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Green-tinted glasses: how do pro-environmental citizens conceptualize environmental sustainability?

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2	Environmental Communication: a journal of nature and culture
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4	sustainability?
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1	Abstract
2	Recent research has shown that many Australians see pro-environmental behaviour as
3	desirable, and identify as being green. However when compared to other countries,
4	Australians score poorly on pro-environmental behaviour measures, engaging mostly in
5	tokenistic pro-environmental actions, and demonstrate low levels of concern for the
6	environment. In this article we examine this tension through exploring the meaning of the
7	term sustainability to Australian participants who self-identify as pro-environmental. Twenty
8	six interviews were conducted and analysed using Causal Layered Analysis. Through the
9	examination of participants' environmental discourse and practices, some of the deeper socio
10	psychological processes influencing pro-environmental behaviour are revealed. While
11	participants aspired to be green, their actions were bound by cultural traditions and
12	worldviews that perpetuate environmental degradation. Participants struggled to define the
13	term sustainability and held self-enhancing motives for adopting what they identify as a pro-
14	environmental identity. These findings highlight the influence of collective cultural
15	constructs in shaping how pro-environmental behaviours are understood and enacted.
16	
17	Keywords: sustainability, social construction, worldview, Causal Layered Analysis,
18	environmental identity
19	Highlights: Despite claiming to hold a sustainability identity participants found it difficult to
20	define sustainability, and distanced themselves from social activism. A sustainability identity
21	was used to leverage moral superiority and feelings of self-approval and accomplishment.
22	Acknowledgements: Hannah V. Uren is a recipient of a Curtin University. The research was
23	conducted without any commercial or financial relationship that could be construed as a
24	potential conflict of interest.
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1 Introduction 2 Sustainability and environmental sustainability are concepts that have gained increasing 3 popularity in Australia, and across the Western world in the last few decades. Yet despite 4 social, political, and commercial recognition of the need for sustainable lifestyles, few would 5 argue that lifestyles are becoming more sustainable (Batel, Castro, Devine-Wright, & 6 Howarth, 2016). Compared to Organisation for Economic Co-operation and Development 7 (OECD) countries, Australia scores poorly on a number of sustainability indicators (Kroll, 8 2015). Australia's continued reliance on coal as a power source, makes it one of the top ten 9 emitters of greenhouse gases in the world, producing more pollution per unit of energy than 10 China or the USA (Kroll, 2015; Stock, 2014). Australia also has the highest domestic material consumption rate of any OECD country, and now consumes resources three times 11 12 faster than they can be replaced (Kroll, 2015; WWF, 2016). The latest Australian statistics 13 reveal a 145% increase in gross waste production in the 15 years leading up to 2012, despite 14 only a 22% increase in population over the same period (ABS, 2013). Additionally, almost all 15 biodiversity indicators examined by the 2011 State of the Environment Report rated 'Poor' or 16 'Very-poor' and are predicted to deteriorate further (State of the Environment Committee, 17 2011). 18 Despite Australia lagging behind developed nations in environmental credentials, there has 19 been a growing focus by media on promoting pro-environmental lifestyles, with increased 20 attention given to environmental issues (Schmidt, Ivanova, & Schäfer, 2013) and sustainable 21 lifestyle television programs (Lewis & Potter, 2011). Similarly, recent years have witnessed 22 an increased uptake of environmental sustainability reporting by business (Higgins, Milne, & 23 van Gramberg, 2015) and the consumer market has seen an increase in both demand and 24 supply of green consumption products, such as organic and eco labelled products (Hassan & 25 Valenzuela, 2016; Nielsen, 2015). Australians also consider sustainability to be an important 26 issue and desire to live in a sustainable society (van Dam & van Trijp, 2011). However, 27 understandings of what a green lifestyle entails does not appear to be well understood. A 28 survey of over 5000 Australians found that Australians' think they are more 'green' than they 29 are in practice (Leviston, 2014). When people were asked what pro-environmental 30 behaviours they were carrying out in their everyday lives, more than 90% believed that, 31 compared to others, they were doing the equivalent of the average Australian or more. In 32 2012, National Geographic asked approximately 17,000 people from 17 countries about their 33 environmental attitudes and lifestyles (Malmqvist & Whan, 2014). Australians were some of

- 1 the least concerned about the environment, and performed the fewest pro-environmental
- behaviours. However 53% of Australians thought of themselves as 'green', with a further
- 3 24% agreeing that they are not 'green' now, but plan to be in the next five years (Malmqvist
- 4 & Whan, 2014). This suggests that while Australians like to think of themselves as
- 5 environmentally friendly members of society, they are seldom as 'sustainable' as they
- 6 believe.

7

The Role of Psychology in Promoting Pro-environmental Lifestyles

- 8 A range of social, psychological, and community-based research has been conducted in an
- 9 attempt to understand how humans think and behave with regard to environmental issues
- 10 (Clayton et al., 2015; Swim et al., 2011). This work has significantly advanced
- understandings of the predictors and descriptors pro-environmental behavioural engagement
- used in the creation of interventions to encourage pro-environmental behaviour (Osbaldiston
- 8 Schott, 2012). There has been a tendency however, to focus on individual factors and there
- is a corresponding lack of research looking at the broader social and cultural drivers of
- 15 environmentally detrimental behaviour.
- 16 In order to create true and lasting social change, it is necessary to understand the underlying
- social systems and structures that underpin unsustainable lifestyles (Bishop & Dzidic, 2014).
- 18 It can be argued that the social, historical, and political systems in which we are embedded
- will by virtue of context shape how we view and understand the world, the research questions
- we ask, and subsequently the conclusions we make (Bronfenbrenner, 1977; Gergen, 1985).
- 21 Empiricism has historically been the 'valued' epistemology within psychology and the social
- sciences, and hence the types of questions asked have been those that answered through
- 23 positivistic and at times reductionist methods (Teo, 2006; Tolman, 2012). This episteme lends
- 24 itself to a certain 'type' of questioning, typically quantitative enquiry, and in doing so
- provides a certain 'type' of answer, claimed to be objectivist, value free, and
- 26 'truth' (Prilleltensky, 1989). 'Alternative' epistemological positioning, such as that which
- argues for a more complex and contextualised perception of knowledge (and knowledge
- 28 generation), can for example be seen within constructionism, whereby foundational beliefs or
- 29 the status quo, are fundamentally questioned (Breen & Darlaston-Jones, 2010). This episteme
- demands an exploratory and contextualised 'type' of questioning conducive to qualitative
- 31 methodology whereby the 'type' of answers found through this process of enquiry can be
- forms of social criticism themselves (Prilleltensky, 1989).

- 1 For some, it might be perceived audacious to ask qualitative questions in a bid to understand
- 2 wicked problems such as sustainability and consumerism, particularly given the social
- 3 scientific value and perceived worth in positivism. However, we argue that failing to
- 4 recognise dominant paradigms embedded within our discipline, and how this shapes
- 5 questioning is grossly limiting (Sarason, 1982). Failing to examine the types of questions we
- 6 ask and how we ask them, may instead be maintaining methodological status quo, and
- 7 consequently limiting the conclusions we make, and the strategies we pose to address the
- 8 issue under investigation (Sarason, 1982).
- 9 One area of investigation that has addressed systemic-level influences on the behaviour and
- 10 choices of individuals are theories of social-system legitimacy. Grounded in traditions such
- as Marxism and Feminism, these social psychological conflict theories seek to explain how
- individual differences and values interact with, and are constrained by social institutions.
- 13 These theories, including System Justification Theory (Jost & Banaji, 1994), have only
- 14 recently been applied to elucidate the nexus between environmental attitudes, behaviours, and
- social change (Hennes, Ruisch, Feygina, Monteiro, & Jost, 2016; Jost, 2015).
- 16 The central tenet of System Justification Theory (SJT) is that there is a general ideological
- motive that functions to justify the existing social order. SJT identifies three main motives:
- 18 ego justification, or the need to maintain a positive self-image and to feel justified, valued,
- and a legitimate member of society; *group justification*, the need to maintain a favourable
- 20 image of one's own group and fellow group members; and to this is added system
- 21 *justification*, the need to maintain a favourable view of the status-quo and to see it as fair,
- 22 legitimate, desirable, natural, and inevitable (Jost, Banaji, & Nosek, 2004). System
- 23 justification works predominantly at the implicit, non-conscious level, and occurs even if this
- comes at the expense of personal and/or group interests (Jost et al., 2004).
- 25 Whereas ego and group justifications function to protect the interests and positive image of
- 26 the self and the group, social-system legitimacy provides ideological justifications. These
- 27 justifications are a sense-making mechanism to explain why things are as they are, serving to
- satisfy people's drive to think the world is just and fair, and increasing satisfaction with one's
- 29 own situation and life circumstances (Lerner, 1980). In addition, in seeking to understand
- 30 why people engage in system justification, Jost and Hunyady (2003) conclude that system-
- 31 justifying ideologies have a more immediate, palliative function. Specifically, these
- 32 ideologies reduce anxiety, guilt, cognitive dissonance, discomfort, and uncertainty for both
- those who are advantaged by prevailing systems, and those who are disadvantaged by them.

- 1 These goals are achieved by bolstering one's defence of the status quo, and by
- 2 rationalisations, justifications, and legitimising 'myths' for prevailing social systems and
- 3 inequities.
- 4 To date, the myths and worldviews shaping people's notions of 'sustainability' and
- 5 'sustainable lifestyles' have not been sufficiently considered nor explored. This has often led
- 6 to shallow deconstructions of what sustainable lifestyles are, as well as to campaigns and
- 7 approaches that unintentionally reinforce consumeristic and individualistic values (Barnhart
- 8 & Mish, 2016; Evans et al., 2013). This unintentionally promotes unsustainable ways of
- 9 living, as it ignores the behavioural constraints imposed by prevailing societal systems;
- systems that we are ideologically motivated to defend (Evans et al., 2013; Steg & Vlek,
- 11 2009). As such, we set out to unpack the concept of sustainability in Perth, Western
- 12 Australia.

13 **Research Rationale**

- 14 In Australia, while discourses of environmental sustainability have becoming increasingly
- ubiquitous; lifestyles are becoming increasingly resource intensive (Malmqvist & Whan,
- 16 2014). It is well documented that there is an inconsistency between people's environmental
- values and their pro-environmental behaviours the value-behaviour gap (Kollmuss &
- 18 Agyeman, 2002). Yet little research exists exploring what environmental sustainability means
- 19 to people who see themselves as pro-environmental. The vast majority of research
- 20 investigating pro-environmental behavioural engagement has concerned itself with the
- 21 psychometric development of scales such as the frequently used New Environmental
- 22 Paradigm (Dunlap, Van Liere, Mertig, & Jones, 2000). The qualitative foundations upon
- 23 which such quantitative scales are built are not commonly revisited (Hawcroft & Milfont,
- 24 2010), nor is there adequate reflection or critique that the range of attitudes captured by such
- 25 scales may be bounded by hegemonic systems that impose structural constraints on
- behaviour. Qualitative research on environmental sustainability has tended to focus on the
- 27 construction of the sustainable consumer identity (Autio, Heiskanen, & Heinonen, 2009; Roy,
- Verplanken, & Griffin, 2015), corporate settings (Millar, Hind, Cherrier, Russell, & Fielding,
- 29 2012; Wright, Nyberg, & Grant, 2012), and students (Emanuel & Adams, 2011; Kagawa,
- 30 2007). A possible outcome of an identity-driven focus to pro-environmental behaviour that
- 31 ignores structural-level constraints is that proffered solutions to environmental problems
- 32 unwittingly reinforce the imagined boundaries of actions available to the individual (Brulle,
- 33 2010). As such, there is a need to elucidate the implicit assumptions in individuals about what

- 1 these structural constraints are, and to investigate the deeper functions and meanings of
- 2 environmental sustainability within the everyday life experience of Australian's who consider
- 3 environmental sustainability an important part of their identity.
- 4 In the current study we draw on interviews with people for whom environmental
- 5 sustainability is an important part of their identity. Focusing on those who see sustainability
- 6 as a part of their self-concept sheds light on tensions, paradoxes, rationalisations,
- 7 conceptualisations, and broader socio-cultural drivers implicit in adopting an environmental
- 8 self-identity. Understanding the contextual and cultural factors influencing the gap between
- 9 environmental attitudes and environmental behaviour is key for effective interventions to be
- designed. We argue that it is both difficult and impractical to live sustainably in our modern
- 11 consumerist society. Australian lifestyles are bounded by the dominant cultural and social
- systems that rely on biophysical impossibility of constant economic growth and promote self-
- interest and unsustainable levels of consumption. Yet, people identify as someone who is
- sustainable or green. We set out to better understand the paradox of seeing oneself as
- sustainable in in an unsustainable society. The term sustainability in the context of the
- 16 environment continues to provoke conflict over its definition and interpretation and there is
- 17 little consensus as to what these terms means (Roy et al., 2015). For the purpose of this paper
- we define sustainability as the maintenance of earth's natural capital and systems, such that
- 19 the planet is able to provide resources necessary for human and other life both now and in the
- future (Christen & Schmidt, 2012; Morelli, 2013).
- 21 The four research questions driving this research are as follows:
- 22 1. How do Australians who consider environmental sustainability to be an important part of
- 23 their identity conceptualise what environmental sustainability is?
- 24 2. What do Australians who consider environmental sustainability to be an important part of
- 25 their identity consider their role and responsibility in enacting their identity?
- 26 3. What function(s) does an environmental sustainability identity serve?
- 4. What are the underlying societal forces shaping these conceptualisations of sustainability?

28 Methods

- 29 Given that limited empirical research has investigated how environmental sustainability is
- 30 understood and enacted amongst those who hold a green identity, an exploratory research
- design was deemed appropriate. Qualitative methods are advantageous for exploration as they

- 1 offer enhanced possibilities for contextually-anchored analyses, especially when investigating
- 2 complex issues such as sustainability (Whitmarsh, 2009).

Participants

3

- 4 As the overarching aim of the current study was to understand sustainability from those who
- 5 identify as pursuing a sustainable lifestyle, we engaged a diverse group of people who self-
- 6 identified as attempting to live a sustainable lifestyle. Potential participants were recruited
- 7 through postings obtained via a convenience sampling process. Using the Facebook search
- 8 function "environment Perth", "sustainability Perth" and "green Perth" were searched for
- 9 pages related to environment and sustainability. Twenty-six Facebook pages related to
- sustainability were also posted to, including pages promoting green energy, sustainable
- housing, environmental conservation and advocacy, eco catering and environmental
- education. Administrators were also sent a message asking for them to also share the
- advertisement. This allowed for snowballing to a wide section of sustainability groups and
- organisations located in the Perth, Western Australia. Maximum variation sampling (Suri,
- 15 2011) was employed, whereby diverse stakeholders were chosen from members of the public
- who expressed interest in participating. This allows for the shared patterns of experiences in
- sustainability by diverse stakeholders to be identified. In total 28 participants took part in 26
- interviews (24 individual interviews, two interviews in pairs). Participants represented a
- broad range of ages and occupations, although the sample was highly educated, with 20 out
- of 28 participants completing at least an undergraduate degree (see Table one). Participants
- 21 also came from various parts of the Perth Metropolitan Area, with 22 different postcodes
- 22 represented.
- 23 [Table 1. Summary of participant demographics]

Procedure

- 25 Interviews were held at a location convenient to the participant, usually a café, or their
- workplace or home. Interviews lasted between 30 and 90 minutes. Participants were asked a
- series of semi-structured questions covering the following: how they define sustainability,
- 28 where their interest in the topic stemmed from, which pro-environmental behaviours they
- 29 engage in or would like to engage in, what the barriers to environmental sustainability are,
- and whether and how they see society becoming sustainable. A follow up demographic
- 31 survey was sent asking for gender, age group, occupation, and education. Transcription,
- 32 interviewing, and analysis occurred simultaneously, allowing for the interview schedule to be

- 1 updated as questions revealed themselves as redundant or requiring more in-depth
- 2 exploration (Coyne, 1997).

3 Analysis

- 4 This study adopts Causal Layered Analysis (CLA), an emerging method and methodology
- 5 which has arisen out of futures research. CLA is a particularly suited to the deconstruction of
- 6 complex or wicked social issues that are often seen as unresolvable and overwhelming for
- 7 those attempting to solve them (Bishop & Dzidic, 2014). The aim of CLA is to get to the root
- 8 of an issue. It is argued that depth of understanding in the form of discourse, worldview,
- 9 myths, and metaphors shape our understandings and reactions to complex problems, and are
- therefore essential to examine, if meaningful change is to occur (Inayatullah, 2004). The key
- strength of this approach it that forces the analyst to view the problem under investigation
- under four different lenses, and therefore allows for strategies and interventions which
- capture the deeper more complex underpinnings of an issue. For detailed instructions on the
- use of CLA see Bishop and Dzidic (2014). The four layers examined in a Causal Layered
- Analysis are presented in Table 2, starting with the most shallow layer (litany) at the top and
- working down to the deepest, most unconscious layer (myth/metaphor). The steps involved in
- 17 conducting a CLA are presented in Table 3. To assist in ensuring quality throughout the data
- collection and analysis phase, findings were discussed between the authors at weekly
- 19 research meetings, and themes developed in an iterative process as further interviews were
- 20 completed.
- 21 [Table 2. Layers of a Causal Layered Analysis]
- 22 [Table 3. Steps involved in Causal Layered Analysis]

23 Findings

- 24 In the findings section the conceptualisation of sustainability among people who consider
- 25 sustainability to be an important part of their self-concept is explored. Findings are presented
- as themes within each causal layer starting with the most proximal layer, the litany, and
- 27 progressively delving into deeper, more complex understandings of the issue. A thematic map
- 28 illustrating the relationship between themes is presented in Figure 1. Unlike the name 'causal
- 29 layered analysis' these arrows do not infer causation, rather illustrate how an issue can
- 30 manifest at different levels of understanding. Here each theme is presented next to the
- 31 associated causal layer, and links to deeper layers are illustrated.
- 32 [Figure 1. Thematic Map HERE]

Litany

1

6

- 2 The litany layer consists of the uncontested truth of an issue. Through analysis two prominent
- 3 themes were identified: 'Definitional Confusion', and 'Different. But Proud'. The former
- 4 reflects participants' confusion in defining sustainability whilst the latter reflects the sense of
- 5 pride and enjoyment participants experienced in attempting to live a sustainable lifestyle.

Definitional Confusion

- 7 Although participants volunteered to participate in an interview about their experience living
- 8 a sustainable lifestyle they tended to find sustainability as a concept difficult to define and
- 9 conveyed confusion surrounding what sustainability meant theoretically and practically. One
- 10 participant stated:
- "I think as a society even within the sustainability realm it is really hard to
- 12 understand what that actually means because something that is recycled is assumed
- automatically to be sustainable." Participant 18
- Here the participant posits that recycling behaviours are incorrectly thought of as being
- sustainable. When describing sustainable actions, recycling was a behaviour that held mixed
- meanings. For many participants, recycling was a key behaviour they engaged in in an effort
- 17 to be sustainable. For others, recycling was seen as a reflection of consumption, and therefore
- effort was made to reduce or reuse items rather than recycle. Several participants expressed a
- 19 frustration that recycling was assumed to be automatically sustainable, and that people who
- were consuming were able to rid themselves of environmental guilt by discarding consumed
- 21 resources into a recycling disposal. What to one person was viewed to be sustainable, was to
- 22 others unsustainable. This was not limited to recycling, but also included low density versus
- 23 high density housing, growing one's food versus buying food, and the benefits of installing
- 24 water tanks or grey water systems. As one participant noted, "the huge problem with any
- 25 debate about sustainability, is that everyone has different definitions of it." Participant 22
- 26 For those who provided definitions their descriptions of sustainability varied greatly, and
- 27 included terms such as living "within our limits", ensuring intergenerational equity, and
- 28 protecting "our lifestyles". Despite their differences, participants' approaches to sustainable
- 29 lifestyles commonly converged on the sustainability of human quality of life, as opposed to
- focusing on sustaining the environmental systems that support humans. That is,
- 31 environmental sustainability tended to be framed as protecting humans from the limits of the

1	environment rather than protecting the environment from human destruction. This is
2	important, as the framing of the environment as an externalised issue can have implications
3	for action. This will be examined further in the worldview/discourse layer.
4	Different, but proud
5	Although sustainability was difficult for participants to define there was an overwhelming
6	sense that people were proud to engage in what they perceived as sustainability practices. In
7	particular, participants were proud to engage in sustainable consumption practices such as
8	buying local food and, installing solar panels, as well as high effort behaviours such as
9	growing vegetables. One participant reflected:
10	it [sustainability] has that feel good factor, it gives you that feeling of saving and it
11	is fun because it is something to look forward to and it is something that gives you
12	identity. Participant 4
13	It appeared that adopting a sustainability identity served a function beyond reflecting a
14	concern for the environment. Engaging in pro-environmental behaviours was an identity that
15	promoted a sense of pride. Another participant stated:
16	I take a bit of personal satisfaction in reusing stuff, our housemates are kind of like,
17	'What the fuck are you doing'? Participant 17
18	Participants explained that despite feeling as though others perceived them as unusual and
19	unorthodox, they experienced a sense of fulfilment from engaging in pro-environmental
20	behaviours, and appeared proud to be different.
21	Social Causative
22	At the social causative layer of analysis, the systemic limitations to engaging in a sustainable
23	lifestyle in Perth are explored in the theme 'Justifying the Status Quo'.
24	Justifying the Status Quo (by attacking the status quo)
25	Not only was there confusion as to what sustainability meant in theory, there was also
26	confusion as to what sustainability looked like in practical terms. Many participants reflected
27	that making decisions with the aim of making their lifestyles more sustainable had the
28	potential to be very difficult. As one participant noted, "it is difficult to live in a sustainable
29	manner, because society is against you" Participant 19, acknowledging that their efforts to

- live sustainably were bound by the city in which they lived. Another participant commented "Often it's especially complicated with living in Perth too because the urban fabric doesn't
- 3 lend itself, necessarily, to living a wholly sustainable life." Participant 3. Furthermore,
- 4 participants noted that acting sustainably in one capacity was to be unsustainable in another.
- 5 An example posed by participants was that of owning a car. Most participants accepted that
- 6 owning a car was an unavoidable reality of living in Perth ¹. One participant described
- 7 owning a four-wheel-drive, and posed a justification of this ownership by explaining that this
- 8 vehicle allowed for camping trips and for the participant's children to engage in nature. In
- 9 this way, the participant is seen to justify ownership of an unsustainable vehicle, through
- 10 environmental reasons but acknowledges the paradox that their car was contributing to
- environmental problems. Another participant stated that he still owned his vintage car
- because he would rather own an older inefficient car and drive it less than owning a more
- efficient newer model. Similarly, another participant described how they tried to think about
- the long-term effect of their behaviour, the net impact of driving their car.
- 15 The way I always justified it in the past, was well, what is your net impact, so you
- drive your car but by doing that you are doing good. So you just do this little
- balancing thing in your head, where you think, well the good that I am doing, offsets
- that negative, but I do think that it is a lot of playing with things in your head.
- 19 Participant 20
- 20 Other examples of justifying unsustainable behaviours included only buying second-hand,
- 21 eating only organic meat, and only driving on weekdays. These examples potentially reveal
- 22 post-hoc justifications and rules that participants made to themselves around their
- consumption behaviours to offset what appears to be cognitive dissonance regarding their
- consumption. These systemic societal restrictions are invoked as a barrier preventing the
- 25 participant from aligning their behaviours to their values.
- 26 Many participants recognised tensions and contradictions in their consumptive practices,
- acknowledging that if it were not for perpetual economic growth they would not have the
- opportunities and privileges that they currently hold. Participants reflected that the economy

¹ Perth was designed around the use of the car, and the low density and urban sprawl make travel without a car difficult (Newman, 2014). In the most recent census, only 6% of Perth households did not own a car (ABS, 2016).

1 in Perth is based around the mining and resources sector, and without this environmentally 2 destructive industry, they might not have a job. As one participant noted, 3 An apparent paradox which is for my business to exist, I need a growing economy 4 and yet a growing economy is one of the things I have acknowledged is not sustainable unless we decouple economic growth from resource use. Participant 4 5 6 Here the participant acknowledges the paradox that their own sustainability business is most 7 successful when the economy is growing, while recognizing these are inherently 8 unsustainable. 9 Worldview/ discourse 10 The third layer of a Causal Layered Analysis examines the worldviews, ideologies, value 11 systems and beliefs, and discourse that perpetuate or fuel conceptualisations of sustainability. 12 Here we are interested in precisely what people say, and the perspective that these words 13 convey. Through analysis three prominent themes were identified 'Do my bit' and 'Seeking a 14 higher purpose'. "Do my bit" 15 16 When participants described how they went about engaging in actions for sustainability, a 17 distinct discourse was identified, "doing my bit". When describing what they did and what 18 they saw as important participants focused on the ethics of the personal actions, with 19 individual acts and private decisions seen as the key vehicle by which sustainable 20 development would be possible. Participants idealised the role of individual action, where the 21 individual was seen responsible for doing their "fair share" of pro-environmental behaviours, 22 and the household was seen as the key setting in which sustainability would occur. 23 Interestingly, "doing my bit" was used with reference to physical and tangible household 24 behaviours, rather than to activism behaviours. Participants tended to distance themselves 25 from collective efforts to pursue social change, such as political environmental activism. 26 Collective action to promote sustainable lifestyles was spoken about far less than individual 27 household behaviours, and when mentioned it was criticised. One participant captures this in 28 their comment that sustainability is "more than just doing petitions and talking about it"

Participant 5, suggesting that sustainability is viewed as involving tangible individual actions.

Talking about sustainability was not only seen as an ineffective way to create change, but was

also seen as having the potential to reflect badly on them. Participants reported that they

29

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1	choose carefully when to speak about sustainability issues; "I don't want to sound preachy"
2	Participant 11, suggesting that being seen to be an environmental activist was not a desired
3	social identity. Similar to this, attending rallies or joining community groups were seen as
4	painful and difficult means to create change. One participant stated that she had come to
5	realise that the forms of political agency that she had tried in her past were ineffective and
6	made her frustrated, stating, "I think sustainability has got itself a bad rap because the people
7	representing it can often be difficult people." Participant 4. Dismissing environmental activst
8	behaviours as fruitless appeared to serve as an ego defence function, allowing them to adopt a
9	sustainability identity without engaging in actions for collective transformative change;
10	actions they felt might meet with social disapproval.
11	Participants also alluded to their motivation to engage in pro-environmental actions to feel
12	good about themselves, rather than to reduce their environmental footprint. For example,
13	one participant stated "I feel better about all the different things happening around me, by
14	doing something myself, even if it is something small" Participant 28. For others however,
15	doing their bit was in recognition that the government was not taking action, and if lifestyles
16	were going to become more sustainable then action needs to come from an individual and
17	community level.
18	"A lot of people have the belief that, "I'm only one person, I can't make a difference"
19	and I've got a very crude joke that I use with people, say it only takes one of your
20	body hairs found in food, to shut down an entire restaurant. Do not think for a minute
21	you don't have the power to make good choices." Participant 23
22	For some, the discourse of "doing my bit" was motivating and led to participants engaging in
23	behaviours which they might cast off as not having an impact in the grand scheme of things.
24	For others however, in the context of Australia where privacy and individualism are rewarded
25	(Klocker, Gibson, & Borger, 2012), the collective dilemma of environmental sustainability
26	manifests as an individual pursuit to feel a sense of self-approval.
27	Seeking a Higher Purpose
28	For many participants holding a sustainability identity appeared to provide a sense of life
29	purpose and a moral code to live by; "Anything that has an ethical base is irrefutable for

- 1 easy as far as that's concerned." Participant 6. Embracing sustainable ways to live was
- 2 described as adding meaning and purpose and the ability to "make a difference".
- 3 Engaging in pro-environmental groups and activities was described as a way for people to
- 4 engage meaningfully with their local communities. Participants appeared to gain significant
- 5 satisfaction from their sustainability actions and reported that it genuinely made them feel
- 6 happy, satisfied, and provided a sense of mission. Some examples included "I started to think
- 7 about my place in the world and in society and where I fit and what I am doing" Participant
- 8 1, and "it is important to me to live my life with some kind of purpose" Participant 9; and a
- 9 higher purpose at work "I want to feel a sense of purpose when I am doing my work"
- 10 Participant 19. Explanations had an altruistic component: "Sustainability to me is being able
- 11 to contribute meaningfully to the society in a way that doesn't degrade anyone or anything as
- best as possible. To me that means future generations can also benefit" Participant 20. Like
- membership of a sporting club or a church, an interest in environmental sustainability served
- multiple social functions; as a way for people to connect to one another, and as a way to
- present themselves to others as virtuous and altruistic.

Myth/ Metaphor

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- 17 The myth/metaphor layer is the deepest layer in Causal Layered Analysis, and constitutes the
- 18 (often subconscious) non-rational ways of knowing embedded with-in culture. Through
- analysis two prominent themes were identified: 'Sustainability as a journey', and
- 20 'Sustainable consumption as social status'.

Sustainability as a Journey

- 22 The metaphor of the journey was commonly used amongst participants when describing
- 23 actions they were taking towards an environmentally sustainable lifestyle. This metaphor
- presents an interesting tension. It acknowledges that one will never become "sustainable".
- One participant stated, "It's a journey. It's nothing; we will be sustainable when we are dead.
- 26 If I could be buried under a tree to become compost, I'll be sustainable" Participant 13. Here
- 27 the participant recognises that they will never be sustainable on their own, yet conceptualises
- 28 themselves as an individual. Further, pursuing a purpose with no destination was a potential
- source of confusion, as there was no vison of where the journey was going.
- 30 For others participants however, sustainability was seen to have an endpoint. They would
- 31 refer to "when I am sustainable". Whether sustainability is conceptualised as an end point or

- as a journey, both are problematic. Seeing oneself as able to become sustainable means that
- 2 participants did not see themselves as a part of a system but rather as an individual acting in
- 3 isolation. This is in contrast to the social causative layer where systemic barriers to
- 4 sustainability were used to justify the individuals' inability to attain sustainability.

Sustainable Consumption as Social Status

- 6 While participants described avoiding talking about sustainability issues because it might
- 7 reflect negatively on them or make others uncomfortable, engaging in certain sustainability
- 8 actions served as a way to receive praise, respect, and admiration from others. When asked
- 9 what they aspired to, participants most commonly described wanting highly visible symbols
- of a sustainable lifestyle e.g., "I would love to have an electronic vehicle" Participant 19),
- "I'd love to build a sustainable house" (Participant 22), "I would love to put in solar panels"
- 12 (Participant 15). Interestingly, these are all individual consumption behaviours rather than
- collective or activist behaviours. This illustrates that the hegemonic western worldview which
- has emphasized economic growth and individualism has perpetuated environmentally
- unsustainable behaviours also underlies the way participants conceive 'attaining' a
- sustainable lifestyle. There were some who recognised the paradox of consumption
- behaviours being seen as sustainability actions. One participant acknowledges the tension that
- using any resource, no matter it's environmental credentials is less sustainable than not using
- 19 that resource at all:

- 20 "If you want to be really sustainable with your house, live in the one you're living in,
- 21 put in a ceiling fan and get a jumper.... don't kid yourself that the reason why you're
- doing it [building a sustainable house] is to be as sustainable as you can, because just
- 23 the offset of having to build that house is going to cost you 30 years worth of anything
- you save in energy." Participant 16.
- Here the participant alludes that people are able to socially justify their consumption
- behaviours as moral and noble acts by portraying them as sustainable endeavours. This is
- 27 consistent with the idea that sustainable consumption behaviours are used to signal a person's
- wealth, as well as their altruism (Griskevicius, Tybur, & Van den Bergh, 2010). An architect
- 29 specialising in sustainable design explained that clients start off wanting a sustainable
- 30 solution but will give up when there is cost involved: "clients will be happy if you give them
- 31 a cost effective solution that makes them look good" Participant 3. This suggests that a desire

1 to be seen to acting green by others may be an important driver of pro-environmental 2 behaviour. 3 **Discussion** 4 The findings of the interviews reveal some paradoxical tensions in the identities of the 5 participants. On examination of the themes there are two key narratives. 6 The first narrative is that what sustainability means theoretically and practically is poorly 7 understood. Participants conceptualised sustainability as an arbitrary concept which is 8 difficult to understand, has competing interests and changing contextual conditions making 9 choosing the most sustainable option almost impossible. 10 The second narrative is a product of the first. In an effort to engage in sustainability, 11 participants engaged in individual green consumption behaviours. Consumption behaviours, 12 unlike conservation or activism behaviours, are concrete tangible. Replacing a 'brown' 13 product with a 'green' one does not require the actor to diverge from the status quo. 14 Participants described feeling good about these actions, and sustainability was seen as 15 providing purpose, and was a way to gain social approval from others. We now consider the 16 meaning of both of these narratives in turn, and their consequences and implications. 17 Narrative One: What are we working towards and why? 18 Dominant discourses of perpetual economic growth and consumption continue to perpetuate 19 unsustainable lifestyles even in those who are conscious of sustainability issues (Roy et al., 20 2015). In our study, participants felt unsure what they were working towards, and even for 21 those with a keen interest in sustainability, the concept was confusing. Living out a pro-22 environmental identity in the context of a culture that prioritises the values of growth and 23 consumption gives rise to internal conflict. 24 Perhaps understandably then, while sustainability has become a popular discourse, it remains 25 abstract and vague and has been used inconsistently, serving divergent and even mutually 26 exclusive visions of what sustainable means (Hedlund-de Witt, 2014). As with our findings, 27 previous research investigating conceptualisations of sustainability has also found great 28 variation in how people conceptualise sustainability (Byrch, Kearins, Milne, & Morgan, 29 2007; Morelli, 2013). However they did not allude to confusion within individuals.

Participants in this study despite seeing sustainability as an important part of their identity

- 1 found it difficult to define what sustainability meant and were confused as to what exactly it
- 2 was that they were working towards.
- 3 Sustainable lifestyles can be considered a wicked problem, as it is often implied that it
- 4 requires a trade-off between immediate personal benefits and delayed collective benefits.
- 5 Unlike Roy et al. (2015), who found that participants tended to attribute their unsustainable
- 6 behaviour to "lack of thought" (p.190), participants in this study demonstrated that they
- 7 conceptualised their own unsustainable behaviour as meeting some other sustainability goal.
- 8 For example, keeping an inefficient car means not consuming a new car. This fits with with
- 9 fundamental attribution error whereby people tend to overestimate the influence of
- 10 personality or individual traits as driving others behaviour, and by contrast cite the situation
- as being the driver of their own actions.

12 Narrative Two: Sustainability as a tool for self-enlightenment and enhancement

- 13 Participants labelled themselves as being abnormal and marginal, but also considered
- themselves enlightened and superior to those who do not prioritize a pro-environmental
- 15 lifestyle. The moral tenets of holding an environmental identity served as ego and group-
- justification. Consistent with previous qualitative findings (Wright et al., 2012), participants
- expressed a sense of satisfaction from engaging in pro-environmental behaviours. The
- metaphor of the "sustainability journey", described also in (Yacoumis, 2017), served as a
- 19 loophole allowing participants to avoid the tension that participants often did not know where
- 20 they were going. There remained a dominant perception that sustainability can be 'bought'
- 21 through consumption behaviours and that those engaging in these behaviours become
- 22 enlightened moral beings who attract praise from those who surround them. As sustainability
- 23 was framed by participants as being best pursued individually by making changes in the
- 24 home, and by purchasing the right products, participants were able to gain the social status
- associated with consuming, and give life meaning (Moisander & Pesonen, 2002) and justify
- 26 the status quo i.e. system justification (Jost & Hunyady, 2003).
- 27 The major root causes of environmental degradation by humans are economic growth and
- population growth (Brulle, 2010). Despite this, engaging in individual household level
- 29 behaviours was seen to be the path forward for sustainability with the discourse of 'do my
- 30 bit' framing environmental actions as behaviours which should be done individually.
- 31 Participants felt responsible and empowered in dealing with environmental risks to both the
- 32 planet and themselves. It appeared that discourses of sustainability emphasised the role of the

- 1 individual in taking responsibility for the mitigation of environmental degradation. Collective
- 2 behaviours such as political action were dismissed. Effective responses to today's
- 3 environmental problems require coordinated actions among diverse actors (Adger, Arnell, &
- 4 Tompkins, 2005). Yet desire to engage in collective action to promote environmental
- 5 sustainability among participants was virtually absent.
- 6 Participation in private, household level sustainable consumption behaviours are short-term
- 7 pragmatic strategies that reduce the perceived need to engage in collective, potentially
- 8 socially-stigmatising actions, thus encouraging a more passive civil society. These private
- 9 actions perpetuate the imperatives of the economic and political systems and fail to address
- meaningfully the ecological imperatives defined by global warming. As Gamson and Ryan
- 11 (2005) note, a focus on finesse in individual framing undermines the goal of increasing
- 12 citizens' sense that they can collectively change things. The participants in our study were not
- interested in engaging with collective social movement organizations. Yet it is in the public
- sphere where collectives can identify problems, develop collective solutions, and create
- sufficient political pressure to have them addressed by constitutional governments (Brulle,
- 16 2010). A participatory structure is essential for large-scale social change. Similar to the
- 17 findings of qualitative work by Moisander and Pesonen (2002), who gathered narratives of
- 18 green consumerism from students in Finland, "doing my bit" was conceptualised as "making
- 19 a difference". It is argued that this accentuates the primary importance of the individual and
- 20 the virtues of self-reliance and independence of the social and institutional environment for
- 21 sustainable development. In this study, participants distanced themselves from the traditional
- 22 'radical environmental activist'. With the "do my bit" discourse, participants were able to see
- themselves as moral household agents, even though their environmental efforts were framed
- by consumerist pursuits (Moisander & Pesonen, 2002).

Strengths, Limitations and Future Research

- 26 This is the first article we know of to explore the conceptualisation of environmental
- sustainability by those who see sustainability as an important part of their identity. This type
- of work is important, as it points to some of possible explanations for the attitude behaviours
- 29 gap, which would not be feasible using quantitative methods. In addition, this paper
- 30 showcases CLA, a valuable and underutilised methodology in exploring environmental
- 31 communication which deserves increased attention. This study is strengthened by the broad
- 32 range of lived experiences which participants represent. Although, the participants as a group
- 33 to be highly educated, this is in line with research which shows that people with pro-

1 environmental leanings tend to be highly educated (Tranter, 2014). It should also be noted 2 that while members of a number of environmental advocacy groups were invited to 3 participate in this research, the dominant anti-activist discourse suggests participants who 4 identified as environmental activists were underrepresented. Given the importance of 5 activism behaviours for sustainability (Stern, 2000), and the negative associations 6 surrounding activism in found in this study, future research should explicitly aim to explore 7 the social construction environmental activists, as well as the experiences of those who label 8 themselves an environmental activist. Another line of research which requires further 9 exploration is the social rewards assocated with sustainable lifestyles. Given that participants 10 in this study appeared to be motivated to engage in behaviours in which they would receive 11 social praise, it would be valuable to investigate the social status associated with various pro-12 environmental behaviours. In particular the role of environmental identity (including social 13 stigma arising from collective environmental actions) in shaping perceptions of social status. 14 Finally, caution should also be taken when transferring the findings of this study to locations

other than Perth. Comparative studies within other geographical and cultural contexts are

17 Conclusion

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greatly needed.

The findings from this research suggest two narratives both of which rely on conceptualisations of environmental sustainability based on existing cultural resources. The overarching idea here is that adopting a 'green' identity does not mean that environmental sustainability is understood or that a sustainable lifestyle is engaged in. Even those for whom sustainability is a strong part of their identity, conceptualisations are underpinned by hegemonic worldviews whereby environmental degradation is attributed to a defect in the environment, and solutions are individualistic and consumption oriented. The findings highlight that sustainability can be used as a platform for feelings of moral superiority, guilt and dissonance reduction, and meaningful life purpose. Any attempt to engage the population on a wider scale needs to understand the many facets, tensions, and difficulties (including systemic barriers) associated with 'real world' attempts to live a sustainable lifestyle. It is also important to acknowledge that as researchers we are arguably unwitting accomplices in the creation of the issues presented in this research. More specifically, the research questions we ask and the hypotheses we pose are also somewhat paradoxically a product of the broader Western dominant cultural context we are critiquing. It is perhaps not surprising then that the way we have historically asked questions pertaining to sustainability and our relationship

- 1 with the natural environment, has been dominated by positivism; in doing so we appear to be
- 2 constructing the collective issue of sustainability individualistically, and as an issue that can
- 3 be resolved at the individual level. To wear 'green tinted glasses' then, is to avoid thinking
- 4 critically about what sustainability actually means and perhaps gives licence for us to
- 5 decontextualize and individualise not only our (green) consumptive practices, but also our
- 6 responsibility as global citizens to question the status quo. This argument can also be made
- 7 for the way we conduct our research.

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