

'Solastalgia'

A New Concept in Health and Identity

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Solastalgia: the Origins

As environmental philosopher at The University of Newcastle I had a reputation within my region as an activist and advocate for environmental conservation and I had published a number of academic and media articles on the environmental history and sustainability of the Hunter Region.² Residents within the region would often ring me at work and talk to me about their concerns about particular environmental issues and I would advise and help as best I could. However, I began to notice the increasing number of people who were concerned about the sheer scale of the environmental impacts in the Upper Hunter Region of NSW. In their attempts to halt the expansion of open cut coal mining and to control the impact of power station pollution, individuals would ring me at work pleading for help with their cause. Their distress about the threats to their identity and well-being, even over the phone, was palpable.

I had been thinking about the relationship between ecosystem distress and human distress for some time. Under the influence of David Rapport and his concept of 'ecosystem distress syndrome'³ I had been working through some of the influences on my own thinking about this relationship. The two major influences at this time were Aldo Leopold and his own concept of 'land health' and ~~the~~ Australia's own pioneer environmental thinker, Elyne Mitchell⁴. In the USA, Aldo Leopold with his ecologically inspired concept of

¹ Glenn Albrecht is an environmental philosopher who works in the School of Environmental and Life Sciences at the University of Newcastle. He has a long-term interest in the environment and the relationships between humans and the rest of nature. He has been actively involved in conservation projects in the Hunter Region (where he resides) and was a founding secretary and director of the Wetlands Centre at Shortland. In recent years he has been engaged in transdisciplinary research on the impact of open cut mining and other heavy industry on the well-being of people in the Upper Hunter region of NSW. The sight of hundreds of square kilometres of open cuts in his own backyard and the direct contact with distressed people affected by such enormous environmental change caused distress in the mind and heart of Albrecht the researcher. Thus, the concept of solastalgia had its genesis in his own lived experience of distress in land and people. He now seeks to find solastalgia in others and to help defeat it in the creation of an endemic sense of place.

² See G. Albrecht and J. Gutberlet (2000), "Sustainability and the Hunter Region", in P. McManus *et al* (eds, *Journeys that Shape a Region*, Allen and Unwin, Sydney. pp. 246-267, and G. Albrecht (2000), "Rediscovering the Coquun: An Environmental History of the Hunter River", *Proceedings of the Water Forum 2000*, Hunter Catchment Management Trust, NSW. (www.hcmt.org.au/ep_publications.php3)

³ D. Rapport and W.G. Whitford (1999), "How Ecosystems Respond to Stress", *Bioscience* 49, pp.193-203.

⁴ Elyne Mitchell should properly be seen as Australia's Aldo Leopold. Her book, *Soil and Civilisation*, published in 1946, is a systematic exploration and analysis of environmental problems in the Australian context. Her prescient work has not been adequately appreciated in the history of environmental thinking within Australia.

the Land Ethic in *A Sand County Almanac* (1949) broke new ground in the emergent domain of environmental ethics. Leopold also created a concept of 'land health' that he defined as "the capacity of the land for self renewal"⁵. However, he did not see in his contemporaries any connection made between "sick landscapes" and pathological psychological states. He noted that in the West of the USA there is "as yet, no sense of shame in the proprietorship of a sick landscape"⁶.

In Australia, even before many of Leopold's ideas were published posthumously, Elyne Mitchell, in her book *Soil and Civilization* (1946) was attempting to explain to Australians the importance of the connection between human and ecosystem health. In the context of the impoverishment of the Australian environment by agricultural activity she writes:

But no time or nation will produce genius if there is a steady decline away from the integral unity of man and the earth. The break in this unity is swiftly apparent in the lack of "wholeness" in the individual person. Divorced from his roots, man loses his psychic stability.⁷

It was this concept of loss of "psychic stability" that further stimulated my interest in land health – human health issues. I was confronted by a classic case of the breakdown of this relationship and it was being clearly manifested in the lives of those people I came into contact with in the Hunter Valley.

At this time I sought a suitable concept to describe the distress these people were suffering. With my wife Jill, I sat at the dining table at home and explored numerous possibilities. One word, 'nostalgia', came to our attention as it was once a concept linked to a diagnosable illness associated with the melancholia of homesickness for people who were distant from their home. It seemed very close to the condition that Upper Hunter people were manifesting yet had an obvious limitation in that I was dealing with people who were not distant from their home.

Nostalgia (*nostos* = return to home or native land, *algia* = pain or sickness) or literally, the sickness caused by the inability to return home was considered to be a medically diagnosable psycho - physiological disease right up to the middle of the C20. In 1905 nostalgia was defined as:

... a feeling of melancholy caused by grief on account of absence from one's home country, of which the English equivalent is homesickness. Nostalgia represents a combination of psychic disturbances and must be regarded as a disease. It can lead to

⁵ A. Leopold (1949)[1989], *A Sand County Almanac*, Oxford University Press, New York, p.221.

⁶ *Ibid.* p.158.

⁷ E. Mitchell (1946), *Soil and Civilization*, Halstead Press, Sydney, p.4.

melancholia and even death. It is more apt to affect persons whose absence from home is forced rather than voluntary.⁸

Nostalgia was particularly evident in soldiers fighting in foreign countries who experienced homesickness to the point where they became ill and unable to perform their duties. The cure⁹ for nostalgia was a prescription for afflicted soldiers to return home to recuperate and restore their well-being and health. According to Feinnes, nostalgia was still being discussed in journals such as *War Medicine* in the 1940s¹⁰ and “as late as 1946 was termed a possibly fatal ‘psycho-physiological’ complaint by an eminent social scientist”.¹¹

However, in general, reference to ‘nostalgia’ as a sickness resulting from a longing or desire to return home while one is away from ‘home’ is no longer in common use. The more frequent modern use of the term loses its connection to the geographical ‘home’ and suggests a ‘looking back’, a desire to be connected with a positively perceived period in the past. Typically, there is a longing for a cultural setting in the past in which a person felt more ‘at home’ than the present. For individuals who see the past as better than the present there is the possibility that nostalgia remains a very real experience that can lead to deep distress. For example, for Indigenous people who have been dispossessed of their lands and culture, the nostalgia for a past where former geographical and cultural integration was both highly valued and sustainable is an ongoing painful experience. As explained by Casey, “[n]ostalgia, contrary to what we usually imagine, is not merely a matter of regret for lost times; it is also a pining for *lost places*, for places we have once been in yet can no longer reenter.”¹² Casey systematically explores the contexts where symptoms of “place pathology”¹³ are presenting problems for indigenous and present Western culture. He asserts:

It is a disconcerting fact that, besides nostalgia, still other symptoms of place pathology in present Western culture are strikingly similar to those of the Navajo: disorientation, memory loss, homelessness, depression, and various modes of estrangement from self and others. In particular, the sufferings of many contemporary Americans that follow from the lack of satisfactory implacement uncannily resemble (albeit in lesser degree) those of displaced native Americans, whom European Americans displaced in the first

⁸ The New International Encyclopaedia of 1905 as quoted by R. Fiennes (2002), *The Snow Geese*, Picador, London, p.122.

⁹ One particularly notable ‘cure’ was the use of terror to counter the influence of the nostalgia. Soldiers in the Russian army in 1733 were buried alive (up to three times) to test the genuineness of their sickness and commitment to home, see D. Lowenthal (1985), *The Past is a Foreign Country*, Cambridge, Cambridge University Press, p.11.

¹⁰ R. Fiennes, *Op Cit*, p.122.

¹¹ D. Lowenthal, *Op Cit*, p.11.

¹² E. Casey *Getting Back Into Place: Toward a Renewed Understanding of the Place-World*, Indiana University Press, Bloomington, p. 37.

¹³ E. Casey, *Ibid*, p.38.

place. These natives have lost their land; those of us who are non-natives have lost our place.¹⁴

Peter Read in his book, *Returning to Nothing* (1996), explores the experiences of people in the Australian context who were displaced or forced to migrate away from places that have been, or were about to be, obliterated. Read documents the emotion and distress of people in circumstances where their homes are lost by natural disasters, such as the destruction of the city of Darwin by cyclone Tracy in 1974 or social development with the drowning of the town of Adaminaby by Lake Eucumbene in 1957 as part of the Snowy River Hydro Electric Scheme. In his chapter on the (former) town of Yallourn in the brown coal region of the La Trobe Valley of Victoria, he graphically captures the distress caused by open cut mining dispossession. Read concludes that in addition to the cultural significance of the diversity of unique places "... loved sites are worth preserving because of the intense pain which their destruction may cause to the inhabitants of those places".¹⁵

However, in their analysis of "place pathologies" both Casey and Read focus on 'lost places' and displaced people. In the Hunter Valley it was the distress of those that remain in the wake of zones of high impact that was the focus of my concern. The places that I was interested in were not being completely 'lost', they were places being transformed. The people I was concerned about were not being forcibly removed¹⁶ from their homes/places, however, their place-based distress was also connected to powerlessness and a sense that environmental injustice was being perpetrated on them. In the Upper Hunter, people were suffering from both imposed place transition (place pathology) and powerlessness (environmental injustice). In overview, there seemed to be some justification for the creation of a new concept that captured the conceptual space or territory connected to this particular constellation of the factors that define place and identity. The people I was concerned about were still 'at home', but felt a similar melancholia as that caused by nostalgia connected to the breakdown of the normal relationship between their psychic identity and their home. What these people lacked was solace or comfort derived from their present relationship to 'home'. In addition, they felt a profound sense of isolation about their inability to have a meaningful say and impact on the state of affairs that caused their distress. 'Solastalgia' was created to describe the specific form of melancholia connected to lack of solace and intense desolation.

¹⁴ E. Casey, *Ibid*, p.38.

¹⁵ Peter Read (1996), *Returning to Nothing: The Meaning of Lost Places*, Cambridge University Press, Melbourne, p.197.

¹⁶ Some properties were being compulsorily acquired and their previous owners were relocating themselves, however, it was not these people who contacted me and discussed their plight. The Hunter Valley does have many lost places and lost people due to open cut mining, but they are the subjects of another study.

Solastalgia Defined

Solastalgia has its origins in the concepts of 'solace' and 'desolation'. Solace is derived from *solari and solacium*, with meanings connected to the alleviation of distress or to the provision of comfort or consolation in the face of distressing events. Desolation has its origins in *solus* and *desolare* with meanings connected to abandonment and loneliness. As indicated above, *algia* means pain, suffering or sickness. In addition, the concept has been constructed such that it has a ghost reference or structural similarity to *nostalgia* so that a place reference is imbedded. Hence, literally, solastalgia is the pain or sickness caused by the loss or lack of solace and the sense of isolation connected to the present state of one's home and territory.

Solastalgia, in contrast to the dislocated spatial and temporal dimensions of nostalgia, relates to a different set of circumstances. It is the pain experienced when there is recognition that the place where one resides and that one loves is under immediate assault (physical desolation). It is manifest in an attack on one's sense of place, in the erosion of the sense of belonging (identity) to a particular place and a feeling of distress (psychological desolation) about its transformation. It is an intense desire for the place where one is a resident to be maintained in a state that continues to give comfort or solace. Solastalgia is not about looking back to some golden past, nor is it about seeking another place as 'home'. It is the 'lived experience' of the loss of the present as manifest in a feeling of dislocation; of being undermined by forces that destroy the potential for solace to be derived from the present. In short, solastalgia is a form of homesickness one gets when one is still at 'home'.

Any context where place identity is challenged by pervasive change to the existing order has potential to deliver solastalgia. New and powerful technologies have enabled transitions to occur to social and natural environments at a speed that makes adaptation difficult if not impossible¹⁷. While some might respond to such stress with nostalgia and want to return to a past state/place where they felt more comfortable, others will experience solastalgia and express a strong desire to sustain those things that provide solace. Solastalgia, as opposed to atavistic nostalgia, can also be future orientated, as those who suffer from it might actively seek to create new things or engage in collective action that provides solace and communion in any given environment. Solastalgia has no necessary connection to the past, it may seek its alleviation in a future that has to be designed and created.

The factors that cause solastalgia can be both natural and artificial. Drought, fire and flood can cause solastalgia, as can war, terrorism, land

¹⁷ Alvin Toffler in *Future Shock* promoted the idea that "[f]uture Shock is a time phenomenon, a product of greatly accelerated rate of change in society". Toffler also predicted epidemics of psychiatric disease connected to such shock. See A. Toffler (1970) *Future Shock*, The Bodley Head, London, p. 13.

clearing, mining, rapid institutional change and the gentrification of older parts of cities. I claim that the concept has universal relevance in any context where there is the direct experience of transformation or destruction of the physical environment (home) by forces that undermine a personal and community sense of identity and control. Loss of place leads to loss of sense of place experienced as the condition of solastalgia. The most poignant moments of solastalgia occur when individuals directly experience the transformation of a loved environment. Watching land clearing (tree removal) or building demolition, for example, can be the cause of a profound distress that can be manifest as intense visceral pain and mental anguish. However, with media and IT globalisation bringing contemporary events such as land clearing in the Amazon basin into the lounge room, the meanings of 'direct experience' and 'home' become blurred. I contend that the experience of solastalgia is now possible for people who strongly empathise with the idea that the earth is their home and that witnessing events destroying endemic place identity (cultural and biological diversity) at any place on earth are personally distressing to them.

The 'diagnosis' of solastalgia is based on the recognition of that type of distress within an individual or a community connected to the loss of an endemic sense of place. All people who experience solastalgia are negatively affected by their desolation and likely responses can include the generalised distress outlined above but can escalate into more serious health and medical problems such as drug abuse, physical illness and mental illness (depression, suicide). It is possible to view solastalgia as either a philosophical or a psychosomatic illness (or both) with conceptual and empirical dimensions.

Solastalgia Applied

The dynamic of the breakdown in the relationship between individual humans and their communities has long been an object of psychological and sociological investigation.

Social instability as manifest in either too much or too little solidarity with others can be a root cause of psychic instability and be manifested in drug abuse, mental illness and suicide. There is a social correlate of Mitchell's identification of the loss of the unity of humans and the earth with psychic instability in Emile Durkheim's concept of anomie, where the loss or lack of social norms can lead to intense personal distress resulting in psychiatric problems and (anomic) suicide¹⁸.

Historically, Indigenous people are likely to experience both nostalgia and solastalgia as they live through the destruction of their cultural traditions and their lands. Where a collective memory of an ancient culture such as that of Indigenous Australians still exists, there is no idealisation of a golden past,

¹⁸ See E. Durkheim, in J. Douglas (1967), *The Social Meanings of Suicide*, Princeton University Press, Princeton.

but a genuine grieving for the ongoing loss of 'country' and all that entails. The strength of attachment to country is difficult for people in European cultures to fathom. A translation of a song from the Oenpelli region captures some of this power:

Come with me to the point and we'll look at the country,
We'll look across at the rocks,
Look, rain is coming!
It falls on my sweetheart.¹⁹

Many authors have identified the social problems experienced by traditional indigenous cultures worldwide and their connection to loss of culture and support environment²⁰. In the Australian context, Indigenous people experience physical and mental illness at rates far beyond those of other Australians. Their social problems; unemployment, alcoholism, substance abuse (particularly glue and petrol sniffing in youth), violence against women and disproportionately high rates of crime and custody and an epidemic of deaths in custody, lead to community dysfunction and crisis. Indigenous leaders are attempting to deal with the sheer scale and scope of these problems and they and non-indigenous academics have presented accounts of them.

Tatz (2001), for example, has highlighted the relevance of what is called 'existential suicide' for the explanation of the tragically high and increasing rates of Indigenous suicide within custody in Australia. Based in part on the work of Albert Camus, existential suicide is connected to issues such as ending the meaninglessness and purposelessness that afflicts Aboriginal life²¹. Camus saw the "undermining"²² of the goals and purpose of life as being at the core of recognising 'absurdity' and the anguish that can follow such an existential state. While Tatz concentrates on the social dimensions of the tragedy of Indigenous suicide, it must be recognised that an element of the situation is tied to the imposed break between humans, ecosystems and the land. Deborah Bird Rose captures the essence of this situation when she provides an account of what "country" means to Indigenous people in Australia:

Country is not a generalised or undifferentiated type of place, such as one might indicate with terms like 'spending a day in the country' or 'going up the country'. Rather, country is a living entity with a yesterday, today and tomorrow, with a consciousness, and a will toward life. Because of this

¹⁹ in R. Broome (1982), *Aboriginal Australians: Black Response to White Dominance 1788-1980*, George Allen & Unwin, Sydney, p.14.

²⁰ see, for example, P. Knudsen and D. Suzuki (1992), *Wisdom of the Elders*, Allen & Unwin, Sydney.

²¹ C.Tatz (2001), *Aboriginal Suicide is Different: A Portrait of Life and self-Destruction*, Aboriginal Studies Press, Canberra, pp. 97-98.

²² A. Camus (1955), *The Myth of Sisyphus*, Penguin Books, Harmondsworth, p. 12.

richness, country is home, and peace; nourishment for body, mind and spirit; heart's ease."²³

Both the loss of country and the disintegration of cultural ties between humans and the land (their roots) are implicated in all aspects of the 'crisis' within many Indigenous communities in contemporary Australia. The difficulty or inability to find "heart's ease" is a root cause of the identity problems faced by Indigenous Australians. As explained by one Indigenous elder, suicide occurs "because life at home is too awful"²⁴. This insight, combined with the knowledge that premature death rates for Indigenous people are highest where people remain in their traditional lands, suggests that solastalgia, rather than nostalgia is a powerful factor.

With an understanding of the psycho-dynamics of solastalgia, the problems of a pathological or toxic home and a lack of "heart's ease" can be explained with greater cross-cultural sensitivity and relevance. The 'dis-ease' of Indigenous people can, in part, be explained as a response to solastalgia. Both social and medical epidemics that afflict some Indigenous people can be partly understood as their attempt to relieve themselves of the distress, desolation and pain of solastalgia. Perhaps solutions to such problems can come from the diagnosis of solastalgia and its negation by self-empowered Indigenous people being directly involved in the repair and restoration of their 'home'. In areas where people still have strong, direct connections to country, the defeat of solastalgia can come from actions that strengthen the endemic and weaken the alien. Such actions could, for example, range from Indigenous responsibility for the removal and management of exotic species²⁵ (flora and fauna) to the active promotion of Indigenous culture. In urban areas where links to land are more tenuous, reinforcing old and building new cultural sources of solace and power will assist in the creation of heart's ease.

²³ D. Bird Rose (1996), *Nourishing Terrains: Australian Aboriginal Views of Landscape and Wilderness*, Australian Heritage Commission, Canberra, p. 7.

²⁴ in C. Tatz, *Op Cit* p. 115.

²⁵ This is an enormous problem that requires intense environmental education and management and would generate meaningful employment for many Indigenous people into the indefinite future. An example of such an idea in practice is the Northern Land Council's Caring for Country program. The *Daluk* (women rangers) are carrying out environmental (and psycho-cultural) restoration. One woman, Cherry Wulumirr Daniels a Senior Ranger with the *Ugul Mangi* women rangers from *Ngukurr* in S.E. Arnhem Land explained: "What the weeds have been doing in our country, in Australia, damaging, a lot of things, especially in our waterways, taking up much of the soil, taking up much of the water, so we have been looking at a lot of trees that are not ours, so we told our people to get rid of those trees, trees and weeds, and even feral animals ... and I'm very glad, it makes me feel happy inside when I see them do those things. Without me they identify an ant from our natural ant to the other ant that comes from out of Australia, like the Singaporean ant, the big-headed ones, they can identify which". Earthbeat ABC
<http://www.abc.net.au/cgi-bin/common/printfriendly.pl?http://www.abc.net.au/rn/science/earth/stories/s1139266.htm>

Non-Indigenous Solastalgia

There is an epidemic of psychiatric illness in the western world, connected in some respects to the crisis in Indigenous people, while in others quite separate from it. Global suicide rates have increased 50% in the last 50 years²⁶ and rates of mental illness or psychological and psychiatric disorders have also increased. The connections between psychiatric illness and a significant proportion of suicide cases are well documented and psychiatric illness (particularly depression) creates major burdens on society.²⁷

In Australia as a whole and in rural and regional Australia in particular, there are reports of increasing rates of depression and suicide. The number of deaths in Australia attributed to suicide rose from 2,197 in 1988 to 2,723 in 1997, an increase of 24% over the 10 year period²⁸ and deaths through suicide of male farmers and farm workers is now around double the rate of that of the Australian male population.

The standard explanations for increasing rates of suicide and depression in the rural context include rural economic reconstruction in the face of globalisation, high indebtedness and financial problems, unemployment, distress over loss of family owned property and heritage and easy access to chemicals and firearms. However, as argued by Horwitz et al:

Rarely is environmental change regarded as a possible contributing factor, yet landscape degradation, manifesting as soil erosion, river or wetland degradation, or increasing salinity on previously productive land, may underlie or exacerbate any of these other contributing factors.²⁹

In Australia in general, the psychological health of farmers is very much related to the health of the environment. In the grip of drought, when stock die of malnutrition and thirst, the dams are empty, the pasture is barren and even the wildlife begins to die, severe depression about such a state of affairs is not uncommon. During 'natural' events like drought, the morale of farmers, their families and communities decline and with drought breaking rains, joy and confidence in the future returns. Solastalgia is negated by the natural restoration of the present to something that is full of creative and productive potential.³⁰

²⁶ J.M. Bertolote and A. Fleischmann (2002), "A global perspective in the epidemiology of suicide" *Suicidologi* 7 (2) <http://www.med.uio.no/iasp/bertolote.pdf>

²⁷ C. Hamilton (2003), *Growth Fetish*, Allen and Unwin, Sydney, p.41.

²⁸ Year Book Australia (2002), Health, Special Article - Suicide <http://www.abs.gov.au/ausstats/abs@.nsf/94713ad445ff1425ca25682000192af2/be00331a0c387533ca2569de0024ed5b!OpenDocument>

²⁹ P. Horwitz *et al* (2001), "Biodiversity, Endemism, Sense of Place, and Public Health: Inter-relationships for Australian Inland Aquatic Systems", *Ecosystem Health*, 7, (4) p. 255.

³⁰ see, G. Albrecht (2001), "Applied Ethics in Human and Ecosystem Health: The Potential of Ethics and an Ethic of Potentiality", in *Ecosystem Health* 7, (4) pp. 243-252

In the sheep/wheat belt of Western Australia severe environmental change is currently manifest in ten percent of formerly productive land being affected by dry land salinity. It is estimated that up to 40% of the SW region of WA will be affected by salinisation by 2050 with attendant loss of agricultural productivity, biodiversity, water quality, river and stream health and fresh water wetlands. The cause of this situation is primarily the historical clearing of native vegetation for agriculture which has allowed the water table to rise bringing with it ancient layers of salt. Reports of high levels of suicide and mental illness in farming communities within the wheat belt of WA are therefore one type of expression of psychic instability in this region and are a classic illustration of the relationship between ecosystem distress syndrome and human distress expressed as solastalgia. Indeed, since the problem of land degradation in this part of the world has been caused largely by the property owners themselves, the type of solastalgia-related distress at the loss of productive farms is likely to be more intense than that which is 'natural' in origin³¹.

Solastalgia in the Upper Hunter Region of NSW

In the light of contact with distressed people in the Upper Hunter, I consulted with my friends and colleagues, Linda Connor and Nick Higginbotham at the University of Newcastle about the idea of conducting research focussed on the relationship between ecosystem health and human health (physical and mental) in the Upper Hunter Region. We had previously collaborated on a number of transdisciplinary³² (TD) projects and the rough idea was worked into a detailed research plan based on both qualitative and quantitative methods. We would attempt to explore and describe the ecosystem-human health relationship and, in addition, see if the concept of solastalgia had any philosophical and empirical currency within the affected population. With funding secured and ethics clearance from the University of Newcastle, qualitative research in the form of in-depth semi-structured interviews began in April 2003.

The TD team conducted the semi-structured interviews with over 50 key informants and community residents within the region from April until December 2003. The community interviewees included rural and urban residents, in farming and non-farm related occupations. Both long-term residents and more recent arrivals were identified for interview through a process of self-selection via media releases and information from community groups and social networks.

³¹ I thank Pierre Horwitz for this observation.

³² See G. Albrecht, N. Higginbotham and S. Freeman (1998) "Complexity and Human Health: The Case for a Transdisciplinary Paradigm", *Culture, Medicine and Psychiatry*, Vol. 22, pp. 55-92, and, N. Higginbotham, G. Albrecht and L. Connor, (authors/eds) (2001) *Health Social Science: A Transdisciplinary and Complexity Perspective*, Oxford University Press, South Melbourne.

Preliminary³³ analysis of transcribed community interviews suggested that, for a substantial number of residents, development and environmental change in the region is associated with considerable personal distress about personal health, damage to homes and farming properties, the Hunter River, the landscape and community heritage. Deeply emotional responses were especially evident in relation to pollution impacts on individuals, family homes and properties. An additional source of distress was the social pressure caused by the two coal-based industries. Higher costs of living, rapid turnover of neighbours, the escalating power of multinational companies and mistrust between supporters and opponents of development added to the cumulative psychological and community distress.

While appreciating that the responses received were not from a representative sample of the Upper Hunter population, the research team came away from the interviews with the recognition that the people we interviewed were losing the very things that once made life in this part of rural Australia so valuable to them. Loss of ecosystem health and loss of community were negatively transforming the foundations of their existence. Those interviewed were also unimpressed by the quality of remediation undertaken by mining companies and saw the environmental legacy of mining as a complete disaster.

Despite the current high level of cumulative impacts, the scope and scale of both the power generation and mining industries look likely to be even more intense and widespread with greater power generation capacity and even more open cut mining to be developed in the area in the near future.

Solastalgia and the Transcripts

Distress within the community has been expressed in a multitude of ways but constant themes have been disgust at the assault on the quality of life, fear of ill health (risk imposition) and frustration caused by the inability to stop the pollution and have any real say in the way the region is being developed. The transcripts have revealed a perception within the population that adults and children within the region experience unusually high rates of respiratory

³³ The research team is undertaking further analysis of transcripts and future publications will detail the qualitative dimensions of the distress described in this essay as solastalgia. At present, two papers have been published specifically on this research. See L. Connor *et al.* Environmental Change and Human Health: A Pilot Study in Upper Hunter Communities, in G. Albrecht (ed.) (2003) *Proceedings of the Airs Waters Places Transdisciplinary Conference on Ecosystem Health in Australia*, School of Environmental and Life Sciences, The University of Newcastle, and; L. Connor, G. Albrecht, N. Higginbotham, W. Smith & S. Freeman, (2004) Open Cuts to Land and Culture, Strip Mining and its Impact on the Sense of Well-being of People in Rural Communities: A Case Study in the Hunter Region of Australia, for *EcoHealth* (accepted April 2004 for publication in 2004).

disease (asthma), clusters and high rates of rare cancers, high rates of birth defects, depression associated with declining quality of life and other problems connected with shift work patterns and wealth being generated by the mining and power industries. As an additional first step to establish the case for the existence of solastalgia, material contained in the transcripts is selected to highlight the elements of respondents' distress related to place pathology, powerlessness, isolation and psychosomatic illness.

The emotional impact of the extent of physical change to the environment and the associated sense of place pathology are evident in the following comments by interviewees:

One of the reasons they (my ancestors) left the North of England was on the physician's recommendation because they were suffering from respiratory problems and consumption ... the child mortality rate was pretty high ... they had steam engines roaring past the house and black smoke and soot. Yes it's gone round in a big circle. It took a hundred and fifty years, they came here to get away from it and they did. They said what a wonderful country it is and it's caught up, the industrial revolution's caught us again, we've got the same trouble. Where do we go? Patagonia or somewhere?(Howard)

Originally they (the miners) said they were going to go underground but the DA (development application) ... is for open cut ... Now that is in danger. Species there, there is a very rare woodland banksia in all of that. And It's distressing. It almost reduces me to tears to think about it [mining]. (Eve)

The fact that you can see those huge mine heaps etc. makes you think that some time in the future there maybe dreadful consequences for the water table movement in the valley etc.(Leo)

When the coal is gone, the people of Singleton will be left with nothing but "The Final Void". (Eve)

The lack of support and the alienation caused by political powerlessness contributes to solastalgia about the negative transformation of the physical environment:

...I think one of the problems of the mining and the industry is, they play on the basic everyday person's lack of resources. There's no social support for displacement, none whatsoever. (Lea)

And it's a big thing when your family has owned the place for generations. You love that land, even though I married into it. I came to love it because I knew the history of it ... And I thought, the love of that place, it doesn't mean anything now that we've got all those wretched international companies. They don't care. (Dora)

Certainly I believe that there are a greater number of impacts on Singleton than any other communities, especially the Hunter. But certainly ... other communities are also being impacted on and people are feeling the same way as we are. That sense of no power to do anything, that there's no way of stopping what's happening around you without a fight. And people are tired you know, we just get rid of this issue and

the next issue's waiting and so on, it's like a conveyer belt of issues. And there could be two or three issues sitting on the table at the same time. (Brenda)

The impact of pollution on physical and psychological health is a constant theme and is deeply implicated in a diagnosis of solastalgia:

The other concerns that I have are that we seem to have a high incidence of cancer. Even younger people are getting cancer. It seems to be, from what we have seen, brain cancers and rare ones. (Fleur)

The environmental issues have certainly affected my health as in the physical but emotionally, again it's hard to quantify how much stress and emotion plays in somebody's health, but I certainly know that when things are running on an even keel, if that's the right word, if you don't have those issues that you feel like you've got to really stand up and fight and are you the only one that's doing anything? You always find out that you're not the only one that's doing something but at times you feel ... is anybody out there listening? I know how much worse my asthma is. (Brenda)

Well I noticed when this business with – (mine name) when I was really fighting here. And my manager would come to me and say he didn't sleep last night. The noise, because they're loading right near the road, he's just across the creek from the road. And you hear a drag line swinging around and dumping rocks into a truck. And then the truck would back away ... beep, beep, beep, beep, beep. And then the next one would roar in. He used to say to me "we just can't cope any longer". They wouldn't listen. I then had to go to the mining company. I went to my solicitor...But I lost a lot of weight. I'd wake up in the middle of the night with my stomach like that (note: clenched fist), and think, what am I going to do? We're losing money, they won't listen to me, what do I do? Do I go broke? I can't sell to anybody, nobody wants to buy it because it's right next to the mine. What do I do? And I was a real mess. (Dora)³⁴

What comes across clearly in the majority of interviews is distress caused by the assault on the interviewees' senses of identity, place, belonging, control and good health. Their frustration at not being able to stop or reverse the development that was causing the desolation of the environment and the loss of their sense of well-being added to the cumulative distress. These people were suffering both mentally and physically, but mainly articulated their distress through very generalised descriptions of their suffering or through body language such as the 'clenched fist' to show how they were feeling inside. The clenched fist is more than symbolically important; it shows that solastalgic distress, like the older connotations of nostalgia, is capable of causing a real and diagnosable illness.

³⁴ Material taken from L. Connor, N. Higginbotham, W. Smith and G. Albrecht, (2003) *Relating Ecological and Human Distress Syndromes: A Pilot Investigation in Upper Hunter Communities Exposed to Large Scale Industrial and Mining Activity*. Funded Research Project 2003-4, Research Grant Committee of The University of Newcastle.

In some respects, the people in this region are experiencing a wave of aggressive colonisation by large scale, extractive and power-generating industries owned by State, national and multinational corporations. The first wave of colonisation dispossessed the Indigenous people of the Valley and for them post-colonial shockwaves continue to the present day expressed, in part, as both nostalgia and solastalgia. The second wave of colonisation, ironically impacting on the descendents of the original colonists, is leading to complete dispossession for some and solastalgia for those left behind.

Farming families whose occupation of the valley goes back to the first half of the nineteenth century are being evicted from their properties while others who are not in the direct line of fire are being literally undermined by extractive industries. They are having their lives made intolerable by the wholesale assault on the ecosystem health of the bioregion manifest as toxic air pollution, constant noise, excessive dust and increasing salinisation of the Hunter River. The net result is a community in a stressed landscape where stressed people experience the deep distress of solastalgia while others (the region and the State) profit at their expense. While still 'work in progress', the research is showing a clear conceptual link between the well being of people and the well being of the land³⁵. Mitchell's identification of "psychic stability" and "heart's ease" by Rose find relevance in the lived experiences of people in the Hunter Valley.

The attempt to relieve solastalgia by those affected by it can be manifest in negative or positive ways. The sublimating or diluting of solastalgic distress can occur in the form of a range of social, physical and mental health problems ranging from substance abuse to serious psychiatric disorders and suicide. However, an alternative positive response is personal and community involvement in the protection, restoration and rehabilitation of their home/place/bioregion/country and the nurturing of an endemic sense of place in both individuals and communities. In Australia, the attraction of movements like Land Care is in part related to the desire of people to confront solastalgia in the repair and restoration of land that has been degraded by human mismanagement. Direct action by environmental activists to save endangered environments can also be seen as an urgent response to solastalgic distress. Further, a counter to solastalgia in the political context is resistance to the power and arrogance of both government and corporate bodies to silence and isolate public participation in the development approval and environmental monitoring processes. The refusal to be the sacrificial lambs of the Hunter Valley marks some of our research respondents as public dissidents in the face of multi-billion dollar multi-national industries.

It seems that many people in a variety of contexts sense that something is wrong with our relationship with the planet and their unease just might be an

³⁵ The TD research team has created an instrument to measure the degree of solastalgia as expressed by the level of distress connected to the breakdown of an endemic sense of place. Funding has been sought to conduct such research.

expression of deep-seated solastalgia about non-sustainability. The innate desire to be connected to life and living things, what E. O. Wilson calls “biophilia”³⁶ or what could be called ‘ecophilia’ is, in part, an innate desire to overcome solastalgia by finding an earthly ‘home’ in the connection with living things and life processes on this planet. The defeat of solastalgia and non-sustainability will require that all of our emotional, intellectual and practical efforts be redirected towards healing the rift that has occurred between ecosystem and human health, both broadly defined. In science, such a commitment might be manifest in the full redirection of scientific investment and effort to an ethically inspired and urgent practical response to the forces that are destroying ecosystem integrity and biodiversity. The need for an “ecological psychology” that re-establishes full human health (spiritual and physical) within total ecosystem health has been articulated by many leading thinkers worldwide.³⁷ The full transdisciplinary idea of health involves the healing of solastalgia via cultural responses to degradation of the environment in the form of drama, art, dance and song at all scales of living from the bioregional to the global. The potential to restore unity in life and achieve genuine sustainability is a scientific, ethical, cultural and practical response to this ancient, ubiquitous but newly defined human illness.

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³⁶ E.O. Wilson (1984), *Biophilia*, Harvard University Press, Cambridge Massachusetts.

³⁷ See, for example, J. Hillman, on Justice and Beauty: Foundations of an Ecological Psychology, <http://www.online.pacifica.edu/alumni/facultynews/medalhillman> (accessed April 2004).