

## **Stigma and attachment: performance of identity in an environmentally degraded place**

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### **Abstract**

Research examining the relationship between place and identity shows that the experience of places influences a person's process of identification, through which an emotional bond with the place may be developed. However, the implications of this literature for land restoration remain unexplored. This is partially due to a gap in empirical research that explores the performance of identities in environmentally degraded settings. This paper examines the relationship between identity and place among residents living around five coal ash disposal sites in Tuzla, Bosnia and Herzegovina. The paper develops a qualitative model to understand the emergence of divergent responses towards the pollution and illustrates that in an environmentally degraded setting the bonds between the individuals and the place are not necessarily dislocated; in some cases, these bonds may be even reinforced by the performance of adaptive identities in response to environmental change.

**Keywords:** Bosnia and Herzegovina, coal ash, environmental pollution, identity, land restoration, place

## **Introduction**

Although the relationship between place and identity has received considerable attention within the literature, this relationship has rarely been examined in environmentally degraded settings. Hence, how research on place and identity can contribute to current thinking in land restoration remains largely unexplored. This paper examines the links between identity and place in a polluted landscape, among residents living around five coal ash disposal sites in Tuzla, Bosnia and Herzegovina.

Firstly, the paper reviews some of the issues currently being discussed in the place-and-identity literature that directly relate to degraded environments. Secondly, the paper presents a case study of coal ash pollution in Bosnia and Herzegovina. The case study is presented within the framework of a research consortium (RECOAL), financially supported by the European Union, whose remit is to develop low-cost solutions for the remediation of the coal ash disposal sites in Tuzla. Thirdly, two aspects of the relationship between identity and place within the case study are presented: the preservation of the ties to a place despite its ongoing degradation and the emergence of identities associated with the pollution features of that place. The findings of this paper are then assessed in terms of their relevance and applicability to environmental planning and management, and some general conclusions are drawn in the final section.

### **Identity development in environmentally degraded places**

Place and its influence on the formation of identity is an intriguing topic that has received considerable attention from different disciplines. Focusing on individual identities, environmental psychologists have defined place identity as one of the basic components of self-identity. Place identity refers to the aspects of identity defined in relation to the physical

environment, and the conceptual understanding which enables the individual to interact in a particular setting (Proshansky 1978; Bonaiuto et al. 1996; Hopkins and Dixon 2006; Manzo and Perkins 2006). The concept of place identity has been further developed by identifying other characteristics of the bond between identity and place such as ‘sense of place’, ‘place attachment’ or ‘place dependence’, triggering explorations of the differences and connections between these terms (Low and Altman 1993; Hummon 1993; Manzo 2003; Stedman 2003; Smaldone et al. 2005).

The attachment of meaning to places has received considerable attention through exploring their attribution (Gustafson 2001), their contribution to the formation of social identities (Rubinstein and Parmelee 1993; Harner 2001) and how they are contested in natural resource struggles (Cheng et al. 2003). However, two other components of place, the physical setting and the activities performed in it, are also relevant (Relph 1976). Hence studies of place should not overlook the influence of the physical components of a place on the sense of place (Stedman 2003) or the experiential, interactive and relational components of places (Relph 1985; Gieryn 2000).

Landscape studies have paid considerable attention to the action component of places emphasising people’s engagement with landscapes through daily practices (Thomas 1993; Macnaghten and Urry 1998; Ingold 2000; Castán Broto et al. 2007). Doreen Massey describes places as the sites where social relations and ‘activity spaces’ intersect (Massey 1995). These places or ‘meeting points’ of interactions are necessarily multiple, dynamic, fragmented and changing (see Massey 1994; May 1996; Casey 1998; Hall 2000; Manzo 2003; Davenport and Anderson 2005; Smaldone et al. 2005). The sense of place has been shown to predispose action (Stedman 2002).

Moreover, certain expressive components of identities are ‘performed’ with relation to places (Hetherington 1998). Both identities and place are reflected in the interactions occurring in those places: for each interaction a particular conception of self and of the place is called into being helping to explain the actions taken (Anderson 2004). Examining identities as ‘actions’ addresses the experiential nature of the social process by which identity and place are produced and re-enacted.

Empirical studies concerned with identity-place relationships have recurrently focused on recreational or scenic settings (e.g. Bricker and Kerstetter 2000; Vitterso et al. 2000; Wickham and Kerstetter 2000; Vorkinn and Riese 2001; Kyle et al. 2004; Stedman and Hammer 2006). These studies seem to assume that the nature of the bond with places is necessarily positive (Manzo 2005). Less work has been done in understanding the relationship people have with polluted or hazardous places. Environmental degradation may have discernible impacts on social understandings of the degraded place and in the formation of identities (Davenport and Anderson 2005). Such environmental transformations can pose a threat to existing social identities and generate adaptative responses (Brown and Perkins 1993; Bonaiuto et al. 1996; Twigger-Ross and Uzzell 1996; Hopkins and Dixon 2006). In these circumstances sense of place can be an important mediator for social experiences of the place (Simmons and Walker 2005).

Goffman (1990) uses the term stigma to refer to a particular deeply discrediting attribute, which makes an individual less desirable than others in the same category. He emphasises that stigma emerges within relationships: it requires a set of social anticipations or expectations about what is ‘normal’ prior to the identification of potential deviations from that ‘normality’ (Goffman 1990). For the stigma to be recognised, visible symbols need to be identified that can be attributed, communicated and acted upon (Goffman 1990). In relation to place, stigma can be

used to explain how the perception of a negative environmental change in a place can result in profound transformations of local identities (e.g. McGee 1999; Bush et al. 2001; Edelstein 2004; Simmons and Walker 2005). We focus here not on how stigma is attributed to the people but to the place where the physical changes occur. Those physical changes provide visible symbols through which the place is stigmatised.

The concept of 'insideness/outsideness' (Relph 1976) is useful to conceptualise the relationship between identity and the ties to a place. Insideness represents a commitment to the place not only from an individual but also from a collective perspective; outsidersignifies the separation of the individual who is transformed into an observer of that place. Individuals exhibiting strong ties with the place (insideness) characterise the place as a unique component of their existence. On the contrary, individuals exhibiting weak ties with a place (outsideness) behave in space as if the place was something accidental and with limited influence over their personal decisions, and appear to lack interest in collective action (see Relph 1976).

Some authors contend that environmental degradation results in erosion, if not rupture of the bond between people and places, 'placelessness' (Relph 1976). Because an existing perception of place is questioned when spatial observations no longer correspond with expectations, those physical changes may trigger the re-negotiation of the human relationship with that place (Relph 1976). If this re-negotiation is unsuccessful, place changes may catalyse the estrangement of people from that place (Hummon 1993) and turn them into 'outsiders'.

A range of literature supports the idea that environmental degradation weakens the bonds with a place. In particular, place attachment, the element that emphasises the emotional bond to a place, is regarded as necessarily connected to a positive emotional relationship with a place (Guiliani

and Feldman 1993). This suggests that the emergence of negative emotions about a place would necessarily lead to the rupture of the emotional bonds between identity and place. However, some authors contest this simple relationship and maintain that these bonds are influenced by a range of experiences, both positive and negative (Manzo 2005). For example, empirical studies of pollution in residential areas have shown an ambivalence within the accounts of those living with environmental pollution risks (Burningham and Thrush 2004; Phillimore and Moffatt 2004). This paper contributes to this debate by exploring the relationship between identity and place in a polluted place.

### **The case study**

The abundance of brown coal in the municipality of Tuzla, in North-East Bosnia, has fuelled industrial development since the 1960s. At the heart of the industrial complex is an 800 MW thermoelectric power plant (TEP) which currently supplies 58% of the total thermal electricity production in Bosnia and Herzegovina (BiH). The collapse of the former Yugoslavia and the civil war (1992-1995) have limited the capacity of the local industries to compete in the global market while meeting the environmental demands of society. Some of the chemical plants and most of the mines have closed and TEP has reduced its workforce by 50% to 900 people. Under the shadow of unemployment and poverty, claims about the deteriorated environmental conditions have erupted in the communities around TEP.

TEP produces around 600,000 m<sup>3</sup> of coal combustion residues annually, mostly ash. Coal ash is mixed with water and pumped into settling ponds established on former coal mines or in nearby valleys. In 2006, the residues occupied an area of 173 ha of which 73 ha were covered with soil or mineral substrates, and those areas are currently utilised for marginal agriculture. From 2005

to 2007, TEP was a project member of RECOAL, an EC-supported research consortium that focused on identifying risks associated with coal ash disposal and developing low-cost solutions for their remediation. Remediation is commonly understood as solely the mitigation of physical, chemical and biological hazards, as opposed to land restoration which implies the return of the land to its original or desired state (Doick and Hutchings 2007).

Coal ash disposal poses three main environmental threats to the landfill sites and surrounding areas: (i) contamination of the food chain through growing crops and rearing livestock on abandoned soil-covered disposal sites; (ii) dispersion of fine ash particles from uncovered and active disposal sites into the surrounding environment; and (iii) effluent discharge from coal ash deposits entering surface waters and contaminating groundwater (Popovic et al. 2001). Health problems and diseases associated with coal ash are related to the elevated concentrations of potential pollutants such as heavy metals and metalloids (Gupta 1999; Finkelman et al. 2002). For instance, plants growing on landfill sites may accumulate considerable amounts of pollutants such as Arsenic, Boron, Chromium or Molybdenum, and reach the food chain through current agricultural and pastoral use (Dellantonio et al. 2008).

About 4000 people living close to the disposal sites are potentially exposed to the pollution. Citizens are organised into 'local communities' (Mjesna Zajednica), with elected representatives whose responsibilities include voicing local concerns to the relevant municipal authorities. The institutional structure, locked into the requirements of 'power sharing' between the three 'constituent peoples' (Serbian, Croatian and Bosniak), is perceived to be unable to improve citizens' lives (Castán Broto and Carter 2007). In contrast, environmental activism appears to be constrained by the lack of an appropriate policy framework within which to operate and the lack of mechanisms to ensure accountability of the political elites (Fagan 2006). Part of the remit

under RECOAL was to consider the policy and social context of coal ash remediation, in order to develop solutions reflecting local expectations and concerns. The research presented in this paper was developed as a part of this work.

## **Research methods**

The development of the methodology incorporated the idea of ‘habitus’ (Bourdieu 2005), a system of schemes of thought and action developed through interactions and experiences. Casey borrows Bourdieu’s notion of ‘habitus’ as a tool to explain how nature and culture come together into a disposition for action in a given setting (Casey 2001). ‘Habitus’ constitutes the basis for the continuity of identity in a particular setting, while accommodating the existence of infinite variations within that continuum (Casey 2001). This concept resonates with the idea that individuals and social groups develop relatively stable images of places and self-identities with the effect of ordering and balancing their observations, expectations and experiences (Relp 1976). Performed identities stem from this ‘habitus’, relating a particular set of actions to a particular discourse of the self that explains those actions. Hence, such identities can be characterised by exploring the discourses associated with them. The importance of language as a nexus between place and identity has already been described by Dixon and Durrheim who propose a discursive approach to understanding the construction of identity and its place-related components (Dixon and Durrheim 2000).

In order to access local discourses of place and pollution in Tuzla, 36 semi-structured interviews<sup>i</sup> were conducted in Tuzla among 51 residents of four local communities living in the immediacy of the disposal sites (see Table 1). A comparable number of people approached declined to be



interviewed. Two sampling strategies were adopted: using a network of local contacts, and targeting residences in proximity to the disposal sites.

#### INSERT HERE TABLE 1

An interview guide was locally piloted and revised. The interviews were carried out with the aid of a translator and taped. The recordings were transcribed into Bosnian and later translated into English. The literature demonstrates that translation may influence the validity and reliability of qualitative research, in particular regarding the lack of equivalent words in the target language and the influence of the grammatical style on the analysis (Twinn 1997). To minimize misreadings of the data the research was carried out with only one translator, as recommended, who worked closely with the researchers during part of the analysis.

The interviews were coded using qualitative data analysis software<sup>ii</sup>. The analysis focused upon identifying shared discourses about their immediate environment, the pollution and the activities associated with these discourses. The analysis examined how interviewees presented themselves in terms of the actions they had taken- or a program for action- to deal with the pollution. This helped to describe different performed identities by referring to a) the influence of the pollution on their lives; and b) their relationship with the place. Further analysis compared the performed identities emerging from the analysis in relation to the perception of stigma and the preservation of ties to degraded places.

#### **Preservation of the ties to an environmentally degraded place**

The interviews reflected how physical changes strongly affect citizens' experiences of a place, their practices and feelings. In this case study, most people acknowledged the presence of pollution, for which they found evidence in the most quotidian experiences. Citizens recounted

awkward experiences typical of their locality (which reflect the three main risks outlined above) and which expressed the construction of a pollution stigma associated with the coal ash. This section presents some examples of interviewees who, despite perceiving the situation as critical, appeared to maintain strong links with the place they live in.

Interviewees referred to the high incidence of diseases such as bronchitis, asthma, and cancer among the local population and the general dirtiness of the area as symptoms of the hazards posed by pollution. Evidence of pollution was found in different spatial practices, most notably within the domain of the household: For example, Antonija<sup>iii</sup>, a middle-age woman, explained how pollution affects her by recounting a series of observations- stigma symbols- related to her interpretation of the space:

*Antonija: "I can not sit in the garden and drink coffee; in a moment 'the dust' suddenly falls all over you, you can only run where you can hide. (...). We cannot grow flowers on the outside: we all have roses; in my garden flowers can grow and blossom, but then they quickly fade. (...) Vegetables are spotty. The plum- [to the translator] you know what the plum means-, the plum cannot grow here because of the pollution.*

Drinking coffee in the garden is a common practice in BiH, particularly during the summer when the dust problem is more acute, as Antonija explains. The plum brandy, 'Slivovica', considered a national drink, and the plum itself hold extraordinary significance within the local culture.

Hence, the pollution is perceived as a threat to mundane habits and significant customs. Antonija explained the sense of loss this caused in her:

Antonija: “[W]e lost a lot: the environment, greenery...it just will not grow, it dries up, we have no fruit even if we have land to plant it, we don’t have...flowers like they used to be... now everything is unhealthy”.

In another interview a couple of retirees, Maja and Antun, explained how the ashes had affected their lives. They explained how coal ash disrupted their life by preventing them from cultivating vegetables and creating anxieties about the high incidence of cancer cases among neighbours and the pollution of water resources. Like Antonija, Maja expressed a profound sense of loss of the original characteristics and meanings of the place she lives in:

Maja: “Well it can’t get nicer than when everything was nature; but everything is now gone. You know, like when you have something beautiful and you lose it and it’s no longer there. Everything was beautiful until this thing started pouring.”

In her account she characterised the pollution as a threat not only to her spatial practices but also to her understanding of life:

Maja: “(...) you have to see [the pollution], when you pass this house... [she points to the North] (...) We will show you, it is coming so close to us, and soon we will have no place to go.”

Maja felt that they ‘could not go anywhere’ because ‘they were too old’. They also seemed unable to imagine themselves away from the house they built “for their children”:

Maja: “[I]t is very hard here...but you have to endure it, where else are we going to go?”

Despite the threat of pollution Maja and Antun appear to be attached to the place, whether for social, psychological or economic reasons. Rather than eroding their bond with the place the pollution has compromised the continuity of life as they understand it.

In some cases the maintenance of the ties with the place is expressed explicitly. For instance, Halid, a middle-aged man and local entrepreneur, explained:

Halid: *“Coal mines, the exploitation of coal, electricity production, the dirt, the slag site... but I was born here in Tuzla and I have never thought about leaving Tuzla because of the ecology.”*

In the interview Halid also recalled many experiences related to his place of birth and home, most notably the recent civil war, and how he built a particular relationship with the place he has lived all his life:

Halid: *“...when the grenades were falling down I looked forward to the day when they would stop. I said: ‘when the war ends we will plough deep, weed our land, plant flowers: it will be beautiful’. Now people make jokes telling me: ‘where are those flowers of yours; that ploughed land?’ I thought we would make it like that... this is our land, and we should give as much as we can for it...”*

For Halid, the place embodies memories and hopes. The place is not only the space where he and others have lived but moreover he thinks that they have to ‘*give as much as they can for it*’. The pollution aside, the place is ‘*their land*’. The ties to the place are maintained (and perhaps even reinforced) through the struggles.

The above extracts from interviews illustrate the abundance of examples among local residents that represent stigma symbols related to the degradation of the place. Yet, for some of them, the deterioration of environmental conditions has not destroyed the bond with the place. Hence, the emergence of a stigma associated with environmental pollution is not necessarily correlated with deteriorating ties with a place. This suggests that the ties with a place are maintained through both the positive and negative physical features that influence human experiences of that place.

### **Emergence of new identities associated with a degraded place**

The second part of the analysis focused on the reactions of local residents to environmental pollution. The analysis delineated four main types of performed identities associated with the degraded setting: ‘activism’, ‘opportunism’, ‘escapism’, and ‘conformism’. Following the definition of stigma proposed by Goffman (1990), each identity type can be described according to how they perceive and react upon this stigma. In addition, the identities can be classified using Relph’s (1976) dialectical concept of insideness/outsideness as described above. This analysis is summarised in Figure 1<sup>iv</sup>.

INSERT HERE FIGURE 1

#### **(a) Activism**

If the ties with a place remain strong in an environmentally degraded place, then social action will be directed to establishing means for the continuation of personal and collective welfare into the future. However, the character of such actions will be closely linked to the perception of a stigma attached to the environmental pollution. In the case study, activism was the most common response to the perceived pollution stigma. People with strong ties to the place and making strong claims about the existence of environmental pollution demanded actions to improve the

state of the environment within their community. A manifestation of this identity is reflected in the local emergence of highly active lobby groups such as the local NGO 'Eco-Zeleni' (Eco-Green), whose members defined themselves as 'environmental activists'. For instance, a local representative talked about an action they took to inform the press:

Muhamed: *"...I personally led the journalists (...) and showed them the washed laundry all over the community, to show them the stains (...) [A]nd when I called TEP's director he was absent and his deputy wasn't authorised to make statements...(...) The journalists took pictures of the community, of the places I show them... All the damage can be seen in the pictures..."*

Muhamed referred to some of the initiatives taken by local activist groups, and explains that when confronted with these issues the main responsible actor, TEP, chose not to respond. Some activist actions are hence, directed to either seek help from government and international institutions or demand coercive action to limit TEP's activities or punish them for the pollution caused.

However, in Tuzla, activism is not always confrontational. For instance, Emina, a middle-aged woman involved in the local NGO 'Eko-Zeleni', explained that life in her community could be improved if TEP would provide them with thermal heating. This would reduce the dependence of local residents on coal or using waste material as fuel, and hence reduce the overall pollution. She affirmed that *"[if] TEP installed heating at the level of the local community, then each of us could build our own connections to the main pipeline."* Here activism is directed to create a symbiosis between TEP and the residents, which would help both to reduce pollution and benefit the community.

## (b) Opportunism

Some residents do not consider the environmental pollution as stigmatising; for them the environmental change is a source of new opportunities. For example Zlatko, a young student of journalism living below the dyke of one of the disposal sites explained that he would like the local institutions to turn the ashes into an economic opportunity. For Zlatko, the ash offers new economical opportunities, and the environmental impacts of the sites are minimal compared with the opportunities offered to the local communities.

Perhaps the most striking action developed on the disposal sites is their cultivation by some of the local residents. Cultivation was made possible by covering about 73 ha of the sites with a thin soil cover (10-50 cm). Some residents argue that the food shortage during the recent war forced them to start cultivating the sites. After the war the practice continued and, since 2005, a farmers' association is operating to promote farming on the sites. They perceive that cultivation is necessary to take maximum advantage of the sites. For instance, the president of the farmers' association, who pioneered the cultivation of the disposal sites against the criticism of a wide sector of the community, was keen to explain his motivation for growing crops and fodder on the disused disposal site. He remembers himself walking around the site when a local elder pointed to the flat extension of derelict land saying to him: *'look at that land. It should be used...'*

## (c) Escapism

If existing ties with a place become threatened or broken, then performed identities will tend to de-emphasize those aspects linked to the specific environment. Responses include emphasizing private actions to cope with pollution. If the perceived stigma is high and the ties with the place broken, the individual may find no reason to remain within the local community. For some Tuzla

residents the pollution and lack of jobs have created an emerging sense of desperation and loss of hope for the community's future. Elma, a young woman, explained:

Elma: *"I don't see any future, any! There is no future. (...) We have a growing number of people suffering from cancer, every second-third day children are sick with cancer or leukaemia. (...).There are no jobs, it gets harder and harder to find a job."*

The desire to leave the community and abandon the degraded place emerges even among people that lack the means to move away:

Elma: *"The youth leaves this place on a massive scale. And our land is...without prospect...I don't see any prospect here: If I had somewhere to go I would also leave, or I would send my child there."*

#### (d) Conformism

Those who appear disengaged from the ongoing changes and play down the place stigma, consider the existing situation as an inevitable fact of life or as a minor problem compared with other aspects of their life. This behaviour signals a conforming to the current state of affairs. This reaction was often manifest among those residents who refused to participate in this research. For instance, a couple living right next to one disposal site declined to be interviewed on the grounds that *'they cannot speak up for the community because they are not from here'* even though they were happy to show the researcher and translator around their house and invited them for coffee. Another couple of retirees sunbathing in front of their house from where TEP's chimneys were clearly visible declined the interview because *'they were not interested in any environmental issues'*. People avoid talking about the pollution and try to live a 'normal life'; they adapt to the pollution as best as they can and continue doing what they like to. This does not



necessarily mean that such ‘conformists’ are really disinterested; rather, some may not want to discuss intimate experiences with an unknown foreigner or may not want to risk offending others. Behind these comments there may also be a profound sense of resignation or scepticism about the positive outcomes of the research.

#### (e) Performed identities

Each performed identity is defined by the kinds of action individuals exhibit, characterising divergent ways of reacting to the environmental change. Because performed identities are inherently dynamic and evolving, the identity types proposed and discussed in this section are derived from individuals and group behaviour in a particular place and situation, a snapshot image of what was observed at the time of the interviews. An individual may present more than one performed identity, depending on the situation they find themselves in. Yet these performed identities are not completely improvised; rather they are built in a ‘habitus’, a set of dispositions acquired during individuals’ interactions with the place and other residents. Similar performed identities could emerge in other polluted settings. Two aspects reinforce the general interest in the above classification and analysis:

- First, identities are self-reinforcing. For instance, an individual performing an activist identity is likely to defend the links between residents and places, and therefore these actions reinforce the ties with that place every time the activist identity is performed. This is likely to result in a more or less stable perception of the self-identity and the belief that other members of the local community may share it.
- Second, these are public identities performed, in this case with a foreigner. They may differ slightly from other identities that the individuals perform in private or to a different

audience. However, understanding the identities performed with a foreign researcher is likely to be useful in understanding the performance of identity with decision-makers and other foreign researchers developing projects for land regeneration.

## **Discussion**

The empirical evidence obtained from the interviews and summarised here shows that environmental pollution does not necessarily rupture the bond between identity and place. This implies that emotional bonds to a place emerge from both positive and negative experiences of that place which contribute to the process of identification. However, even though the linkage with the place is maintained, the environmental degradation may constitute a stigma threatening local residents' lifeworld; i.e. the informal, culturally influenced background environment in which a person carries out their daily life and relates their experiences and understandings. This supports evidence observed in other studies where for a community '*the sense of loss that they express is not only a loss of place but also, more profoundly, a loss of self.*' (Dixon and Durrheim 2000). Hence, efforts to reverse degradation processes should incorporate measures to reverse the physical symbols of stigma. This may require researchers to go beyond the mere reduction of elevated concentrations of pollutants and also address the disruption of the landscape; foul odours; regeneration of the vegetation and other issues that local residents may consider important for their lives.

From this point of view, testing and understanding the range of potential reactions that are likely to emerge in an environmentally degraded place is important for decision-makers to develop appropriate policies and environmental management solutions. Characterising the residents as a single group with a homogeneous reaction obliterates the different opinions, demands and coping

strategies that the degrading place invokes. The identities proposed here resonate with those proposed by Sarah Wakefield and Susan J. Elliot in their study of landfill sitting process in two Southern Ontario communities. The researchers adapted a risk society framework to characterise four strategies to cope with environmental threats: *pragmatic acceptance*, *sustained optimism*, *cynical pessimism* and *radical engagement* (Giddens 1990) showing that the concerns reported related not only to the process of sitting a landfill but also to the perceived impacts of the landfill itself (Wakefield and Elliot, 2000).

In Tuzla, opportunism is evident amongst some local residents. An opportunistic disposition or stance helps develop the capacity to adopt new identities and actions associated with the transformation of a place without identifying a stigma associated with the environmental transformation; its positive impacts will be proclaimed while rationalising its negative outcomes or potential threats. For instance, interviewees who cultivated the disposal sites argued that it could not be dangerous, because if it were, the responsible institutions would have advised them not to cultivate there. The transformation of a place creates momentum for redefining one's identity and finding opportunities for social action (Petrzelka 2004). However, ignoring the potential dangers of environmental pollution requires the rationalisation and denial of pollution stigma symbols (see also e.g. Zonabend 1993), symbols that in Tuzla are constantly repeated by those who attribute a stigma to that place.

Activism is another reaction and overtly performed identity in Tuzla's communities in association with pollution stigma symbols; activist individuals seem to strengthen their identity by redirecting action towards the restoration of the degraded place and identifying those responsible for the pollution. Negative aspects of the environmental transformation are highlighted and its stigmatisation symbols taken as a platform for collective action. Interviewees

showing activist identity characteristics were concerned about neglected sectors of the community. They also dared to question the effectiveness of industry and institutions in addressing the range of hazards associated with environmental pollution.

The findings echo earlier research that focused on the formation of grassroots organisations within contaminated areas (see e.g. Edelstein 2004). Edelstein argues that these organisations emerge after the failure of individuals and groups to cope with the pollution and contribute to the formation of a '*sense of community*' which may enable their development, mutual support and capacity to initiate political action for mitigating or stopping pollution. In that sense, the creation of action groups to contest the pollution is a key for the development of a new community identity, and for its survival.

Our research findings also reflect Hetherington's point that the formation of activist groups is intrinsically linked to how individual identities are developed through protest (Hetherington 1998). Members see themselves as progressive members of their community with the capacity to represent the '*moral self*' of that particular group – and, more generally, of society (Hetherington 1998). However, in establishing a moral baseline, they may demean other forms of identity. For instance, in Tuzla, activists strongly criticise those who cultivate the derelict ash disposal sites, those who leave the local community, and those who they perceive as not seeing the bigger problems beyond their own self-declared insignificant lives.

When the ties with a place weaken or break, individualist identities are likely to manifest themselves in escapism and/or conformism. Some individuals are able to reinvent themselves in a different setting after the rupture of their linkages to that place. Migration, although widely understood as the only alternative left for unemployed youngsters, is perceived as a symptom of

the annihilation of the local communities. In contrast, ‘conformists’ renegotiate their identity as their fate. An underlying notion in those interviews was that their capacity to improve the situation surpasses them. In this context, the environmental degradation is rationalised as an inherent characteristic of the place. Conformism resonates with one of the coping responses described above, ‘*pragmatic acceptance*’ which is characterised by “‘*numbness*’ towards the issue and withdrawal into everyday life” (Wakefield and Elliot 2000; p. 1141).

Conformists, and individualistic attitudes more generally, were characterised by other interviewees as uncaring and selfish; individualists are seen as having little interest in the place and impeding collective action to adapt to or ameliorate the environmental change. They can be easily ignored by a policy process that demands active participation from its citizens. In practice, it does not really matter whether people are really uncaring or selfish; the fact that they are perceived to be so by their neighbours is enough to create social tensions.

At this stage, it is important to bring to the fore the opinions of the individuals exhibiting these identities. Firstly, we may not be aware of the reasons that motivate conformism. For instance, research has shown that within disadvantaged groups acknowledging the pollution may pose more problems than it resolves (Burningham and Thrush. 2004). Secondly, conformism may emerge due to the difficulties individuals may have in contributing to a debate in which arguments not only need to be convincing, but also brought within a frame of reference that is not shared by all actors. Land regeneration projects thus need to pay explicit attention to the emergence of conformist identities, in order to avoid overlooking relevant, but often unvoiced, needs and concerns of the affected community.

### **Concluding remarks**

This paper investigates how place identity studies can contribute to the development of solutions for degraded environments. It has demonstrated that land degradation does not necessarily rupture the ties between identity and place, but rather, it may pose threats for the continuity of the residents' identities. Because returning a place to its original pre-industrial state is rarely possible (or even desirable), land restoration needs to take account of the hazards posed for local residents and address their concerns about regeneration plans and what happens thereafter. Hence, projects researching land restoration solutions, such as RECOAL, need to identify and address threats perceived by the affected population in addition to the pollution remediation requirements as both critically affect individual and collective well-being. Social research aimed at understanding the local identities associated with a polluted place helps elicit latent and expressed social concerns which can then be incorporated into restoration projects, alongside measures to mitigate the bio-physical impacts of pollution.

Research should examine the evolution of local identities, their disruptions and means of continuity and the reasons why conflicts arise. In particular, two different types of actions may be included in institutional projects to improve the lives of people affected by pollution. First, actions to eliminate the symbols of stigma associated with a place, not only physically (e.g. removing dirt, rubbish etc.) but also by creating new values and uses for the polluted place; and second, the identification of ways to facilitate identity change and counteract stigma. Such measures need to be tailored to each specific context. In the case of Tuzla, living around the ash disposal sites can be improved by:

- creating new sources of reliable employment;

- establishing green-spaces and improving the infrastructure to make the local landscapes ‘look beautiful’; and
- providing benefits that could make life in the area more desirable (e.g. co-generation of electricity and heating for local residents).

This paper proposes a model for understanding how new identities emerge in the context of environmental change based on the concepts of sense of place and stigma. While the model is very effective for explaining the emergence of alternative perspectives on pollution in Tuzla, further empirical research is needed to test the model for other case studies which aim to identify and explain local reactions to a range of social and environmental transformations.

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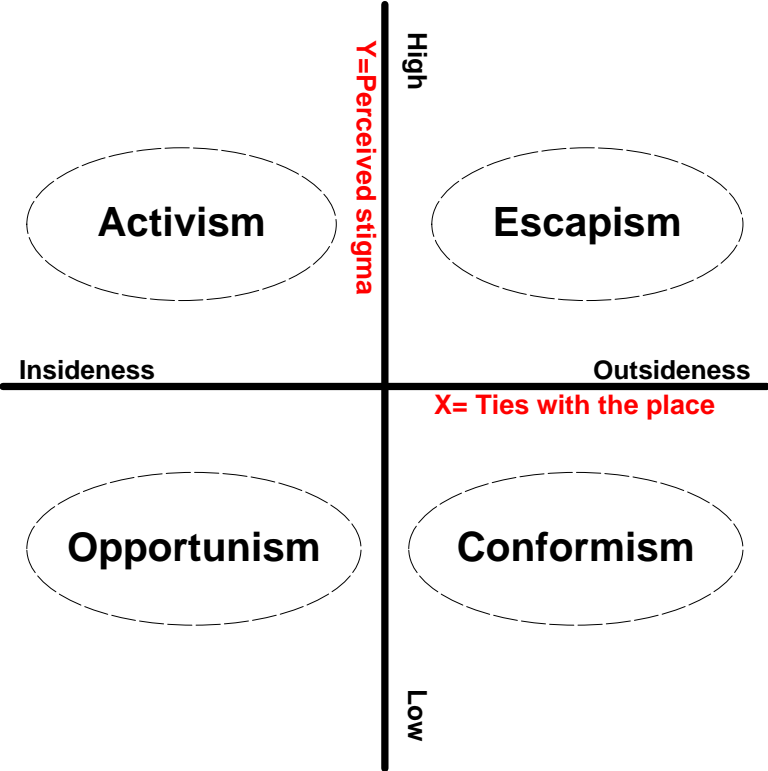
<sup>i</sup> Semi-structured interviews are open ended interviews which encourage a two-way communication between interviewer and interviewee. The interviewer uses an interview guide summarising the main topics of research, to conduct a conversation with the interviewee.

<sup>ii</sup> NVIVO V.7, QSR International, Victoria, Australia, 2006.

<sup>iii</sup> All names have been changed to protect the identity of interviewees.

<sup>iv</sup> This type of analysis owes considerable inspiration to the cultural theory developed by Mary Douglas (Douglas, 1970) and its application to water policy by Arjen Hoekstra (Hoekstra, 2000).

**Figure 1: Performed identities in an environmentally degraded place**



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**Table 1: Main descriptors of interviewed sample**

	<b>n</b>		<b>n</b>
<i>Gender</i>		<i>Age distribution</i>	
Male	27	<40	9
Female	24	41-60	36
		>60	6
<i>Religion/Ethnicity</i>		<i>Local community</i>	
Orthodox/serb	2	MZ Šićki Brod	18
Catholic/croat	21	MZ Bukinje	17
Muslim/ bosniak	21	MZ Drežnik	7
Unspecified	7	Other	9

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