Social Psychology and the Empirical Body: re-thinking the relationship

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Social and Personality Psychology Compass 4,1 (2010): 1-13

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Abstract

Although social science work on the body has demonstrated its thorough socialisation, social psychology has barely recognised the mutual interdependence of the physical body and the social world. Accordingly, we propose that social psychology might be enriched and extended by detailed investigation of changes in the activity of the empirical body alongside processes of meaning-making during social interaction. We illustrate our proposal with a case study of changes in blood pressure during conversation, explored in conjunction with analyses using four discursive frames: gaining voice; identity negotiation; joint action/knowing of the third kind; positioning theory. We argue that this approach challenges the artificial separation of social psychology from other sub-disciplines, might inform social psychological analyses of emotion and belief, and allows it to address substantive topics, such as psychopathology, which it typically largely excludes.

Introduction

For at least the last two decades the body has been a major focus of research in the social sciences. Scholars in anthropology, sociology, social theory and cultural studies have examined how the body gets invoked as metaphor (Turner, 2003), and investigated how it gets constructed or 'written upon' by discourse and narrative (Gergen, 1997; Young, 1997). They have explored how the body is made to signify through practices of exercise, diet, adornment, dress, fashion, training and style (Budgeon, 2003; Hebdige, 1979), and how discursively arranged performance and repetition mobilise the body to stabilise normative distinctions around gender and sexuality (Butler, 1993). In this heterogeneous work it is inaccurate to speak of 'the' body, since bodies get conceptualised and investigated differentially from one scholar, one theoretical perspective, to

another. Indeed, social science contains bodies that are discursive, performative, disciplined, cyborged, phenomenological, and relational, to specify but a few (Burkitt, 1999; Crossley, 2001; Csordas, 1990; Haraway, 1985; Shilling, 2003). Currently, some of this interest may be mutating into a concern with emotion, affect and feeling in what is being described in some quarters as an 'affective turn' (Clough & Halley, 2007). Simultaneously, notions of biopower and biopolitics are being elaborated with respect to both contemporary body-related concerns (health, reproduction, longevity) and emergent political formations (N. Rose, 2007; N. Rose & Rabinow, 2006). Relatedly, the bi-directional associations between the social and the neural are being enthusiastically interrogated (e.g. by the European Neuroscience and Society Network, and the international electronic journal 'Frontiers in Neuroscience and Society'). These contemporary developments are opening up new research agendas, suggesting that the intense social science interest in the body will not abate any time soon. But despite [p.2] all this, and despite social psychology's symbiotic relations with these other disciplines, there has been relatively little social psychological research on the body.

There are many possible reasons for the absence of a distinctive strand of social psychological research on the body to complement those in its sister disciplines, but perhaps the most immediate is that psychology already has its own (version of the) body. Merleau-Ponty (2002) distinguished between the 'body subject', the phenomenological, lived body by which we experience the world, and the 'body object', the empirical body that affords characteristics such as beauty and measures such as body-mass index. While some critical and feminist psychology work has explored the 'body subject' (e.g. Bayer & Malone, 1996), psychology's body is predominantly an empirical one that, for the most part, resides within the sub-disciplines of physiological and biological psychology. Intellectually, these sub-disciplines are largely distinct from social psychology, although institutionally it is typically co-located with them. Hence, there is a conceptual distance between social psychology and psychology's empirical body, instantiating both the Cartesian

structuring of philosophical and psychological knowledge (Johnson, 2007) and the presumed sharp divide between the individual and the social (Burkitt, 1991; Newton, 2007). From a social psychological perspective this distance reproduces numerous shortcomings, since for the most part the empirical body within physiological and biological psychology simply gets reduced to its biological traces and functions, which are then all-too frequently assumed to be naively causal of social activity. When social psychological concerns do appear in studies of the empirical body, they are typically under-theorised, addressed using relatively static variable designs and measures, and relatively insensitive to the variability and multiplicity of social influence (for example, psychological constructs such as hostility, stress or social anxiety are typically assessed with self-report, one-off measures and scores correlated with physiological variables). Moreover, in many institutional settings biological and physiological explanations are privileged and viewed as more fundamental than those supplied by social psychology. Consequently, the troublesome conceptual distance between social psychology and the body is also intertwined with practical-historical issues, related to the barriers erected between (sub) disciplines and bound up with various interests – not least the career interests of researchers themselves, who are rewarded for not going beyond these barriers, thus enabling, for example, publications and grant income (Brewer, 1999; Rhoten & Parker, 2004). So psychology's empirical body is both conceptually separated from social psychology and bound up with sub-disciplinary interests and power relations that are, for many social psychologists, troublesome.

Consequently, little systematic research has attempted to develop a corporeal social psychology, although there are some honourable exceptions (e.g. Gillies et al., 2004, 2005; Langdridge, 2008; Ussher, 1997; 2008; Yardley, 1997). Leaving these aside, the body in social psychology remains relatively under-theorised and under-explored, and this has arguably had various effects. One is that, by comparison to other disciplines, psychology frequently operates with overly-cognitive notions of such phenomena as emotion and belief. Emotions, for example, are often simply

treated as states amenable to self-report in questionnaire or interview, rather than also being understood as embodied modalities that pre-reflectively influence the nature, content and style of self-report in ways that participants (and analysts) might not easily recognise. Similar issues surround the treatment of beliefs; as Baerveldt & Voestermans (2005, p.453) put it, psychology typically makes the mistake of "misconstruing 'belief' as something that is claimed or stated, rather than lived". Beliefs, they argue, are integral components of our embodied engagements with the world, but most psychological research works with an impoverished conceptualisation that treats them as mere propositional attitudes (discursive psychology, they note, [p.3] constitutes an advance by treating beliefs as thoroughly social, but still does not capture their embodiment). These relatively disembodied conceptualisations are associated with both theoretical indeterminacies and empirical-methodological deficiencies so that, for example, two diametrically opposed notions of emotion regularly get deployed in social psychology. On the one hand, social psychologists sometimes utilise distinctions between basic and secondary emotions (Ekman, 1992), structuring their research with a notion that is effectively biological. On the other, they sometimes invoke Schacter & Singer's (1962) seminal paper to warrant not engaging at all with the embodied aspects of emotion, on the erroneous supposition that this study demonstrated conclusively that bodily sensations are meaningful only by virtue of their contextual interpretation.

Our proposal is that social psychology might be both enriched and extended by detailed investigation of changes in the activity of the empirical body that occur during social interaction. Whilst our ultimate concern is with how the contingent, reciprocal relations between the lived, phenomenological body, the empirical body and the social get played out, the more specific aim of the style of research we advocate here is to investigate how changes in the empirical body are already bound up with lived processes of meaning-making in social interaction. In this respect, it is relevant that there is already a wealth of evidence showing that the empirical body is a dynamic

collection of interwoven systems, continuously open along multiple pathways to interpenetration by social influence. For example, one way of interpreting the current proliferation of fMRI studies, showing how the brain responds to learning by changing its patterns of neural activation, is that the effects of social practice drill down to the level of synapse and neurone: the brain itself is socialised. Other evidence can be found in psychoneuroimmunology, where many studies show the direct impact of social support upon immune responses (Byrne-Davis & Vedhara, 2008). The recognition that the empirical body is already open to social influence is also part of medical practice and informs studies in social and psychiatric epidemiology, as well as in psychosomatic and behavioural medicine (de Groot, Anderson, Freedland, Clouse, & Lustman, 2001; Herbert & Cohen, 1993). It is similarly of direct relevance for health psychology, where the primary focus on physical health means an adequate grasp of the relationship between embodiment and the social is particularly important: here the individual as a thinking, cognitive and social being collides directly with the individual that has, and is, a physical body (Lyons & Chamberlain, 2006).

Empirical studies in psychology also demonstrate associations between social interaction and the empirical body. For example, Larkin and colleagues studied the associations between self-reported fear of negative evaluation, cardio-vascular responsivity and gender of an observer whilst performing challenging mathematical and verbal tasks (Larkin, Ciano-Federoff, & Hammel, 1998). A median split of questionnaire scores divided their group of forty-eight males into participants with either high or low fear of negative evaluation. Although there were no group differences in task performance, participants in the high fear group exhibited raised heart rate during one task and raised diastolic blood pressure during the other - but only when being observed by a female (rather than male) confederate. Similarly, Britton and colleagues found that subjective emotional responses to stimuli were associated with changes in skin-conductance, but these changes were significantly more marked for stimuli defined as social (comedy,

bereavement) than non-social (pizza, wounds), and this difference could not be explained by differences in subjective arousal (Britton, Taylor, Mikels, & Berridge, 2006).

These, and other studies exploring psycho-physiology and social influence, demonstrate that psycho-physiological measures are instantly reactive to, and can be modulated by, social interaction. However, such studies typically aggregate physiological measures both [p.4] within and across participants, and then examine differences across groups and/or conditions. These procedures illuminate relatively gross differences, but at the expense of concealing detailed temporal and interpersonal variation. Here, we advocate a more finely-detailed, temporally-nuanced focus on psycho-physiological fluctuations, within persons and during conversations, to supplement and extend qualitative, discursive analyses. In this, we are not suggesting that psycho-physiological measures somehow yield foundational 'proof' of bodily influence - as though we were identifying putative biological mechanisms causal of social processes. Rather, as we will now attempt to show with a case study, the aim is to explore how bodily changes are already responsive to, and bound up within, the ongoing flow of social interaction.

Case study

The case study used data gathered for a larger, ongoing research project exploring the relations between social interaction and physiology, and involved two same-sex friends engaging in a discussion about a psychological measurement scale in a laboratory setting. Friends were recruited via notices at Massey University (New Zealand) and through word-of-mouth. They needed to be between the ages of 25 and 50 years of age, with no history of high BP or heart disease. The case study involved the discussion between two male friends, Bob (aged 35) and Sam (aged 43) (both pseudonyms), and was selected because the data where available when the researchers were collaborating on this project.

On arrival, Sam and Bob completed a physical health screening questionnaire to check for histories of cardio-vascular disease or high blood pressure (BP), then had 'Accutracker' cuffs fitted to their non-dominant arms, enabling their BP to be measured at intervals throughout their discussion. After taking baseline BP measures, they were given the 25-item Attitudes Toward Women Scale (AWS: Spence, Helmreich, & Stapp, 1973) and asked to discuss it together. The AWS contains items such as, "Swearing and obscenity are more repulsive in the speech of women than men" and "Under modern economic conditions with women being active outside the home, men should share in household tasks such as washing dishes and doing the laundry". The scale was used as a prompt to facilitate conversation about a range of issues including, but not limited to, gender. Their conversation, which took roughly 33 minutes, was audio-recorded and subsequently transcribed.

The analysis began with an exploration of the physiological data, looking at patterns, peaks and troughs in both participants BP. We know that BP fluctuates throughout daily life, and also increases in varying amounts while people are talking or engaging in social interaction (Kamarck & Lavallo, 2003; Lyons, Spicer, Tuffin, & Chamberlain, 2000). There are numerous analytic frames available to explore the discussion between Sam and Bob, and we chose to focus on four in particular: 1) gaining voice, 2) identity negotiation, 3) joint action and knowing of the third kind, and 4) positioning. Each of these frames can demonstrate how the participants are engaging in multiple levels of discursive 'work', which – because speaking is also gestural, corporeal, bodily activity – might be visible in the activity of their empirical bodies.

As Figure 1 shows, there is a distinctive peak in Sam's systolic BP at about 13-18 minutes into the discussion; Bob's systolic BP is more stable, without the dramatic peaks of Sam's readings, and generally lower, but nevertheless also achieves its highest readings at either side of this point. The diastolic BP readings give a different but related picture: again, Sam's BP peaks at about 13-

18 minutes; whereas Bob's plummets to its lowest point before rising steeply. So we explored the transcript for this time point, and [p.5] found that at around 13-14 minutes Bob and Sam are discussing an item on the AWS that asks who should pay on a date:

Bob: *"Women earning as much as their dates should bear equally in the expense when they go out together." I think that's something that should be discussed (.) by the two parties involved.*

Sam: *But if you're just looking at a basic principle.*

Bob: *True.*

Sam: *But then really if the person's earning power hasn't got anything to do with it.*

Bob: *Mmm. If you're going to have dinner together, wouldn't you think you'd be at a point of assuming both of you were going to pay your own way?*

Sam: *You'd think so, you'd think so.*

Bob: *No if I ever took someone out for dinner and I paid for it, you know, my expectation wouldn't be for sex.*

Immediately following this, Sam goes on to recount a 'mini-narrative' about a male colleague at a former workplace:

Sam: *No! Funnily enough I worked in this place, and this bloke said to me, "Hey, I went out for dinner the other night, and you know, I paid for dinner and everything, and it came to the, the old- bottom line. She wasn't interested". And he says, "by Christ, I might just as well have gone to a massage parlour". (laugh)*

Bob: *(laughs loudly)*[p.6]

Sam: *"It wouldn't have cost me as much and sex would have been a dead cert!"*

Bob: *Yeah, true.*

Sam: *And I thought "You sorry bastard!"*

Bob: *Mmmm. I reckon. Especially as that's your attitude going in.*

Sam: *Yeah. Mmm.*

Bob: *Wowee! Wouldn't have gone down well with the lady either, I don't reckon.*

Sam: *No, well we were talking about this in an office environment, and you should have seen the ladies in there!*

Bob: *Oh the fallout! OOOH!*

Sam: *You know, they sort of established that er, all men were bastards after that. They saw, that you know, the way that he thought, that possibly most men thought that way.*

Before using our analytic frames to explore the data, we need first to go beyond these particular sections of transcript to provide a fuller context. Up until this point, Bob has been the more dominant speaker, and the story Sam tells in the extract above is the only time during the entire discussion when he holds the floor in this way. In the terms of the first analytic frame, then, when Sam tells his mini-narrative, he is literally 'gaining voice'. Gergen (1989) argues that during social interaction the prime motivation for speakers is to gain voice. Gaining voice leads on to different social and practical consequences, including gaining power and resources (Burr, 2003). In this excerpt, Sam, by virtue of his mini-narrative, acquires the space and time to speak; a shift which may be paralleled in his cardiovascular functioning. The acquisition and maintenance of power, at whatever level and no matter how trivial the context, is likely to require effort. It may be that elements of this effort are indexed by the changes in Sam's BP, just as Bob's work of negotiating his response to the insertion of Sam's narrative may be indexed by the changes in his own BP. Having previously been the subordinate speaker in this conversation, Sam is now engaging in some potentially tricky interactional work: not only is he taking up the dominant

speaking role, by so doing he exposes himself to potential challenges from Bob, who may wish to take this role back. Sam must therefore enrol Bob's interest in his story, keeping him engaged by driving the narrative forwards and producing a pay-off that makes his temporary capture of the dominant position mutually acceptable. At the same time, Bob must also negotiate this shift in dominance in ways that are consonant with normative etiquette. Evans (2002) argues that self narratives are likely to invoke somatic activity because of the emotion work they require, and that people in minority positions frequently engage in additional emotional work to position themselves in relation to others: hence, perhaps, the striking peaks in Sam's BP. Speaking and relating are always whole-body activities, always-already conducted by living, breathing, sweating humans in concrete situations with interests and concerns at stake. Perhaps we should not be surprised, then, at the possibility that even small shifts in power may be registered corporeally as well as discursively.

At the same time as he is gaining voice, Sam is also constructing a particular desired identity. People can be viewed as rhetoricians, using discourse and talk in social interaction to produce and construct themselves in specific ways (Billig, 1987). The challenge for speakers is to use discourse in order to "bring off their desired identity construction for themselves, and to resist those offered by others" (Burr 2003, p.137). Lyons et al. (2000) have argued (and empirically tested the possibility) that cardiovascular activity during communication and social interaction may reflect ongoing discursive processes of self construction, and in these extracts we see Sam succeeding in constructing himself as humorous and as a good story-teller. Examining this more closely, Sam uses scripted formulations of ostensibly reported speech ("This bloke said to me.."; "And he says..") [p.7] to add credibility to his narrative. Simultaneously, this 'footing' (Goffman, 1979) distances him from his former colleague's views. The distance is then made more explicit by using reported thought rather than reported speech: "And I thought 'You sorry bastard'". On the one hand this rhetorical move is *entirely* immune to challenge; on the other, it speaks to the

forceful immediacy of Sam's response. Sam's invocation of this vehement, subjective reaction doesn't just help him achieve an identity as a more empathic, more feminine-friendly man; it also endows this identity with authenticity. This effect is amplified by Sam's report of the reaction of his female colleagues, where double emphases ("you should have seen the ladies") strike further rhetorical distance from his former colleague by endowing Sam with sensitivity: unlike his colleague, Sam actually noticed the women's reactions. This kind of detail, too, works to furnish the account with degrees of facticity (Potter, 1996), further bolstering the credibility of Sam's account. Sam, then, is working to bring off a desired identity and make it stick through a nested series of rhetorical contrasts. Our data not only suggests that this work may have measurable somatic aspects, but also that these are intercorporeal, visible in the empirical bodies of *both* participants; this brings us neatly to our next analytic frame.

For Shotter (1993), all social interaction is simultaneously both discursive and corporeal. Inspired predominantly by Wittgenstein, Shotter's sensitive analyses of social relations foreground two interlinked concepts: joint action, and knowing of the third kind. Joint action refers to the way in which speakers must always be rhetorically responsive to an emergent, ongoing, dynamically co-created context of talk. As we have explained, in this discussion the data extracts capture a notable shift in this context, a move to Sam doing most of the talking and, for the first time, predominantly shaping the context as he elaborates his story. Bob and Sam's talk, Shotter would say, is both responsive to the context that preceded it, and rhetorical within it. The exclamation '"No!" before Sam tells his story is a surprisingly forceful marker of agreement with Bob's previous turn. In agreeing with Bob's prior statement ("my expectation wouldn't be for sex") it is responsive. At the same time, its affect-laden character does much to instantiate the shift in context, the new phase of joint action organised around Sam's narrative: in this sense it is also rhetorical. Importantly, joint action cannot be understood as simply the product of antecedent processes of cognition, evaluation or information processing. Rather, for social actors to

effectively prosecute this kind of activity their ‘cognitions’ (and their talk) must already be embedded within an ongoing flow of other-related embodied experience. In Shotter’s terms, Sam’s exclamation was not so much contingent upon cognition or discourse as upon ‘knowing of the third kind’, an embodied knowing that endows activity with sensuous, practical-moral guidance. It is the mutual co-ordination of somatic characteristics and their conjoined feeling states, both of these always sensitively dependent on the corporeal responses of others, from which our actions always proceed. Sam’s forceful “No!” makes Bob *feel* that Sam has more to say, clearing a space for Sam to embark upon his narrative. As he does so, Sam responds to Bob’s posture, gestures and expressions by *feeling* that Bob recognises and accepts the shift in context. Their mutual knowing is sensuous and corporeal as well as discursive, it is embedded within the moment and constituted pre-reflectively from the ongoing mutuality of their embodied relatedness. Hence it may be significant that both men’s BP fluctuates strikingly at around this time. This raises the interesting possibility that the sensuous co-ordination of Bob and Sam’s lived bodily experience, the mutually constituted embodied knowing of the third kind that makes their joint action possible, is in part indexed by the convergence of their BP readings.[p.8]

Finally, positioning theory also offers a potentially beneficial way to view this data. According to this approach, discourses are forceful because they provide subject positions, and these locate people (and their rights) within the discourse (Davies & Harre, 1990). Positioning occurs constantly during the ebb and flow of real interactions (Burr, 2003) and in this way subjectivity is constructed through talk. Raggatt (2007, p.366) puts it as follows: “positioning theory is social, discursive and dynamic. Identity is fluid and meanings are not fixed, but rather shared and negotiated amongst communities of speakers. People negotiate meanings by strategically positioning themselves and others throughout a social exchange”. Sam draws on dominant discourses of gender, date scripts, and work environments, and positions himself in particular ways within them. For example, he opposes his colleague’s opinion that paying for a date should

automatically mean he will have sex with her later, and in so doing also positions other actors (the 'ladies' at work, most men) in various, related ways. There is a clear ethical or moral dimension to this positioning work, and there are both conceptual arguments and empirical evidence suggesting that morality is enacted, at least in part, by affective and corporeal means (Benson, 2001; Moll, de Oliveira-Souza, & Eslinger, 2003) As Sam gains the temporary right to occupy a subject position of relative superiority, he passes moral judgement upon his former colleagues' approach to sexual relations and, through his enthusiastic agreements ("you'd think so, you'd think so"; "Yeah. Mmm"), strives to actively recruit Bob into sharing this judgement. And Bob, similarly, actively colludes with these judgments ("No if I ever took someone out for dinner and I paid for it, you know, my expectation wouldn't be for sex"). The relatively high BP of both men at around this time might, then, index some part of the corporeal dimension of this joint moral positioning.

In discursive terms, these four brief analyses suggest that Sam's mini-narrative functions to give him voice (and shift the relative dominance of each speaker), keep Bob engaged in the dialogue through an interesting story, position Sam as a competent story-teller (important social skill) who is also humorous, deal with difficulties around prevailing discourses, distance Sam from outmoded date scripts, position him as morally upright, and conversely position others in various ways ('ladies', 'blokes'). Because this discursive work occurs in an interactional context of embodied, reciprocal mutuality, it may be associated with heightened cardiovascular activity in both men. This is not to say that the discursive work *causes* their BP changes, nor that the BP changes cause the discursive work; rather that, as embodied beings, both Bob's and Sam's physiologies are thoroughly enrolled within their social lives.

Discussion

A first point to note is that these analyses were offered without recourse to any kind of 'stress' theory or discourse, which is unusual in a research project that examines BP functioning in social situations. Many psychophysiologists, and psychologists may explain this data by saying that the conversation is stressful, particularly for Sam, or that Sam may be experiencing his heightened arousal as positive because of the situation (debating with a friend). Sam does seem to be enjoying himself, and later stated that the discussion was *not* stressful for him. As Newton (2003, p.35) observes: "psychobiological research still tends to assume that one can read the social (e.g. psychological stress) from the biological (physiological 'indicators') through a linear or reductionist 'lens' which detracts from the complexity of the social and the biological". [p.9] In contrast, our analyses suggest that there may be other, more fruitful ways to conceptualise the relationships between talk and somatic activity, and that examining physiological measures need not lead inexorably to individualism.

Our analyses nevertheless raise related questions of validity and specificity. With respect to validity, one question is whether it is possible to use discursive techniques to identify moments of heightened BP in social interaction prior to examining physiological measures (recall that we began by identifying heightened BP in the participants, and moved from there to looking in more detail at the transcripts). This would reinforce the validity of the claim that the discursive interpretation (taken from the text only) is visible in the activity of the empirical body. It seems likely that if we had begun with analyses of gaining voice, positioning or joint action we would also have quickly seized upon this section of transcript as significant, since at no other point during the discussion does Sam briefly dominate the interaction by recounting a story about himself. It is less obvious that a discursive analysis would have led us directly to this particular section, although it would certainly have been a candidate. This raises the question of specificity: the extent to which the BP changes we observed were specific to one or more of the forms of interactional business we identified. To some extent this question may be a chimera, since the

four analyses are arguably different conceptualisations of the same phenomena: positioning himself and others requires Sam to gain voice, and he does this by rhetorical-responsive engagement in joint action that clears a space for him to conduct identity work. However, to the extent that there are indeed unresolved issues here we acknowledge that we do not have answers – we do not know which, if any, of these forms of discursive work might be specifically correlated with BP changes; nor do we know how any such associations might play themselves out. Also, according to our framework, the discursive work does not *cause* the BP changes, rather the changes are part and parcel of the discursive work; the social and the body are thoroughly enrolled in each other. Insofar as this potentially opens up new trajectories of empirical research investigating the varying ways in which different kinds of discursive work are somatically enacted, we see this not as a weakness but a strength.

Since the primary aim of this paper is to demonstrate how social psychology might benefit from exploring changes in the empirical body that occur during social interaction, we now want to suggest some specific ways in which such a focus might yield benefits for social psychology. We have already described how social psychologists frequently operate with overly cognitive notions of belief, and the approach demonstrated here might be used to explore how beliefs are enacted through the body as well as in discourse. For example, Billig (1995) showed how nationalist beliefs constitute an informal or lived ideology that on the one hand is durable and widespread, and on the other hand discursively flexible. He thus identifies a paradox: nationalist beliefs are flexible, yet durable; mobile, yet somewhat predictable; variable, yet also repetitive. Cromby (2005) suggested that we might address this paradox by investigating how socialised, embodied feelings run alongside and within discursive interaction. The mixing of physiological measures and discursive analyses that we have demonstrated might facilitate such investigation, allowing social psychologists to study how beliefs are enacted both corporeally *and* discursively. Similarly, in social psychology there are analyses of emotion discourse that divorce such talk from bodily

states, and other (typically quantitative) studies structured by biological distinctions between ‘basic’ and ‘secondary’ emotion. By contrast, the methodology proposed here might allow emotions to be explored as dynamic elements of social relations (Burkitt, 1999), mutually enacted in an ongoing manner through conjoined discursive and somatic activity. [p.10]

Further benefits might arise from the way that this methodology cuts across some of the artificial divides between social psychology and other psychological topics and sub-disciplines. For example, studies of this kind might enrich both health psychology and social psychology, allowing topics and analytics from each to be deployed more readily in the other. They might also allow social psychology to address substantive topics not usually considered within the subdiscipline, despite having marked social dimensions - for example, those constructs currently under the umbrella of ‘psychopathology’. In recent years cognitive psychologists have made significant advances in developing, and empirically testing, consistently psychological accounts of such phenomena (Bentall, 2003). Conceptual arguments in support of similar social accounts have already been made for paranoia (Cromby & Harper, 2009) and depression (Cromby, 2004a, 2004b). It is claimed that socialised feelings – phenomenological experiences of changes in the body-brain system – are central to both depression and paranoia, so studies of the kind suggested here might be one way to empirically test these accounts. Similarly, using this methodology to conjoin social influence with the empirical body might afford social psychology a greater, more thorough engagement with the influential research tradition on emotion work (Hochschild, 1979) and affective labour (Hardt, 1999).

In conclusion, we want to emphasise again that our suggestion to include the empirical body within social psychology is in no sense a foundational move, an attempt to simplistically ‘read off’ social interaction from biological activity: we are proposing to extend social psychology, not limit it. The empirical body, while often measured, poked and weighed, is in actuality dynamic,

fluid, and ultimately *processual* (Williams, 2003): measurement frequently makes it appear static and unmoving, yet it is just the opposite. As Stephen Rose (1997, p.306) eloquently puts it: "Reductionism ignores [this] paradox and freezes life at a moment of time. In attempting to capture its being it loses its becoming, turning processes into reified objects". Rejecting reductionism enables us to investigate the multiple, dynamic, fluid and reciprocal processes that conjoin our empirical bodies with our social worlds. Moments within these processes are often falsely rendered as static and innate, due to inadequate theorising and limited methodology, since capturing dynamics and processes is often seen as too difficult, even impossible. The approach advocated here would enrich and expand methodology, providing as it does an example of the advantages of mixing methods, a move toward pluralism and away from sterile purity (Todd, Nerlich, McKeown, & Clarke, 2004). In advocating this move, we nevertheless remain wary of both biological reductionism and 'discourse determinism', whereby much is reduced to discourse, and hope that our focus on what the empirical body actually *does* might enable us to elide these twin snares (cf. Mol & Law, 2003). Alan Radley (1998) argued that the body makes itself understood through engaging in the world, but this engagement is not just *through* the body: it is *with* the body, and is effectively a 'con-figuring' of social worlds. Bringing this process-driven understanding into social psychology opens up exciting possibilities for empirical research, within which the body is understood as already social, and as an integral, indispensable tool of psychological investigation.

Figure 1: systolic BP readings

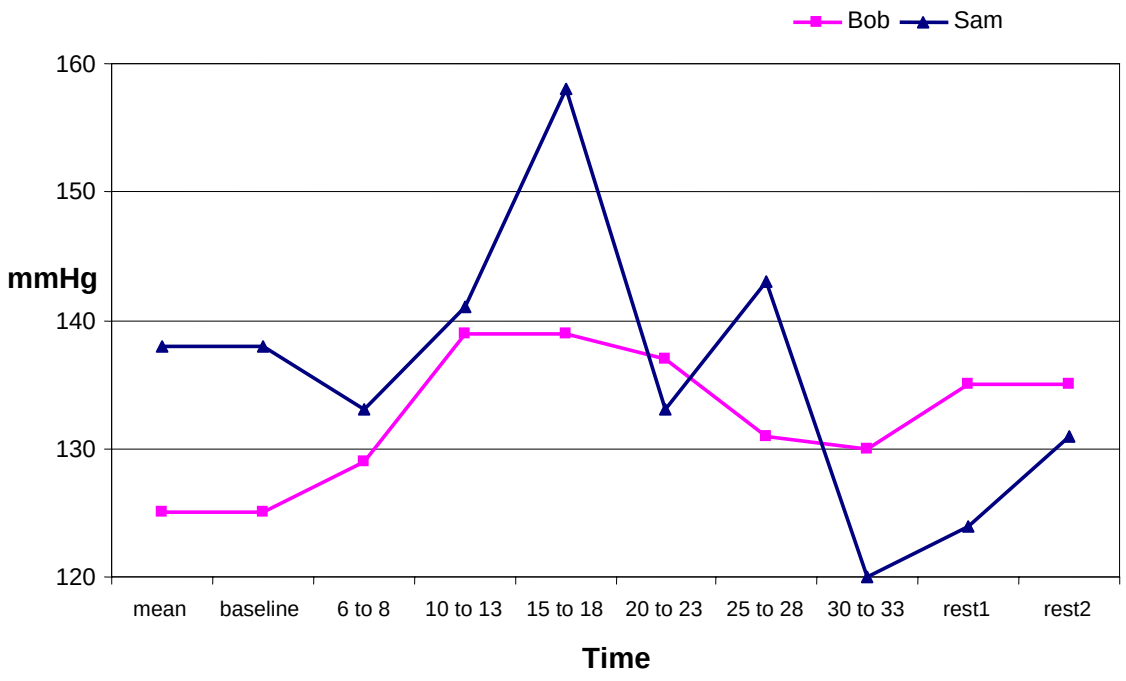
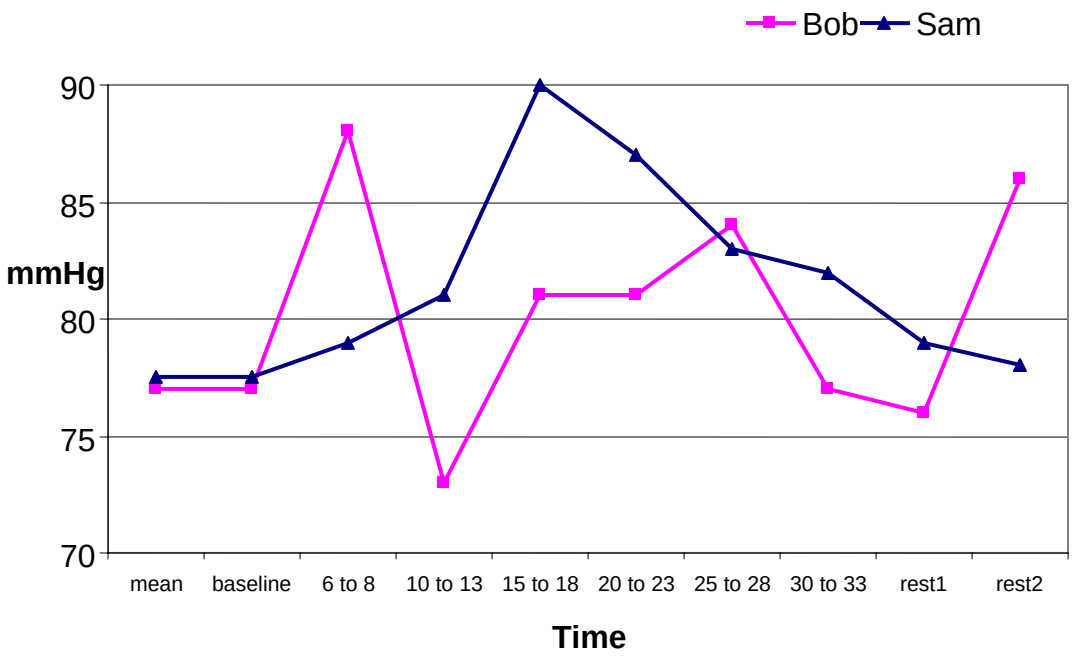


Figure 2: diastolic BP readings



REFERENCES

Baerveldt, C., & Voestermans, P. (2005). Culture, Emotion and the Normative Structure of Reality. *Theory and Psychology, 15*(4), 449-474.

Bayer, B. M. & Malone, K. R. (1996). Feminism, Psychology and matters of the body. *Theory & Psychology, 6(4),* 667-692.

Benson, C. (2001). *The Cultural Psychology of Self: place, morality and art in human worlds*. London: Routledge.

Bentall, R. (2003). *Madness Explained*. London: Allen Lane / Penguin.

Billig, M. (1987). *Arguing and Thinking: a rhetorical approach to social psychology*. Cambridge: Cambridge University Press.

Billig, M. (1995). *Banal Nationalism*. London: Sage Publications.

Brewer, G. (1999). The Challenges of Interdisciplinarity. *Policy Sciences, 32*(4), 327-337.

Britton, J., Taylor, S. F., Mikels, J., & Berridge, K. C. (2006). Differential subjective and psychophysiological responses to socially and nonsocially generated stimuli. *Emotion, 6*(1), 150-155.

Budgeon, S. (2003). Identity as an embodied event. *Body and Society, 9*(1), 35-55.

Burkitt, I. (1991). *Social Selves*. London: Sage Publications.

Burkitt, I. (1999). *Bodies of Thought: embodiment, identity and modernity*. London: Sage Publications.

Burr, V. (2003). *Introduction to Social Constructionism* (2nd ed.). London: Sage Publications.

Butler, J. (1993). *Bodies That Matter: on the discursive limits of sex*. New York: Routledge.

Byrne-Davis, L., & Vedhara, K. (2008). Psychoneuroimmunology. *Social and Personality Psychology Compass, 2*(2), 751-764.

Clough, P., & Halley, J. (Eds.). (2007). *The Affective Turn: theorising the social*. Durham NC: Duke University Press.

Cromby, J. (2004a). Between constructionism and neuroscience: the societal co-constitution of embodied subjectivity. *Theory and Psychology, 14*(6), 797-821.

Cromby, J. (2004b). Depression: embodying social inequality. *Journal of Critical Psychology, Counselling and Psychotherapy, 4*(3), 176-187.

Cromby, J. (2005). Theorising Embodied Subjectivity. *International Journal of Critical Psychology*(15), 133-150.

Cromby, J., & Harper, D. (2009). Paranoia: a social account. *Theory and Psychology, 19*(3), xx-xx.

Crossley, N. (2001). *The Social Body: habit, identity and desire*. London: Sage Publications.

Csordas, T. (1990). Embodiment as a Paradigm for Anthropology. *Ethos, 18*, 5-47.

Davies, B., & Harre, R. (1990). Positioning: The discursive production of selves. *Journal for the Theory of Social Behaviour, 20*(1), 43-63.

de Groot, M., Anderson, R., Freedland, K., Clouse, R., & Lustman, P. (2001). Association of depression and diabetes complications: a meta analysis. *Psychosomatic Medicine, 63*, 619-630.

Ekman, P. (1992). Are There Basic Emotions? *Psychological Review, 99*(3), 550-553.

Evans, K. (2002). *Negotiating the self: Identity, sexuality, and emotion in learning to teach*. New York: Routledge-Falmer.

Gergen, K. J. (1989). Warranting Voice and the Elaboration of Self. In J. Shotter & K. J. Gergen (Eds.), *Texts of Identity* (Vol. 70-81). London: Sage Publications.

Gergen, K. J. (1997). *Realities and Relationships: soundings in social construction*. Cambridge, Mass.: Harvard University Press.

Gillies, V., Harden, A., Johnson, K., Reavey, P., Strange, V., & Willig, C. (2004). Women's collective constructions of embodied practices through memory work: An exploration of memories of sweating and pain. *British Journal of Social Psychology, 43*, 99-112.

Gillies, V., Harden, A., Johnson, K., Reavey, P., Strange, V., & Willig, C. (2005). Painting pictures of embodied experience: the use of non-linguistic data in the study of embodiment. *Qualitative Research in Psychology, 2*(3), 199-212.

Goffman, E. (1979). Footing. *Semiotica, 25*, 1-29.

Haraway, D. (1985). A manifesto for cyborgs: science, technology and socialist feminism in the 1980s. *Socialist Review, 80*, 65-107.

Hardt, M. (1999). Affective Labour. *Boundary 2*, *26*(2), 89-100.

Hebdige, D. (1979). *Subculture: the meaning of style*. London: Routledge.

Herbert, T., & Cohen, S. (1993). Stress and immunity in humans: a meta-analytic review. *Psychosomatic Medicine, 55*(4), 364-379.

Hochschild, A. R. (1979). Emotion Work, Feeling Rules and Social Structure. *American Journal of Sociology, 85*, 551-575.

Johnson, M. (2007). *The Meaning of the Body: aesthetics of human understanding*. Chicago: University of Chicago Press.

Kamarck, T., & Lavallo, W. (2003). Cardiovascular reactivity to psychological challenge: Conceptual and measurement considerations. *Psychosomatic Medicine, 65*, 9-21.

Langdridge, D. (2008). Phenomenology and critical social psychology: directions and debates in theory and research. *Social and Personality Psychology Compass, 2*(3), 1126-1142.

Larkin, K., Ciano-Federoff, L., & Hammel, D. (1998). Effects of gender of observer and fear of negative evaluation on cardio-vascular reactivity to mental stress in college men. *International Journal of Psychophysiology, 29*, 311-318.

Lyons, A., & Chamberlain, K. (2006). *Health Psychology: a critical introduction*. Cambridge: Cambridge University Press.

Lyons, A., Spicer, J., Tuffin, K., & Chamberlain, K. (2000). Does cardiovascular reactivity during speech reflect self-construction processes? *Psychology and Health, 14*(6), 1123-1140.

Merleau-Ponty, M. (2002). *Phenomenology of Perception*. London: Routledge.

Mol, A., & Law, J. (2003). Embodied Action, Enacted Bodies: the example of hypoglycaemia [Electronic Version]. *Body and Society*, 10, 43-62. Retrieved 6/6/08 from http://www.lancs.ac.uk/fass/sociology/papers/mol-law-embodied-action.pdf.

Moll, J., de Oliveira-Souza, R., & Eslinger, P. (2003). Morals and the Human Brain: a working model. *Neuroreport, 14*(3), 299-305.

Newton, T. (2003). Truly embodied sociology: marrying the social and the biological. *The Sociological Review, 51*(1), 20-42.

Newton, T. (2007). *Nature and Sociology*. London: Routledge.

Potter, J. (1996). *Representing Reality:discourse, rhetoric and social construction*. London: Sage Publications.

Radley, A. (1998). Displays and fragments: Embodiment and the configuration of social worlds. In H. Stam (Ed.), *The Body in Psychology*. London: Sage Publications.

Raggatt, P. (2007). Forms of positioning in the dialogical self: A system of classification and the strange case of Dame Edna Everage. *Theory and Psychology, 17*(3), 355-382.

Rhoten, D., & Parker, A. (2004). Risks and Rewards of an Interdisciplinary Career Path. *Science, 306*, 2046.

Rose, N. (2007). Molecular biopolitics, somatic ethics, and the spirit of biocapital. *Social Theory and Health, 5*(1), 3-29.

Rose, N., & Rabinow, P. (2006). Biopower Today. *Biosocieties, 1*, 195-217.

Rose, S. (1997). *Lifelines: life beyond the gene*. Oxford: Oxford University Press.

Schacter, S., & Singer, J. (1962). Cognitive, social and physiological determinants of emotional state. *Psychological Review, 69*, 379-399.

Shilling, C. (2003). *The Body and Social Theory* (2nd ed.). London: Sage Publications.

Shotter, J. (1993). *Conversational Realities: constructing life through language*. London: Sage Publications.

Spence, J., Helmreich, R., & Stapp, J. (1973). A short version of the Attitudes toward Women Scale (AWS). *Bulletin of the Psychonomics Society, 2*, 219-220.

Todd, Z., Nerlich, B., McKeown, S., & Clarke, D. (2004). *Mixing Methods in Psychology: the integration of qualitative and quantitative methods in theory and practice*. Hove: Psychology Press.

Turner, B. (2003). Social fluids: metaphors and meanings of society. *Body and Society, 9*(1), 1-10.

Ussher, J. M. (1997). *Body talk: The material and discursive regulation of sexuality, madness, and reproduction.* London: Routledge.

Ussher, J. M. (2008). Reclaiming embodiment within critical psychology: A material-discursive analysis of the menopausal body. *Social and Personality Psychology Compass, 2(5),* 1781-1798.

Williams, S. (2003). *Medicine and the Body*. London: Sage Publications.

Yardley, L. (Ed.). (1997). *Material discourses of health and illness.* London: Routledge.

Young, K. (1997). *Presence in the flesh: the body in medicine*. Harvard, Mass.: Harvard University Press.