

Watering Ideas – notes from discussion exchange

Rose Timlett, Glenn Watts, Elizabeth Shove, Sarah Hards

Aim of the exchange

To think about what practice theory interventions could look like for water

- Generating new ideas about intervention, for instance building on the drought and demand work - how we can design interventions to reduce or stabilise water use, and I'm particularly interested in the aspects of water use that are most important in droughts, as well as interventions that could be effective in droughts.
- Thinking about how we can use practice theory to inform more 'traditional' approaches
- Think about social change in the context of climate change adaptation (impacts will be primarily felt through medium of water) and whether this produces a new (or same) agenda or sets of issues.

Discussions

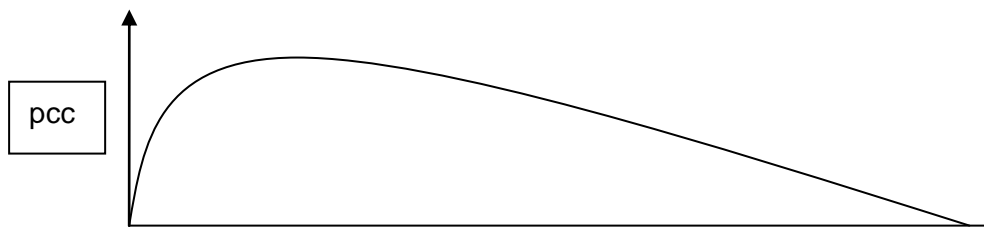
Time and space

Initiatives like WWF's Save Water Swindon (a new project that seeks to reduce water use via offering free retrofits of water saving products and behaviour change-style communications) concentrate on geographical site but we have no idea how these relate to the wider social geographies of practice, largely because we don't know what these are. Do geographies of practice relate to age/demographics, to social class and in terms of water, why or how might patterns of demand map on to river catchments or any other spatial or institutional zone. We noticed that practices and patterns of demand and rivers have different (partly related) seasonalities. Summer is also about hours of light and not only about garden watering, does the volume of laundry vary across the year, are there other periodicities to water demanding practices?

Imagining tracking the individual through the day and identifying moments of water usage (in order to capture that at work as well as home); alternatively, figuring out how much water a building uses, never mind who is in it; in a way the freedom here is to work with different units of measurement and representation in order to escape current framings of the problem and solution. E.g. also time of day as well as time of year.

Beyond the averages

Water use in talked about averages per capita consumption (pcc). In England its 148 litres per person per day. Most demand reduction work is focused on reducing average to 130 litres. Averages and beyond: there are some funny things going on out there, e.g. quite major variations in per capita demand between adjacent water resource zones and companies, which might relate to methods of calculation, or to features of the population but no one really knows. Average belies huge variation in practice and skewed shape of consumption curve. Interesting to map variation across water companies / areas. What's the shape of a consumption distribution curve? In different places, at different times? Where and when does high consumption matter? What is high consumption? What's the threshold, what does the practice look like? What's noise , outliers, leakage, etc?



Variation between households: this is something the Swindon (and other studies) can begin to document, but the issue is how to analyse the resulting data and how to interpret it. So far household size is the biggest ‘factor’ affecting pcc – but what if there are no social or other patterns in water demanding practices beyond this? Maybe age is, for instance, relevant to certain practices (toilet) but not to others, in short much more detail than usual would be required to ‘see’ what is going on.

With Swindon there is a chance to find out about what other people do: e.g. video clips of micro-habits e.g. of washing up, of doing laundry, of watering the garden. There is also a chance to ask questions, e.g. about their orientation to gardens (send Rose the drought and demand typology, possibly in the form of the pipeline presentation).

David Butler’s pie chart shows litres per practice and this is also a good idea with which to work. Perhaps with the Swindon people we might also add ‘time per litre’ as a means of figuring out when and how long it takes to ‘use’ different types of water (garden-water; laundry-water).

Outputs:

We discussed the idea of a relatively significant ‘beyond the averages’ workshop or similar event drawing people from water companies (who have an idea about consumption in their areas) to try to map variation, and explain – and question - variance. WWF now planning to incorporate this into new work stream, with a workshop planned for the Autumn. Think about what this approach would mean for interventions – more targeted at ‘high’ users, learning from ‘low’ using practices?

Included a couple of practice questions in survey to 5000 homes in Swindon to try to map some variation (results July):

Which of the following statements best describes your garden? TICK ALL THAT APPLY

- A playground for children
- Somewhere to relax / entertain
- A place where I enjoy growing plants and flowers
- An allotment / a space to grow food

On average, how many times do you wear your favourite sweatshirt or jumper before putting it in the wash?

TICK ONE BOX ONLY

- | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Once | Two or three times | Four or five times | Five or more times | Don't know |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Not talking about water

We invented the idea of never talking about ‘water’, and only ever using terms like bath-water, washing-water; garden-water.. making sure it was always hyphenated so as to focus on using-

practices and keep them in view, and so as not to fall into the resource trap of thinking of water as something 'real' or monodimensional or as something that is consumed.

Consumption: past, present and future

We wondered about where 'we' are today in terms of some future graph of water consumption: how much more could we be using and where, ie in relation to what practices might this be located. For instance, could it be normal to shower three times a day, to wash clothes half way through 'a wear' (that is a day); to be more profligate than anyone can yet imagine.. (could this be in relation to embodied water? Or to increasing water pressure, or to new ratios of water:fun).

Could we imagine a practice-based 'market transformation programme' initiative that took 'water' and not appliances as its focus – while remembering to always hyphenate all types of water.

Speciation of water-using devices, could we plot a family tree of stuff that is plumbed in? Not quite sure of the historical period we were working with here....

Relatively new stuff	
Hoselock/fittings	Wash stand
Paddling pools	Basin in bathroom
Sprinklers	Toilet size
Drip irrigation	Bidet? Plumbed in.
Aquaria, hot and cold	
Washing machines	
Shower	
Dishwasher	
Icemaker	
Central heating	
Coffee machines	
Toilets	
Underfloor heating	

I still like the plumbing history idea. Pursuing the thought that a practice involves people and objects, perhaps we could trace the plumbing history of a house or a few houses? Our 200-year old cottage, for example...

1800 - 1920? collect water from a pump (there are still a couple left in the town)

1920 - water from a tap in the yard; outside toilet

1930s - indoor water in kitchen lean-to, outside toilet

1960s - indoor bathroom, ground floor (our row of houses was condemned in the 1950s but saved by a local builder whose wife still lives opposite)

1970s - plumbed washing machine, outside tap for garden (so full circle from only source of water, to unnecessary, to "vital" bit of gardening kit)

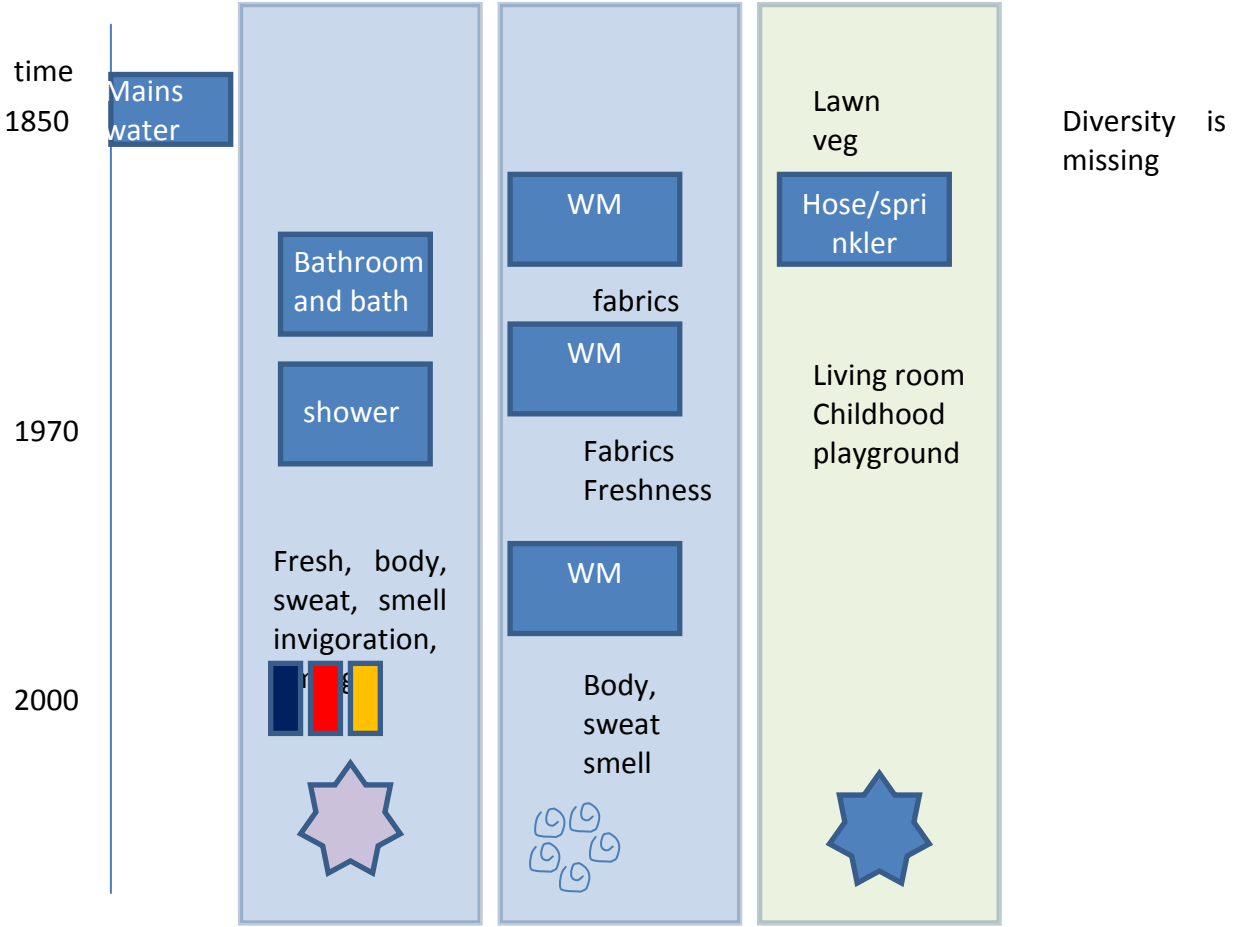
1970s - central heating

2006 - upstairs bathrooms, dishwasher (whether chosen or imposed - who knows?)

2010 - well, I can't think of anything we want but who knows what we or the next owners will do?

It's partly a social history of a rural town, of course - easy motorised transport lets people live here and work elsewhere, which in turn means that a cottage condemned 50 years ago is now an attractive holiday destination (actually true of our next door neighbour, now a luxury holiday let). If you attached pcc to these stages, we'd find that the 2006 changes represent a turning point (I hope) in that we have more water using appliances but we should also have reduced

water use...a shower as well as a bath, low flush toilets, efficient dishwasher and washing machine. Perhaps we've started to decouple volume from development? The practices persist but there's less water attached to them.



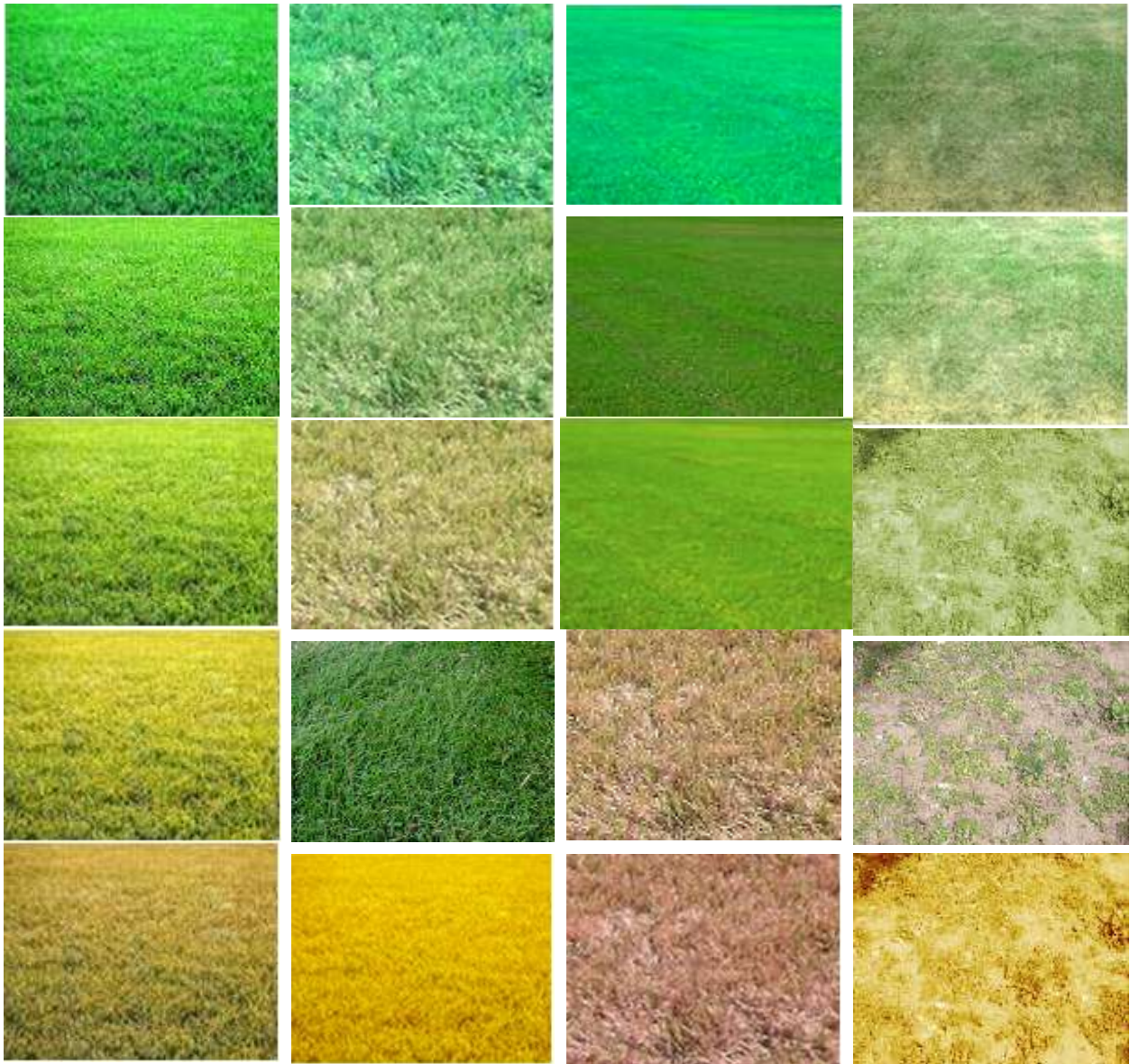
Seasons and grass

We imagined a colour chart, as per B and Q, showing different shades of green grass, through to brown. Which is normal? That would be one question. And we thought of asking or inviting working party participants to bring picture of their nearest grass patch (ran into issues of renting and ownership) on the back of the cards we could note if they were public or private patches. This could be a computer based 'game'. Turn the card to see where the grass is from. Recall the 'lawn' exhibition in Canada.

It is itself an interesting game: five pictures of grass are 'real' from google images, the rest are thanks to photoshop – only I know which is which.

This exercise demonstrates the importance of texture, not only colour

It also made me want to make one of those puzzles where you slide squares around! In reality that would be easy enough to make by sticking pics of grass on an existing puzzle.



Droughts

People who manage water / in water sector have own practice with entrenched elements. Have certain perceptions, images, objects, etc which determine what they do. An intervention here is as useful as an intervention aimed at consumers. For example: views towards drought:

“We would say we are in a potential drought. The Environment Agency define the region as being in drought at the moment...Our state of resources in reservoirs and groundwater, we don't feel as though we are properly in a drought yet”

(Water resources manager, August 2006)

Environmental drought – in 2006 dry summer meant all the anglers on the River Ex were calling it a drought (lots of fish died as river dried up in places). But the water company definitely did not think it was a drought – reservoir was full and “no problem”.

Climate change – more droughts or redefine drought?

Over the the next 5 years, water companies are planning a series of water efficiency projects with an estimated saving of just 1% of total water supply. What would a strategy to save, say 30% would look like: how would this translate into daily life? In relation to which practices might the greatest difference (compared to present practices) lie?

Perhaps there is scope to think about scenarios for what water supply and demand should or could look like in the future i.e. going beyond the assumption that there always has to be unlimited public water supply. This would make an interesting theme for a chatham house / high profile debate.

Practice theory and interventions

Can we understand practices only by building from individuals' experiences or is there a different way of thinking that puts the practice at the centre of the investigation?

How do transitions into and out of practices occur? Are there thresholds or smooth transitions? We can perhaps draw on physical science concepts here - thresholds, hysteresis, changes of state or simple perturbations.

It seems to me that "practice theory interventions" are completely different to how we've thought of "interventions" before, in the sense that they cannot be solely targeted at the end user. Hence, my instinct that we will not be able to turn practice theory into litres saved per person per day! I guess anyone could try to do so, but the issue would be how plausible would such measures be, and is this the right 'unit': for instance it might be possible to assess the quantities of water implied by a lawn used as football pitch vs a vegetable garden – but it would be the gardening practices, not the per person that counted as the 'consumer'. I wonder if your study areas would help us understand the possible effectiveness of different actions? My policy friends would love to quantify the effectiveness of interventions in l/h/d but this might be going a bit too far.

Practice interventions are those that shift the landscape / context to enable a growth in more sustainable forms of a practice and a shrinking of less sustainable forms. Given that, I think it would be interesting to understand the elements of these high / low practices in more detail. If we take garden watering for example, we could deconstruct the practice for groups that are low water users and high water users:

- Look at historic trends and how this led to lower / higher garden water use – this is interesting, there is some good work on the history of the lawn – not quite sure how or what data we'd get also bearing in mind the diversity of gardens – size, etc., and location.
- present - look at different high / low groups today - what makes them different;
- future - look at a range of scenarios by which garden water can get to a set of determined conditions (i.e. adaptable, cope with hose pipe bans, x number of litres).

Interested in the idea that some practices are more flexible to change than others and looking at how practices change linked to new technologies – what's negotiable?

Ideas for exhibition

1. Grass game / display

2. Maps of 'beyond average' water consumption

3. Running a bath

As the for the exhibition, the idea of 'running' a bath is truly great: I can see it now, people running down the full length of the conference hall, carrying a bath's worth of water ... And you may be right, we have a big cube for show but actually work with the more manageable daily quota. Last year I made this fetching easter bonnet from a 5litre bottle (with two plastic ducks carefully inserted) and it was quite heavy.

I like the idea of a wall of water, but water really is heavy and surprisingly messy if it escapes (in fact, probably one of the last things that you want hanging around your house!). For the exhibition, we could perhaps have the cardboard cube for the volume, and then represent a day's water use with real water. 150 litres is fifteen buckets (still dangerously messy) but we could perhaps get five or ten litre containers that we could seal...lots of fun could be had getting people to carry all their toilet flushing water or to "run" a bath!

