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Abstract

There is widespread agreement that current climate change scenarios mean we have to change how we live on this planet. Yet our current understandings of social and behavioural change seem insufficient for the task at hand. In this paper we explore Bruno Latour's notion of 'learning to be affected', and we argue that this idea of bodily learning seems well-suited to thinking about how people can be moved to act in response to the human and nonhuman world that is all around us. We also argue that research can prompt and sharpen this form of embodied learning when it is conducted in a performative and collective mode that is geared towards crafting rather than capturing realities. We demonstrate how this might occur through the example of a community garden research project based on a collective bus trip-workshop method.

Keywords

learning to be affected; performativity; hybrid collective; community gardening; bus trip-workshop method

Introduction

In this era of unprecedented environmental change, it is clear that we have to change how we live on the planet. Researchers have puzzled over how best to do this. Is it a matter of refining and better targeting information so that people are more informed about the impacts of climate change (e.g. Lorenzoni *at al.* 2007); is it matter of engaging people more meaningfully to reach their underlying attitudes and values (e.g. O'Neill and Hulme 2009); is it a matter of providing infrastructure and supports that will encourage people to shift their habits and behaviours (e.g. Lorenzoni *et al.* 2007); is it a matter of tapping into people's already existing desires for personal and collective well-being (e.g. Hobson 2008)? What has become clear is that provoking the sorts of changes now required of us is far more complicated than we ever thought. Research is showing that not only is there a knowledge-action gap, but there is a value-action gap and that "what one claims to care about does not strongly determine how one behaves" (Hobson 2008, p. 205). But this is not necessarily a

reason to feel hopeless about our future prospects. Out of this uncertainty and unknowing about how best to proceed there are opportunities for experimental research approaches (Hobson 2008, especially pp. 204 & 210).

Our understandings of how humans behave and interact with the world around have been based largely on the founding dualisms of Western thought. The assumption of a mind-body split means that thought, particularly in the form of knowledge, has been prioritised as the basis for action. The assumption of a human-nonhuman divide means that agency has been attributed to human subjects while the nonhuman world has been rendered as the mute object of human intervention. Within the social sciences there has been a long interest in rethinking humanism beyond these dualisms to appreciate the role of the body, emotions and affect in shaping what it means to be human, and to appreciate the role of nonhuman agency in shaping the world and the ways humans and nonhumans might live together. These currents of thought are expressed in the contemporary scene in ideas such as actor-network theory, non-representational theory, relational thinking and body-centred scholarship.² Such ideas challenge our understandings of social and political change, and modes of social and political inquiry.

In this paper we take up one of these recent ideas that addresses bodily learning and the agency of the nonhuman world—‘learning to be affected’. Drawing on the work of others, we explore the potential of learning to be affected as a means for prompting changes in how we live on this climate changing planet. We also explore the implications of learning to be affected for research practice. Using the example of a bus trip-workshop research project with community gardeners in Newcastle, Australia, we highlight how a form of collective research can play of role in learning to be affected and potentially contribute to shifting human actions. We start by elaborating the idea of learning to be affected and illustrating its relevance to gardening and community gardening. We then explore the implications of this for research practice.

Learning to be affected

In a 2004 paper, Bruno Latour introduced the idea of ‘learning to be affected’ to explore the process by which bodies learn to become more and more receptive to the world around, and to be “moved, put into motion by other entities, humans or non-humans” (2004, p. 205).

Latour illustrates the process through the training of noses for the perfume industry. Pupils start with “a dumb nose unable to differentiate much more than ‘sweet’ and ‘fetid’” but with the use of odour kits pupils develop—become—a nose that can distinguish more and more

subtle differences in odours (p. 207). Thus the body is not the vessel for the mind or soul, it is in Latour's words "an interface ... by which we learn to register and become sensitive to what the world is made of" (p. 206).

Researchers have used learning to be affected in ways that give us an insight into the relevance of the idea for understanding how we can be propelled to act in response to a climate changing world. For example, Gibson-Graham and Roelvink (2009) use the concept to explore ways that various groups in the Australian context have developed an awareness of the environment that propels them to act. Aboriginal groups, for example, manage country in response to careful listening and observing. Rose (2002) has written about this communicative web in the following way:

For MakMak people [of the Wagait floodplains in the Northern Territory], interactions with country that take place in daily life are called forth by country. April explained this when she said, '... country tells you where and when to burn.' Many of the MakMak people's actions are organised around messages of country that, for knowledgeable people, are calls to action. (p. 44)

Similarly, some Australian farmers have let the land speak to them and have revolutionised their farming practices so they now work *with* the land in ways that are compatible with Australia's dry conditions (Gibson-Graham and Roelvink 2009, pp. 336-342).³ In the UK, Bingham (2006, p. 489) canvases how bee-keepers, organic farmers and amateur entomologists also develop a capacity to learn to be affected by bees, pests, and butterflies. And Hinchliffe explores how volunteer field observers are trained to identify traces of water voles: "we had started to learn to be affected. We were bodies in process, gaining ways of looking, a new set of eyes (or newly conditioned retina), slightly more wary nose, a different sensibility" (2007, p. 132).

These various settings in which bodies interface with the world to register differences suggests that one way we might be moved to respond to climate change is through bodily learning. Indeed, the visceral impact of a climate changing world is more than evident as I work on this paper during a week-long heat wave where temperatures have twice reached 43 degree Celsius; while to the north and south of the country cyclones and floods are devastating lives and landscapes, and in the Northern hemisphere the Arctic has had its lowest ice extent since satellite records began and relatedly there have been heavier-than-usual snow storms across much of the US and Europe (National Snow and Ice Data Center 2011; Osborne 2011). One strategy for prompting the sorts of changes in human behaviour that are currently needed might be to provide opportunities for more and more bodily

encounters with this climate changing world. This strategy that comes from rethinking the mind-body and human-nonhuman dualisms contrasts with more familiar strategies for prompting behavioural changes such as education and information programs (with their focus on deepening people's knowledge) or advertising campaigns (with their focus on shifting environmental and social values and attitudes). For Gibson-Graham and Roelvink, one of the attractions of learning to be affected is that it disrupts the usual human-nonhuman dualism which "has arguably led us into the planetary crisis" and provides an opportunity for "un-performing" the dualism (2009, p. 324). In this special issue on community gardening, we raise the possibility that gardening, and particularly community gardening, might be one activity through which a climate changing world registers more and more strongly and might thereby prompt changes in actions.

Although not framed in terms of learning to be affected, the work of several other researchers provides an insight into the potent ways the world registers through gardening. In her book on thinking through the body, the feminist philosopher Ladelle McWhorter reflects on her experience of starting a small backyard vegetable garden. The quote is long but it tells an important story of the process of learning to be affected by gardening and being propelled to act differently:

The plants came up and grew steadily, and I watched each one. At first I watched to see if they would take on any recognizable shape, since I didn't know which were crops and which were weeds. Then I watched because they fascinated me. I began to be able to detect the most minute changes in each one. I could tell they were wilting before they drooped. I learned which species likes cool weather and which liked more sun not by reading seed packages but by watching each plant's response to light and shade ... I learned to watch other things too—rabbits, the path of the sun as the summer wore on, ants and moths and endless varieties of bugs I couldn't name. Then I began watching other people's gardens, began wandering up and down alleys and side streets, leaning over back fences to catch a glimpse of an onion patch or a row of Swiss chard. Before long I found myself talking about cutworms and blossom end rot and recipes for beets. I could feel myself coalescing, becoming a part of a network of endeavour, spreading out, putting down roots. A world was opening toward me ... (1999, p. 164)

Just as Latour describes how the training of noses in the perfume industry brings into being professionals who are able to detect more and more subtle odour differences, McWhorter

describes how her backyard gardening endeavours have sharpened her senses and sensibilities so that a new world of plants, gardens, animals, insects and other gardeners opens towards her. In a similar way, Russell Hitchings explores how experienced gardeners rather than directing and controlling their lawns and plants learn to watch and respond in order to “help plants along” (2006 p. 372-373). Latour explains that in the process of learning to be affected subjects become more articulate—articulate not in the sense of being able to speak with more authority, but articulate in the sense of being more affected by differences, more resonant with the world around (2004, p. 210). In McWhorter’s reflections and Hitchings’ discussion of urban gardeners, we see how people are becoming more articulate by registering more and more subtle differences and thereby becoming more receptive and responsive to gardening matters.

Out of these two examples of learning to be affected in urban garden settings, there are three points to make. First, although not framed in terms of climate change, the implications should be clear. We know that climate change will have dramatic impacts on agriculture, including changing seasonal conditions, changing the crops that will grow in certain areas, and changing insect life and pests and weeds. For those of us in urban areas, gardening is one of the practices through which we might viscerally register these changes—and with the pace of climate change exceeding predictions (Lydersen 2009) we are likely to register these changes in shorter time frames than previously thought. So urban gardeners like McWhorter who are watchers of seedlings, plants, weeds, insects and pests are likely to start to detect climate-related changes in their gardens and become more sensitive to and articulate about climate change and its impacts. The gardeners in Hitchings’ study are likely to find that they have to act differently ‘to help plants along’, and perhaps that there are some plants that cannot be helped along.

Second, while gardening is a potentially fruitful avenue for registering the differences that climate change is making, it is also a means for addressing some of the impacts on agricultural productivity. Urban gardening is an avenue for diversifying our sources of food, and recent research has shown just how much urban gardening can contribute to meeting our food requirements (e.g. Ghosh et al. 2008; Kortright and Wakefield 2011).

Third, in highlighting the potential of gardening, we are not saying that everyone should become gardeners in order to learn to be affected by a climate changing world. We are using gardening as an example to explore the potential of an approach such as learning to be affected that involves rethinking mind-body and human-nonhuman dualisms.

If gardening provides opportunities for learning to be affected, then perhaps community gardening provides even more. Community gardeners are observing and caring for their plants, seedlings, compost, soil and insects in the company of others. As they work alongside other gardeners, they are likely to be ‘comparing notes’, for example, commenting on what’s growing well, what’s struggling, what’s happened to the bees this year, how summers and winters are changing—and speculating on what this means in the context of climate change. This is certainly our experience of the different collective community gardens in which we participate. Even in individual allotment gardens, gardeners at the very least are likely to take note of what is going on in each other’s garden beds; but most gardeners with individual plots regularly interact with each other (e.g. Glover et al. 2005; Kingsley and Townsend 2006; Saldivar-Tanaka and Krasny 2004). In community gardens, then, the opportunities for learning to be affected are potentially amplified through interactions with others; and this has implications for social and political change, as Hale (2010, p. 261-2) observes:

Our actions are deeply embedded in the wider environment, and in the habits and culture and social norms of those around us. If we are to change, we will do so together.

In this paper, we are interested in the potential role that research might play in prompting such changes ‘together’. We suggest that just as community gardening amplifies learning to be affected and thereby increases possibilities for action, research might play a similar role by being put to work as part of the “complex of activities and interactions” (Hinchliffe 2007, p. 132) through which we can collectively learn to be affected. In the next section we discuss the implications of this for research practice and in the following section we discuss how this has been operationalised in one research project and the contribution it has made to a collective learning to be affected.

Research: Performative and Collective

The idea of learning to be affected has implications for how we think about doing research. The idea that the body is an interface through the world registers suggests a mode of research that involves doing, moving, smelling, tasting and other forms of bodily encounter, as opposed to a mode of research that privileges thought and talk. This concern with more embodied forms of research is common to those who are reworking mind-body and human-nonhuman dualisms (e.g. Hitchings and Jones 2004; Whatmore 2006). However, learning to

be affected suggests a more fundamental rethinking of research. It suggests a form of research that is of and in the world, and actively participating in processes of learning to be affected. This implication coincides with work that scholars are doing on research as a performative and collective practice.

Recently, researchers have begun to talk of social research as a performative practice to highlight the way in which all research, in one way or another, contributes to shaping the world that we come to live in (e.g. Gibson-Graham 2008; Hinchliffe and Whatmore 2006; Law 2004; Roelvink 2009).⁴ Law and Urry (2004, p. 390-1) put it this way: social inquiry and the methods used help to “*make* social realities and social worlds. They do not simply describe the world as it is, but they also enact it” (original emphasis). Here Law and Urry refer to two understandings of social research. On the one hand there’s the view, informed by a realist epistemology, that the role of social research is to ‘capture’ an external reality. On the other is the view, informed by an ontological politics, that social research is a constitutive practice and that by focusing on and describing certain aspects of the social world researchers are helping to make those aspects more real and other aspects less real (Law and Urry 2004, p. 396).

This places a different sort of responsibility on the shoulders of researchers and a different set of criteria by which to gauge research practice. If research is concerned with capturing and uncovering an already-existing external reality then it has to meet the criteria of being objective and representative, and reliable and valid. However, if research creates realities then our ‘criteria’ are about the type of world our research is helping to create. For Law and Urry (2004, p. 396) the critical questions include “what might be brought into being ... [and] what should be brought into being.” For Gibson-Graham (2008, p. 615) the critical questions include “How can our work open up possibilities? What kind of world do we want to participate in building?”⁵

These types of questions of course concern researchers who take a realist stance; we all want our research to contribute to making a better world. The difference is that when researchers foreground the performative effects of research, they attend to the ways in which their research methods might help to enact or erode certain aspects of the social world. Whereas in the realist approach, the assumption tends to be that uncovering the world is sufficient in itself and that the truth of the research findings will speak to what needs to be done.

The performative approach is particularly well-suited to collective forms of research. As Gibson-Graham highlight, the performative possibility of bringing new worlds into being

invites researchers to work ‘alongside other world-makers, both inside and outside the academy’ (2008, p. 614). One of the things that can happen in this collective and performative mode of research is that the various world-makers (human and nonhuman) learn to be affected by each other. Gibson-Graham and Roelvink (2009) and Roelvink (2010) have used Callon and Rabeharisoa’s (2003; 2008) investigation of the French Association of Muscular Dystrophy (AFM) to demonstrate how this happens.

Until the 1950s, in France, people with muscular dystrophy (MD) were considered sub-human and were basically ignored by medical and research communities: [t]here was no cure, no care, no research, no constituted facts, and no causal relationships on which to draw to find solutions’ (Callon and Rabeharisoa 2008, p. 234). Then in 1958, a group of parents formed the AFM and one of their strategies was to foster research on MD. They sought to change the reality of MD—and they have had success. Through an annual telethon they raise substantial funds for research (for example, in 2004 they raised 100 million euros, Callon and Rabeharisoa 2008, p. 232). But they are also active participants in research on MD. As Callon and Rabeharisoa describe, a hybrid collective has developed in which people with MD, their families and carers, researchers and medical practitioners research the disease in various ways. The collective has developed to the extent that some people with MD participate as fully-fledged researchers and are authors on academic publications (2008, p. 238). At the same time the AFM conducts research on issues of concern to them and they make this information available to researchers and medical practitioners. The expert-nonexpert divide has been broken down: “there is no fundamental difference of status between knowledge produced by patients and that produced by researchers or clinicians” (2003, p. 197).

From our point of view, what is important about this example of a hybrid collective is that people have learned to be affected. For example, researchers and medical practitioners have learned to be affected by people with MD. They are no longer treated as sub-human; through various encounters and interactions they have “become personalized while gaining depth and complexity” (Callon and Rabeharisoa 2003, p. 199). Researchers and medical practitioners have become more articulate about the nuances and the complexities of the disease, as have patients, families and carers. This process of becoming more articulate—of registering more and more differences—involves bodily learning and a hybrid collective that includes humans and nonhumans. For example, Callon and Rabeharisoa, describe how patients learn to live with various nonhumans including prostheses and even a worm whose genome is critical for research and treatment:

[patients'] understanding of the disease is thus enriched with an array of new human and non-human entities that they learn to describe and with which they become accustomed to sharing their existence. (2003, pp. 199-200)⁵

As a result of the work of this hybrid collective more and more possibilities have opened up for living with and responding to the disease.

In this paper, we started with the idea that one possibility for prompting action in a climate changing world is through the type of bodily learning that is captured in the idea of learning to be affected. We have suggested that research has a role to play as a performative practice that can help bring into being a more and more differentiated world that offers “new possibilities for living and acting” (Gibson-Graham and Roelvink 2009, p. 328). This involves conducting research in a collective or hybrid mode not just with different groups of humans, but with nonhuman others. In the next section we turn to a research project that attempts to put these ideas into practice. This is a small attempt, but one that explores possibilities for prompting shifts in a climate changing world.

Designing a performative and collective community garden research project

The Newcastle Community Garden Research Project has been informed by ideas of research as a performative practice that can be undertaken by a hybrid collective. The project grew serendipitously out of an informal conversation, at a community garden working bee, between the author and Craig Manhood, the then Coordinator of Fig Tree Community Garden in Newcastle. As a piece of research it was designed to produce knowledge about community gardens and especially the sorts of challenges community gardens face and how they respond to the challenges. But as a piece of performative research it was also designed to help bring new realities into being. In the Newcastle area there are around twenty-three community gardens (excluding school-based ‘community’ gardens), but these gardens have very little to do with each other as people tend to be very focused on their own community garden. We were interested in the possibility that research on the challenges of community garden could be conducted in a way that would help community gardens respond to new challenges. Therefore, we used research methods that would connect community gardens in Newcastle and potentially contribute to network-building so that gardens might be able to help each other respond to challenges in the future. The project was, as Hinchliffe and Whatmore (2006) describe, “an *intervention in the world*” (p. 136, original emphasis); it was “an experiment with others ... in making new political configurations possible, in bringing new ecological associations and knowledge practices into being” (p. 136).

In order to do this there were two research methods: a bus trip-workshop ‘method’ and a website ‘method’. The bus trip-workshop was held over two Fridays in May 2010. Twenty-two community gardeners from nine operating community gardens (and three planned community gardens) piled onto a mini-bus to visit each other’s gardens.⁶ At each garden there was a tour and presentation by the gardeners from that garden, and then whole group discussion of the issues raised. Before the bus trip-workshop, the participating gardeners were sent a set of question/prompts to help focus their presentations (see Box 1). The presentations and discussions were audio-recorded, and then transcribed and edited into two sets of scripts. One set told the story of each community garden, and the second set told fifteen theme-based stories of the challenges the gardens have faced and how they have responding (see Box 2 for a list of the theme-based stories). Drafts of all scripts were circulated to the community gardeners, and scripts were changed based on feedback and comments. Once the scripts were finalised the gardeners were re-recording reading the scripts. These recordings, with accompanying photos, are presented on the Newcastle Community Garden Project PlaceStories website as ‘movies’ (see <http://ps3beta.com/project/7733>), and written versions are also available as two community garden manifestos (see Newcastle Community Garden Project 2010a and 2010b).

Box 1: Presentation prompts/questions

- Tell us the story of how you got started. What do you think you did well? What would you do differently if you were starting again? Based on your experiences, what advice would you give a group thinking of starting-up a community garden?
- As the garden developed, what were some of the challenges? What do you think you did well in dealing with these challenges? On reflection, what do you think you should have done differently? What advice would you give another community garden that faced the same challenges?
- What about the future, where are you heading? Are there things that you want to change about what you’re doing? How will you go about making these changes?
- Tell us about how you manage the garden? How do you make decisions about what happens at the garden? Who is involved in making these decisions? What do you think works well about this management approach? What are some issues that this approach raises? What advice would you give a new community garden about management?
- Overall, what have been the highlights of your community garden? Why were these highlights for you? What are you doing to try and make sure you have more highlights like these?
- Overall, what have been the lowlights of your community garden? Why were these lowlights for you? What are you doing to try and avoid lowlights like this?

* Challenges might include: tasks falling to a small group of members; keeping the momentum going; dealing with funding and resourcing; figuring out the best legal structure for your gardens; dealing with drop-off of members; dealing with conflict between members.

Box 2: Themes from the Community Garden Manifesto and PlaceStories website.

- The politics of community gardening
- “You think you’re building a garden”
- Kids in the garden
- “Who’s in charge?”
- Managing community gardens
- Keeping things ticking over
- “Putting it out there”
- Getting around what you can’t shift
- Give and take
- Encouraging different groups
- Conflict in community gardens
- Resourcing community gardens
- Likely and unlikely partners
- Valuing what we do
- Tales from the gardens

The material presented on the PlaceStories website and in the two community garden manifestos are the initial ‘findings’ from the research, as these materials document in one way or another challenges faced by gardens and how they have responded. For example, the story of Villiers Street Community Garden

(<http://ps3beta.com/story/15127?project=7733&cmtty=pollinate>) tells of what happened when a garden had to close down because the site was needed for social housing. Two members of the garden reflect on their different responses to the event, and what has happened since.

What’s distinctive about the initial findings is that they have been generated through a hybrid collective involving academic and lay researchers and human and nonhuman entities.

On the bus trip-workshop, academic and lay researchers were co-investigating the challenges of community gardening. This research process was not necessarily tapping into knowledge that already existed. Several gardeners commented on how new knowledge was created, initially as they prepared their presentations by responding to the prompts/questions, and then collaboratively through the discussions that followed the presentations at each garden (and through the informal discussions that occurred as people walked around each other’s gardens together, and sat with each other on the bus and enjoyed lunches together and then drinks at the end of each day). In this process, everyone was positioned as both an expert in the affairs of their own community garden and a learner from others.

The nonhuman world was also an active participant. At each garden the sights, sounds, smells and feel were prompts for the process of collective inquiry (see Figure 1). We would argue that the same outcomes would not have been achieved by simply meeting

together and talking about each community garden (and this has also been observed by other researchers, e.g. Hitchings and Jones 2004; Ricketts et al. 2008). Indeed, even the cramped and uncomfortable mini-bus played a role. One participant later commented on the importance of “being positively entrapped on a bus.” On the bus participants were taken out of their everyday routines and ‘forced’ to be with a mix of community gardeners. A community of sorts was forged over the two days as people chatted, laughed, joked and generally got to ‘hang out’ together (see also Cameron and Gibson 2005, pp. 326-327; Community Economies Collective 2001, pp. 124-126). This hybrid collective that includes bus, plants and gardens is one way of responding to Whatmore’s call to “supplement the familiar repertoire of humanist methods that rely on generating talk and text with experimental practices that amplify other sensory, bodily and affective registers” (2006, p. 606).



Figure 1: A hybrid research collective that included community gardeners, plants and bus
(Photos: JC)

Learning to be affected through performative and collective research

In this paper we have proposed that gardening is one setting where people are learning to be affected by the human and nonhuman world around them. But learning to be affected is an iterative process; “the more contrasts you add, *the more differences and mediations you become sensible to*” (Latour 2004, p. 211, original emphasis). Thus *community* gardening potentially amplifies the process of registering and responding to the world around as more contrasts are added with gardeners working alongside others (even in gardens that use individual allotments). We contend that performative and collective research can add even more contrasts and intensify the ways in which we can learn to be affected by the world around and propelled to act. In this section, we illustrate some of the ways this occurred through the Newcastle Community Garden Project. We do this by drawing from our own reflections on the bus trip-workshop, written evaluations that were completed at the end of the bus trip-workshop,⁷ and observations and conversations at our own and some of the other gardens since.

For the community gardeners one of the outstanding outcomes of the bus trip-workshop was learning about the differences between the community gardens visited. Some gardens only had collective plots, others only had individual allotments; some were fenced, others were not; some were auspiced by Newcastle City Council, others worked in association with various organisations (e.g. a Croatian sports club, the Department of Housing and a local church); some were formed as non-profit legal entities, some were set up under the provisions of Newcastle City Council and others had no legal formation (including one guerrilla garden on ‘no-man’s land’). When asked about highlights of the two days, gardeners commented on how they ‘experienced’, ‘saw’ and ‘learned’ about different types of community gardens. Indicative comments (with emphasis added) included:

- Being able to *experience* the different gardens.
- Visiting the various community gardens and *experiencing* the different approaches/opportunities/issues presented to each group/by each site.
- *Seeing* different garden ideas of what works in Newcastle.
- *Seeing* varied approaches that have been taken in developing community gardens.
- *Learning* the various attitudes and methods of the gardens visited.

In what follows, we argue that becoming ‘sensitive to’ the differences between the gardens provided a necessary backdrop for distinguishing the shared features of the community

gardens and for becoming more “more resonant with the [community garden] world around” (Latour 2004, p. 210).

For example, when community gardeners talked about how they addressed the challenge of managing and co-ordinating their gardens they invariably highlighted how they used a ‘loose’ approach. This was reiterated at each garden, and when asked in the evaluation about what had been learned about managing and coordinating a community garden, almost every response included the following sorts of comments (with emphasis added):

- We’re definitely on the right track with the *loose* approach.
- Most important for me was the affirmation from others that it is ok to take on a more *low key* approach
- Relax and be as ‘*loose*’ as possible.
- A *loose* structure is good to facilitate community growth.
- Keep things *simple* and friendly.
- Like the *informality* of the running of most of the gardens.

We content that even though the community gardens were already taking a loose approach many of the gardeners only became ‘sensible to’ this feature as each different garden was visited and ‘more contrasts added’ (to use Latour’s words).⁸ As a result, it seems that some community gardeners are going to work on deepening this practice. When asked about what they had learned about their role in their community garden or about their personal journey, many of the gardeners responded with the following sorts of comments (with emphasis added):

- I loved how people talked about *letting go* – the letting go of self – as a way to create space for others.
- *Letting go* a bit more.
- To be a little more *laid back*. Take things easy; *go with the flow*.
- *Relax* and be as ‘loose’ as possible.
- It’s better to *stand back* and let things happen.
- *Leave the ‘door’ open* for people to be involved.

These types of comments provide an insight into the shifts that individuals need to make in order to foster a loose management approach.⁹ In line with the idea that learning to be affected involves bodily shifts, it is noteworthy that gardeners used phrases like ‘letting go’, being more ‘laid back’, ‘going with the flow’, ‘relaxing’, ‘standing back’ and even ‘leaving

the door open' that are imbued with a physicality that differs from ideas about leadership and management as 'pushing forward' or 'moving on' or 'leading the charge'.

Through the bus trip-workshop not only were existing strategies affirmed, in some cases gardeners were propelled to try out new strategies. As people walked around each other's gardens and looked, touched, tasted, smelt and talked they were acquiring new knowledge about community gardening. This was reflected in the responses to the evaluation question about what had been learned about gardening and what gardeners might try out in their gardens. Gardeners mentioned practices like composting, planting legumes to help improve soil fertility, building sweet potato mounds, raising chickens, using various plants for pest control and using different sorts of irrigation systems. These techniques have been put into practice. For example, at Silsoe Street Community Garden, the Committee of Management met immediately after the bus trip-workshop to talk about what their representatives had learned. Based on this discussion, four new gardening projects were implemented at the next working bee (see Figure 2).



Figure 2: Moved to act

(Photos JC)

Clockwise from top left: planting legumes; new signs for experiments with sprouted and unspouted lentils; completed sweet potato mound (with sign) and new compost bins; starting the sweet potato mound.

The importance of building connections between members was also highlighted as a practice that could be strengthened. One garden has a monthly Friday evening ‘cocktails in the garden’ event and another has a monthly Friday evening pizza oven get-together, and these practices stimulated lively discussion about the importance of events that have a social rather than gardening focus. When asked about what had been learned about managing and coordinating a community garden, almost every response referred to the importance of such social practices, and gardeners who didn’t already have them spoke of how they were going to introduce more regular social get-togethers. Since the bus trip-workshop, community gardeners from at least one community garden have been put into motion organising social events that have included a spring equinox party, a farewell party to two members who were moving and even a film night in the garden to view *Dirt! The Movie* on World Soils Day (5

December 2010).

In designing a performative and collective piece of research we may have intended to connect community gardens and provide an opportunity for network-building; but there was no guarantee that community gardeners would want the same thing. We were heartened that at the time of the bus trip-workshop this intention seemed to be shared. In responding to the question about highlights of the bus trip, almost every participant commented on the connections and nascent network, for example:

- Meeting other community garden members and forming a network of contacts.
- Sense of community and connections.
- Contacts made.
- Developing a network.

Since the bus trip-workshop some community gardeners have been moved to act on this. For example, community gardeners attend each other's working bees, open days, workshops and meetings. It is now commonplace to attend a community garden event and to meet not only community gardeners from the bus trip-workshop but other people from their respective community gardens as the effects of the research have rippled out. The network also has two 'technologies' to help keep the connections going—a timetable of the regular events at different gardens and an email list of community gardeners across Newcastle, which is growing as more community gardeners ask to be included. Gardeners use the email list regularly to stay in touch with each other and to provide updates of developments and events.

Of course, not every community gardener is involved in this network to the same extent, and several are not involved at all. Performative research as Law and Urry point out is “not a matter wish fulfilment. The relations of the world will put up greater or lesser resistances to most of the realities that might be created” (2004, p. 396). With this type of research we can only create openings for realities to shift, but we can't force realities to shift. As we look to the future there are ideas about further collaborations,¹⁰ but as Craig says “we don't know where the project will go next, that's going to depend on all the community gardens involved, and other community gardens that might want to join in.” (Newcastle Community Garden Project 2010a, p. 32).

Conclusion

In this paper we have used the example of a community garden research project to introduce a mode of research that is (explicitly) performative and collective. We have argued that

research that is oriented towards crafting realities and that involves human and nonhuman entities can potentially “create knowledge that increases the possibilities for action” (Roelvink 2010, p. 113). In the example used, community gardeners were affirmed that the ‘loose’ approach they were using to manage their gardens was appropriate. But having ‘seen’ the approach in a range of community gardens, gardeners became more sensitive to the practice and were encouraged to deepen their actions to support this loose approach. Having also seen, felt, smelt, heard and tasted some of the different gardening and socialising practices that other community gardens used, some community gardeners were prompted to encourage new gardening and socialising practices in their gardens. Finally, some community gardeners have acted on the opportunity providing by the research project to contribute to a network of community gardens in Newcastle.

We argue that this type of research is worth considering as we find ourselves living in and having to respond to a climate changing world. All too often our strategies for provoking shifts in behaviour are based on mind-body and human-nonhuman dualisms in which the first term is privileged. As a result, we have perhaps tended to focus on providing information and education, which can run the risk of “preaching and hectoring” (Hobson 2008, p. 204). Whereas if we also use a learning to be affected approach, the emphasis shifts to include embodied forms of learning where people are doing, walking, chatting, moving, tasting, sensing with each other and with nonhuman others, and potentially registering the world in more articulate and more sensitive ways.

In this paper we have explored how this occurred in the context of a community gardening project, but any number of activities could be the focus of such research—canoeing, climbing, bushwalking and even shopping, driving or showering. Focusing on everyday and even mundane activities involves “‘starting from where people’ ... [and] engag[ing] both ourselves as researchers, and our research subjects as co-creators of sustainable futures” (Hobson 2008, p. 208). How to conduct performative and collective research on these types of activities will depend on all sorts of factors (such as who we are collaborating with, what the activity is and how much time and money we have), but methods to engage bodily researching and learning and heighten our sensitivity to the world around could well include field trips, photography, journaling, ‘webcaming’ and videoing. In light of the scale of climate change, these research actions may seem small and insignificant but as others have argued what is needed in these uncertain times are modest experiments from which we can harvest practices for new worlds (e.g. Hobson 2008, p. 210; Lynch 2008).

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Endnotes

1. The title deliberately echoes Hobson's (2008) sub-title "thinking sustainably for a (climate) changing world".
2. Obviously there are numerous texts that could be referred to. Two recent and useful reviews are Braun (2008) and Hayes-Conroy and Hayes-Conroy (2010).
3. Here there are parallels to Rigby's (2009) discussion of "dancing with disaster" and "contact improvisation." Like learning to be affected these concepts can help us think about bodily learning as a way of relating differently to the world around us.
4. The term 'performativity' is often associated with the work of Judith Butler on gender. Butler (1993) argues that there is no gendered essence that subjects reflect, rather gendered subjects come into being through endlessly repeated practices. In the same way, research as a performative practice means that research is not about reflecting and 'getting at' the features of the social world that exist independent of the researcher, rather the world comes into being through endlessly repeated practices that include research.
5. This is one way in which the idea of a hybrid collective working in a performative mode differs from participatory action research (PAR). The focus in PAR is very much on human interactions. While there are parallels (for example, both value multiple forms of expertise, and both attend in some way to emotions and affect), PAR has largely developed within a realist tradition that seeks to capture the reality of the world, particularly the reality of oppression and exploitation. For more on PAR and how it connects with and differs from participatory projects informed by a different set of epistemological and ontological understandings see Cameron and Gibson (2005).
6. With only enough funding for a mini-bus and lunches etc. for two days we could not include all the community gardens in Newcastle, so we focused on gardens that were relatively close to each other. Craig Manhood phoned or visited each garden to explain the project and invited the gardens to send along two representatives.
7. This evaluation comprised nine questions:
 1. What were the highlights of the field trip/workshop for you?
 2. What were the lowlights? What didn't work so well?

3. For a similar event in the future, what do you think should be done the same?
 4. For a similar event in the future, what do you think should be done differently?
 5. Can you tell us a bit about what you've learned or what's been confirmed for you about gardening (things like crops you might grow in your community garden, or the activities you might include in the garden)?
 6. What about the way your garden is managed and coordinated. What have you learned about this (or what's been confirmed for you)?
 7. What about your own role in your garden or your own personal journey. What have you learned about this?
 8. Overall, can you tell us a bit about what you've learned or what's been confirmed for you about community gardening in general?
 9. Finally out of all the things you've learned through the field trip, what ideas do you plan on putting into practice?
8. Arguably the distinctiveness of each garden was the result of this loose approach which meant that each garden developed in response to the specificities of its social and environmental setting.
 9. One participant has since got a job as a community garden facilitator in a public housing estate. He has commented how almost everyday he has to 'step back' from what he thinks should be done to let community members drive and own the garden, and that he only learned the importance of doing this through participating in this project.
 10. One idea is to work with community gardens in Newcastle to research more about the community economies that are being created around each garden through ethical economic decisions about necessity, surplus, commons and consumption (see Gibson-Graham 2006; Hill, this volume).

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