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Narrative: An ontology, epistemology and methodology for pro-environmental psychology research

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ABSTRACT

The actions of individuals are recognised as crucial in reducing energy demand and shifting people towards sustainable energy sources. Much of the work that has occurred within environmental psychology has been built upon a social cognitive paradigm, which attempts to explain the drives, forces and processes that explain and determine individual behaviour. Despite the volume of this work, the promotion of pro-environmental behaviour has not achieved broad transformations in energy conservation behaviours. Recently, researchers working in the field of pro-environmental research have started to draw on narrative in their work as a framework to (re) integrate individuals into their historical, social and cultural settings. However, this work, when applied to energy conservation, remains in its infancy. This paper adds to the growing literature that is increasingly asserting the key role for narrative in the field of pro-environmental psychology research. The paper articulates the foundations of the narrative turn from its development within literary theory to its adoption by the social sciences, with particular reference to psychological theory. This paper provides a review of the ways in which taking a narrative perspective can offer rich insights into complex phenomena, as well as potential ways to reconceptualise ways forward for energy research.

1. Introduction

The need to curtail carbon-intensive behaviours in order to reduce greenhouse gas emissions and address the complex challenges posed by climate change is now well established at international, national and, increasingly, local levels. Although infrastructure can be updated, public policies drafted and new technologies deployed, these often fail to realise optimal energy reductions owing to the complex array of human factors and social practices involved [e.g. 1]. As such, addressing the unsustainable use of energy by individuals (better known as achieving behaviour change) has become a key area of focus for both policy-makers and researchers. The field of pro-environmental psychology, a discrete area of the broader domain of environmental psychology, has a long history of exploring and articulating the drivers, processes and motivations involved in shifting people's behaviour, in varying contexts, to being more environmentally sustainable [2]. A significant amount of pioneering work in this area can be traced back to the 1970s, largely as a reaction to the fears over energy security at the time [2]. However, in the last couple of decades research in this area has grown, as have the areas of applied focus. Work within pro-environmental psychology has explored a number of discrete areas including attitudinal change [e.g. 3,4], habitual change [e.g. 5], social norms [6][e.g. 6], feedback and goal setting [e.g. 7,8] and so on.

Despite the longevity of this work, it can be argued that the successes of these activities have not been realised and applied on a wide scale, with notable exceptions such as the use of social norming in hotel towel use [9] and the work on social comparisons that underpins the work of Opower in the United States.

Part of the reason for the limited societal impact of many pro-environmental psychology studies may be the inherent individualism within many of these works. Such works have tended to focus on mental processes, attitudes and decision-making without sufficient reference to an individual's place in wider society, as Brown [10] has asserted:

> "We all strive to fit in with our peers and follow the many complex and hidden rules of behaving in the society in which we live. This is why harnessing the power of others (and more specifically our desire to be like others) is so important for energy efficiency"

Many of the models and theories within pro-environmental psychology developed predominantly within the United States at a time when there was a huge increase in the number of studies embedded within social psychology, which was, at the time, dominated by *social cognition*. Such an approach channels Cartesian thinking, which dominates Western models of psychology and seeks to measure, record and explain [see 11], treating the person as a processor of information. At the centre of theories within the social cognitive paradigm is the belief

that there is a core essential self that has an objective and universal reality, with cultural, historical and social factors enabling the 'display' of this self but not taken to be inextricably interwoven with it [12]. Largely owing to the dominance of these approaches, Gough and McFadden [13] argue that individuals in Western societies have become used to thinking about themselves as in possession of some unique 'core' personality, ultimately quantifiable and known as either one thing or another. Such identification appears to help to predict what individuals would do in certain situations and what tasks or situations are unsuitable or incompatible for such individuals. The self, conceived from this position, provides conditions that remain constant throughout situations, making no allowances for important social or cultural influences [13].

The notion and assertion of the self as a core and essential entity have been at the centre of a debate across a number of disciplines over the years. Goffman [14] argues that the self, or rather the presentation of the self, is a managed performance that is tailored to certain situations in order to fulfil certain societal and cultural norms and obligations. Rather than a self that is stable across situations and time, writers such as Goffman [14] posit a self that is "…flexible and dynamic, adopting and discarding 'multiple roles' as the situation demands – a fragmented rather than a unitary self" [13]. Similarly, Burkitt asserts that "…human individuals, embodied persons become identified within the multiple relations in which they are located and which, as agents, they change through their mutual interactions" [15]. Writers such as Goldstein and Rayner reject the existence of a 'core', stable and 'essential' self and assert that the self "has no permanent essence but continuously reinvents itself" [16].

Thus, researchers and writers within psychology have had to look to other disciplines within the social sciences such as sociology, anthropology and philosophy in order to attempt to contextualise the human self. One of the areas psychology has drawn upon and applied across a whole range of research areas is narrative. Although in recent years such ideas have been increasingly explored in the context of climate change adaptability and policy development [17–19], the application of narrative within pro-environmental psychology remains in its infancy. This essay reviews the development of narrative approaches within psychology and applies this to the growing literature base that recognises the key role narrative can play in supporting pro-environmental research and, more specifically, in understanding the behaviour of people. The essay is structured in three parts. Sections 1 and 2 articulate the foundations of what is known as the 'narrative turn' from its development to its adoption within psychology. Following this, Sections 3 and 4 outline the functions a narrative approach has. Section 5 looks at how narrative is accommodated within the research process, before the essay is concluded in Section 6. The literature on narrative is extensive and it is not the intention of this essay to review all permutations of narrative theory. Instead, the essay is focused on delineating the limitations of the empiricist approach to social cognition, which underpins much of pro-environmental psychological theory, and advocating the benefits approaches grounded in narrative can have for understanding complex reasoning and behaviours.

2. The adoption of narrative within psychology

Narrative approaches have been applied diversely through a vast number of distinct fields. These include history [20–22], philosophy [23], sociology [24,25], anthropology [26], education [27,28], social work [29,30] and psychology [31–33]. However, the foundations of the broad area that is now referred to as the narrative approach in psychology have their roots mainly in writings within literary theory [34]. A considerable body of work now exists in relation to policy-making and policy analysis [35,36][see,for example,35,36], with an ever-increasing proportion of this work looking at climate change or environmental research [17,19]. The turn to narrative ways of understanding human action and experience has its theoretical place within what has generally been termed 'the interpretative turn' in the social sciences [37,38].

When adopted by psychology, the interpretative turn was a way in which certain writers such as Bruner [32] intended to 'return' to a theoretical position of understanding individual psychology that had been seen to be overwhelmingly dominated by mechanistic metaphors [39] and the normative 'cognitive revolution' [32]. According to Bruner, the cognitive revolution, which developed from the 1950s alongside the evolution of the information communication technologies, was an attempt to understand human actions and psychological processes as being analogous to those of a computer, using as its base a computational information-processing metaphor to explore how individuals make sense of their world [32]. Similarly, Sarbin argues that the dominant worldview in modern Western civilisation relies on the 'root metaphor' of mechanism [39]. He argues that by drawing on such a metaphor we come to understand and explain our lives in terms of 'drives' and 'forces' that determine the causes of behaviour that underpin human experience. Such mechanistic and computational approaches are empiricist approaches, and, as Milnes outlines, these:

> "…rely heavily upon the realist assumption that individuals, cultures and events exist independently of our perception and interpretation of them and can therefore be studied 'objectively' using methods of inquiry originally developed to aid in the study of objects and forces in the natural and physical world" [40]

Although such empirical positivist approaches are arguably, as Sarbin claims, the dominant viewpoints in psychology [39], numerous arguments highlight their possible limitations and, in turn, outline the contribution that alternative interpretative approaches, such as narrative, can make. Indeed, Bruner outlines how William Wundt, who heralded the idea of the psychological laboratory, commented in his later life how:

> "…constricting the new 'laboratory' style could be, and in formulating a new 'cultural psychology' urged that we embrace a more historical, interpretive approach to understanding man's cultural products" [32]

Bruner argues that human beings understand their world in two distinct ways, defined as the 'paradigmatic mode' of thought and the 'narrative mode' of thought [32]. The paradigmatic mode of thought is exemplified by scientists and logicians, who seek to determine cause-and-effect relationships and develop tightly reasoned analyses, logical proofs and empirical observations. In this model, Bruner proposes that human beings attempt to understand the world by establishing and maintaining unambiguous objective truths [32]. In this way, hypotheses and theories can be tested and demonstrated to be proved or disproved. The 'paradigmatic mode' of thought, however, "…is not able to make much sense of human desire, goals, and social conduct" [41]. In contrast to scientific logical reasoning, McAdams proposes that human events are often ambiguous and cannot be reduced to such tightly reasoned analysis devoid of rich contextual landscapes, as human stories describe their experiences in words that often "…mean more than they can say" [41]. Bruner sees the narrative mode of thought as enabling the organisation of everyday interpretations of experiences, events, places, people etc. in story form. The challenge for contemporary psychology, according to Bruner, is to understand this 'everyday' form of thinking [32].

In understanding human experience in the social sciences, utilising narratives did not entail an immediate turn away from empiricism, such as those approaches characterised by classic laboratory research. Instead, there was a gradual movement in the kinds of approaches used within the social sciences in order to qualitatively explore individual and social experience [38]. The utilisation of narrative within qualitative social science research can be traced back to the works of the Chicago School [42,43]. However, stories and narratives in these ethnographic approaches were still firmly entrenched within a realist