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Citation for this version:

Citation for the publisher’s version:
From Users to Consumers

Water Politics in Nineteenth-Century London*

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On Monday 15 July 1895 one and a quarter million inhabitants in the East End of London awoke to a water shortage. Charles Lyel, a householder and member of the Hackney Vestry, complained that the East London Waterworks Company had stopped his constant delivery and switched back to intermittent supply. Water was turned on between 9 and 10 in the morning and flowed for a mere two to three hours, with the result ‘that I am deprived of my morning tub, [and] there is no bath for the children in the evening’. To be told by ‘the company that the supply “is ample for all legitimate use” is adding insult to injury’, Lyel told The Times.1 East Enders without Lyel’s benefit of a cistern, or occupying the upper floors of tenements, were still less fortunate. People began to store water in jugs, buckets, basins or any container available. Others began to mobilize consumers against water companies. John B. Kyffin, a draper of Hackney Road, had for some days put up with the ‘scant supply of water’ for his shop and twenty-six assistants. When the water necessary for domestic purposes ‘practically ceased altogether’ on 15 and 16 July, he had had enough. Looking at the rates (local taxes) water companies were collecting on his £200 property and at his toilets with ‘no flushing remedy’ and assistants taken ill while local authorities received a million gallons to water the roads, Kyffin took the company to court for failing to give the statutory ‘proper supply of water for domestic purposes’. Kyffin lost but proceeded to mobilize consumers across Hackney with support from the vestry and fellow ratepayers.2

The battle between consumers and water companies during the 1895 East London ‘water famine’ marked a formative stage in the breakthrough of a new consumer identity and politics in the modern period. Water has been mainly understood in the context of public health, urbanization, housing, leisure and the material environment.3 While building on this research, this chapter seeks to reconnect the contestation of a basic good (water) to central problems of modern consumer society, in particular the formation of the consumer around questions of needs, rights and waste. Whatever their particular inflection, from Veblen to recent post-modern accounts, most seminal texts have structured their narratives of consumer society or consumerism around the expansion of desire, affluence and commercial objects and spaces and their role.
in creating social distinction, modernity and a liberal self.4 The literature has largely followed Maslow’s chronological hierarchy of needs: consumer societies emerge when humans have advanced from basic needs, like food and shelter, to material wants.

The chapter problematizes this dominant approach by looking at the place of needs and the non-market provision of basic goods in the formation of the consumer. Shopping and the growing mountain of commodities in the eighteenth and nineteenth centuries did not in itself generate reflexive ‘consumers’.5 In Britain, often seen as the birthplace of modern consumer culture, they emerged in battles over ‘necessaries’, especially bread and water. Until the turn of the twentieth century, ‘consumer’ still mainly referred to the person ‘using up’ water, gas and perishable foods. And it was struggles over these particular taxed consumables (rather than commodity culture in general) that fleshed out a new social and political persona: the consumer. Taking water in nineteenth-century London as a case study, we explore the significance of a basic good and questions over access, quantity, quality, price and control in the making of the consumer. Consumers were the agents and products of a shifting contestation of needs, rights, rationality and waste. The nineteenth-century water wars mobilized users and turned them into consumers, defining a new social identity for actors and a category of knowledge and public legitimation. This story broadens our understanding of the evolution of ‘active’ and citizen consumers associated with Western consumer culture and may also help to reunite the study of consumer societies with that of human development and rights to basic goods.

Water London: Monopolies and Fragmentation

One way of thinking about the modern city has been in terms of the body. Organic ‘auto-regulation’ became an attractive model for some nineteenth-century engineers and sanitary reformers envisaging, as Patrick Joyce has recently put it, the ‘constant circulation of fluids and the continuous replenishment of vital functions’.6 This model may hold for the sewage system but has less interpretive potential for water supply and consumption. ‘Water London’ – the metropolitan area covered by the water companies – was less one body with constant circulation than a series of separate monopolistic networks offering mainly inconstant supply, providing uneven access across municipal boundaries and drawing water from different sources and through separate mains systems. Even after the consolidation of metropolitan government in 1889, the territory administered by London County Council (121 square miles) was a mere 14% of Water London (845 square miles). People in neighbouring streets and districts had radically different experiences as users, subject to different hours, quantities, standards of supply and prices. Constant flowing water began to be introduced systematically in the late 1860s but progress was slow and uneven. The number of houses with constant water (482,317) exceeded those with intermittent
supply (287,432) only by 1891. Many areas on constant supply suffered repeated water shortages.

Waste was not so much a by-product as a structuring feature of the system. In 1851 it was estimated that 29 million gallons of the 44 million pumped were wasted through the intermittent system. Rather than striving for a closed, self-regulating system, some companies adopted a more open-ended approach. Under constant supply, the Grand Junction Company found it more rational to pump more than to reduce its waste – in 1891 it supplied over 47 gallons daily per head, an extraordinary quantity compared to the London average of 31 gallons at the time, or the average 33 gallons (150 litres) consumed in England and Wales today.

Until the 1800s Londoners had drawn water from surface wells, public pumps and limited piped supplies. Although wells continued to be a source for some until the 1870s, the nineteenth century established the dominance of piped water. A period of intense competition between private water companies in the first two decades of the century gave way to an informal ‘districted’ monopoly that was to last until 1902. The eight dominant companies were the New River Company (established 1619), Chelsea Waterworks (1723), Southwark Waterworks (1760), Lambeth Waterworks (1785), South London Company (1805, from 1845 Southwark and Vauxhall Waterworks), West Middlesex Company (1806), East London Waterworks (1807), Kent Waterworks (1809) and Grand Junction Waterworks (1811). Despite repeated calls for public control and ownership from the 1810s onwards, London resisted the prevailing nineteenth-century trend of municipalization. The arrangement came to an end only with the Conservatives’ 1902 Metropolitan Water Act, which bought out the companies for a generous £43 million and transferred control to the Metropolitan Water Board, with local authority representation.

Water London, in brief, lacked a unitary system of supply and consumption. Instead of material auto-regulation and an evacuation of the political, water made for political contestation, its rising cultural status becoming harnessed to the language of liberty, property and civilization.

**Cultural Contestation and Early Ratepayer Protests**

The first half of the nineteenth century witnessed the transvaluation of water through cultural notions of purity and cleanliness as well as the impact of Chadwickian public health. Water appeared a ‘first necessary of life’ and, as ‘a gift of Heaven’, was given to all. Water pollution could affect everyone and reduce even ‘splendid mansions’ to ‘whited sepulchres’. Critics of water companies appealed to the public interest in ‘pure water’. What amounted to ‘pure’ or ‘clean’ water, however, was subject to interpretation – a field of disagreement that would diminish in time, but not disappear altogether as theories of disease and testing methods continued to compete with each other. Water undertakings had to be justified by public utility
and those speaking on the water question had to speak for the public. But if the best way of delivering water for the benefit of the public was open to question, so too was the nature of ‘the public’.

In the 1810s and 1820s the status of water as a basic need was mobilized through two complementary liberal languages: liberty vs. slavery and free tax-paying citizens vs. monopoly. In the years following the establishment of monopoly, complaints about the cost, quality, quantity and unreliability of water supplies became commonplace. The first issue to galvanize customers was that of escalating prices. Water rates, part of local taxes, were based on assessments of consumption derived from property size, until the 1850s when they became a percentage of annual property values (like other local taxes). Additional charges were frequently levied for baths and WCs (toilets), or for tall buildings. In 1818 protests arose in various London parishes. The most high profile was the Select Vestry in affluent St Marylebone, a body ‘composed of noblemen and gentlemen’, which introduced three (unsuccessful) bills for a parochial water supply. The Anti-Water Monopoly Association (AWMA) was established in October 1819 by civil servant James Weale. With the active support of the vestry (the parish-based unit of local government representation), the AWMA canvassed parishes in the West Middlesex and Grand Junction Company districts for a boycott of rate increases considered ‘highly illegal, … prejudicial to the Interests of the public in general and … oppressive to a large proportion of the Inhabitant Householders’. Though claiming that the increases were ‘felt as a most oppressive burthen by the least wealthy classes of Housekeepers’, the AWMA was forced to appeal to ‘Gentlemen of rank’ to augment its funds. The companies, however, denied they were making profits at the expense of the public and dismissed the campaign as a sectional interest, ‘fomented by party, kept by party’ and appealing ‘naturally’ to ‘the malcontents of the parish’.

The Association had run out of steam by late 1820, but debate about the rights of householders and the scope of the public continued. The 1821 parliamentary select committee concluded that, given the water companies’ high capital outlay, unrestricted competition would be unmanageable and prices were not unreasonably high, for good quality water. Weale, however, protested that ‘[w]ater must be considered … one of the elements necessary to existence, the same as light and air…; and therefore, its artificial supply to a great city ought not to be the subject of free trade, nor … any kind of trade’. Drawing on an older notion of non-commercial public provision, he held that the supply ‘should be profuse rather than merely sufficient and gratuitous to the poor’. He tied the interests of ratepayers to ratepayer control. Water supply should be maintained by rates and administered by local bodies.

When criticism of the water companies reignited over a deterioration in water quality in the late 1820s – when WC use was rising – debate again concerned the nature of the public and their rights and duties. In 1827 John Wright published *The Dolphin*, an influential protest against the Grand Junction’s new intake opposite the
Common Sewer at Chelsea. For Wright, there was a direct link between the bad state of the water, monopoly and the denial of customers’ freedoms. At a time of heated argument over the emancipation of slaves, Wright saw a parallel with water ratepayers: ‘those customers . . . handed over, by these jobbers in one of God’s choicest blessings, from one set of monopolists to another, like so many negroes on a West Indian estate’.  

Writing in support of the companies, engineer William Matthews sought to undermine Wright’s ‘public’. Water users were not synonymous with ratepayers, Matthews emphasized. Nor did local government representatives necessarily have the same interests as their ratepayers. Matthews denied that a parochial water supply would lower the rates, ‘the public having experienced many expensive instances of Select Vestry economy’. Private enterprise and public interest need not conflict. Among those undertakings derived from ‘a spirit of enterprise’ and risk, water companies were ‘conspicuous . . . for their public and private utility’. Wright, he charged, merely wanted to establish a rival company. On both sides, accusations of sectionalism challenged an essential notion of the public as rational, economizing and free.  

The *Westminster Review*, in 1830, offered a third view of the public that showed how difficult it still was to graft the consumer on to the public interest. Embodied here in the figure of John Bull, the public had indeed been represented by Wright, but in the process made a fool of. The concern with water was not the natural priority of a rational householder promoting his family’s health, but the result of a herd instinct: ‘[t]his is the way to govern multitudes. Justification, taxation, emancipation, the nation, or Dolphin and poisoning, it is all one: the halloo is given and the dogs follow’. And while the status of water as a basic need validated calls for reform, the very unpopularity of London water as a beverage could undermine the attempts of water campaigners to speak as consumers. John Bull, the reviewer pointed out, was ‘no very violent water drinker’, though ‘always ready enough to poison himself with gin and compounds’.

**Health, Liberty and Civilization: Ignorant and Responsible Consumers**

The 1840s saw the establishment of sanitarian priorities associated with Chadwickian public health: a focus on the prevention of epidemic disease through the reform of drainage and water supply. The Public Health Act of 1848 – the year of Britain’s second major cholera epidemic – established a General Board of Health with powers to enforce the appointment of local boards of health in crisis areas. While the utilitarian focus on clean and sufficient water contributed to the emergence of a public function for cleanliness, this was often fused with a Christian view of the symbolic properties of water and the moral value of cleanliness. Philanthropic and
temperance initiatives, such as the public bath and drinking fountain movements, aimed to promote the consumption of water by the poor, for their ‘moral and physical welfare’, as well as for a ‘future saving’ on the poor rate.\textsuperscript{22}

Water campaigners exploited the notion that ‘cleanliness is next to godliness’.\textsuperscript{23} Without cleanliness, Christian Socialist Charles Kingsley emphasized, ‘education is half powerless, for self-respect is all but impossible’. He referred not to the ‘stains contracted by honest labour, which the butcher . . . washes off’, returning ‘at once to decency and comfort, but . . . [to] the habitual ingrained personal dirt, where washing is either impossible or not cared for; . . . which extends itself from the body to the clothes, the house, the language, the thoughts’ of the many thousands in British cities who ‘never dream of washing’. To them, water was no necessity but ‘a luxury as impossible as turtle or champagne’.\textsuperscript{24} In the wake of cholera, the \textit{Edinburgh Review} argued that ‘an abundant supply of water’ was needed to ‘wash away the causes of those diseases which are silently but incessantly wasting away the health, the morals and the wealth of the community’. Nor did cholera stop at the doors of the rich, whose water had been contaminated by leakage from cesspools and sewer gases. The water question was a reminder of ‘the great law which binds the rich and the poor together’. Once the public had a right and a duty to cleanliness, it was a short step to demand that London water ‘be placed in the hands of the Government, or some public body responsible to the consumers’.\textsuperscript{25}

Empowered consumers, however, were quite specific social and political actors. Water drinkers and users did not yet perfectly map on to water ‘consumers’. There was tension between a public health notion of universal needs and the dominant political language promoting a narrower idea of the ‘consumer’ as a ratepaying citizen, that is, a propertied (mainly male) householder paying local taxes and with rights to local government representation. The payment of water rates legitimated this group of users as ‘consumers’ and it was in this strictly limited and legally defined sense that we encounter the voice of the consumer in the mid-nineteenth century. Importantly, this initially meant that those speaking as ‘water consumers’ or ‘gas consumers’ included commercial users (shopkeepers, warehouses, fishmongers) as well as propertied private users. Consumers, appealing to public opinion or calling for representation of the public interest, tended to invoke a ratepaying public.

Public health discourse promoted a more inclusive, universal notion by linking consumers’ interests to those of community welfare. A gulf emerged, however, between consumer interests and consumer knowledge. In contrast to the consumer envisaged by Victorian and Edwardian free traders, or the more familiar recent model of the rational, utility-maximizing individual, the new interest in the consumer in the water debates of the late 1840s and early 1850s had ignorance at its starting point. Consumers allowed themselves to be cheated, Kingsley argued, paying for water the companies wasted. ‘[P]ure and wholesome water’ was the aim, but ‘the consumer [was] not the best judge of this’, being ignorant of the new science of public health and ‘often content for years to drink . . . fluids which physicians . . . warn . . . in vain,
to be mere diluted poison’. Kingsley contributed to the broadening of the social persona of the consumer, referring also to users of standpipes. Poor consumers were doubly hurt: not having clean or soft water, they worked longer and wore away more soap and fabric in the process of washing. Yet all consumers shared a common position of ignorance and apathy. Self-interested, short-sighted shopkeepers and middle-class local government representatives deprived the city of the civic-minded leadership found elsewhere. Water company power and the impotent consumer resulted from a materialist culture and its erosion of public spirit.

Such contrasts between consumer (social need and public interest) and materialism (selfish interest and money) are noteworthy for running counter to the individualist and market-based conceptions of the consumer that have structured recent debates about consumption and citizenship. Interestingly, in his appeal to the ignorant consumer Kingsley drew directly on John Stuart Mill’s Principles of Political Economy. Unlike economists on the continent, Mill was strongly opposed to state attempts ‘to create consumers’ and overcome ‘underconsumption’ and thought the discussion of consumption as a separate branch of political economy misguided. Where Mill inspired Kingsley and others was in his connection of consumer knowledge to a moral project of self-cultivation operating beyond the commercial domain. Consumer knowledge here did not concern price awareness but those ‘things, … the worth of which the demand of the market is by no means a test’. The consumer came to be of interest at the point where the issue ceased to be one of serving ‘the daily uses of life’ or ministering to existing inclinations and became a civilizing project: the consumption of things tended ‘to raise the character of human beings’. This developmental view of knowledge and self-formation suggested an immature rather than a sovereign consumer. ‘The uncultivated cannot be competent judges of cultivation’, as Mill put it characteristically. Put differently, consumers were not a solution, unfolding through the price mechanism of demand and supply, but a problem, a cultural project for civil society. This association – between the consumer, the underdeveloped self and the need for the ethical cultivation of higher sensibilities – would become a prominent theme in late nineteenth and early twentieth-century progressive politics and social philosophy in Europe and America.

Earlier, in 1851, Mill had lent support to a call for a municipal take-over of London water, but his discussion of consumer cultivation in the Principles related to education. Kingsley’s instinctive connection between Mill’s consumer and the need for water reform suggests the fluidity of contemporary conceptions of water as a material and cultural good: water met physiological needs but, equally, cultivated self and moral conscience and socialized individuals as virtuous members of the community. Self-government depended on England showing that ‘her boasted civilization and liberty has a practical power of self-development’.

These intertwined themes of self-fashioning and self-government, civic engagement and Christian duty, were not merely literary tropes but provided a language for the political mobilization of water users. The cholera outbreak of 1848–9 – killing
14,000 in London – triggered the formation of the Metropolitan Parochial Water Supply Association (MPWSA).\textsuperscript{32} Founded in Southwark, at its peak in 1850–1 the Association attracted representatives from ninety parishes, over an area of 1¼ million people, with forty vestries petitioning Parliament. It brought together local officials, sanitary and housing reformers, surgeons and respectable ratepayers – a broad middle-class alliance pressing for public water management and for a constant supply at high pressure. Economic rationale and Christian teaching were complementary, warning of the ‘moral slaughter’ as well as ‘physical devastation’ resulting from poor water. Concern for the poor combined with an increasingly assertive sense of the consumer as taxpayer and representative of the public interest. ‘Competition, animated by mere … gain’, the MPWSA argued, ‘has totally failed to secure the necessary advantages… The consumer has been sacrificed, that the producer might be enriched’.\textsuperscript{33} Here too, the consumer appeared in a narrative of social development that challenges the conventional story in which the material and discursive unfolding of the ‘modern’ consumer takes place only after the fulfilment of basic needs (characterizing ‘traditional’ society).\textsuperscript{34} The MPWSA took a different view. Although British society was the most affluent in the world – with the ‘highest mental and spiritual wants … satisfied’– ‘the necessities of the most elementary animal … requirements have been neglected’.\textsuperscript{35} The consumer was to tame, not to strengthen, Mammon.

These ‘consumers’ were stirred by recent images of cholera and anxieties of divine retribution, but also by the dramatic increase in local water rates following the renewal of a monopoly agreement between the Southwark and Lambeth companies. Public control would provide better service at a lower price, they hoped. Although they failed to formulate a precise scheme, the principles of consumer representation were clear: a water management board elected by and accountable to ratepayers.\textsuperscript{36} The consumer was the water taxpayer not the water user.

The MPWSA’s political rationale (and failure) was part of the larger liberal project of creating virtuous citizens by expanding local self-government. Assessments of the capacity for civic-mindedness of local taxpayers inevitably influenced the nature and political appeal of reform schemes. When in the vestry of St. Luke’s propertied and commercial users of water met in July 1851, W. Horne, ‘a large consumer of water in trade’, insisted that ‘ratepayers are quite competent to the management of the water supply. They are generally willing to … take part in parish affairs’. In this district of 55,000 people, the vestrymen spoke on behalf of the inhabitants suffering from poor water. In contrast to the vestry’s £30 electoral qualification, Horne (a Poor Law Guardian) called for ‘some new body…, to be elected by the consumers… [E]very ratepayer should have a voice’.\textsuperscript{37} The growing reflexivity of ratepayers as water consumers benefited from parallel debates over gas supply and the representation of the interests of (mainly commercial) gas consumers.\textsuperscript{38}

The MPWSA was close to Mill’s Athenian vision of representative local government. Other sanitary reformers such as Chadwick, with low expectations of local
taxpayers, looked instead to the central state for public investment and services. Both sides shared a view of the water problem as a sign of ‘the abdication of the most imperative functions of citizenship’, in the words of the MPWSA. Where they differed was in their estimation of a property-owning electorate’s ability to overcome this apathy. The rights of the ‘consumer’ could be invoked to underwrite a more ambitious role for local taxpayers, but there were other ratepayers for whom the prospect of public management raised fears of spiralling costs and risky investments in new technologies. The fragmented nature of London’s local government made it easy for opponents of public control to play off the latter against the former.

The select committee on the 1851 Metropolis Water Bill captured this tension and illustrates some of the difficulties faced by advocates of consumer representation. Edward Collinson, an MPWSA supporter and former chairman of the Board of Guardians for St George-the-Martyr, Southwark, faced challenges to the MPWSA’s claims to speak for the public. How representative were their gatherings of ratepayers? A meeting in December 1849 brought together 137 parish officers from thirty-three parishes. An 1851 meeting in Southwark produced a unanimous requisition signed by 700 inhabitants, ‘the largest … for a public meeting that ever was known in the borough’. Yet there were ‘about 280 parishes in the metropolis’, Collinson was reminded by the counsel for the Bill. Nor was it clear that the parish officers attending were elected by their ratepayers. Collinson’s was an ‘open’ vestry (open to all ratepayers), but others were not. And if the Association truly represented the interest of consumers, critics asked, why did it have to cancel its activities in the summer of 1850 because of a lack of funds?

If only supported by a minority of ratepayers, how could the Association justify the potentially ruinous burden of a public take-over of the water companies? Nor was it clear that, once water was in public hands, ratepayers would be willing to spend higher taxes on much-needed investment in new sources of supply, reservoirs and pipes; ratepayers’ fiscal conservatism had blocked improvements in Derby, Reading and several other towns. Moreover, as the Lambeth Company engineer emphasized, poor or deficient supply was often the fault of selfish landlords who failed to furnish tenants with butts or repair interior pipes.

Consumers themselves were far from homogeneous. Water districts had different material and natural properties (such as landscape and building height), as well as different water sources, entailing different costs, quantity and quality of water. To amalgamate companies into one public body might pitch consumers against consumers – ‘Bethnal Green against Hyde Park Gardens’. Here, then, the asymmetry was not between consumer and monopoly, but between different groups of consumers. Critics of the compulsory rate favoured by the MPWSA were quick to point out that it would adversely affect the many occupiers of houses serving as both shop and home. More generally, such proposals raised fears that public control would exacerbate rather than diminish social polarization. Calls for public control in the name of the consumer, by the MPWSA and in Francis Mowatt’s unsuccessful
bill for a ‘water parliament’, might be little more than a scam by better-off citizens to reap disproportionate benefits from public services.

The idea that the water consumer had a right to representative control and ownership had nevertheless by 1850 become an established part of political discourse, though the form and level of representation remained contentious. While some vestries continued to press for local control, municipal control became a real possibility with the establishment of the Metropolitan Board of Works (MBW) in 1855 and was taken up with sustained vigour by the London County Council in the 1890s. The 1880 parliamentary select committee opened its report on London’s water purchase in words almost identical to those cited in 1850 by the MPWSA: ‘the supply of water to the Metropolis should be placed under the control of some Public Body, which shall represent the interests and command the confidence of the water consumers’.

Expanding Consumers: Identities, Needs and Entitlements

The quality of London’s water supply probably improved in the second half of the nineteenth century, following relocation of the companies’ intakes, improved storage and filtration and the transformation of the sewerage system, although anxieties about epidemics, eels and microbes persisted; developments in chemistry and bacteriology arguably increased sensibilities of risk. Patrick Joyce has presented the Chadwickian revolution as a paradigmatic development in ‘[t]he “black boxing” of sanitation as a matter of science and technology, separate from the political’. Water consumption and supply, however, followed a different trajectory. Instead of being part of a general framing of the material world in durable forms, water consumption remained fluid and contentious, fuelling political mobilization and raising questions of political subjectivity and authority. As a political actor, legal entity and part of an imagined community of users, the consumer acquired a new prominence in the 1870s–90s. The water wars of this period continued certain earlier themes – such as monopoly versus consumer – but at the same time expanded the identity of the consumer through a more extensive contestation of its membership, rights and needs. As a concept and identity, the consumer was one of the beneficiaries of the dynamic democratic culture created by the 1867 and 1884 Reform Acts, the extension of the borough franchise (1867, 1869) and the rise of progressive politics in London. We shall focus on three areas of this expansion: consumers’ successful challenge of the basis for water rate assessment, the invoking of consumer rights by commercial ‘consumers’ and the activism of Consumer Defence Leagues.

The mobilization of the consumer as ratepayer needs to be placed in the context both of the changing basis on which companies charged consumers and of the disproportionate increase in the amount of the water tax relative to other goods. Until the mid-nineteenth century, companies had estimated each household’s domestic
consumption (counting rooms or chimneys, for example). Legislation in 1847/52 compelled water companies to provide water for domestic supply. At the same time, the companies’ Special Acts of 1852 introduced a new regime of maximum legal rates for six of the companies, in the form of a graduated scale of percentages set against ‘annual value’.\textsuperscript{49} Domestic water rates in London became based on the value of property, not actual use, in contrast to other European capitals like Paris (where it was based on estimated consumption) or Berlin (where private use was metered).\textsuperscript{50} Importantly, water-closets, baths and gardens, excluded from ‘domestic supply’ obligations, remained subject to extra charges. Commercial and industrial properties were also assessed separately and increasingly by meter. The precise meaning of annual value, however, was left underspecified. London water rates may have been below the charges levied in provincial cities, as defenders of the companies stressed. Still, the inequalities in charges faced by householders in different districts were glaring. In 1890, for example, the owner of a house of £50 rateable value paid £2 4s. if supplied by the Chelsea Company, but £3 17s. if dealing with Lambeth.\textsuperscript{51}

Charging on the basis of annual value had enormous financial implications, tying water rates to the tremendous property boom. While Londoners saw the price of food fall and enjoyed the declining costs of other utilities like gas, thanks to new technologies, water rates were going up and up. It is doubtful whether water companies reaped sufficient profit from the charging system to meet the ever-expanding needs of a growing city like London – water supply was liable to diminishing returns and benefited less from cost-saving technologies.\textsuperscript{52} What is certain is that it made water companies vulnerable to charges of profiteering and inevitably drew them into political debates about the ‘unearned increment’ and progressive taxation in radical politics. Reformers argued that growth in site value alone gave the companies an annual windfall of some £200,000 (one fifth of their dividends) in 1897, ‘for which they have provided no greater advantages to the consumers’.\textsuperscript{53}

The post-1852 payment regime became a rich source of consumer protest from the 1870s, as the legitimacy of different versions of annual value came under fire. Controversy over valuation raised fundamental questions. Who was a ‘consumer’? Who had the right to compel the companies to provide water? What was ‘essential domestic supply’ and for what ‘domestic’ purpose, by what kind of service and on what basis could companies charge or disconnect their customers?

The repercussions of a legal case brought against the Grand Junction Company reveal the development of ‘the consumer’ as an increasingly contested site between water companies, on the one hand and propertied water users and ratepayers (mainly middle class, but also increasingly clerks and artisans) as well as commercial users, on the other. In 1882 Archibald Dobbs, a barrister with progressive political ambition, decided to do what generations of consumer advocates have done since: he introduced a test case challenging the method of property valuation. The difference to Dobbs, the leaseholder of a modest house in Paddington, was small: £4 per cent on the ‘net value’ of £118 instead of on the ‘gross value’ of £140. The difference
to the water companies was the potential loss of several hundred thousand pounds and an avalanche of litigation from aggrieved ratepayers seeking to retrieve over-payments. Supported by several vestries, Dobbs pursued the case all the way to the House of Lords and won.\(^5^4\)

Water companies were quick to decry the Lords’ decision, but in most cases decided to abide by the new interpretation, revising their rates.\(^5^5\) Dobbs became the hero of the ‘rate-paying public’ and, amidst cheers in public meetings, promised to continue his battle to secure the same advantage for ‘every water consumer in London’.\(^5^6\) A network of Water Consumers’ Defence Leagues (WCDLs) sprang up all over London. These leagues had some kinship with earlier ratepayer associations and drew support from prominent vestries, but were not parish-based. Between 1883 and 1885 branches were established in Islington, East London, Clapham and other parts of London; consumer leagues also emerged in other cities, like Sheffield. They held public meetings, distributed leaflets and posters, wrote to the press and had the support of several local MPs. Focused at first on annual value, they were reinvigorated in the mid-1890s by water shortages in south and east London, circulating ‘Instructions to Consumers’, with advice not to fill in company questionnaires and to pay water rates only on the poor law assessment rateable net value.\(^5^7\) They set up advice bureaus and provided legal support. Pressure by the Battersea Water Consumers’ Defence Association (WCDA) and by East End Leagues led to reduced rates for members and equitable settling of disputes without recourse to litigation.\(^5^8\) In more affluent areas, like St John’s Wood, propertied individuals were emboldened by Dobbs’ success and instructed their solicitors against the long-standing ‘robbery’: by over-charging, the companies were violating the property rights of consumers.\(^5^9\) In other places, water consumers were less fortunate as water companies successfully objected to ‘incorrectly rated’ values.\(^6^0\) Still, the proto-Naderite foundations of consumer advocacy had been laid.

The companies’ response to the campaigns only reinforced the centrality of the consumer. In correspondence with the Local Government Board and the Wandsworth District Board of Works in 1884, the secretary of the Southwark and Vauxhall Company was in little doubt of the serious threat represented by these grass-roots consumer associations with their boycotts. One strategy was to turn consumers’ public health rights against them: the company stopped the water supply of ratepayers withholding rates, hoping that the sanitary authority would step in, since it could not allow houses to remain occupied without sufficient water. But the Wandsworth Board made it clear it would not do the company’s dirty work and its powers ‘should not be used as a means of enforcing payment’. The company had experienced unprecedented difficulties in collecting rates but also realized that to cut off supply in cases of non-payment could inflame the situation; in a district of 102,781 houses, only 135 had been cut off in the preceding six months.\(^6^1\)

The weak regulatory setting left, however, plenty of possibilities for the companies. Another strategy was to recoup declining profits from average householders by
turning the screw on rich and commercial users. A committee of ‘aggrieved occupiers’ was quickly formed, after the New River Company raised rates in the City. Wealthy firms were consumers too, they argued. The case of Cooke, Sons & Co. versus the New River Company hinged on the very question of who was a consumer and who was not. In his six-storey warehouse in the New River district, Cooke paid by meter for a hydraulic lift but by rate for ‘domestic’ uses of water, such as toilet flushing. In 1887 Cooke sought to discontinue his payment of these ‘domestic dwelling house’ rates, demanding that all his warehouse water be classed as non-domestic and therefore metered. The company, however, argued that if Cooke no longer claimed to be using water for domestic purposes, payable by rate, he ceased to be a consumer under existing legislation and had no right to demand supply or meter.62

The New River Company’s Act (1852) had left the nature of consumers and their entitlement ambiguous and Cooke eventually lost. What mattered historically, however, was that the dispute over entitlement to metered supply revealed the widening social functions of the rights and expectations of consumers. Effectively, Cooke had turned to the identity of the consumer as a way of extending to commercial users the rights of private consumers to a secure water supply. Against a narrower legal definition, consumer advocates began to champion more ‘common sense’ definitions of the consumer. Significantly, this involved at first only a partial broadening. The consumer ‘may be taken to mean the whole human race’, but only if pressed to ‘an absurd length’, Dobbs felt. Given the necessity of contracting for water supply, it excluded ‘infants’, ‘lodgers’, ‘non-householders’, ‘paupers’ and ‘lunatics’ (house-holding women were not mentioned here). Property and ability to pay remained essential.63

In the context of continuing fears of epidemic disease and concern over water shortages, the conception of the consumer became more socially inclusive, as questions of private rights fused with concerns for public welfare and consumer mobilization created new social solidarities. When a mechanic walked into the offices of the Water Consumers’ Defence League in High Holborn in 1884, it was found that his charges were nearly double the legal rate (at £2 2s. per year on a house rented at £37). ‘[W]ater consumers [are] placed . . . between two fires’, one Massey Mainwaring wrote to The Times: ‘water at an exorbitant rate, or no water and the dread of cholera’. His rates having increased from £16 16s. to over £20 16s., Mainwaring had also consulted the League office and expressed his sympathies with the mechanic. As consumers, rent-paying tenants were now linked to rich inhabitants of Belgravia.64

Complaints and legal action by tenants suggest a growing sense of entitlement and consumer awareness amongst social groups not formally qualifying under the dominant rubric of ratepayer consumers. The status of non-ratepaying tenants had always been precarious in the English system, where service depended on the landlord’s payment of water rates. In the short term, the Dobbs decision put some vulnerable tenants at risk, where landlords felt encouraged to enter into disputes
with companies on precarious grounds. In the long-term, however, such cases helped
to disseminate more ambitious views of company obligations to water consumers.
R. Hayward of West Ham, for example, rented out 39 houses and, in the eyes of
the East London Company, was ‘one of those perverse Landlords’, with ‘passions
. . . enflamed by the Agitators and their “Leagues”’, who erroneously believed that
the parish assessment was the basis under Dobbs. When the company threatened
to disconnect the water because of his year-long refusal to pay on the basis of its
valuation, Hayward took his case to court, stressing in a letter to the Home Secretary
(Harcourt) that the company threatened to deprive over seventy families, ‘no parties
to the dispute, of an element alike necessary to health and Existence’. Increasingly,
non-ratepaying tenants asserted their own rights. Paulet, a weekly tenant, was given
notice to quit by his landlord, who paid the water rate. When he refused to leave, the
landlord instructed Chelsea Waterworks to stop his supply. Paulet protested, invoking
the Water Companies Act (1887) and had the company fined by the magistrate: 2s.
for each day of non-supply. Paulet eventually lost, but there can be little doubt of his
own sense of right as a consumer.

The weak formal powers of consumer complaint were increasingly stretched by
this expanding social conception of the consumer. A minimum of twenty ‘inhabitant’
householders’ signatures were legally required before the Local Government Board
(LGB) could act on a complaint. ‘Water famines’ from the 1870s onwards produced
memorials to the LGB from Kensington to the East End, from householders and
tenants. In September 1896, for example, tenants and householders in Lambeth
protested against a failure to supply. As the company pointed out in painstaking
detail, the protest was invalid; fewer than twenty of the signatories were ratepaying
householders. The list included several non-ratepaying tenants – men and women
– who nonetheless insisted they should be heard since water rates were included
in their rent. Attempts by water companies to exploit such technicalities were
increasingly considered in poor taste by government officials.

In 1895, 1896 and 1898 many parts of London were gripped by a series of ‘water
famines’ and protests that crystallized consumer identity. Shortages were most
severely felt in East London, where the preponderance of poor and working-class
water users ensured the broadening of the terms of water consumer debates. In
August 1898 the 700-strong Bromley Branch of the Union of Gasworkers and
General Labourers pressed the LGB to compel the East London Company to keep
water running for more than six hours a day since the ‘poor’ had no cisterns to
supply WCs without water, ‘thereby creating a danger to our wives and children’. In
Hackney ratepayers called a meeting in September 1898 to protest against the
same company’s ‘criminal neglect of the consumer’ in restricting supply to four
hours a day. The chairman ‘hoped there would be no deaths . . . as a result of the
. . . famine’, but considered that ‘some of the directors (a voice, “All”) might be
charged with manslaughter’. This agitation attracted an overflow of over 1,000
outdoors. The East London Water Consumers’ Defence Association pressed for
the municipalization of water and called on consumers to boycott rates for water not supplied. Radical imagery (see Figure 1) showed the water monopoly as a rocky skull propped up by ‘Capitalism’ and ‘Government Acts’, with helpless women, men and children, squashed by cholera and typhoid, waiting for Moses to strike water from the rock with his rod, ‘Municipal Control’. Moses the 2nd is cheered on by a worker whose pocket holds a paper: ‘Public Opinion’.

Figure 1 Poster of the East London Water Consumers’ Defence Association, 1898.

Source: PRO, COPY 1, 143 folio 165. Reproduced with permission of the Public Record Office (PRO), National Archives, United Kingdom.
At the same time that ‘the consumer’ became socially more inclusive of non-ratepaying working people and the poor, it became newly exclusive in undermining the claims of rich commercial users. The ‘famines’ pitched unmetered domestic users against metered commercial users suspected of being favoured by water companies at the expense of domestic consumers. Progressive attempts to tax the unearned increment, mirrored in the water rate debates, challenged the claims of ratepaying firms to be fellow consumers. The interest of commercial or rich users in paying only for water used – as in the Cooke case – ran counter to a progressive interest in using the water rate as a tax to provide municipal services. William Torrens, the promoter of the 1885 Water Rate Definition Act, complained of the outcry ... lately raised by the owners of luxurious mansions, great warehouses and improved ... offices, that they should be ... taxed only for ... occasionally washing their hands... A water-rate according to property and income, not ... poverty and privation, is one of the justest and wisest burthens that any community can bear.

The rich, too, had an interest in healthy tenants, advocates of ground values argued. Defenders of water companies responded that the graduated system of rates in poor areas like east London and Southwark meant that already ‘the rich pay for the poor’.

The consumer was now moving towards the private end-user, but this movement was neither linear nor complete by 1900. The poor and working people were not only private end-users, but sometimes ran small businesses from home. The Times’ Special Correspondent wrote of the hardship of a Jewish family in Whitechapel during the summer of 1896: a ‘respectable-looking couple’ with ‘children, well kept’, who filled their baths and additional casks from a tap in the backyard – ‘the usual arrangement’ – to catch the intermittent supply. Their ‘real grievance’ was that they needed constant supply for a small lemonade business. Thousands of laundrywomen, fishmongers and other small traders, mixing domestic and commercial premises, were similarly affected by intermittent supply.

The coming of consumer society is conventionally associated with a bifurcation between a domestic, female world of consumption and a public, male sphere of production and commerce. The politics of water are a reminder that, for a significant group, the domestic and the commercial were still fused in the late nineteenth century. Much of the actual consumption of water ‘for domestic purposes’ taking place in households – cooking, laundry and cleaning – was carried out by women. Like Charles Lyel, whose wife had to save water in the bath for ‘the requirements of the servant and her assistant in the scullery’, it was mainly men who, as householders and ratepayers, spoke for their wives, mothers, daughters or servants. Female water users might express grievances within memorials to the LGB, but generally it was male ratepayers and tenants who publicly articulated the water consumer’s domestic interest.
The Consumer between Waste and Abundance: Rationalities and Responsibilities

Daniel Roche begins his historical discussion of water in France with a passage recalling how, in the 1950s, when a rural area in southern France finally received a modern water supply, an elderly woman responded by keeping the tap on constantly. New technologies require new knowledge and habits and produce new norms, expectations and behaviours. The late nineteenth-century conflicts over ‘water famines’ in London, Manchester, Liverpool and elsewhere were political manifestations of the growing tension between water consumers’ expanding everyday practices and expectations and the companies’ uphill struggle to provide constant supply for expanding cities. Between the 1860s and 1890s London water companies almost doubled the amount of water pumped through the system, already supplying 175 million gallons daily (31 gallons per person) by 1890. With the introduction of a ‘constant supply’ and the diffusion of hot running water and WCs (even if only in shared corridors in working-class housing) came a new sense of entitlement. Indeed, water companies and critics of municipalization argued that the Consumer Leagues had reinforced a dangerous sense of popular entitlement, as if water were a free, natural good. ‘Good water laid on in the house’, the conservative physician Arthur Shadwell emphasized, ‘is no more a gift of Nature than loaves of bread brought to the door. And bread is equally one of the necessaries of life’. The ‘modern town-dweller’ had become so used to ‘taps to turn and buttons to press, that he regards them as natural, forget[ting] . . . to whom he owes them’.

Water companies and water-advocacy groups today are aware of the difficulties of changing consumer habits. Water-saving is currently promoted through a variety of educational and commercial tools, from Finding Nemo stickers and local festivals to trade-in schemes for wasteful garden hoses. In the late-Victorian period, neither water companies nor Consumer Leagues produced anything like the more recent apparatus of governmentality. As detailed as the discussion was about rates, quality, hours and volumes of supply, it was vague about the timing and frequency of water use for different functions in the home, such as the washing of the body or clothes. The topic that did come to the fore with a growing sense of entitlement in the 1880s and 1890s was waste.

The debate about the wasteful water consumer reflects the impact of constant supply on consumer expectations and sensibilities and provides an early commentary on human behaviour under conditions of mass consumption. If, as the companies insisted, an abundant supply of water was pumped through their mains, why the numerous protests about a ‘famine’? Where did the water go? The debate about waste laid bare the different rationalities informing the habits of consumption of different groups. In doing so, it raised questions about consumer knowledge and responsibility and about the fractures of a ‘public’ consumer interest.
Companies controlled the supply of water to the doorstep but had limited powers over the arrangements of pipes, stop-cocks and receptacles on the inside. The role of internal pipes and cisterns was one of the most long-standing issues of public debate. Was company water already polluted in the mains or was it polluted by shared water butts and by consumers who ‘will not look after their own affairs’ and allowed their cisterns to rot?82 By the 1880s Consumer Leagues’ efforts to create more literate, active consumers met with a concerted counter-attack from companies holding wasteful consumers responsible for shortages and dirt. Constant supply shifted the problem from poor equipment to irresponsible use or waste. During the alleged ‘famine’ of August 1896, for example, the East London Company continued to pump no less than 154 gallons daily to each house. The problem was, it insisted, that ‘consumers took not the slightest interest in the . . . careful use of the water and made no provision against drought, frost, or the breaking of the mains’.83 The historical emergence of the consumer as a citizen, then, was accompanied by a critique of the apathetic consumer.

Water companies sought to drive a wedge between responsible and irresponsible consumers, reminding those who left their taps running that ‘this waste is distinctly illegal and . . . a great source of inconvenience to neighbouring consumers’. In the summer of 1883 alone over 600,000 notices were distributed across London. Water Examiner Frank Bolton criticized the ‘apathy and carelessness of a great number of the consumers’.84 The water famines from 1895 on brought another wave of such communications, hosepipe bans and threats to return to intermittent service.85 What appeared irrational waste to some, however, was perfectly rational behaviour to others. There is evidence that poor and working-class tenants left water running because of unsatisfactory or non-existent storage facilities and inconvenient or unreliable hours of supply where companies reinstated intermittent supply.86 Punch was quick to caricature the gulf between company attacks on wasteful gardening and the realities of poverty, picturing a company turncock threatening women and children bearing empty pots around a dry standpipe.87

In 1851 gas-fitter Edward Collinson had responded to the select committee that ‘careful’ consumers could be protected from others’ wastefulness by home visits, on the gas inspector model, as long as control was with local authorities. By the 1890s the meter had become for many the preferred means by which consumers might internalize more rational and economizing consumption habits.88 The case for water meters was taken up in 1875 by the MBW and, in the 1880s, by the City Corporation. The dramatic increase in rateable value spread demand for meters well beyond expensive City properties to include middling ratepayers in Consumer Defence Leagues and London County Council (LCC) representatives from the East End. Pointing to the provision of metered commercial users during the 1895/6 famines, some domestic consumers successfully deducted ‘a fair sum’ from their rates for a lack of ‘sufficient’ supply.89
Metered provision was a legislative failure. Obstacles included cost: an average meter was estimated at almost £5 (twice the annual water charge for a middle-class house). Water companies were not universally opposed to meters, but the gains from charging on a rapidly increasing rateable value provided little incentive. Moreover, as one commentator suggested, meters might reduce waste ‘where the consumer pays directly… but… in the case of the small houses in East London, where the effects of the late drought have been most severely felt, the landlord almost invariably pays the water rate. Consequently payment by meter would be no deterrent to the consumer (the tenant) and he might go on wasting the water, … with absolute impunity’. The meter debate of the 1890s reveals the widening social imagery of the consumer – now including non-ratepaying tenants – but also the resulting tensions between consumers in different socio-economic positions.

Companies used meters outside the home, along with ‘water stethoscopes’, to detect leakage or waste and could cut off offenders for systematic waste. In the increasingly confrontational water politics of the 1880s and 1890s, however, the London companies were loath to force their limited powers on wasteful consumers in general. ‘[G]oing to law is generally useless’, The Times’ Special Correspondent found, ‘because of the universal odium in which the … companies are held’; magistrates, moreover, were also ‘consumers and human’. Recourse to law was reserved for strong cases, which illustrate the extremes of consumer waste confronting the companies. Several East London consumers informed on neighbours during the 1896 drought. On 22 June, after a month in which rainfall had dropped to 4 inches (from an average of 25 inches) and after repeated warnings, J. Wheeler of Leyton was summoned. Wheeler paid for domestic use only but ran a pipe to his backyard, with the tap turned full on, using up to 500 gallons an hour. Such waste, the company charged, made it difficult to provide others with sufficient water and it threatened to shut the mains. The water flowed into a pond in Wheeler’s garden, in which ‘about 20 ducks’ were swimming happily.

**Conclusion: Revisiting Consumer Society via Water Consumers**

Our analysis of nineteenth-century water politics has implications for both our understanding of the evolution of the consumer and our approach to consumer society more generally. Water politics were fluid in the sense that debates about water – access, needs and rights – created new social needs, sensibilities and political identities. The role of water in refashioning the self and body through new ideas and practices of hygiene and cleanliness is well known. Water played an equally significant role in shaping the new identity of the consumer. A rare and at best descriptive category in earlier centuries, ‘the consumer’ evolved into a more prominent social and political persona in the nineteenth century. Alongside parallel contests over the taxation of other necessaries (bread and sugar), water played
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a seminal role in the development of the consumer. Several interrelated features stand out. First, the consumer emerged initially as the voice of male ratepayers and property-owners, before becoming more socially inclusive in the late century. Second, consumers did not begin as private users: the category included propertied private end-users but remained open to commercial users and those freeholders who paid tenants’ water-rent but did not themselves consume the water. Third, the central site of contestation was the domestic sphere – the amount, cost, access and quality of water for a household represented by its head, the male propertied consumer – not the world of shops. Finally, the mobilization of the consumer took place over a good located outside a market system of provision. Price was not determined by use or the laws of demand and supply but by property value. Consumption was about using up or wasting a natural resource considered vital for civilized life, not about desire or the utility added in the exchange of a commercially purchased commodity. Politicization was about not only the level or price of consumption but also its changing temporal rhythm and control: constant supply held out to consumers a new sense of freedom – with running water from their domestic tap or external standpipe at any time they chose – that was threatened by the reintroduction of intermittent supply during ‘famines’.

That the politics of water played such a large part in the evolution of consumers in a metropole that was the hub of an expanding commercial culture of consumption raises questions for the study of ‘consumer society’. For all the subtle and complex understandings of consumption, historians, like sociologists, have tended to project an essential consumer into the past without enquiring into the historically specific formation of the consumer as a distinct category. When Victorians established the consumer, they did so by contesting a distinctive good through a broadly liberal political tradition of ideas and concerns about property, accountability, representation and public service. The consumer was a bounded subject. In the twentieth century, markets and liberal economics came to appropriate and universalize the consumer as the purchaser of any kind of good or service, but the social and political foundations of its identity were laid elsewhere. Many of the key debates associated with twentieth-century ‘mass consumer society’, and technocratic consumer movements,93 were introduced by water consumers, consumer defence leagues and their critics. Consumer knowledge versus apathy, the asymmetry between ‘impotent’ consumers and monopolistic firms, the consumer as citizen, the wasteful versus the conscientious consumer – it was around water consumption that the consumer’s characteristics took form.

The study of consumption has been shaped by intellectual currents and projects developed in the generations after the historical birth of the consumer charted here. Whether viewed as a source of social distinction and social solidarity, an instrument of alienation or, more recently, for self-fashioning, irony and resistance, the consumer has predominantly been framed through the study of durables, commercial goods and luxuries and through tastes, desires and signs. ‘Basic’ goods have been left to those
concerned with international development and human rights or historians studying bread riots or subsistence crises. The argument of this chapter has been not only that contestation over necessaries and ‘famines’ continued in the modern period, but also that it was here that the consumer emerged as a prominent actor, identity and subject of politics. In most human cultures, water carries a variety of attributes, meanings and uses. In the modern period, new technologies, public health and changing bodily practices have transformed perceptions of needs, ‘waste’, and ‘sufficient’ supply. Rather than a dichotomy between essential (‘basic’) and non-essential goods, it was precisely the combination of notions about water as both a ‘necessary’ vital for health and a precondition for cleaner, more ‘civilized’ and responsible citizens that propelled the consumer forward. For those metropolitan men who began to agitate as consumers, water was about ‘capabilities’. Access to more, better and cheaper water was not merely about fulfilling basic needs but about the capabilities of truly human functioning. Of course, this argument was articulated within a society and political tradition identifying the consumer as a male property-owning citizen, but it provided a basis for a quasi-constitutional argument that consumers as citizens had a right to demand certain services and standards from their governments. At the beginning of the twenty-first century, water remains a contentious issue for users in affluent as well as poor areas of the globe; one in five UK households are in debt to their water company. Water continues to bring together long-standing issues of citizenship, social exclusion, consumer education and human development alongside more recent concerns about sustainability. Historians and social scientists would do well to reintegrate ordinary goods like water into the study of consumer society.

Notes

* Thanks for comments to Martin Daunton, Christopher Hamlin, Anne Hardy, Patrick Joyce, Robert Millward, Elizabeth Shove, Rick Wilk, and to ESRC/AHRB (L143341003) for assistance.

1. C. Lyel, *The Times*, 23 July 1895, 12e. 1 gallon is 4.55 litres.


8. 3 Hansard Vol. 117, c. 465, 5 June 1851.


11. Already 60% of waterworks in Britain were municipalized by the 1870s.


Fund’, 14 October 1819; Report of the Committee appointed by the Meeting of the Inhabitant Householders of the Parish of St Marylebone, … 14th October, 1819.

18. Wright, Dolphin, p. 7.
20. Wright, Dolphin, p. 7; Matthews, Hydraulia, pp. 332, 350.
28. See D. Winch’s chapter in this volume.
32. For MPWSA, see Collinson, HCSC (1851), Qs 4935–5457. In the Southwark and Vauxhall Co. district, 2,880 died. In London’s 1854 cholera outbreak, contamination was traced to water from this district. W. Luckin, Pollution and Control: A Social History of the Thames in the Nineteenth Century (Bristol, 1986), pp. 79–81.
34. For a critique, see A. Appadurai (ed.), The Social Life of Things (Cambridge, 1986).
36. MPWSA, Supply of Water, p. 4. Collinson, HCSC (1851), Q 5026, Q 5033.
37. The Times, 10 July 1851, 6c.
40. Collinson, HCSC (1851), Q 4967, Q 4980, Q 4982, Q 5079, Q 5091, Q 5118.
41. T. Hawksley, HCSC (1851), Q 13549, Q 13552.
42. J. Simpson, HCSC (1851), Q 12825.
43. Hawksley, HCSC (1851), Qs 13571–3.
44. PRO, MH 29/15: London Water Supply, Executive Committee of Vestries and District Boards: Letter, 29 January 1891; Memorandum, January 1891.
50. Only Southwark and Vauxhall could be compelled to provide water by meter. PRO, MH 29/6: H.J. Smith, Minutes of the Select Committee on Private Bills as to the Southwark and Vauxhall Bill, 8 May 1884, Q 1297. For different pricing regimes on the continent, see Goubert, *Conquête de l’eau*, ch. 7.


55. PRO, MH 29/6: East London Water Works Company Report, 3 April 1884. PRO, MH 29/6: H.J. Smith, Minutes of the Select Committee on Private Bills as to the Southwark and Vauxhall Bill, 8 May 1884, Q 1311.

56. *The Times*, 20 December 1883, 6e: Holloway Hall meeting.

57. PRO, MH 29/6: H. Baines (Battersea Ratepayers’ Association) to Local Government Board (LGB), 2 February 1884, and reply, 13 February 1884; Alfred Jelley (Sec., Southwark and Vauxhall Water Company) to LGB, 27 February 1884; Clapham, Stockwell and South Lambeth Water Consumers’ Defence Association Notice (no date). MH 29/8: T.J. Ewing (Hon. Sec., Bethnal Green Branch WCDL) to Board of Trade, 20 April 1885. MH 29/22: Charles L. Floris (Hon Sec., Clapham WCDA [originally ‘Clapham Ratepayers’]) to Earl of Dudley, 13 August 1895; PRO, MH 29/27: Floris to LGB, 24 January 1896. MPs included Daniel Grant, Adolphus Morton and Percy M. Thornton. *The Times*, 16 July 1881, 6c; 20 December 1883, 6e; 2 January 1884, 6c; 21 March 1884, 10c.


59. PRO, MH 29/8: *St. John’s Wood and South Hampstead Advertiser*, 29 October 1885.

60. PRO, MH 29/8: Chelsea Water Works Co. objection to St. George’s, Hanover Sq. Assessment Committee, 24 June 1885.
61. PRO, MH 29/7: Wandsworth Board of Works to Sir W. Harcourt, 14 October 1884 (emphasis in original). MH 29/7, 10 November 1884: Alfred Jelley (Sec. of Southwark and Vauxhall Co.) to LGB.


64. *The Times*, 17 November 1884, 8a.

65. PRO, MH 29/7: R. Hayward to Sir William Harcourt, 4 October 1884; I.A. Crookenden (Sec., East London Co.) to LGB, 15 October 1884; *The Daily Chronicle*, 16 October 1884; Royal Courts of Justice Judgment, 11 November 1884.


67. PRO, MH 29/23, W.T. Bruce to LGB, 26 September 1896. Compounded ratepayers had local rates included in the rent.

68. PRO, MH 29/4: W.W.G. (LGB) advice to John Lambert (New Hampton memorial), 7 March 1881.

69. PRO, MH 23/33: Branch Secretary, National Union of Gasworkers and General Labourers, to LGB, 23 August 1898.


74. *The Times*, 3 August 1896, 6f.

75. For critical discussion, see C. Breward, *The Hidden Consumer: Masculinities, Fashion and City Life 1860–1914* (Manchester, 1999).

76. C. Lyel, *The Times*, 30 July 1895, 3d.

77. This contrasts with the prominence of women in visual representations of water consumers. Nineteenth-century drinking fountain and temperance imagery drew on traditional associations between water and femininity, but identified female figures, bearing pitchers, more as suppliers than consumers of water.


84. PRO, MH 29/5: East London Water Works Company, ‘Notice to Consumers and Sanitary Authorities’, 2 August 1883; Water Examiner’s Monthly Report, July 1883, pp. 1–3. Bolton complained that many waste pipes were still linked directly to sewers and allowed gases back into the water.
86. A. Walmer, *The Times*, 3 August 1896, 6c.
91. *The Times*, 24 August 1896, 8c.
94. A. Sen, *Commodities and Capabilities* (Amsterdam, 1985).