

Research Article

On time, place and happiness

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Abstract: This paper crosses the borders of human geography to bring back two related bodies of work from experimental psychology that investigate, in an unusual and refreshingly precise way, long-standing human geographical concerns with temporality, place and subject formations, meaning-making and well-being. It is argued that the traffic of ideas and empirical findings between human geography and experimental psychology can be mutually profitable if, and only to the extent that, it encompasses a sustained epistemological, methodological and political critique of the disciplinary practices that have yielded those ideas and findings.

Key words: affective forecasting, happiness, place, subject formation, temporality.

The concept of place in the human geographical literature has almost always been linked with a sense of temporality and meaning (Thrift 1999; Adams *et al.* 2001; May & Thrift 2001; Sack 2004; Tuan 2004; Cresswell 2009; Kearney & Bradley 2009; Smith *et al.* 2009). We grow up in place, we experience our lives in place, we foresee our future in place. The aim of this paper is to signal and build on several recent developments in experimental psychology¹ that promise to complement and refine human geographers' understanding of the relation between time, place and well-being. Serious attempts at understanding this relation emerged in geography in the 1970s, most notably in the work on territorial social indicators pioneered by David Smith (1973, 1977) and Paul Knox (1975) under the label 'welfare geography'. That earlier work has spurred a sustained geographical interest in issues pertaining to place, temporality, quality of life and social well-being. If we step back from the specifics of this body of scholarship (cf. Kearns & Andrews 2010 for a more detailed review), we can identify at least four distinct threads of enquiry within it: the first one is primarily con-

cerned with methodological innovation and relies on quantitative approaches such as multilevel modelling (see, for example, the work of Kelvyn Jones, Ron Johnston or Danny Dorling); the second thread is indebted to Marxist ideas and focuses on the economic determinants of inequalities in well-being and on a trenchant critique of the current political and economic order (see, for instance, work by David Harvey, Jonathan Mayer or David Whiteis); the third thread builds on post-structuralist and feminist theory and attempts to deconstruct those cultural practices and institutions that detract from the well-being of certain disadvantaged groups by legitimising their social exclusion (see, for example, the work of Isabelle Dyck, Geraldine Pratt or Joyce Davidson); finally, the fourth thread encompasses work within 'non-representational' geographies and is focused on rethinking the very ontological categories that enable (or sometimes disable) us to speak meaningfully about place, temporality and well-being (see, for instance, the work of Nigel Thrift, Sarah Whatmore or Derek McCormack). As we proceed further, it will become apparent that

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the psychological research I am reviewing is most likely to find a receptive audience among those geographers labouring within the conceptual horizons of these two last threads.

To be sure, what psychologists say is a story and not the naked truth. When assessing their contributions, it is therefore important to be aware of the broader political, epistemological and methodological context of this discipline in general (Slife & Richardson 2008; Kagan 2009) and of its seeming reliance on a positivistic view of science, on a non-relational ontology and on methodological individualism, in particular.² Nonetheless, we should also remember the epistemic strengths of this tradition of enquiry, especially its strong commitment to experimental data gathering and the somewhat more recent attention paid to the articulation of its research findings with those of neuroscience and to the examination of the cross-cultural validity of its claims (Yanchar *et al.* 2008).

With these caveats in mind, I will proceed to highlight in the first part of the paper Boniwell and Zimbardo's empirical research on temporality as key explanatory variable of inter-individual differences in happiness, followed in the second part by an assessment of the implications of the innovative experimental work of Daniel Gilbert and Timothy Wilson on the poor reliability of people's mechanisms of affective backcasting and forecasting.

Temporality and affective becoming in place

Boniwell and Zimbardo's work on the human experience of temporality and its relation to happiness (Boniwell & Zimbardo 2004; Boniwell *et al.* 2010) provides a new sense of the way in which we are the victims of our own constructions of place. If one divides time into past, present and future, and one analyses the way happy and unhappy people live and embody this division, one observes that the happy lot stands out in three respects. The first of them is the *balance* between the attention paid to the past, the attention paid to the present and the attention paid to the future. Happy people cherish their sense of belonging, celebrate their roots, but they avoid being stuck in the past (Boniwell *et al.* 2010). They envision their futures, plan ahead, work towards achieving

goals, but they do not live for the future. One of the hallmarks of happiness is the ability to live in the present, to open up one's senses and attention to the happening of the here and the now (Collard *et al.* 2008) and to maintain positive emotion over longer stretches of time (McMakin *et al.* 2009). However, in a discussion of the merging of space, time and self within the households of families living in Chicago, Csikszentmihalyi (1993, pp. 224–5) subtly captured the way a place is always already expressing the past in the here and now through people's present interaction with objects:

... a chair in the living room was very special for a man because its practical and economical design expressed perfectly his own values. His wife cherished an old recliner because it was in that chair that she nursed her children when they were babies. Their son favoured a third chair because it was like a trampoline, and he could bounce on it and feel free. Each of these chairs was a concrete reminder of an important aspect of the self for a different member of the family ... Values, beliefs, and even the sense of who one is are constantly buffeted, challenged, and corroded through trafficking with the outside world. By returning home each day people not only restore themselves physically, but they also renew and reaffirm their identity by interacting with objects that contain desired images of the self.

This intersection of geography and history, prompting Heidegger to think that eternity is in the present moment (Heidegger 1962), brings forward a clearly performative and entangled understanding of place along the lines recently traced by non-representational theory (Thrift 2008; but see Barnett 2008 and Pile 2010) in geography. Having said this, the balance between past, present and future is but one of the factors that distinguishes happy people from the unhappy lot. To paint the complete picture, we also need to consider the two remaining factors.

One of them is the *emotional valence* with which we experience the flow of time (Boniwell *et al.* 2010). Happiness comes from thinking positively about the past (sense of satisfaction and gratitude for what has happened so far),

thinking positively in the present (sense of joy in the here and the now) and thinking positively about the future (expecting things to get better). Unhappiness comes from (or is reflected through) a negative emotional attitude about at least one of the three divisions of time, with pessimism about the future ranking as the most damaging of them (Seligman 2008).

Finally, the third factor that separates the happy from the unhappy is the *density of time*. This beautiful metaphor almost gives a tactile feeling of the texture of our places and resonates with geographers' recent emphasis for a relational and affective thinking of place formations (Thrift 1999; Whatmore 2002; Pile 2010). A true understanding of place must be more than four-dimensional, that is, time plus space do not equal place. Instead, we make places, and it is our subjective experiencing of the things that we are doing that constitutes the key dimension of our sense of place (Sack 2004; Cresswell 2009). This subjective experiencing may seem to be too rich to be measured in any objective way, but there are some approaches that provide a glimpse of its role in place making (Layard 2010; Oswald & Wu 2010). Boniwell and Zimbardo (2004) approached it by expressing the density of one's time as a function of the number of activities and projects one undertakes in a given horizon of time. They gathered empirical evidence that shows that happy people are too busy to be unhappy (note that the statement 'all happy people are busy' does not entail its logical converse 'all busy people are happy'). At any given time, they are deeply immersed in activities and see the future as a long string of diverse projects awaiting them (Boniwell *et al.* 2010). They feel energised and alive in the present and at the same time, are optimistic and feel that they have plenty of things to live for. As far as their past is concerned, they sense that they had a rich life, full of 'happenings', in stark contrast with the paucity of experiencing recollected by depressed individuals (Blanchette & Richards 2010; Johannessen & Berntsen 2010).

Zimbardo and Boniwell's temporal understanding of happiness as the product of (i) balance between past, present and future, (ii) positive emotional valence about past, present and future and (iii) rich density of time adds to geographers' recent accounts of the phenom-

enology of place (e.g. Seamon 2000; Adams *et al.* 2001; Davidson 2003) a more precise and empirically grounded perspective of how time and its subjective experience co-produce both the sense of happiness and the sense of place. However, by drawing on recent discoveries in cognitive and affective neuroscience and experimental psychology, we can go even further to bring out a number of recalcitrant assumptions that cloud our theories of how lives are spent in places.

Stories we tell ourselves

I will primarily focus here on Daniel Gilbert and Timothy Wilson's groundbreaking experimental work on the construction of autobiographical memories and on affective forecasting (Gilbert 2006; see also Wilson & Gilbert 2008; Gilbert & Wilson 2009) given its direct articulation with Boniwell and Zimbardo's just discussed stream of research. Gilbert and Wilson take aim at the assumptions we all make regarding the accuracy and reliability of our perceptions and analyse them by disentangling our recollections of the past, our awareness of present reality and our imaginations of the future. Consider the past. Current work in experimental psychology (Holland & Kensinger 2010; Johannessen & Berntsen 2010) confirms and extends an idea with a long and distinguished pedigree (Bartlett 1932), namely that our memories of the past are fabricated in the present with the help of just a few items remembered about the actual past. We forget almost everything that happened, save for those things that stand out: the beginnings and the ends of various experiences and the very high and very low emotional points of those experiences. On the skeleton of those few items remembered, we put the flesh of our present confabulations (Holland & Kensinger 2010). The resulting 'memory' is therefore not so much something that has been conserved and then retrieved from some part of the brain as the present fabrication of a story with the help of our imagination and secondarily, of the very few items actually remembered. A logical concomitant of this understanding of memory is that our happiness about the past is not the sedimentation of the sum of happy moments lived in the past, but the indirect expression of

our happiness at the very moment when we think about (and fabricate) our past. People happy in the present tend to construct³ happy memories, and people sad in the present tend to construct sad memories (Holland & Kensinger 2010). In turn, this very act of construction generates a loop of reinforcing feedback: the dwelling on happy memories enhances the positive mood that originated them and the dwelling on sad memories aggravates the negative mood that originated them (Seligman 2008).

If people might see the truth in the argument about the fabrication of the past without much difficulty, the same does not hold true about the more unsettling finding that we are fabricating our present perception as well (Blanchette & Richards 2010). Put simply, at any given moment, we are immersed in an enormous stream of information and our conscious processing of information is able to apprehend a very tiny fragment of that stream (Thagard 2010). We do not perceive total reality as such; rather, we perceive mainly those bits of reality we unconsciously or consciously choose to pay attention to (Clore & Huntsinger 2007), and a Matthew effect ensues: people born with a high homeostatic set point of happiness have an attentional bias to things that bring optimism, fun and good dispositions, whereas people born with a low homeostatic set point of happiness preferentially attend to those bits of reality that signal danger, trespassing, rejection, failure and sadness (Seligman 2008; Kringelbach & Berridge 2009; Bang Nes 2010).

As far as our anticipation of the future is concerned, Gilbert (2006; see also Wilson & Gilbert 2008; Gilbert & Wilson 2009) summarised experimental evidence that explains why we are unable to correctly estimate our feelings about future events, that is, why we are poor affective forecasters. One source of this inability is focalism, that is, when thinking about the future, we isolate a particular set of focal events and forget to see the bigger picture within which those events will take place. Thus, a young person might look with dread at the idea of getting older for she will focus only on the decline in her beauty and not also on the increased income and status that usually accompany the process of aging. A second source that generates our poor anticipation of future feelings is presentism, that is, the

inappropriate filling in of the scenes of the future with things extrapolated from the present (Gilbert & Wilson 2009). To give an example, in imagining ourselves two years from now, we might take it for granted that the same people who are now in our lives will be there, when in actuality some of them will likely be gone and some new people will enter the stage on which our lives unfold. Of interest for us as geographers, Gilbert showed that the way out of this anticipatory impotence is not perseverance with improving our skill at divining the future but instead, an awareness of our surroundings. More precisely, instead of thinking ahead in time, we need to watch around in space and discover our future selves in those fellow humans who live in the very present what we would think we would like (or dislike) in our future:

Imagination is the poor man's wormhole. We can't do what we'd really like to do – namely, travel through time, pay a visit to our future selves, and see how happy those selves are – and so we imagine the future instead of actually going there. But if we cannot travel in the dimension of time, we can travel in the *dimensions of space*, and the chances are pretty good that somewhere in those other three dimensions there is another human being who is actually experiencing the event that we are merely thinking about. (Gilbert 2006, p. 223; emphasis added)

To sum up how our sense of place and level of happiness unfold with respect to the past, present and future, we can say that we constantly operate with a hefty dose of 'white lies' (things from objective reality that we do not remember, notice or anticipate) compensated for with an equally hefty dose of 'black lies' (things made up in our minds and taken as if they were actual parts of what happened in the past, of what happens in the here and now or of what will happen in the future). To be sure, if the number of lies⁴ one tells oneself reaches too high a level, the individual becomes psychotic, that is, almost completely cut-off from reality (Seligman 2008). This tendency towards self-deception must therefore be counterbalanced with a reasonably strong commitment for grasping the general contours

of how things actually are.⁵ Each of these two tendencies would by itself be maladaptive because too much awareness of reality pushes us into depression, dread or resignation,⁶ whereas too much delusion endangers our ability to take action to improve our chance of survival (Clore & Huntsinger 2007; Blanchette & Richards 2010). The uneasy relation between these two tendencies governs our geographical agency: how we take in place, how we produce place, how we change in place and how we replace place. More specifically, the 'taking in' of place refers to how a given person copes with their surroundings. Our knowledge is indexical, or situated, which means that even if it were not for our propensity for self-deception, we would still have an incomplete, less than omniscient grasp of the objective realities unfolding around us. Once self-deception is taken into consideration, geographers can deepen and refine their understanding of how humans cognise their places in a way that goes over and above the often invoked account provided by Donna Haraway (1988).

To illustrate, psychologists identify three strategies by which humans 'take in place', that is, cope with change in the places where they live (Skinner & Zimmer-Gembeck 2007): active coping (reacting to an event by taking some specific action within that place and thereby, co-producing that place or even 'replacing' that place with something better); passive or emotional coping (reacting to an event by developing the right emotional frame of mind; for example, cultivating a state of equanimity and serenity towards those changes that we cannot control or undo); and avoidance coping (refusing to accept the reality of an unpleasant change in one's place by denying that it has happened at all or by keeping it 'out of mind', that is, refusing to think about it and to behave in a way that acknowledges the reality of its happening). A given individual can be described by the relative dominance of the three coping strategies in their overall manner of 'taking in place'. An interesting point of contact between psychologists and critical geographers is that both emphasise the desirability of active coping even though the motivation for this emphasis is different: whereas psychologists see the strengthening of one's

individual reliance on active coping as a sign of improved mental health, critical geographers encourage active coping as a political strategy, as a weapon of the weak. Indeed, one of the recent methodological trends in critical geographical scholarship is the preference for participatory and emancipatory research, which aims to go beyond the mere collection of data from informants so as to empower them by raising their awareness of the myriad local ways in which they can take steps (i.e. active coping) to resist the dominant system (capitalism, patriarchy, etc.) and reshape it to their advantage (i.e. 'to produce place' and 'to replace place').

However, it is not only the taking in of places, their production and their replacement that depend on how individuals negotiate the tension between confronting objective reality and preserving their self-esteem. The fourth process that depends on this same tension is how we change in place. The time-geography of an individual is and must be an uninterrupted line that connects his or her past, present and future places and his or her past, present and future selves (Hagerstrand 1982). We can change either in a given place or, more spectacularly, as we dislocate our selves in the process of moving from one place to another and going through the pains of subsequent adjustment. Both types of change are geographical even though the former has most often been studied under the heading 'the geography of everyday life' whereas the second within the geographical literature of international migration, exile, diaspora and transculturation in postcolonial contexts. Unfortunately, these bodies of geographical scholarship have failed to take into their accounts of subject (*trans*)formation the role of individual self-deception. Our contact with reality is mediated by a filter of beliefs and emotions the change of which lags behind the objective changes in our surroundings. One might move from place A to place B, but to understand one's *transformation*, we need to remember that one appraises the new realities of B through the filter of beliefs and emotions constructed in A. That is to say that we carry over in our minds place A onto place B and that this geographical mismatch may well be a breeding ground for self-deceptions (e.g. we might fail to adapt to the new realities and

withdraw from normal social intercourse because of objective language barriers or xenophobia but be unaware of our failure because we re-describe it to ourselves as a normal consequence of our justified contempt for the perceived cultural inferiority of place B). However, to understand my emphasis on the need for geographers to improve their accounts of subject *transformation* by a proper consideration of the role of self-deception, I need to say more about the latter.

Freud (1940) referred to the problem of self-deception *versus* objective perception as the conflict between the pleasure principle (our tendency to see things in such a way so as to make us happy; this principle malfunctions in those with 'negative therapeutic reaction', that is, those who are motivated to see the dark side of things) and the reality principle (our tendency to keep an eye on our surroundings in order to maximise our likelihood of survival) and dwelled at length on the centrality of this conflict to the explanation of the human psyche, in general, and the impossibility of lasting human happiness, in particular. Three quarters of a century later, experimental psychologists are rediscovering the Freudian wisdom, albeit with a different vocabulary. Thus, Gilbert prefers the metaphor of a psychological immune system (Gilbert 2006, p. 162):

A healthy psychological immune system strikes a balance that allows us to feel good enough to cope with our situation but bad enough to do something about it. We need to be defended – not defenseless or defensive – and thus our minds naturally look for the best view of things while simultaneously insisting that those views stick reasonably closely to the facts.

The implications of these ideas for our understanding of the spaces of happiness are far too significant to be left unanalysed for they *seem* to cast doubt on the claim by Diener *et al.* (2006) that objective life events such as unemployment or divorce lastingly influence the level of positive affect. Before exploring some of these implications, a terminological clarification is in order. Geographers, similar to all humans, are boundedly rational beings (Simon 2000), which means

that each and every of their enquiries must be incomplete, privileging some items over most others. Whenever they enquire into the problematic of happiness and well-being, they conjure up 'spaces of happiness' (which might take the explicit form of narratives, maps, simulations and diagrams, or the implicit form of privately held mental models about the causes, concomitants and consequences of happiness). In other words, by 'spaces of happiness', I mean the research outcomes produced whenever a scholar studies the problematic of happiness with the lenses of a geographer (i.e. thinking about happiness through geographical categories such as space, place, scale, distance, environment, time-space, spatiality, etc.). This clarification aside, the most direct implication of these findings is that what actually happens in our lives does not straightforwardly influence our level of happiness; rather, it is the *story* we tell ourselves about those happenings that most powerfully determines our happiness (Thagard 2010). In turn, and maybe more difficult to accept, the kinds of stories we tell ourselves are not determined so much by objective happenings as they are by the way our brain has been wired in the wake of the genetic lottery (Davidson 2004; Kringelbach & Berridge 2009; Bang Nes 2010): those born with an excessively active Behavior Activation System may be able to find some fun and joy even in the most dire circumstances, whereas those born with an overactive Behavior Inhibition System will tend to have a bias to notice the dark side of things even when bathed in a sea of joy and fun (Davidson 2004). What is more, the phenomenology of place formations may be just as merciless as the genetic lottery (Fowler & Christakis 2008; Raafat *et al.* 2009): those who are happy will tend to elicit happy reactions from others and to surround themselves through assortative mating (Figueredo *et al.* 2006) with other happy people, whereas the unhappy people will tend to keep their (spatial and affective) distance from others and thereby evoke the negative reactions and (reciprocal) avoidance of the happy lot (Williams & Bargh 2008). In other words, genetic and epigenetic factors have their own epiphenomenal geographies (Plomin 2004; Lamm & Jablonka 2008; Zhang & Meaney

2010) and must therefore be understood relationally through their time-sensitive interplay with the environment, including in the latter the social environment.

Conclusion

I hope to have made the case that human geographers could profit from a more thorough engagement with recent psychological research on temporality, place and well-being. Psychology can offer human geography what our discipline sorely lacks,⁷ namely experimental evidence with human subjects as well as a detailed, mechanistic understanding of the articulation of emotional and affective processes that geographers quite often simply theorise about (Pile 2010). Indeed, as Steve Pile showed in his review of emotional and non-representational geographies, much of this work is too metaphorical and polysemantic to hope to be used in any meaningful way by mainstream social science. When reading this more recent geographical literature, we are left pondering just what is being hinted at by beautiful but baffling expressions such as ‘through the lived, time and spaces are folded into rhythms’ (May & Thrift 2001, p. 31), ‘the ecology of place is a rich and varied spectral gathering, an articulation of presence as the tangled exchange of noisy silences and seething absences’ (Thrift 1999, pp. 316–7), ‘space and time are practised as embodied and involved activity, as means of shoving off’ (Thrift 1999, p. 302) or ‘place is not in space, but is a means by which space is produced as a plenitude of different relations’ (Thrift 1999, p. 310). I think that the psychological work reviewed in this paper may begin to help us clear up some of the fog surrounding this increasingly influential style of geographical prose. Indeed, Boniwell and Zimbardo’s research on temporality gives us a firmer grasp of the idea that ‘space and time are practised as embodied and involved activity, as means of shoving off’. Similarly, Gilbert and Wilson’s research on reconstructive memory and affective forecasting may well lend some meaning to the otherwise puzzling formulation ‘the ecology of place is a rich and varied spectral gathering, an articulation of presence as the tangled exchange of noisy silences and seething absences’. These connections aside, there are

obvious resonances between the aforementioned psychological research and an older and more controversial tradition of humanistic geographical scholarship centred on the concept of ‘sense of place’ (cf. Cresswell 2009, for a recent critical appraisal). Future work may well explore to what extent that concept may be revamped in light of this novel psychological research and in a way that is more palatable to the current political and ethical sensibilities of human geographers.

In turn, and to look from the other direction of this traffic of ideas, human geographers could help situate, qualify and question these bodies of experimental evidence by providing a sustained epistemological, methodological, and political critique of the presuppositions undergirding psychological science as well as by exploring the extent to which they hold outside the laboratory in this wild unruly world of ours. To elaborate on the latter point, we can bring our geographical sensibility to bear on the very problematic blind spots and cultural agnosticism that underpin some of the psychological research reviewed in this paper. While its findings may hold for Western culture, would it not be outrageous to overgeneralise and wrongly imply (cf. Harvey 2010; Simandan 2010) that the lack of happiness of a person suffering from hunger in sub-Saharan Africa derives merely from a negative emotional attitude?

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After it had been accepted for publication, Editor Michael Roche informed me that the referee with a background in psychology whose comments I quoted extensively in the endnotes is Dr Stephen Hill. I am grateful to him for allowing me to quote them at length.

Endnotes

- 1 Narrowly defined, experimental psychology refers to perceptual, psychophysical, learning and cognition research. In this paper, I used the term in a broader sense to encompass all the branches of psychology that make use of experimental methods. For the sake of precision, it is also impor-

- tant to note that some of the papers I cited were not experimental but instead, rely on quantitative analyses.
- 2 This is a somewhat coarse statement that says more about how psychology is viewed by the other social sciences than about how psychologists see themselves. Stephen Hill made a comment that underscores this point: '[i]n general this characterisation is roughly correct for the "harder" experimental parts of psychology but even within experimental psych(ology) there are strong traditions that are, for example, strongly relational (e.g. Gibsonian/ecological psychology). My sense is that the characteristics noted above are not NECESSARILY allied. The recent enthusiasm for embodied cognitive science (of which I'm an advocate) challenges all of these characteristics and yet is still strongly experimental'.
 - 3 To forestall the risk of reading too much into this particular formulation, I quote in full the nuanced comments of Hill: '[o]ne has to be careful to distinguish the claim that recollections are constructed from the idea that they are wholly invented and thus erroneous. There is good evidence that there are numerous ways in which recollections do not reflect "how things really were" and also good arguments about why (sometimes) this is a good thing – indeed some have convincingly argued that the primary function of remembering is not to "recover the past" but rather to adaptively inform behaviour in the present (and for planning for the future). Despite all of this people actually have pretty good memories for crucial (adaptively-relevant) details and we need to be careful not to lose sight of this. This "happy bias" way of framing memory is complicated by the fact that it is unlikely that we possess a single memory system – the mainstream view in cognitive psychology/cognitive neuroscience is that humans (and other animals) remember in a variety of ways and that different memory systems do not always represent the past in the same way (i.e. they don't always tell us the same story). Indeed, one of the most striking findings of the last 40 years is that the functioning of explicit (or declarative) memory can be dissociated from implicit (or non-declarative) memory. These two basic forms of memory are commonly broken into further subdivisions (e.g. episodic, semantic, procedural, perceptual-representation system). To be sure there is debate over the which memory-splitting taxonomy is the right one but the general consensus seems to be that memory is a many splendoured thing and that the complex interactions among the different ways of remembering underpin the often puzzling phenomenology of memory. I suspect that "encounters" with place simultaneously trigger a variety of memory-related responses (familiarity, recognition, recollection, metacognitive reflection) that combine/mesh in often unpredictable ways. Conflicting memorial responses can be drivers of emotional reactions in their own right'.
 - 4 To avoid confusions, it is worth keeping in mind that most of the 'lies' we tell ourselves are confabulations, that is, lies without conscious intent. In this paper, I used 'lies' *lato sensu* for all items that are not true regardless of whether they are underpinned by a *conscious* intent to deceive or simply by habitual, subconscious and semi-conscious patterns of thought and behaviour.
 - 5 The importance of this observation can not be overstated. As Hill noted '[c]learly all experience must be subjective in some sense but experiences need not be "untrue to the way the world is." Indeed, some (perhaps most) experiences must be "true-to-the-world," at least with respect to survival-relevant features of the world or the individual would not be able to behave adaptively. This "subjective but true" view is clearly not the same as the claim that we can experience the world "objectively" in some kind of mind-independent fashion but rather that our "hook-up" with the world must be adaptive much of the time if we are to go on being. The subjective-objective dichotomy has been grappled with in interesting ways by psychologists of different stripes. Many embodied cognitive scientists have borrowed Von Uexkull's notion of the "Umwelt" to describe an animal's view-of-the-world, which is (or can be) true-to-the-world-as-it-relates-to-the-animal. Gibson's concept of an "affordance" has a similar flavour – it describes properties of the things in the world in terms of the action-possibilities they offer a specific animal. None of this precludes the possibility of creatively constructing (usually co-constructing) new or modified Umwelts that allow new ways of perceiving/conceiving of the world, only that such construction involves a difficult balancing act where "serious misreadings" of what is going on must be (somehow) avoided if the individual is going (to) survive'.
 - 6 This idea is a staple of Freudian thinking: '[I]f, as we find it, is too hard for us; it brings us too many pains, disappointments and impossible tasks. In order to bear it we cannot dispense with palliative measures . . . There are perhaps three such measures: powerful deflections, which cause us to make light of our misery; substitutive satisfactions, which diminish it; and intoxicating substances, which make us insensitive to it. Something of the kind is indispensable' (Freud 1930/1989, pp. 24–5). Hill made a comment that is a useful counterpoint to this Freudian line of thought: '[r]esearch on "depressive realism" (the idea that people with MILD depression often make more accurate judgments about their abilities and prospects than non-depressed or seriously depressed individuals) is mixed (for instance, the effect occurs more often in lab studies than in studies in the "wild") and the effect is weak

(see p. 581 of Blanchette & Richards 2010). Even if we accept the depressive realism hypothesis it doesn't follow that this means that "opening oneself to reality" will CAUSE depression. In fact there is good reason to believe that we can't reverse the causal arrow here – depression "causes" us to see/process info about the world in a different way from the way we do it when non-depressed, but there is no evidence, as far as I know, that "being realistic" can drive us to depression'.

7 The astute reader will have noted that I am critical of both psychology (for relying too much on positivism and methodological individualism) and geography (for its infatuation with post-positivist approaches and methodological holism). Geography's strengths are psychology's weaknesses and geography's weaknesses are psychology's strengths. The theoretical standpoint that enables me to be at the same time critical and admiring of both disciplines without contradicting myself has been elaborated by philosopher Mario Bunge under the name of 'methodological systemism' (Bunge 1998, 2006). It argues that a truly comprehensive methodology needs to combine individualistic bottom-up approaches with holistic top-down approaches. I see geography and psychology as complementary, each having to offer the other what the other lacks and/or de-emphasises.

References

- Adams P, Hoelscher S, Till K, eds (2001). *Textures of Place: Exploring Humanist Geographies*. University of Minnesota Press, Minneapolis, MN.
- Bang Nes R (2010). Happiness in behaviour genetics: Findings and implications. *Journal of Happiness Studies* **11**, 369–81.
- Barnett C (2008). Political affects in public space: Normative blind-spots in non-representational ontologies. *Transactions of the Institute of British Geographers* **33**, 186–200.
- Bartlett FC (1932). *Remembering: A Study in Experimental and Social Psychology*. Cambridge University Press, Cambridge.
- Blanchette I, Richards A (2010). The influence of affect on higher level cognition: A review of research on interpretation, judgment, decision making and reasoning. *Cognition & Emotion* **24**, 561–95.
- Boniwell I, Zimbardo P (2004). Balancing time perspective in pursuit of optimal functioning. In: Linley PA, Joseph S, eds. *Positive Psychology in Practice*. John Wiley & Sons, Hoboken, NJ, pp. 165–79.
- Boniwell I, Osin E, Linley PA, Ivanchenko GV (2010). A question of balance: Time perspective and well-being in British and Russian samples. *Journal of Positive Psychology* **5**, 24–40.
- Bunge M (1998). *Social Science under Debate: A Philosophical Perspective*. University of Toronto Press, Toronto.
- Bunge M (2006). *Chasing Reality: Strife over Realism*. University of Toronto Press, Toronto.
- Clore G, Huntsinger J (2007). How emotions inform judgment and regulate thought. *Trends in Cognitive Sciences* **11**, 393–9.
- Collard P, Anvy N, Boniwell I (2008). Teaching mindfulness based cognitive therapy (MBCT) to students: The effects of MBCT on the levels of mindfulness and subjective well-being. *Counseling Psychology Quarterly* **21**, 323–36.
- Cresswell T (2009). Place. In: Kitchin R, Thrift N, eds. *International Encyclopedia of Human Geography*. Elsevier, Oxford, pp. 169–77.
- Csikszentmihalyi M (1993). *The Evolving Self: A Psychology for the Third Millennium*. Harper Collins, New York.
- Davidson J (2003). *Phobic Geographies: The Phenomenology and Spatiality of Identity*. Ashgate Press, Aldershot.
- Davidson RJ (2004). Well-being and affective style: Neural substrates and biobehavioural correlates. *Philosophical Transactions of the Royal Society B* **359**, 1395–411.
- Diener E, Lucas RE, Scollon CN (2006). Beyond the hedonic treadmill. Revising the adaptation theory of well-being. *American Psychologist* **61** (4), 305–14.
- Figueredo AJ, Sefcek JA, Jones DN (2006). The ideal romantic partner personality. *Personality and Individual Differences* **41**, 431–41.
- Fowler JH, Christakis NA (2008). Dynamic spread of happiness in a large social network: Longitudinal analysis over 20 years in the Framingham Heart Study. *BMJ* **337**, 23–38.
- Freud S (1930/1989). *Civilization and Its Discontents*. W.W. Norton & Company, New York, Transl. James Strachey.
- Freud S (1940/1979). *An Outline of Psychoanalysis*. Hogarth Press, London.
- Gilbert D (2006). *Stumbling on Happiness*. Knopf, New York.
- Gilbert DT, Wilson TD (2009). Why the brain talks to itself: Sources of error in emotional prediction. *Philosophical Transactions of the Royal Society B* **364**, 1335–41.
- Hagerstrand T (1982). Diorama, path and project. *Tijdschrift voor Economische en Sociale Geografie* **73**, 323–39.
- Haraway D (1988). Situated knowledges: The science question in feminism and the privilege of partial perspective. *Feminist Studies* **14**, 575–99.
- Harvey D (2010). *The Enigma of Capital and the Crises of Capitalism*. Profile Books, New York.
- Heidegger M (1962). *Being and Time*. Blackwell, Oxford. Trans. J. Macquarrie and E. Robinson.

- Holland AC, Kensinger EA (2010). Emotion and autobiographical memory. *Physics of Life Reviews* **7**, 88–131.
- Johannessen KB, Berntsen D (2010). Current concerns in involuntary and voluntary autobiographical memories. *Consciousness and Cognition* **19**, 847–60.
- Kagan J (2009). Historical selection. *Review of General Psychology* **13**, 77–88.
- Kearney A, Bradley JJ (2009). 'Too strong to ever not be there': Place names and emotional geographies. *Social & Cultural Geography* **10**, 77–94.
- Kearns RA, Andrews G (2010). Wellbeing. In: Smith SJ, Pain R, Marston SA, Jones JP III, eds. *The Sage Handbook of Social Geographies*. Sage, London, pp. 309–28.
- Knox PL (1975). *Social Well-Being: A Spatial Perspective*. The Clarendon Press, Oxford.
- Kringelbach ML, Berridge KC (2009). Towards a functional neuroanatomy of pleasure and happiness. *Trends in Cognitive Sciences* **13**, 479–87.
- Lamm E, Jablonka E (2008). Integrating evolution and development: From theory to practice. *Perspectives in Biology and Medicine* **51**, 636–47.
- Layard R (2010). Measuring subjective well-being. How should human happiness and life-satisfaction be assessed? *Science* **327**, 534–5.
- May J, Thrift N (2001). Introduction. In: May J, Thrift N, eds. *Timespace: Geographies of Temporality*. Routledge, London, pp. 1–37.
- McMakin DL, Santiago CD, Shirk SR (2009). The time course of positive and negative emotion in dysphoria. *Journal of Positive Psychology* **4**, 182–92.
- Oswald AJ, Wu S (2010). Objective confirmation of subjective measures of human well-being: Evidence from the U.S.A. *Science* **327**, 576–9.
- Pile S (2010). Emotions and affect in recent human geography. *Transactions of the Institute of British Geographers* **35**, 5–20.
- Plomin R (2004). *Nature and Nurture: An Introduction to Human Behavioral Genetics*. Wadsworth Pub Co, London.
- Raafat RM, Chater N, Frith C (2009). Herding in humans. *Trends in Cognitive Sciences* **13**, 420–8.
- Sack RD (2004). Place-making and time. In: Mels T, ed. *Reanimating Places*. Ashgate, Burlington, pp. 243–54.
- Seamon D (2000). A way of seeing people and place: Phenomenology in environment–behavior research. In: Wapner S, Demick J, Yamamoto T, Minami H, eds. *Theoretical Perspectives in Environment–Behavior Research*. Plenum, New York, pp. 157–78.
- Seligman M (2008). Positive health. *Applied Psychology* **57**, 3–18.
- Simandan D (2010). On how much one can take: Relocating exploitation and exclusion within the broader framework of allostatic load theory. *Health & Place* **16**, 1291–3.
- Simon HA (2000). Bounded rationality in social science: Today and tomorrow. *Mind & Society* **1**, 25–39.
- Skinner E, Zimmer-Gembeck M (2007). The development of coping. *Annual Review of Psychology* **58**, 119–44.
- Slife BD, Richardson FC (2008). Problematic ontological underpinnings of positive psychology: A strong relational alternative. *Theory & Psychology* **18**, 699–723.
- Smith DM (1973). *The Geography of Social Well-Being in the United States: An Introduction to Territorial Social Indicators*. McGraw-Hill, New York.
- Smith DM (1977). *Human Geography: A Welfare Approach*. Edward Arnold, London.
- Smith M, Davidson J, Cameron L, Bondi L, eds (2009). *Emotion, Place and Culture*. Ashgate, Aldershot.
- Thagard P (2010). *The Brain and the Meaning of Life*. Princeton University Press, Princeton, NJ.
- Thrift N (1999). Steps to an ecology of place. In: Allen J, Massey D, Sarre P, eds. *Human Geography Today*. Polity Press, London, pp. 295–321.
- Thrift N (2008). *Non-Representational Theory: Space, Politics, Affect*. Routledge, London.
- Tuan YF (2004). Sense of place: Its relationship to self and time. In: Mels T, ed. *Reanimating Places*. Ashgate, Burlington, pp. 45–56.
- Whatmore S (2002). *Hybrid Geographies*. Sage, London.
- Williams LE, Bargh JA (2008). Keeping one's distance: The influence of spatial distance cues on affect and evaluation. *Psychological Science* **19**, 302–8.
- Wilson TD, Gilbert DT (2008). Explaining away: A model of affective adaptation. *Perspectives on Psychological Science* **3**, 370–86.
- Yanchar SC, Slife BD, Warne C (2008). Critical thinking as disciplinary practice. *Review of General Psychology* **12**, 265–81.
- Zhang T, Meaney M (2010). Epigenetics and the environmental regulation of the genome and its function. *Annual Review of Psychology* **61**, 439–66.