connected with their landscapes, understand their value and undertake outdoor activities, such as walking and cycling, as well as in some cases developing potential economic opportunities. Conversely, disconnection is indicated by a lack of identification which, in extreme cases, results in negative, destructive behaviour, such as countryside arson and fly-tipping (Figure 1).

Study areas

The Valleys comprise most of the former south Wales coalfield, an area of around 2000 km² flanked to the north by the Brecon Beacons and to the south by the coastal plains around the cities of Cardiff, Swansea and Newport. Whilst each has particular characteristics, our study areas, the Ebbw Fach and the upper Rhondda Fawr valleys (Figure 2) share opportunities and issues with many other Valleys communities, witnessing substantial land reclamation over recent decades and continuing to endure issues of socio-economic decline.

Ebbw Fach

Towns and villages here originated through iron-making, then coalmining which triggered development of its main settlement, Abertillery. Its population rose from a few hundred in 1841 to nearly 40 000 by 1921, but today with surrounding communities is around 16 000. Increasingly, community organisations are focusing on the natural environment as an asset for recreation and economic development. Developed by a partnership between community groups and the local authority and funded primarily through the VRP, the 16-km Ebbw Fach Trail (2015) links fourteen community green spaces, four of which, created on ex-industrial sites, are community-managed Local Nature Reserves, for example, Cwmtillery Lakes, site of a former colliery feeder lake that underwent major land reclamation in the 1970s (Figure 3). Tourism is increasing especially since the erection in 2010 of the imposing Guardian memorial commemorating Wales' worst post-war mining disaster.

Under a strategic regional plan in 2011, Forestry Commission Wales, now part of the national single environmental body, Natural Resources Wales (NRW), designated priority woodlands in areas of the

Table 1. Some examples of claimed landscape disconnections (adapted from Selman, 2012).

Loss of attachment between people and place
Disruption between past and present, eroding landscape memories and meaning
Disconnection between town and country
Disconnection between people and nature
Fragmentation of ecological habitats
Loss of linkages between and within ground and surface waters

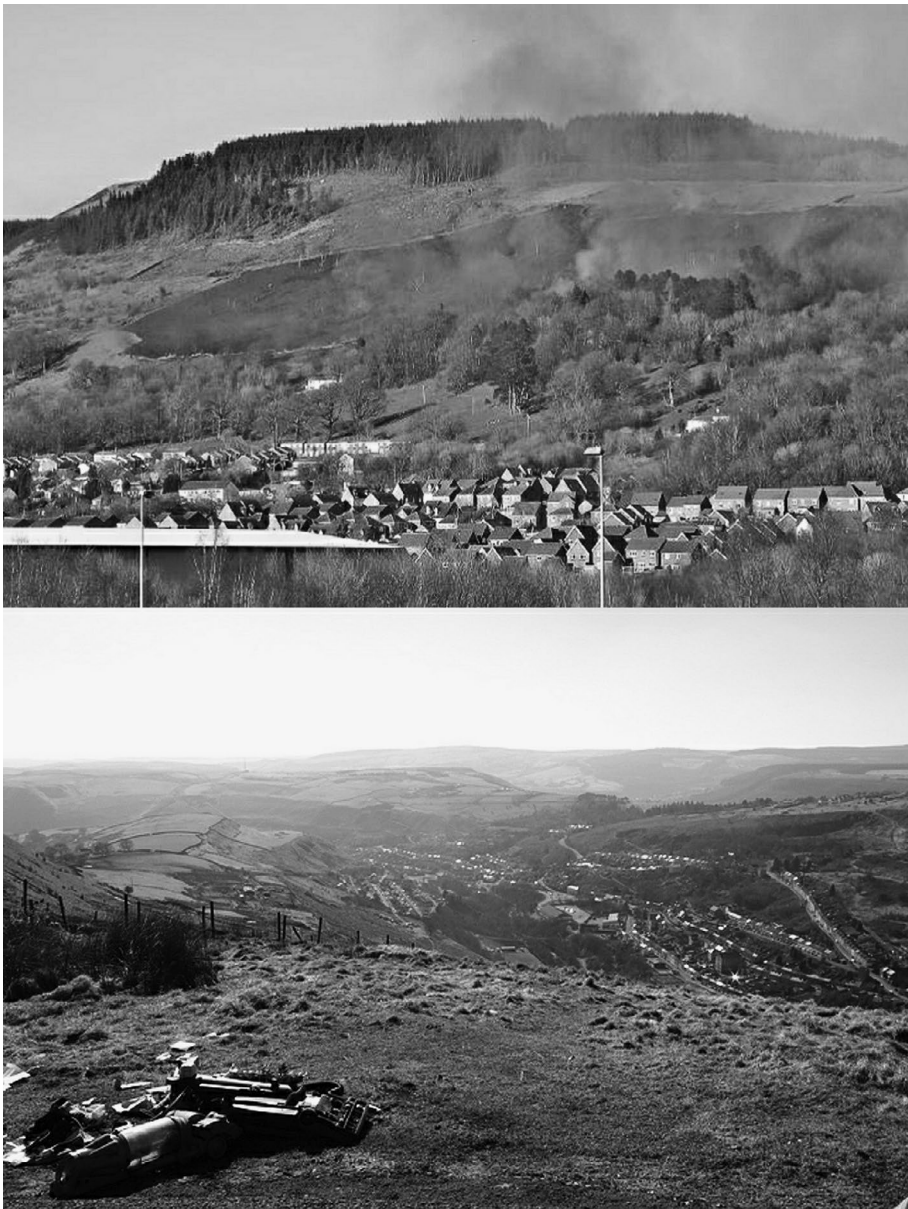


Figure 1. Examples of landscape disconnection in the valleys.

Top panel: Deliberate hillside grass fire above the community of Cwmbach in the Cynon Valley (April 2015). Image: Dean Johns. Bottom panel: Example of wanton fly-tipping at a popular viewing point overlooking Tylorstown in the Rhondda Fach Valley (March 2012). Image: David Llewellyn.

Valleys with the potential to deliver the greatest social, environmental and economic gains in deprived communities, including the Ebbw Fach.

Upper Rhondda Fawr

Treherbert, with a population of around 6000, is situated at the northern end of the upper Rhondda Fawr, where settlements developed in the mid-nineteenth century primarily through coalmining. Coniferous woodland, planted over the last 40 years, is a prominent landscape feature. A major recent development

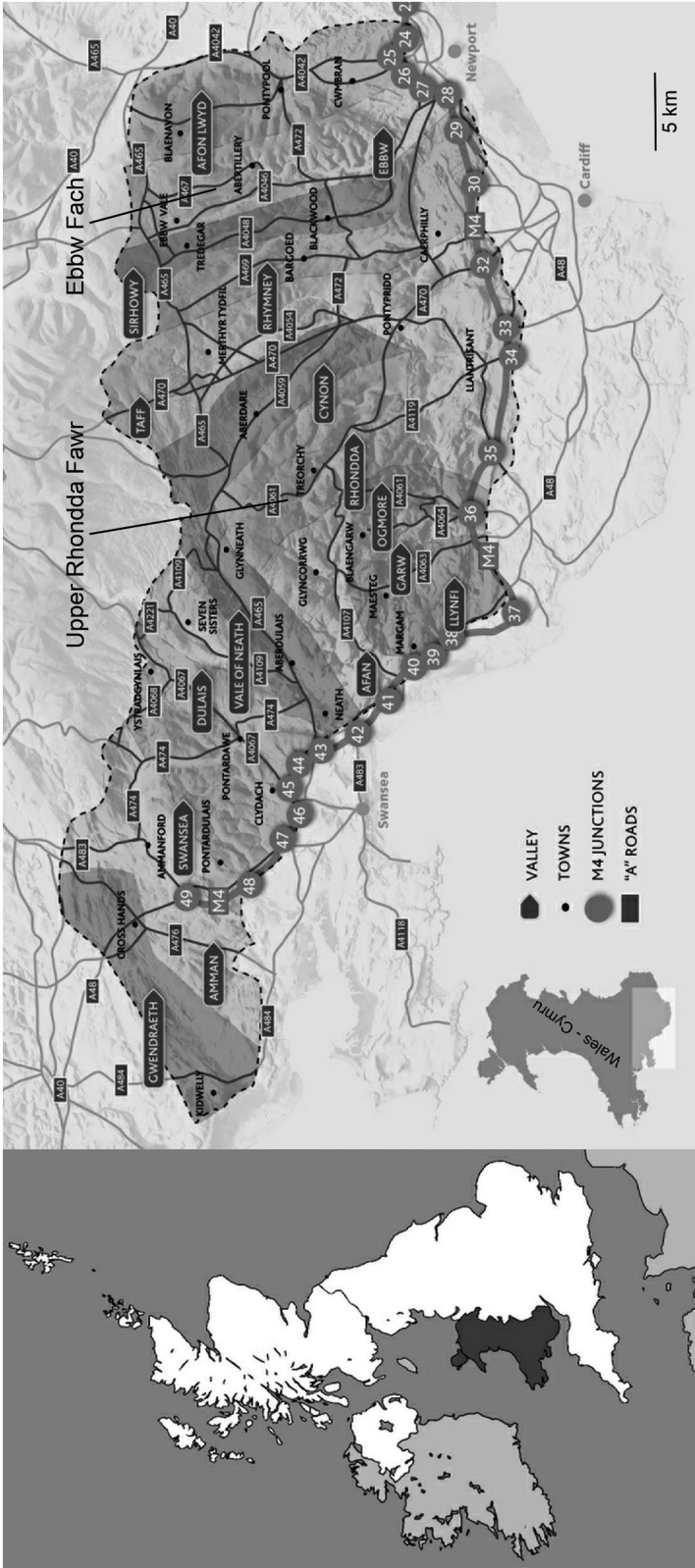


Figure 2. The south Wales valleys. Note: Locations of the study communities with respect to UK (left panel) and Wales (inset). Source: David H. Llewellyn.

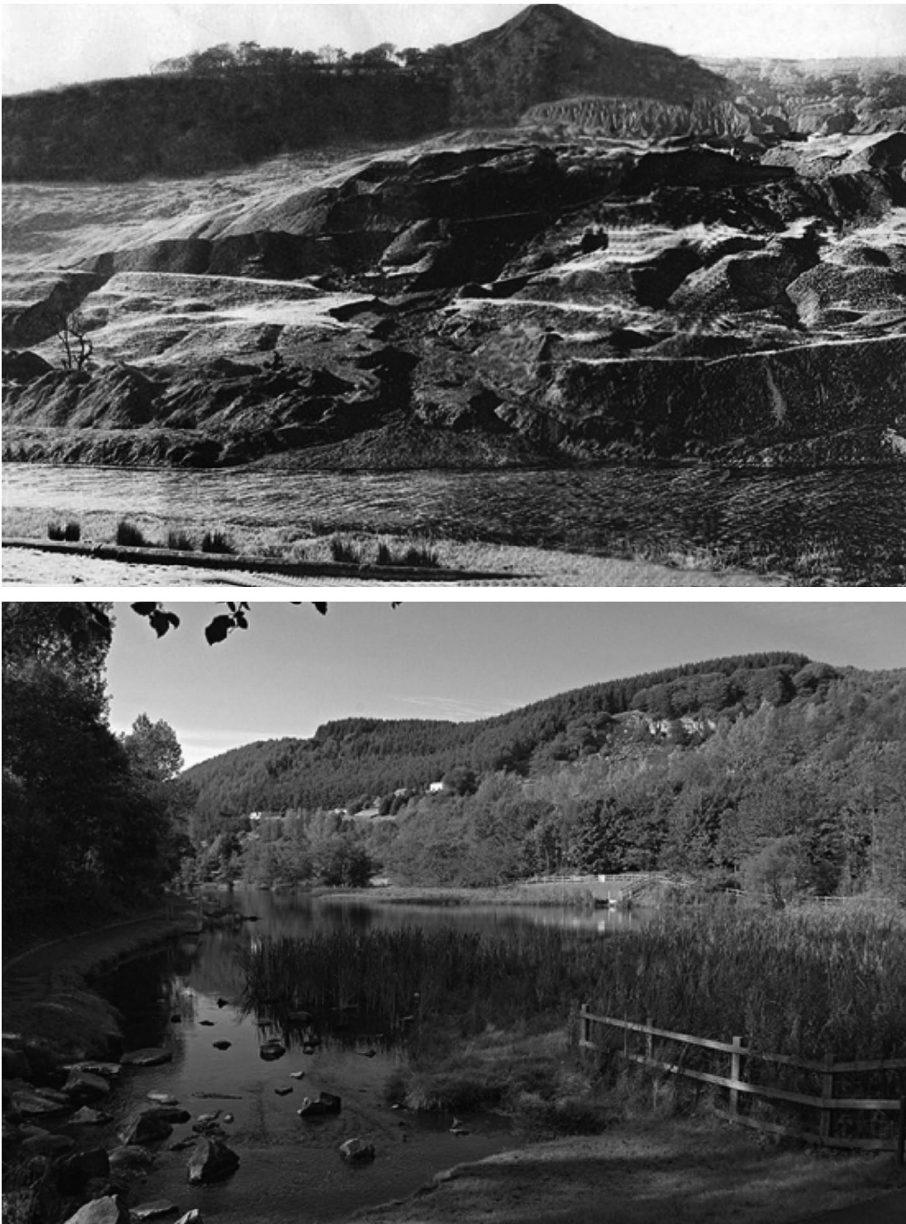


Figure 3. Environmental transformation in the Ebbw Fach valley.

Cwmtillery Lakes (in the Tyleri Valley, a small offshoot of the Ebbw Fach valley). Top panel: 1972, showing waste tips and deposits over and alongside the lower lake. Image: Chris Gwilliam. Bottom panel: 2014, same area further to land reclamation and recolonisation by nature.

is the Pen-y-Cymoedd windfarm, currently under construction, comprising 76 turbines located on land managed by NRW overlooking the valley to the north and west. The upper Rhondda Fawr has similarly witnessed remarkable environmental transformation (Figure 4) with priority woodlands designated under the Strategic Plan resulting in increased community-led initiatives in tourism and community energy generation amongst others.



Figure 4. Environmental transformation in the Upper Rhondda Fawr Valley.

Looking south towards Blaenrhondda and Pen Pych (flat top mountain) near Treherbert. Top panel: 1947, showing working collieries and spoil tips around the pits and on hilltops. Image: RCT Archive Services. Bottom panel: 2017, same area further to land reclamation, conifer plantation and recolonisation by nature.

Methodology

Ebbw Fach

We employed a purposive sampling approach (Palys, 2008) identifying here individuals from organisations involved in landscape-related activities; however, they work with communities and are knowledgeable on issues regarding landscape attitudes and usage.

Details of the participants are shown in Table 2. As shown, fourteen of the twenty approached responded in full to an initial questionnaire which focused on landscape usage and possible

Table 2. Details of the participants and respondents in the Ebbw Fach valley.

Type of organisation	Number approached	Number responded
Local authority	2	1 (male)
Local business	2	2 (1 male/1 female)
Third sector partnership	3	2 (2 male)
Landowner	2	2 (1 male/1 female)
Community organisation/partnership	10	6 (3 male/3 female)
Housing association	1	1 (male)

opportunities. This was followed up with semi-structured interviews with all respondents (about 30 min). Finally, a further questionnaire was sent later to garner more specific views of perceptions of local community relationships with, and usage of, the natural environment with eight responses received.

Upper Rhondda Fawr

We worked in co-production with community partners to explore everyday relationships with energy; past, present and future (Stories of Change, 2015). Together, we established a 'pop-up Story Studio' over an 11-day period in July 2015 in a centrally situated disused building, formerly a chapel then library. Here, locals were invited to contribute and share stories and experiences on energy and the landscape. This was publicised through postcard flyers and a community magazine delivered to every household, and an advertising banner outside the venue. Access was free and open to all with nearly 500 different people visiting.

One area of the studio focused on the landscape where we provided large-scale local maps on which people could write comments regarding their usage, memories, hopes and aspirations. All visitors (except children for consent reasons) were invited, without obligation, to record audio contributions with research team members on energy and on the local environment. These had no set structure other than occasional prompts and clarification questions. In total, 40 individual contributions were recorded, varying between 18 min and an hour. Despite the open invitation, we cannot discount self-selection bias, although as Table 3 shows with anonymised details of participants, contributors had varied backgrounds and experiences.

Analysis

With the Ebbw Fach material, we examined survey responses directed at eliciting more expert views regarding community relationships and usage of the landscape. The Story Studio audio material was professionally transcribed. Transcripts were examined in detail to identify elements within them regarding landscape relationships, whether personal or community. These were split into themes of landscape perceptions, landscape use and potential disconnection.

Findings and discussion

In this section, we initially examine perceptions of landscape changes before exploring community-led landscape actions in both study areas. We then turn to material concerning reported landscape disconnection followed by consideration of evolving landscape identities in the Valleys and possible consequences for future policy and practice.

Landscape perceptions

There were strong indications that most view the current Valleys' landscapes very positively using descriptions such as 'beautiful' and 'stunning'.

Table 3. Outline details of audio contributors in the upper Rhondda Fawr.^a

Ref.	Sex	Age	Born locally	Resident locally	Landscape connection	Explanatory notes
RF1	M	26	Y ^a	Y	Y	Local volunteer
RF2	M	26	Y	Y	N	
RF3	F	30s	N	N	Y	Employed as community worker in vicinity
RF4	M	30s	Y	Y	Y	Employed as community worker in vicinity
RF5	M	30s	Y	Y	N	
RF6	F	30s	N	N	Y	Employed arts practitioner in vicinity
RF7	M	30s	N	Y	N	
RF8	M	36	Y	Y	N	
RF9	M	46	Y	Y	N	
RF10	F	49	N	Y	Y	Local volunteer
RF11	M	50s	N	Y	N	
RF12	F	50s	Y	Y	N	
RF13	M	55	Y ^a	Y	N	
RF14	F	58	Y	Y	N	
RF15	M	59	N	N	N	Works in the area
RF16	M	60s	Y	Y	Y	Local non-professional author on local landscapes
RF17	M	60s	Y	Y	N	
RF18	F	60s	Y	Y	N	
RF19	M	60s	N	N	N	Visited the studio specifically—familiar with the area
RF20	M	60s	N	Y	Y	Local volunteer
RF21	F	60s	N	Y	Y	Local volunteer
RF22	F	60s	Y	Y	N	
RF23	M	66	Y	Y	N	
RF24	M	70	N	Y	Y	Lived in the area over 35 years—previously volunteer
RF25	F	70s	Y	Y	Y	Previously volunteer
RF26	M	70s	Y	Y	N	
RF27	F	71	Y	Y	N	
RF28	F	72	Y	N	N	Visiting the area
RF29	F	74	N	Y	Y	Family connections with the valleys—previously volunteer
RF30	M	79	Y	Y	N	
RF31	F	79	Y	Y	N	
RF32	M	82	Y	Y	N	
RF33	M	84	N	Y	N	Lived in the area over 50 years

^aForty (40) audio recordings made in total involving 42 individuals (2 recordings each involved 2 people). Examination of audio and transcripts deemed 33 contained sufficient content concerning the landscape and these were analysed further. With respect to those, there were 20 male and 13 female contributors with ages ranging from 26 to 84. Twenty-one (21) were born in south Wales, 19 of them in the immediate vicinity and 2 in Cardiff (RF1 and RF13) 5 people lived outside the immediate vicinity; three work in the area, one a visiting ex-pat (RF28), and the other (RF19)—familiar with the area—who visited the studio specifically having heard about it. Of the 11 individuals not born but resident in the area, all had lived there for over 10 years other than one (RF7) who had moved to the area within the last two years. As indicated, some people were volunteers in a local environmental group, Welcome to our Woods (other than RF1 associated with another group). Others indicated as 'previously volunteer' had been attached to different environmental groups.

The landscape is cracking. To wake up to this every day is great, isn't it? If you took the Valleys' accents away and the British cars, you could pretend you were in a different country quite happily. (RF2—see Table 3 for details)

About a third of Rhondda Fawr participants enjoyed some practical engagement with the landscape, largely through volunteering, but in some cases through employment (Table 3). However, they did not appear to express stronger or contrary views to those without such experience. Moreover, there were no discernible differences in positive aesthetic perceptions between participants whether raised in the valley or incomers. Descriptions by those raised in the area often made comparisons with the previously despoiled landscapes, indicative that they welcomed the aesthetic changes.

When I was growing up ... we went out to play, you came back stinking dirty because it was just coal everywhere. So, I think it's fantastic that the collieries are gone because the landscape around you now is absolutely beautiful. (RF14)

Some expressions were comparative perhaps suggestive of a desire to counter negative external perceptions.

The Brecon Beacons are so close, people go there but they don't stop off here. We've got just as much beautiful scenery as they have ... (RF10)

Interestingly, a small minority of those brought up in the area displayed some affection for familiar features of the area's landscapes prior to reclamation, accentuated through contemporary toponyms, for example, with respect to two adjacent now-reclaimed waste tips.

King Kong's Arse ... we wanted it to stay, but they wouldn't let it. (RF12)

Similar toponymic identification with former tips is also apparent in the Ebbw Fach and might suggest wider occurrence. Wheeler (2014) has shown that social memories of mining persist in a small community in Cumbria with landscape vestiges of previous activity key to 'understandings of place and temporality'. However, most Valleys' mining landscapes are gone or, at least, no longer obvious, which many welcome as this quote illustrates.

There's not much left of the industrial landscape around here. In fact, you have to look for it. It is a lot nicer area. (RF9)

Recent community-led initiatives such as Guardian in the Ebbw Fach and the creation of the Welsh National Mining Memorial and Garden in Senghenydd in 2013, commemorating the centenary of the UK's worst mining disaster, demonstrate a strong attachment and reverence to past industrial struggles and achievements even though deep coalmining ended nearly 30 years ago, and had been in decline for many years prior to that. Remaining mining activity in south Wales is opencast and recent public protests against extending such activities in the Rhymney Valley highlighted a desire to preserve the area's aesthetic beauty as a prime objection, again suggestive of positive identification with the changed landscapes. These perceptions seem to equate with the 2013 survey where Valleys' residents were reported to be proudest of their 're-greened' surroundings. However, there was no detailed demographic breakdown in it and it was also unclear whether the views reflected aesthetic appreciation and/or valorisation of associated recreational or economic opportunities.

Aside from mining-related reclamation, conifer plantation has greatly impacted the landscape character in the Valleys, an aspect necessitating consideration beyond the view. Based on factors that influence landscape relationships, people generally prefer conifer plantations from a distance rather than close-up (Natural England, 2009). Whilst conifers have added to visual 're-greening' in the Valleys, they were a focus of contention for some audio contributors within the Rhondda Fawr, whilst pejorative comments were written by others on maps provided.

Used to go picking wimberries up the mountain, taking the dogs for a walk, and it was quite open. But since the forestry ... you don't, it's insidious, it takes over. (RF9)

We tried so hard to stop them planting conifers in the basin, the only almost perfect glacial cwm (valley) around here. We've lost all our wild flowers ... where the conifers are. They've been planted in rows so you get flooding off the mountain (RF27)

These opinions exemplify some deep-seated issues over environmental impacts and, as reported previously, ownership (Kitchen et al., 2002). State-owned coniferous woodlands also dominate the hillsides in the southern Ebbw Fach valley. Largely inaccessible to modern forest operations and designated consequently as a 'natural reserve', they are unlikely to be managed for timber, receiving little maintenance over many years. Several respondents in the Ebbw Fach alluded to a sense of negativity in attitudes around community usage and enterprise within state-owned woodlands.

Forests in South Wales generally have a 'negative' feel—great potential but underutilised.

In Scotland, their use is actively encouraged. South Wales has a 'No' culture in forest use and access.

Indeed, a recent NRW report acknowledged the need to change the legacy of the forests in Rhondda from a 'no-go area' and reconnect people to their local environment (Natural Resources Wales, 2015b).

Landscape actions

Recent developments suggest an emerging desire amongst community groups and organisations in the Valleys to develop opportunities offered by the new landscapes. In the case of tourism and renewable energy, these are conceived as actual livelihood opportunities, for example, prospects for enhanced tourism were a clear driver for the Ebbw Fach Trail with a new social enterprise created for training and employment. In the upper Rhondda Fawr, a consortium of organisations has devised an initiative entitled 'A Natural Future for the Rhondda', which aims to create jobs based on the environment.

It's basically looking at the people ... the landscape around here and coming up with ... a long-term, sustainable model. It may not be huge but it's going to be more than we have just now ... we're not expecting to create thousands of jobs but creating, over three or four years, a hundred jobs would be a hundred more than this valley has at the moment. (RF19)

It was not possible in this study to discern the extent of such thinking although others not directly associated with the group shared similar views.

You've got a beautiful part of the planet here and we ought to have it so that we have people longing to come here, flocks of tourists coming to see the beauty of our valleys, of our lakes, of our waterfalls, the caves, the history. (RF28)

I think the future will be in tourism, and people coming for the countryside and the mountains that we've got. (RF4)

Currently, another community group is seeking to reopen a former railway tunnel to the adjacent Afan valley, aiming to link nature areas in both valleys through walking and cycling opportunities.

Tourism can change identities, including landscape identities (Dossche et al., 2016), and be divisive (Duffy, 2002) and even threatening (e.g. Reinfeld, 2003). Yet, it can support identity-building in communities (e.g. Silva & Leal, 2015) and increasing community-led tourism in the Valleys is arguably indicative of new pride in the landscapes. Former industrial areas are developing initiatives to protect and capitalise upon their cultural heritage (Ballesteros & Ramirez, 2007; Kaminski, Benson, & Arnold, 2014). A current tourism campaign devised originally by Visit Wales, the Welsh Government-sponsored tourism body, pitches the Valleys as the 'Heart and Soul' of Wales, reflecting a 'strong sense of community and unique industrial past that 'turned rural Wales into the world's first industrialised nation'. Interestingly, the community partnership overseeing the Ebbw Fach Trail labels it as 'A walk from our industrial past to our environmentally-friendly future', both celebrating the cultural heritage and recognising emerging opportunities afforded by the new landscapes.

Community-owned renewable energy is also emerging in the Valleys, for example, the Awel Co-op windfarm and the micro-hydro scheme at Clydach Vale that powers the café at the community-run Country Park. These are necessarily small scale at present with most emergent large-scale windfarm activity owned by large concerns, for example, the Pen-y-Cymoedd windfarm above the Rhondda Fawr owned by the Swedish Government-owned company Vattenfall. Although far from universally decried, again there were some concerns regarding community involvement and ownership, echoing the situation over conifer plantation.

I would love to see our valley resort to its beauty before coal; I would love to see the windfarms taken ... I really feel we've been raped a second time. You feel helpless, there's nothing you can do because big money, foreign money, not even our money, has the right to come in and dig up and rape the mountain ... (RF27)

Key community workers in the planning and delivery of the Ebbw Fach Trail viewed community involvement as crucial to its success in encouraging community use.

The projects [along the Trail] were valued by the community and continue to be so ... community buy-in at all stages proving that things can be done ...

Yet community involvement is not seen as extending to the woodlands along the Trail to date, something that would be welcomed by one local landowner and business man.

An increased sense of [community] ownership of and responsibility for the local woodlands might be a positive development ... with benefit to both the woodland and the local economy.

Management of one of the Trail's woodlands was developed under a strategic programme aimed at increasing community involvement. But issues in both community and institutional capacity with the

Local Authority and NRW impacted upon that. In the Rhondda Fawr, recent developments such as Welcome to our Woods, supported by NRW, have increased community involvement. Their project officer expounded a growing desire for greater ownership.

It's about things like wind turbines, water turbines, local wood, but it's about people owning that. This place wouldn't exist if it wasn't for energy, the production of coal ... that was produced and kept by the owners ... not a lot passed to the workers.

The national launch of NRW took place in Treherbert in 2013, since when it has initiated three area-based natural resource management trials, one in the Rhondda valleys. Despite enhanced community involvement as a key principle in the trials, some still feel excluded.

What is annoying is all these decisions aren't being made in the community. They're all being made by people away from it. (RF10)

Landscape disconnection

As previously indicated, notions of landscape disconnection are multifaceted. Participants in both study areas suggested a conspicuous element of indifference or apathy towards use of the local environment amongst some residents.

People generally don't appreciate what's around them. It takes people from outside to come and say, 'Gosh, this is tremendous. I've had people who've lived all their life in Treherbert and never been on top of Pen Pych [local mountain]. It's crazy. People see these things every day, but they don't go and explore them. (RF4)

This was echoed by this respondent, involved in community environmental activities, in the Ebbw Fach.

Many people still overlook local amenities, even though they are often (literally) on their doorstep.

Others in the Ebbw Fach felt the outdoors was used more often by people in employment. Evidence from England indicates green space usage is more prevalent amongst people who are healthy, employed, more affluent, and living in what are deemed rural areas (Natural England, 2016), and that people in deprived areas close to green spaces use them more infrequently (Public Health England, 2014). Both our study areas are poor (Welsh Index of Multiple Deprivation, 2014) with high instances of chronic limiting ill-health. The UK 2011 census reported that five of the ten areas where people themselves felt least healthy were in the Valleys. Accordingly, deprivation and health issues might contribute to a lack of usage of the outdoors by some.

Physical constraints as barriers were also raised in both study areas. There were suggestions that fencing off land during land reclamation for safety considerations might have affected subsequent behaviours and there are also legitimate concerns over fissures on the hilltops with mining having caused subsidence and re-activated geological faults across the former coalfield (Donnelly, 2006). However, most notably, poor forest management has impacted access to the wider countryside, illustrated by these respondents in the Ebbw Fach, first, and the Rhondda Fawr.

35 years ago, signs were good and footpaths were there, but they haven't been replaced or renewed since and the firebreak is too overgrown to be used anymore.

the forestry is spoiling it ... It's not giving the opportunity to go up the mountains where you want to go and do what you want. (RF22)

The 1949 South Wales Outline Plan encouraged extensive afforestation in the Valleys but warned of 'some curtailment of the comparative freedom now enjoyed by the population to roam over what are virtually open hills'. A Civic Trust report (C: - Civic Trust, 1965) indicated large-scale planting would totally transform the familiar appearance and character of the Rhondda and, whilst judicious planning could create 'a recreational area unique in Britain', insufficient consideration was given to safeguarding access to communities. Kitchen et al. (2002) reported poor relations between the-then Forestry Commission and affected communities with 'high-density, linear-edged planting' resulting in 'dark blocks of conifers overshadowing communities' in some valleys and, although communities welcomed enhanced participation in forest management in principle, there was significant 'apathy and antipathy' towards

the forest and the authorities, exacerbated by a lack of capacity within communities needed for effective involvement. They concluded this was state abrogation of environmental responsibility, detrimentally affecting post-productive forestry and environmental democracy.

Despite initiatives since then to engage communities across Wales in their woodlands, our study reveals remaining discontent and importantly suggests a developing desire and capacity within Valleys communities themselves to participate effectively in the stewardship of natural and cultural heritage assets. These increasing community expectations regarding natural resource management were acknowledged by Moffat, Lacey, Zhang, and Leipold (2015) with greater demand for involvement, not just in decision-making, but also operationally and in sharing the benefits.

Nevertheless, recent reports indicate continued instances of arson, fly-tipping and indiscriminate off-road motor biking in the Valleys (Natural Resources Wales, 2015a). Whilst the latter might perhaps be considered as alternative landscape valuation and usage, clearly arson and fly-tipping are not, with an in-comer to the Rhondda Fawr reproachful of some local attitudes.

I find people of these valleys don't know ... what a beautiful country they have ... so many treat it like a trash can.
(RF28)


Evolving landscape identities

The Valleys' landscape character, or spatial identity, has altered drastically over recent decades. Expressions of attachment in our study, and surveys demonstrating pride in the changed landscapes, suggest emergence amongst many of a new collective Cultural-Spatial identity (Stobbelaar & Pedrolì, 2011). The transactional model of landscape identity (Ramos et al., 2016) indicates the importance of dynamic interplay between landscape perception and physical actions between people and landscapes, and Dossche et al. (2016), through empirical study, showed how interactions between spatial and existential identities can impact land use. Multiple existential landscape identities can exist within communities, which are contested and subject to change. Table 4 sets out a collective representation of the complexity and diversity of landscape perception and action in our study areas. This is undoubtedly oversimplified with myriad individual identities within them and blurring across them, with varying scales of each. However, it may be useful in understanding how eliciting greater insights into evolving landscape identities might influence policy and practice and how those might conversely impact upon landscape identities.

As shown, there is a desire amongst some to utilise the 'new' landscapes economically through sustainable tourism, renewable energy and local wood and food products—activities emerging in 'new rural spaces' (Frantal & Martinat, 2013) and potential sectors in rural eco-economies (Kitchen & Marsden, 2009). Since the Local Government Act 1894, the Valleys have largely been viewed politically as urban, a still predominant view (Wales Centre for Health, 2007), although 'rural' activities such as small scale and subsistence farming have continued. Yet, certainly outside the larger towns, the Valleys, distinct from urban or rural, might be viewed as places of change and adjustment (Allen, 2003; Masuda & Garvin, 2008). Interestingly, the local authorities covering our study areas submitted areas for the current Wales Rural Development Plan, having not done so previously.

In the Apennines, incomers are integral to an emerging landscape identity based on new economic opportunities (Dossche et al., 2016). Our findings show some long-standing residents in Treherbert are involved in developing new landscape-based economic activities suggesting the changed landscape character is affecting their identities, but incomers are also involved. Our study locations are not 'rural idylls' but disempowered, 'post-industrial rather than post-modern' areas, suffering socio-economic decline rather than 'middle-class colonisation' (Marsden, Millbourne, Kitchen, & Bishop, 2003). Enhanced economic development based on the changed landscapes, especially tourism, might yet result in significant in-migration impacting landscape identities further. Counterurbanism can be highly important to rural economic development, especially through micro-businesses (Bosworth, 2010). Examining in-migration and associated perceptions of rural life in two English tourism areas, Cornwall

Table 4. Complexity and spectrum of landscape identification and attachment.

	Valuation and use	Illustrative quotes
 Spectrum of landscape identification or attachment	<ul style="list-style-type: none"> • Developing the economic value of the landscapes (Sustainable tourism, wood products, renewable energy) • Desire for greater ownership/stewardship 	<i>My dream is a guided walk up the side of the valley from Cwm Saerbren where they're told about foraging, told about the archaeology on the way up ... when they get to the top, there's a big tent and we've cooked a top-end style food using foraged stuff, using local produce. Maybe they spend the night in a glam tent made out of local wood ... It will put it on the map in terms of tourists. It'll provide jobs in the local economy (RF20)</i>
	<ul style="list-style-type: none"> • Environmental and cultural appreciation • Recreational value—walking, cycling 	<i>We've got some of the best scenery in the world. We got one of the best places for gliding in the world, hang gliding, so why not utilise it? ... Outward bound workers ... (RF13)</i>
	<ul style="list-style-type: none"> • Aesthetic appreciation 	<i>People come through the valley now that it's green and go up onto the top of the Rhigos, they look down and they think, this is stunning. There's nowhere in Europe that can match it (RF12)</i>
	<ul style="list-style-type: none"> • Indifference or Apathy—seeming or real 	<i>You've got people my age living round here who've never been up the top of Pen Pych (local mountain) (RF17)</i>
	<ul style="list-style-type: none"> • 'Active' detachment (Deviant or destructive behaviours and actions—fly-tipping, deliberate arson) 	<i>My personal opinion is that some people set the mountain on fire because they believe it's not their land (RF1)</i> <i>I'm not making any excuses for people who light mountain fires, but I think it's symptomatic of this disconnect between the environment and the people (RF8)</i>

Notes: This shows the complexity and multiplicity of people's attachments and identification with the landscape in the upper Rhondda Fawr valley with indicative, illustrative quotes (for details of contributors, see Table 3).

and Northumberland, both suffering economic deprivation, Bosworth and Willett (2011) showed that in Northumberland, effective local engagement was key to incomers' quality-of-life and business development. In our study, none of the incomers involved were running 'rural' businesses themselves but rather have engaged with community enterprises. Whilst this might reflect the nascent nature of opportunities, there are strong cultural co-operative traditions in the Valleys and further in-depth exploration of their motivations for in-migration and subsequent activities beyond this study might be revealing (Halfacree & Rivera, 2012).

At the other end of the spectrum is detachment from the landscape with deviant behaviour. Whilst clearly not unique to the Valleys, reports suggest higher incidences. Our Story Studio was unlikely to attract those involved, so precluding direct insights. However, lack of ownership is suggested to be contributory (Table 4), echoing some previous findings (Kitchen et al., 2002), which has important implications for future community engagement and involvement in natural resource management.

Similarly, the Studio was unlikely to appeal to those indifferent to the landscape, so again insights are indirect, which indicates the importance of the experiences in the Ebbw Fach from those working with communities and landscapes. Despite increasing sedentary lifestyles in the general populace, ill-health and deprivation, together with actual physical barriers, might specifically affect how some in the Valleys use their landscapes rather than conscious disengagement. Interestingly, *The Valleys Call*, over 40 years ago, suggested myriad factors for apathy amongst Valleys' communities towards their environment. These were especially a sense of irrelevance compared to prevailing economic circumstances, a lack of agency to make any difference, and inurement to the despoiled surroundings (Ballard & Jones, 1974). Attachment to landscape and place is integral to a sense of identity (Taylor, 2008), with Drabble (1979)

describing landscape as 'a living link between what we were and what we have become ... (and) a profound and apparently disproportionate anguish when a loved landscape is altered out of recognition'. Arguably, the transformed Valleys' landscapes are dislocated from cultural memories and identities of older residents and it would be instructive to explore how young people in the Valleys, unfamiliar personally with prior despoiled landscapes and for whom mining is beyond living memory, relate to and use their landscapes. But it would be imprudent to suggest that Valleys' inhabitants previously loved their despoiled environment despite any inurement. Dare Valley Country Park in the Valleys was the first created on reclaimed land in the UK in 1973. When it won a civic award after opening, locals considered removal of the former colliery relics to be the best element (Ballard & Jones, 1974). Ramos et al. (2016) asked whether tipping points in landscape identity can be identified both with respect to landscape character and societal changes. In their Apennines study, Dossche et al. (2016) suggested the spatial identity has passed a tipping point which has impacted on existential identities. In the Valleys, existential identities are evolving in response to the changed landscape character, which was primarily triggered by the Aberfan tragedy. It is interesting to speculate whether relationships between people and landscapes in the Valleys began to change dramatically from that point forward, suggesting tipping points might be brought about by significant events as well as changing landscape character and evolving populations.

Concluding remarks

Our study has revealed greater insights into evolving landscape identities within the Valleys in south Wales. The findings suggest that the changed landscape character is impacting on perceptions, valuation and uses with new existential identities emerging amongst some. Yet, clearly, there are some within communities who remain disconnected for a variety of reasons, some apparently related to land use and management.

In concluding, we comment on some interrelated aspects of our study. The first briefly concerns the creative co-production approaches we adopted to explore landscape relationships within one of our study locations. These types of approaches can facilitate the emergence of new or grounded stories to help unearth and reframe understanding of the multiplicity of ways in which communities perceive, interact with, and use and shape the landscapes in which they are embedded.

The increased community environment-based activities seen in the Valleys in the last decade or so suggest a developing desire and capacity within communities to participate effectively in the management and stewardship of the region's natural heritage assets. This might be explained within the context of shifting landscape identities and how local people are associating with the evolving landscapes in the Valleys. Further studies would provide more insights into how these evolving identities influence and impact upon the motivations and disconnections observed within communities.

Moreover, this enhanced understanding should have significant implications for the ways in which land use policy and natural resource management are effected to achieve socio-economic and environmental benefits. Consequently, in reflecting upon those changing relationships and identities, strategic and local landscape initiatives would benefit greatly from being designed and implemented through more active and effective engagement and the actual involvement of communities.

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