13 Hydrocitizenship

Concepts and insights from the Lee Valley, UK

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Introduction: hydrocitizenship and urban rivers

Urban river systems represent one of the last vestiges of human-nature interaction. They are tangible sites for hybridity between nature and society (Latour 1993). In cities such as London, the rivers have been contained and engineered both to reduce the risk of flooding of urban settlements and infrastructure and to provide the conditions for commercial development and public access. The state of our rivers also reflects the global realities of population growth, urbanisation and related climate change, and global-local responses to this phenomenon such as the Millennium Development Goals, Sustainable Development, Local Agenda 21 and European Water Directives.

The increasing demand by citizens and environmental organizations for cleaner rivers, groundwater and coastal beaches has been evident for some time. This was recently reconfirmed by a poll of all 25 EU countries (Eurobarometer 2012). When asked to list the five main environmental issues that Europeans are worried about, results for the EU25 showed that nearly half of the respondents were worried about “water pollution” (47%), with individual ratings as high as 71%. European Water Policy therefore seeks to clean polluted waters, and to ensure they are kept clean. In achieving these objectives, the roles of individuals and citizens’ groups are seen to be crucial. The EU Water Framework Directive (WFD) was adopted in 2000 with the year 2015 as the target date for getting all European waters into ‘good condition.’ However, England & Wales missed the 2015 “good status” target by some way, with 46% of water bodies failing to meet water quality standards by this date (HoC 2015). In fact, over 50% of European surface waters were forecast to fail to meet this standard by the due date (EEA 2012).

In the UK, population growth, the densification of land use and housing and the opening-up of former industrial waterfront areas has on the one hand increased our exposure to water, but on the other hand has created pressures on the water and sewage systems. Domestic pollution, road run off, storm surge and recreational water use have replaced what was heavy industry and dockland activity as reasons for pollution; but the legacy of those past disturbances remain in our contemporary waterscapes. Water and related urban ecosystems
have therefore seen as objects to be ‘rediscovered’ and promoted to beneficiaries beyond those who have traditionally worked on rivers and canals. This physical, social and economic transformation has created a new type of steward and stakeholder base from what was formerly a small, largely closed group of local users and workers in the canals, reservoirs and transfer points along the river system. This has in turn generated a complex new governance and legislative system both to manage the water resource and the associated ‘risks’ of flooding, water quality, safety and conflicts between users (Nones 2016). Meanwhile, at a local level, communities have to respond to these external changes to large-scale waterfront regeneration as the river becomes a contested place for urban development, and to the prosaic operational responsibilities of access, maintenance, ownership and usage. This new relationship between stewards, stakeholders and residents and users of the river system has therefore created a need and space for a new form of river governance, represented here through the notion of ‘hydrocitizenship.’

To analyse this concept, this chapter presents a critique of the Lea River Basin landscape, and human-nature inter-actions that have shaped it over the past fifty years. The Lee Valley has been the subject of in depth investigation as part of a research project entitled “Towards Hydrocitizenship,” a three-year study of continuity and change in this river catchment. The study engaged communities and other stakeholders in relation to the urban water system. Within social-hydro relations, as in other contexts, citizenship can be understood in diverse, contradictory ways, including, for example, as a social contract, and an individual or moral responsibility which impacts on the practices of a community. There is a need to investigate and understand how particular socio-hydrological configurations (Swyngedouw 2009) are produced and how these contribute to potentially inequitable environmental conditions. Water issues generate specific and contentious forms of conflict within the eco-social fabric, which demand exposure and negotiation in any form of culture, and necessitate policy for addressing rights, sustainability and resilience. Hydrocitizenship is thus conceived as an enhanced awareness of, and sense of responsibility for, water as a vital, shared eco-social resource. It implies ongoing processes of learning, negotiation and practice rather than a precisely defined/static position. In this sense hydrocitizenship is an important and underpinning subset of ecological citizenship (Dobson 2007). The challenges of developing (full) ecological citizenship are daunting, but hydrocitizenship is a relatively achievable step as ‘water is everywhere’ in political, cultural and ecological terms (Linton 2010), and an obvious medium of ecological and social connectivity, albeit in a complex, contested space of interconnected demands. Thus, hydrocitizenship has been developed as an interdisciplinary concept which seeks to investigate past, present and future water-society relationships in holistic, multi-issue, multi-site frameworks. It also seeks to engage directly with critical issues of global sustainability and environmental change in local/community settings by envisioning these ‘macro’ issues through the lenses of everyday relations and lived experience.

The hydrocitizenship project analysed here encompassed negotiating the complex governance arrangements and shifting relationships between new and
established stewards and both incoming and incumbent resident communities. In the Lee Valley, new housing and migration (social, economic, leisure) has generated a human flow mimicking the flow of the river: a flow that is congruent with upstream-downstream relationships. Thus, this project required a multi-disciplinary approach to understand this historic and socially constructed landscape that has brought together social and environmental scientists with practising artists, attempting to work in collaboration with host communities, intermediaries and stakeholders; to co-design a grounded theory/heuristic framework.

River governance in the Lee Valley

The spatial and political complexity of river systems presents particular challenges for governance and issues of access, conservation and ownership. In the UK and in its devolved regions, a patchwork of government departments, agencies, water companies, river catchment partnerships and local authorities, alongside a host of voluntary organisations from environmental charities to recreational users and clubs, has been generated in response to such challenges. This includes privatised former public utilities which replaced the Water Boards in 1989; only the UK and France have their water companies in private ownership (Hall and Lobina 2008). A dominant concern is flood defence and reduction of risk from flooding; in urban river systems, particular emphasis is given to storm surge and other extreme events, and the management of waste and water quality. Organisations such as the Environment Agency and Internal Drainage Boards have statutory responsibility for water level management and flood mitigation, as well as a mandate for securing water quality in accordance with the EU Water Directive.

The River Lee and its tributaries, canals, reservoirs and riparian communities was one of four case study areas selected for the hydrocitizenship research project (the others being Bristol, Bradford/Shipley and Borth coast, Wales). Known as London’s second river, the River Lee originates in the Chiltern Hills north of London and flows south where it meets the River Thames (Figure 13.1). The River Lee runs for 50 miles (82 km) and has tributaries such as the New River (an artificial waterway 20 miles (32 km) in length that was opened in 1613 to supply London with fresh drinking water), the Lee Navigation Canal (a further 28 miles [45 km]), in addition to thirteen major reservoirs which continue to provide drinking water for the catchment area (over 500 square miles of flood plain). Several of these reservoirs are in the process of conversion to wetland nature reserves; these sites include visitor and education centres and pathways, allowing public access for purposes other than controlled use (e.g. for recreational fishing and birdwatching). As an indication of the river’s amenity value and industrial past, over thirty pumping mills are located on the river, which today represent an important physical legacy and cultural heritage alongside a network of locks, bridges and other infrastructure.

For much of its upper reaches, the river runs through semi-rural and suburban residential areas, and then within or as a boundary to the Lee Valley Regional Park, a 10,000-acre, 26-mile-long linear park running through the
northeast of London, Essex and Hertfordshire (Civic Trust 1964). This amenity is managed by the Lee Valley Regional Park Authority (LVRPA) and is made up of a diverse mix of countryside areas, urban green spaces, heritage sites, country parks, nature reserves and lakes and riverside trails, as well as sports centres for riding, boating, ice skating and cycling. In the lower reaches of the Valley is located the legacy from the London 2012 Summer Olympics, a site chosen for regional revitalisation in this otherwise nondescript inner suburb of east London. This place-making project seeks to transform the area into a new destination, and as a site for major new waterside housing.

*Figure 13.1 Lee Valley and neighbouring towns.*

*Source: the Author*
and associated retail, offices and a complex of educational/cultural facilities (Evans 2017). South of the Olympic park, the river’s course is split, and it runs almost completely in man-made channels and canals that were originally created to power water mills, flowing through an area that was once a thriving industrial zone with a legacy of manufacturing and water engineering structures (Evans 2016). There is a high concentration of resident and practising artists around this area, which is the key for an annual arts festival and open studio events. These waterways also host a growing boat dweller population, some in marinas, but most in canal and riverside moorings. This catchment area is set to witness a five-fold population increase over the next 10–15 years (Evans 2015a) as new urban villages are built and new communities are established, mostly on previously undeveloped waterfront land.

The expansive catchment of the Lee produces a spatiality that can be visualised firstly through maps. The extent of the watershed requires a scalar approach and ‘zoning’ for effective governance and for understanding how the river is perceived and experienced by various communities. This fragmentation of the river valley presents challenges for governance on the one hand, and on community responses and identities attaching to the river environment on the other. For example, where host communities are involved at the behest of water authorities, such involvement tends to be area and issue-specific (e.g. sustainable urban drainage, river clean-up, reed planting), with little consideration of mutual interactions (‘upstream-downstream’) between the “manifold characteristics and needs of the management of a river basin, so that when stakeholders are organised with dissimilar spatial references, water agencies may not be inclined to initiate and participate in multi-party stakeholder interactions” (Nones 2016, 1171). River systems and their governance present a multi-scalar challenge, which Lefebvre viewed through global, mixed and private levels of society, equated with the state, the urban and ‘habiting’ (or dwelling) (2003) in the ‘politics of scale.’ The state through national and local levels of government as well as supra-national (European Union) entities sets the legislative agenda, priorities, resource allocation and land use access conditions, and mediates goals such as National Ecosystems (NEA 2011) and environmental targets for water quality and habitat diversity. Urban authorities operationalise these policies and deliver local governance primarily in partnership with community and private organisations. An example in this case is the Lea River Catchment Partnership such as Thames 21 and the local Wildlife Trusts who are appointed by the government’s Environment Agency to conform to the EU’s Water Directive (Table 13.1). This catchment-based approach encompasses engagement with local partners and users, including residents through local environmental improvements such as the installation of Sustainable urban waters Drainage (SuDS) schemes, reed bed planting and environmental education with schools (e.g. installing water butts and waterside planting).

The roles and relationships between stewards of the river environment and stakeholder organisations is summarised in Table 13.1. In some cases, stewardship and stakeholder characteristics are one and the same but as the governance system becomes more distant from the water ecosystem these roles divide and can
<table>
<thead>
<tr>
<th>Interest Group</th>
<th>Level – Stewardship and Stakeholding</th>
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<tbody>
<tr>
<td>Environment Agency (EA)</td>
<td>National – flood risk/defence, air &amp; water quality</td>
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<tr>
<td>Internal Drainage Boards (IDBs)</td>
<td>Regional – storm water management, watercourse maintenance and improvement, adoption of Sustainable Drainage Systems (SuDs)</td>
</tr>
<tr>
<td>Canals &amp; Rivers Trust (C&amp;RT)</td>
<td>National – canal access, safety, maintenance; canal usage, visitor management, boat usage, moorings</td>
</tr>
<tr>
<td>Lee Valley Regional Park Authority (LVRPA)</td>
<td>Regional – park/landscape and visitor management, marina management, leisure facility operator, planning (land-use) authority, governance (33 London Boroughs/riparian Counties)</td>
</tr>
<tr>
<td>Love the Lea/Thames 21</td>
<td>Regional – conservation e.g. reed planting, clean-up, SUDS</td>
</tr>
<tr>
<td>Water Authorities, e.g. Thames Water Authority</td>
<td>Catchment Partner (Lower Lee), Education/schools programme</td>
</tr>
<tr>
<td>London Legacy Development Corporation (LLDC)</td>
<td>Water quality, management and supply</td>
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<td></td>
<td>Regional – visitor access and promotion</td>
</tr>
<tr>
<td>Wildlife Trusts (e.g. London, Herts &amp; Middlesex)</td>
<td>Regional – Olympic Park/zone and waterways, facility and visitor/events management; Planning authority, land development, land/riverscaping</td>
</tr>
<tr>
<td>Local authorities</td>
<td>Local – public access to nature/reserves (Walthamstow Wetlands, Woodberry Wetlands); water heritage interpretation; wildlife conservation and education</td>
</tr>
<tr>
<td>Other landowners (e.g. property, farmers, utility companies)</td>
<td>Local – local governance (via elected ward councillors); Planning authority, housing, recreation, access, revenue, licensing</td>
</tr>
<tr>
<td>Anglers/Fishermen</td>
<td>Local – maintenance/management, access (restricted)</td>
</tr>
<tr>
<td>Canoe/Rowing Clubs</td>
<td>Land values, protection, safety Housing and property development</td>
</tr>
<tr>
<td>Boat dwellers</td>
<td>Local – fish stocks and health, conservation recreational amenity and competition (e.g. Walthamstow Reservoirs Anglers Club)</td>
</tr>
<tr>
<td></td>
<td>Local – river access and quality; recreational amenity and competition (e.g. Lee Valley Rowing Club)</td>
</tr>
<tr>
<td></td>
<td>Local – river access, flow, water quality (also source of pollution, e.g. waste water, litter); alternative housing, recreational amenity, social network (Springfield Leisure Cruiser Club Marina)</td>
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safety and flood prevention are also scalar, through national, regional and local levels of interest and control.

A key role of the governance of river and water management is balancing and resolving conflicts between the needs and interests of different user groups. At a meta-level this is encapsulated in the tenets of sustainable development which necessitates policy changes and greater coherence between sectors, requiring: “integration of objectives where possible; and making trade-offs between objectives where integration is not possible” (Dalal-Clayton and Bass 2002, 7). The current development of the Lee Valley and river system project is based on this concept. However, conflicts of interest occur on the ground between different user groups, for instance between anglers, birdwatchers and canoeists and walkers. While anglers and birdwatchers would need a quiet environment, canoeists and walkers may disturb or frighten fish and birdlife. In addition, birds of prey such as herons and cormorants can compete with anglers for their catch. The opening up of waterside areas and the creation of ‘reserves’ for visitors and educational/observational research clearly presents a challenge to the previously exclusive access granted to groups such as anglers and birdwatchers. For example, Walthamstow Reservoirs (owned by Thames Water as a commissioned water supply), a place currently undergoing transformation into an accessible wetland for visitors, was previously a fishing ground. Not surprisingly, the Anglers Club members see no benefit in opening access and interpretation of these water assets for a wider public.

Managing these reserves, which falls under the mandate of local Wildlife Trusts, also necessitates direct intervention to maintain ecosystem biodiversity. Biodiversity and ecosystems are closely related; the concepts of diversity and variability are important for managing each of them. There are many ways of considering ‘diversity,’ such as the number and abundance of species, their distribution in an area, and different types of interaction pathways. For example, planting reed beds, removing invasive plants, breeding fish stocks for the reservoir and culling Canada Geese and vadeire crayfish are all considered direct interventions that are helpful for the diversity of the local biota.

Currently a particularly problematic conflict is intensifying around resident canal boat dwellers and the Canals & Rivers Trust (C&RT – see Table 13.1). The Trust’s policy has shifted towards recreational use of the canals and waterways, including revenue-generating activities that take the focus away from a residential community of boaters. With few permanent moorings, an increasing number of boats move from temporary mooring to temporary mooring to comply
with C&RT rules that seek to enforce shorter stays to restrict peripatetic waterborne living. Families with children at local schools and accessing work locally are effectively forced off the space of their dwelling (i.e. the river-as-home). This situation is exacerbated by population growth in these waterfront areas, the unaffordability of housing in London in general and in these waterside locations in particular, which is increasingly more expensive to rent or buy. Privatisation of moorings also exploits excess demand and is detrimental to this lifestyle. The focus on the visitor economy is therefore at odds with a section of traditional ‘stewards’ and river users – for example, in Hackney Wick, located in the lower Lee, the local E20 Fishing Trust has been displaced by the C&RT who evicted this angling group to acquire their premises (to be used as a visitor centre). Ironically the Canal & Rivers Trust promotional programme and narrative is titled *Humans of the Waterways*.

This mediation between state-professional-community has created a hierarchical governance system with a complex system of many licences, permissions and barriers. Direct action and access to the river is increasingly difficult unless conducted through the relevant agencies, which makes it difficult for locals or user communities to engage with these waterways. Through the hydocitizenship concept, expectations are that awareness of the value of ecosystems and urban nature and greater citizen responsibility and governmentality will arise out of this form of inclusive engagement. In addition, resilience in the face of climate change, improved access and recognition of amenity values (or ‘cultural ecosystems values’; NEA 2011) are also expected outcomes.

**Social production of river space**

A particularly helpful conceptual framework for understanding the construction of space in the context of the Lee Valley watershed can be derived from Lefebvre’s *tripad* with respect to the river’s governance, perceptions and the scales at which these operate. Firstly, conceived space can be characterised by the *representations* through which dominant groups define space – specifically the spatial representations which urban designers and scientists employ. Here *representations of space* “are tied to the relations of production and to the ‘order’ which those relations impose, and hence to knowledge, to signs, to codes, and to ‘frontal’ relations” (Lefebvre 1991, 33). They also refer to “conceptualized space, the space of scientists, planners, technocratic subdividers and social engineers, and of a certain type of artist with a scientific bent – all of whom identify what is lived and what is perceived with what is conceived” (Lefebvre 1991, 38).

Here, urban planners, landscape architects, environmental scientists, water engineers and ‘environmental’ artists (including writers, poets) dominate the discourse and imagery, and both the interpretation and design of the waterways. This includes the important role that landscape architects and designers have in river walkways and in parkland design and selective interpretation. In a study of the new Olympic Park which abuts the River Lee and Navigation canal, Snaith (2014) found that landscape traits such as presence of natural plants, semi-natural
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A particularly helpful conceptual framework for understanding the construction of space in the context of the Lee Valley watershed can be derived from Lefebvre’s triad with respect to the river’s governance, perceptions and the scales at which these operate. Firstly, conceived space can be characterised by the representations through which dominant groups define space – specifically the spatial representations which urban designers and scientists employ. Here representations of space “are tied to the relations of production and to the ‘order’ which those relations impose, and hence to knowledge, to signs, to codes, and to ‘frontal’ relations” (Lefebvre 1991, 33). They also refer to “conceptualized space, the space of scientists, planners, technocratic subdividers and social engineers, and of a certain type of artist with a scientific bent – all of whom identify what is lived and what is perceived with what is conceived” (Lefebvre 1991, 38).

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or pastoral landscapes and wilder or picturesque characteristics such as perennial flower plantings, meadows, marshland nature reserves were strongly preferred by people claiming white British ethnicity, but such traits were not seen as important by ‘non-white’ British groups (the majority of the population in the lower Lee riparian boroughs). Other key representations of river space as conceived and ‘represented’ by scientists and planners are described in binary terms such as safe/unsafe, accessible/inaccessible, and through flood risk maps which designate areas according to different chances of flooding based on statistical probability of inundation. While such maps claim scientific objectivity, they rely on crude modelling and timelines (1 in 100 years, 1 in 1000 years) and they do not reflect lived experience and knowledge from ‘below’ (i.e. those who have the most direct experience of extreme natural events over time are not consulted for map-making). This highlights Forsyth’s point that “environmental explanation needs to incorporate the views and experiences of people living in (effected) zones to be both biophysically accurate and socially relevant” (Snaith 2014, 147).

Secondly, perceived space embraces the idea of social practice; in this sense space is a social product. Spatial practice refers to the production and reproduction of spatial relations between objects and products, including ecosystems services (human “benefits” from nature – NEA 2011). It also ensures continuity and some degree of cohesion: “in terms of social space, and of each member of a given society’s relationship to that space, this cohesion implies a guaranteed level of competence and a specific level of performance” (NEA 2011, 33). This is consonant with the notion of governmentality. This dispersed form of power (Foucault 1991) seeks to “shape, guide or affect (our) conduct . . . to act on the conduct of conduct” (Gordon 1991, 2), thereby influencing the actions of others through processes which encourage self-regulation. Behaviour towards the river – what is permitted, who can (or cannot) access and for what activities – is therefore not just a question of governance, but is a ‘governmental’ process based on formal rules. This implies a degree of permission and compliance which may not be generally held by, or be within the reach of, most individuals. In our case, river-based stewards hold local knowledge and status, whilst incumbent riparian residents possess both a historic and symbolic association with the river, which may be based on family/historic activity (i.e. work), type of access or skills. To others, ‘outsiders,’ including new urban settlers and visitors, this hydro-relationship is more vicarious and amenity/property based – reflected in the idea of ecosystems services and its underlying economic (cost-benefit) value system (NEA 2011).

Thirdly, lived space encompasses the spatial representations which ‘ordinary’ people make in living their lives, the mental constructs with which they approach the physical world. In this case, such representational spaces refer to space lived directly “through its associated images and symbols and hence the space of ‘inhabitants’ and ‘users’” (Lefebvre 1991, 39). This is also bound up with the perceived and conceived notions of this river space, which have tended to bring negative associations (e.g. fear of crime, pollution) and images of an unsafe, unwelcoming watercourse reinforced through historical associations, oral history and media, but one that still forms a strong symbolic and physical bond with its
constituents who may also have experienced it at other times through pleasant if prosaic interactions (e.g. child and dog walking), and special events. This is reflected in the perceptions and experiences expressed by participants in cultural mapping exercises carried out along the river (see next section). This area of the Lower Lee Valley, once a neglected marshland then a neglected industrial zone and dump for the city’s waste, is currently gentrifying at a rapid pace. New residents and recreational visitors to this “edgy” enclave that stimulated artists sit uncomfortably amongst social housing and elderly community residents. It is the lived experience and day-to-day relationship with the river that stands to suffer most from wholesale regeneration of the waterfront through place-making and intensification of land and space usage.

Analysing the Lee Valley as a lived river space of hydrocitizens

In our study, productions of space were assessed through documentary and discourse analysis of land use plans, policies and governance systems, primarily through regional (meso-level) urban authorities and professionals who carry the main state-led responsibilities. The project ‘conceived’ this urban water space through visual and technical representations of its usage, development potential and access; issues such as flood mitigation, land use planning/zoning, economic development and regeneration, water and environmental quality, recreation, heritage and nature conservation were all analysed for this purpose. Communication of plans and policies relies heavily on maps (including digital data analysis) at varying scales, and the use of visuals (‘artist impressions,’ graphics, photos), technical specifications and quantitative data and forecasts. To provide an alternative and a more qualitative and experiential view of the valley landscape, a series of connected walks were undertaken, providing a visual and textual narrative of the different sections and features of the river and its environs (Read 2015). Stakeholder analysis was done with administrative agencies and with local organisations (Table 13.1). Participatory-GIS (Geographic Information System: GIS-P) method was used to capture spatial characteristics of the valley, to gain insight to the perceptions, usage and aspirations of different communities along the river, as well as to map citizen-science installations, festival events and walking narratives of the river itself.

A first step testing out the relationship between the lived space of outside users and that of the riparian residents employed cultural mapping (Evans 2015b) with participatory GIS (GIS-P) to capture perspectives based on cultural ecosystem values of the local. GIS was helpful to analyse responses from communities that were ‘hard to reach,’ and from those less able to access or comprehend 2D designs, maps or access ICT facilities. In view of its spatial data analytical and visual capability, GIS-P is particularly applicable to the design of urban environments, including transport and mobility, wayfinding, crime and community safety, the design of open space and in capturing and presenting scenarios around a range of environmental scenarios such as flood risk and pollution (Cinderby et al. 2006).
Perspectives on local cultural ecosystems were collected initially from a meeting with residents and ward councillors held in a canal-side location in Hackney Wick, and were later analysed to derive local community values (Ryan 2011). These exercises were repeated in different locations (e.g. marshes, wetlands), reflecting different user and geographic characteristics. The following categories and from the Millennium Ecosystem Assessment (2005), and Plieninger et al. 2013) were adopted for analysis:

- Use: sense of place, activities, recreation;
- Aesthetics: aesthetic values, spiritual values, inspiration;
- Cultural Use: recreation, social relations, cultural heritage values, knowledge/educational systems;
- Problems: accessibility, safety, unpleasant; and
- Community Cohesion: diversity, involvement.

Participants (Figure 13.2) were asked to identify recreational uses, cultural uses and problem areas. A set of socio-demographic questions was also asked regarding gender, age, home postcode and familiarity with the study area; the responses to those questions could be matched with comments and marks annotated on the map. After the workshop, the data was transferred to a database and entered onto

Figure 13.2a-c Cultural ecosystem mapping, Hackney Wick, lower Lee Valley.
Source: the Author
GIS. One benefit of this cultural mapping is that primary data and visualisations can be layered with other data such as environmental, demographic and land use; allowing analysis of correlations, convergence/divergence between lived experience and formal, scientific conceptions, and representations of space. It also provides an opportunity for subsequent iterations to be compared and merged to produce a cumulative picture (see www.leevalley.org).

The most common use of the canal/river was walking along and sitting by it. Walking around the wetland area, Victoria Park and Wick Field was also mentioned as one of the specific activities that participants enjoy doing. The Queen Elizabeth Park was opened in April 2014 and several changes and new landscaping were identified. However, Hackney Wick locals did not ‘connect’ to the east of the canal and there were not many reports of them using the facilities there. Anecdotal evidence suggests that there is a marked (and historic) spatial divide between the west and east neighbourhoods adjoining the Lee river/canal (and new Park), despite newly created bridges and walkways. This divide is both territorial and a reflection of safety issues (e.g. fear of crime, vandalism, falling into the water). Thus, the divide generated by River Lee is both physical and symbolic, despite efforts to create links across it.

Aesthetic values were most commonly mentioned with the places the participants enjoy most, such as watching the lock/gates, walking/sitting at the woodland and cycling along the marshes. The main problems that were mentioned around the canal/river were of rubbish and safety. Participants felt unsafe along the canal at night as there were several mugging incidents in this area. Scariness was also ascribed to certain areas. These incidents and threats also overlap with the places that people enjoy during the daytime (walking/cycling/sitting), clearly exhibiting that individual river features and locations contain multiple and contradictory meanings, depending on the respondent and other circumstantial conditions. Participants also highlighted accessibility issues for the bridges on the canal, and the presence of algae on the canal during the summer. Some of the spiritual and inspirational values were affected by the changes in the area, for instance ‘relaxing by the canal’ was stressed as having a spiritual value – except for the (increasing number of) passing cyclists. Other spiritual values mentioned were ‘watching sunsets during the summer’ over the canal and ‘walking under the open skies over the park’.

There are several heritage assets in this area that mainly arise from its industrial background. Old Ford Locks dating from 1865, with walls of Kentish ragstone along the west bank of the River Lee, was referred to by participants as the ‘ghost of industrial past.’ Queens Yard was also highlighted – a cluster of buildings from different periods providing public access to the canal frontage. Crate Brewery was a local company which produces craft beer in the area and the adjoining café was mentioned as the most popular destination for participants, who visited those locations both to socialise with their friends and meet new people by the canal. The landscape of this former industrial area increasingly reflects the changing economy and the livelihoods which are supported by the improved transport connections and regeneration of the waterfronts – cultural and creative industries with associated café culture, entertainment and events which visitors
Figure 13.3a-b Graffiti and floating cinema, Hackney Wick, lower Lee Valley.
Source: the Author
clearly value (longer established residents less so). Such change has led to make-over and in some cases removal of heritage buildings and infrastructure. At the same time, the conditions which attracted artists and alternative lifestyle (such as canal boat dwellers) are changing, leading to the loss of artist workspaces and studios, live-work accommodation and affordable housing (Figure 13.3). The river in one sense is a benign backdrop to this gentrification process, but then it also plays host to floating cinemas, cafes and pleasure boats, and the culvertisation and clean-up has removed its natural character.

Conclusion: an emerging hydrocitizenship

How does the lived river space of the Lee shape responses to this environment and help form a consciousness of river governance? The dominant narrative, as with urban development more generally, is through spatial ‘zoning’ and large-scale masterplans which attempt to categorise the river’s various separate functions such as industry, recreation, heritage, flood mitigation and environmental quality. Specific interventions can vary according to land-use types (semi-rural, suburban, to urban and industrial areas), with greater intensity of engagement and impact evident in the more urban parts of the catchment. Governance and initial attempts at hydrocitizenship tend to follow these spatially determined functions, and are largely single issue and risk-based (Nones 2016). At this stage, the river is still not represented as an integrated and fluid whole. Perceived key roles are conservation volunteering, greater environmental awareness and personal actions (e.g. waste disposal, recycling, water usage), as well as engagement with the water amenity through a more explicit visitor economy – exploiting the ‘willingness to pay,’ rather than free access and use.

Thus, the spatially conceived river valley is managed through river catchment partnerships that administer environmental improvements, education and promotional programmes, but do not challenge the underlying ownership or access powers. This results in confusion and contradictions over who has and should take responsibility for different aspects of the river – from rubbish collection on the river/banks, lighting, recreational and commercial usage and access, to heritage interpretation and conservation (natural and cultural, e.g. buildings). The everyday river experience aims to remedy this problem and address this hierarchical patchwork through bringing residual and dispersed local knowledge into play; notably, knowledge of established river dwellers (boaters, workers, local landowners – past and present) and residents whose memories transcend the decades of industrialisation-deindustrialisation and rediscovery of the waterfronts, are deemed particularly important for perceiving the river as an organic whole. Of course, such knowledge is augmented by perceptions of new settlers, artists and community groups who adopt this river heritage as their own. As a local resident put it: “I have been travelling all over the world, many times. It’s not that I am everywhere, but everywhere is inside of me.” This is true of the Lee Valley. We base our individual discoveries on the idea that both the place and we ourselves are new, or renewed by the dialogue between place and ourselves. It
is not a general Lee Valley but my Lee Valley (Sinclair 2010, 23); and this is the first meaningful step in a more personalised form of citizen governance, i.e. that of ‘hydrocitizenship.’

In terms of citizen engagement in supposedly consultative processes such as the European Water Directive and Catchment Partnerships (Nones 2016), local stakeholders are generally not engaged in the decision-making or (master) planning processes from the outset; resulting in controversial decisions and public opposition, which can foster negative consequences for freshwater ecosystems. As Raymond Williams argued: “to achieve (cultural) growth, varying elements must be equally available and new and unfamiliar things must be offered steadily over a long period to make general change” (Williams 1961, 365). It is these gradual and sustained partnerships between the stewards and local communities that is likely to have a lasting effect on our attitude to rediscovered urban water landscapes, as opposed to grand schemes such as apartment blocks, cultural and educational institutions, heritage centres, new parks and festivals and destination strategies that are prone to be influenced by vested interests, risking both a commodification of the river and a distancing from the river ecology. This is particularly important as tension and divergence between the stewards and stakeholders in the governance of the river is becoming more apparent as public agencies move towards a visitor-based and economic rationale and a ‘risk-averse’ mindset, exploiting or closing off the river environment as a valorised amenity rather than a public good.

This study also highlighted the need to conduct citizen-based research as a ‘process’ and through participatory and innovative methods. As our rivers are increasingly shaped by human movements and material flows, which in turn are influenced by those rivers, a discursive space created by a reflective research process like the one described in this chapter is equally important for generating a sense of hydrocitizenship, as are specific practices and programs that facilitate responsible and thoughtful engagement with some of the few natural ecosystems left in the city.

Notes

1 Hydrocitizenship has been funded (2014–2017) as part of the UK Arts & Humanities Research Council (AHRC) Connected Communities research programme www.hydrocitizenship.com with the Lee Valley one of four area-based case studies (www.leevalley.org) led by a team from Middlesex and Brighton Universities.

2 http://www.riverleacatchment.org.uk/ The Catchment Based Approach (CaBA) embeds collaborative working at a river catchment scale to deliver improvements to water environments. Community partnerships, bringing local knowledge and expertise, are active in each of the 100 Water Framework Directive catchments across England. Organisations engaged with CaBA include NGOs, Water Companies, Local Authorities, Government Agencies, Landowners, Angling Clubs, Farmer Representative Bodies, Academia and Local Businesses.

3 The UK’s only native ‘white clawed’ crayfish was wiped out along the River Lee after an invasion of the signal crayfish in the 1980s and the associated spread of crayfish plague.
4 In 2015, the number of ‘continuous cruisers’ on London’s waterways increased by a third over the previous year, with over 5,000 boats without a permanent mooring.


References


