Pro-poor sustainable water management through environmental citizenship

Gestion durable de l’eau pour les défavorisés grâce à la citoyenneté environnementale

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RESUME
Selon les auteurs de cet article basé sur une étude de cas des premiers systèmes hybrides eaux grises – eaux de pluie britanniques utilisés dans des zones de logements sociaux, la citoyenneté environnementale doit reposer sur la perception, le sens et les pratiques des populations et leurs sentiments envers des changements à apporter. Les auteurs insistent sur le rôle des institutions informelles et suggèrent que les comportements « verts » des populations reposent sur des normes de respect social et un fort désir d’harmonie locale dans le processus participatif. Cet article met en cause l’hypothèse selon laquelle l’augmentation des responsabilités individuelles offre des solutions « vertes ». Les responsabilités environnementales étant inégalement partagées il n’est pas souhaitable tant du point de vue moral qu’environnemental de demander aux populations défavorisées de promouvoir la citoyenneté alors qu’elles sont confrontées à des difficultés quotidiennes.

ABSTRACT
Drawing on the case study of the UK’s first ever hybrid grey-water and rain-water systems in a social housing estate, this paper argues that the advocacy of environmental citizenship hinges on people’s perceptions, meanings and practices about the changing environments surrounding them and how they feel about making changes. In highlighting the role of informal institutions, we suggest that people’s green behaviours are shaped by norms of social respect and a strong desire for community harmony in the process of participation. This paper also challenges the assumption that enhancing personal responsibilities offers ‘green’ solutions. We argue that environmental responsibilities are not equally shared by all, therefore, it is neither environmentally moral nor desirable to ask poor people to promote citizenship while they face tremendous constraints on their livelihoods.

KEYWORDS
Citizenship, participation, sustainable water management, poverty, institution.
INTRODUCTION

Regulations, financial incentives and information provision have shown some, but not much, success in altering people’s pro-environmental behaviours and attitudes (Barnett et al. 2006). The problems, Dobson (2003) argues, lie, firstly, in an incomplete understanding about the intentionality of human beings in sustainable development, and secondly, in the relationships between the state, industries, community and individuals, both at the local, regional, national and global levels, which need to be redrawn. Against this background, the concept of environmental citizenship has gradually emerged as an alternative route through which to inspire change. Its increasing influence is both on theoretical discussion and policy making. International and environmental organisations, such as United Nations (UNEP, 2002) and Environment Agency in the UK (Barnett et al. 2006), are keen to understand how environmental citizenship can inform alternative policy strategies for promoting sustainable development, alongside regulatory and economic measures.

The rising popularity of the concept of environmental citizenship has, however, aroused concerns. Bell (2005) warns that an increasing number of environmental advocates and policy-makers use the language of environmental citizenship in a way which ‘belies the complexity of the idea’ (p180). Critics suggest that the advocacy of environmental citizenship places too much emphasis on personal commitment (Halpern et al., 2004). The notion of enhancing personal responsibilities, sceptics argue, epitomises the agenda of neo-liberalism - while the governments off-load their responsibilities to private and non-governmental actors, in particular, they highlight how a heavy burden is disproportionately exerted on poor and marginalised individuals in achieving sustainable development (Cornwall and Gaventa, 2001:32).

This paper draws on a case study involved with sustainable water innovations in a home for the elderly in the North-west of England. A combined grey-water and rainwater system and a collective rain-harvesting system were implemented for 34 single tenants who lived in their own flats and bungalows. They were characterised as old (generally above 60 years old) and poor (most of them relied on public assistance). Our aim in this paper is to show how the application of a ‘subjectivity-institution-structure’ environmental citizenship framework provides a strong and nuanced analysis of the case.

In particular, we want this paper to achieve three things: firstly, we will argue that the advocacy of environmental citizenship hinges on people’s perceptions about the changing environments surrounding them over time and how they feel about making changes. We will demonstrate the complexity of agency by exploring the meanings and practices of hygiene in the use of grey-water and rain-water. We will also examine whether tenants’ multiple identities are compatible with ecological citizenship. Secondly, we elaborate an argument that environmental citizenship cannot be exercised in a vacuum, but is relational and is shaped by the right way of doing things. We will illustrate with examples that tenants’ green behaviours are shaped by norms of social respect and a strong desire for community harmony in the process of participation. Thirdly, this paper will challenge the assumption that enhancing personal responsibilities, as one of the key components in citizenship, offers ‘green’ solutions since environmental responsibilities are not equally shared by all. We will argue that it is neither environmentally moral nor desirable to ask the poor elderly to promote citizenship while they face tremendous constraints on their livelihoods.
CASE STUDY: SUSTAINABLE WATER INNOVATION PROJECT IN NORTH-EAST ENGLAND

Our case study is an Environmental Demonstration Project located in the North-West of England. It was started in 1998 and completed in 2002. The environmental improvements were part of the urban regeneration of 34 properties, including part of the extra-care home and some individual bungalows. The majority of the tenants were old and poor. 70% of them are over 60 and rely on housing benefit. The first ever implemented combined grey-water and rain-water systems in the UK is designed to flush toilets, worked initially from recycled grey-water collected from baths and showers, backed up by rain-water, when the grey-water was depleted. The rain-water harvesting system collected rain-water from roof areas for external taps and toilet-flushing. It was also connected with the tenants’ laundry washing machines. Among the 34 properties, twelve were experimented with the combined water system.

Our research objectives were to explore the processes about how these sustainable water devices were initiated and developed. We interviewed ten stakeholders, including the developer, architect, surveyor, plumbing service providers, residential manager, carer and tenants. We also relied on secondary data, such as Scheme Design Report and Meeting Minutes, to enrich our understanding.

The Design Team was responsible for choosing the suitable sustainable technologies for the Project. Seminars and training sessions were organised to allow contractors, sub-contractors, engineers and plumbers to get familiar with different kinds of technologies. The chairman of the Community Centre represented the tenants at the monthly team meetings. Tenants were not involved in the process of choosing sustainable technologies because they were generally perceived as technically-incompetent. The developer in an interview made this point clear: 'that was a basically a technical process and there was not that much point in involving them' (Case study report, p21). However, the tenants had a visit to the Centre for Alternative Technology in Wales. The trip was educational in purpose, aiming to increase their awareness about environmental sustainability. To make the sustainable water innovations attractive, the developer used financial incentives, claiming that the new technologies helped to reduce their water bills. However, since the monitoring systems were not installed properly, it was difficult for the tenants to know exactly how much they could save.

The combined grey-water and rain-water system was found faulty shortly after the implementation in 1998. The functioning of the combined system was as follows: grey-water was collected from baths, showers and washing basins. In principle, the toilet-flushing system was designed to work initially from recycled grey-water, backed up by rain-water, when the grey-water was depleted. However, since each property in the Project was occupied with a single elderly tenant, the grey-water generated from their baths and washing was often sufficient to meet their needs. As a result, the rain-water was never asked for. The system design suggested that if rainwater was not called for within 28 days, the rainwater system would shut down automatically. As a consequence, there would be no water to flush toilets. This brought a serious problem when tenants had a party or their family stayed for the weekend. In addressing the problems, the affected tenants were instructed to turn the taps on or to take longer showers in order to create sufficient grey-water.
The inconvenience and grievances had brought about an ‘anti-technology feeling’ among the affected residents. They felt like guinea pigs subject to an experiment with the new water equipment. The professional stakeholders, in interviews, accused them of technologically-ignorant. A surveyor put it: ‘…we had a tenants’ meeting and the end-users’ understanding of it [the combined water system] is absolutely terrible’ (Case study report, p21). Facing strong resistance, the developers decided to scrap the system and put it back on mains. However, the twelve affected tenants were not informed about this decision.

Interviews were supplemented by the use of documentary evidence and direct observations. Direct observations primarily aided the study in the initial exploratory stage with numerous field visits conducted to inform interview questions. Documentary evidence enhanced the study’s comprehension of the case, assisted with details of events and the process of engagement with stakeholders’ perspectives.

2 SUBJECTIVITIES: MEANING AND PRACTICE

Using financial incentives to promote participation is not necessarily an effective strategy because the task of shifting patterns of citizenship towards eco-friendly norms is far more complex than simply offering financial rewards and penalties. Our case study suggests that behaviour and attitude changes are highly related to people’s subjectivity and agency. Subjectivity is about people’s perceptions about their surroundings, the ascribed meanings towards their environments and their feelings about the actions they can take. From this perspective, how people perceive the change of the environment around them, over time and place, plays a crucial role in ecological citizenship.

In exploring sustainable water practices, Medd and Shove (2006) suggest that investigating water consumption should not simply measure how much water each household uses, but should situate water users within a wider set of domestic practices and daily routines. In our case study, tenants made a strong link between their understanding and use of water and the meaning and practice of ‘hygiene’. Their perceptions about water hygiene mediate what kind of water can and cannot be shared. This shapes how sustainable water innovations are designed and implemented. For instance, tenants had a strong feeling that grey-water is ‘personal waste’ which should not be shared with their neighbours. The combined grey-water and rain-water systems should, therefore, be designed to be individualised and self-contained. Rain-water, in contrast, comes from the sky and is clean enough to be collectively used, and therefore the rain-water harvesting system runs in a collective way.

Environmental citizenship highlights the role of people as ‘citizens’. This is intended to pose a challenge to the rational choice model of ‘consumer’. However, this ‘citizen-consumer’ dichotomy does not pay sufficient attention to the multiple identities that people hold. Apart from being citizens and consumers, the elderly tenants in the case study were also grand-parents, neighbours, friends and community members. Picking their identity as grandparents as an illustration, allowing their grandchildren to play with water is their desire to be ‘good’ grandparents, but it is often in conflict with being a ‘good’ ecological citizen. On one occasion, some tenants hosted Christmas parties for their families and friends. The break-down of the combined grey-water and
rainwater system during that time meant that there was no water to flush toilets. This
did not just cause embarrassment, but made them feel bad about not being a good
‘host’. In addressing the problems, the engineers told them to turn the taps on or to
take longer showers in order to create grey-water. The tenants, in an interview, found
this suggestion ridiculous because grey-water, from their perspective, was generated
from purposeful actions, such as washing hands, and should not be created in order
to support the system.

3 DOING THE RIGHT THINGS

A key feature in promoting ecological environment is to help individuals to get access
to information, so that they can make purposeful decisions about their actions
(Barnett et al. 2006). Despite good intentions, the assumption that more education
and better knowledge lead to more environmentally responsible behaviour is
problematic since it fails to consider adequately the role of institutions in shaping
environmental citizenship (Carlsson and Bruun Jensen, 2005:15).

Institutions are a set of social practices embedded and reproduced in our daily habits
and routines. The power of institutions, in Douglas’ words, is that they ‘think on our
behalf’ (1987). This does not mean that human beings are cultural dopes who do not
reflect on their actions, but we often leave ‘common sense’ and social conventions to
make decisions for us without our close scrutiny. In our case study, the water system
designers connected the rain-water supply with tenants’ washing machine in an
attempt to reduce their potable water consumption. However, the tenants were very
angry about this arrangement. They thought rain-water was not clean enough to
wash clothes and that would also leave a bad smell in their clothes. Facing such
strong resistance, the engineers were forced to re-connect their washing machines
with the mains taps. This example demonstrates that our preferences are historically-
and culturally-shaped. Unsustainable practices, such as using highly-treated potable
water to wash clothes, are ‘the right way to do things’ and thus become normalised
and embedded in our daily practice and thinking. Providing people with more green
information or offering them wider choices of sustainable technologies, as we have
demonstrated, are unlikely to be sufficient to disrupt the embedded nature of our
un-green habits.

The literature on environmental citizenship also promotes active involvement of the
public in the decision-making process that affects their lives. This assumes that
collective action fosters a sense of empowerment and participation ensures
legitimacy and sustainability. Despite good intentions, people exercising their rights to
participate do not exist in a vacuum, but is embedded in social relations. It is the very
minutiae of social life and relationships, as Cleaver (2004) argues, which shape the
‘forms that citizenship can take place’ (p272). For example, the elderly tenants in our
case study were very content to ask their chairperson to represent them in the
Steering Committee of the project. Although ordinary tenants were allowed to attend
the Committee, they did not see it as appropriate since their action might risk
disrupting the collective harmony of the community. The norm of social respect and
the desire to be accepted, therefore, constrain them from getting more involved in the
decision-making process.

4 CONSTRAINTS AND ENVIRONMENTAL INJUSTICE
With reference to sustainable consumption, Seyfang (2005) warns that individuals are not necessarily able to act on their ecological preferences to influence the market owing to a diversity of obstacles, such as affordability, availability and convenience of sustainable products (p296). The idea of constraints is also relevant to the act of environmental citizenship. The participation of the elderly tenants was constrained by normative values, such as the norm of conflict avoidance. Their discontinuous attendance at group meetings (due to poor health), low level of self-esteem (resulting from their poor educational background), a general deficit in human capital and a lack of the 'right' kind of language also hindered them from articulating their needs in formalised public fora. All these factors reinforced the idea that the elderly tenants were 'technically-incompetent', providing the professional stakeholders legitimate reasons to exclude them from the involvement in the Design Committee's choice of alternative technologies. Active citizenship, therefore, cannot simply be achieved by non-engaged tokenistic participation. Neither is offering social groups with multiple disadvantages extra support sufficient. There is a need to challenge discriminatory conditions and structural inequalities that hinders people from being full citizens.

This critique leads to Dobson's thesis about asymmetrical environmental responsibilities (2003). He argues that environmental citizenship, stressing rights and responsibilities, has a serious pitfall since it assumes that the dialogic relations between stakeholders are necessarily fair and that environmental responsibilities should be shared equally by all. He urges a close examination of the distribution of costs and benefits among different groups in citizenship since some people, in reality, have much less power than the others, and they should not accept the same level of duties in achieving sustainable development. Our case study shows that the poor and elderly tenants could not generate sufficient grey-water because they consumed very little potable water in their everyday lives. While their water consumption was much lower than other age and social groups, we need to ask if it is morally-right to ask them to play guinea pig to test the innovations. It requires a re-consideration about whether it is environmentally-just to ask them taking more responsibilities while they have already encountered numerous resource and institutional constraints on their lives.

5 CONCLUSIONS

The following table highlights the features of the ‘subjectivity-institution-structure’ approach to environmental citizenship and summarises the findings from our case study. Putting the three key elements of environmental citizenship (ie. exercising rights, enhancing individual responsibilities and participatory governance) against subjectivities, institutions and structures, we examine how different factors enable and constrain the achievement of successful citizenship. Subjectivity highlights the role of people’s perceptions and meanings in exercising their rights to clean air and water and the motivations underlying their personal commitments to environment and their participation in collective action. Institutional factors are the moral principles, social values and cultural norms that shape people's understanding and access to their rights. Individual responsibilities to the environment are both embedded and reproduced by our daily routines, habits and the 'right ways to do things'. Their participation in environmental governance is also mediated by the norms of decision-making, such as norms of conflict avoidance. Social structures underline the cultural contexts, social constraints and power dimension that influence what rights
can be exercised, how individuals take up more responsibilities to the environment and how collective decisions are made in public fora.

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Case study report. Unpublished.


