Needing NoDI?

The Problem of Information Poverty in Post-Industrial Society

Abstract

The paper addresses one of the main paradoxes of post-industrial society: information poverty. While digital divides of various types have been extensively theorised and researched, the actual condition of the information poor—those at the wrong end of socioeconomic information-divides—has not received sufficient attention. Yet if advanced nations have 'informatised' and thus become, in any sense, information societies, the plight of those lacking the definitive resource ought surely to be high on academic and political agendas. The article reviews the scattered multidisciplinary literature on the condition, confirming the iron link between economic poverty and information poverty, while also registering cultural and behavioural dimensions. Building on such work, a focused, upto-date and, it is believed, original conception is able to be introduced, namely, information poverty as a deficiency in certain taken-for-granted categories of political and cognate information, or Normal Democratic Information (NoDI). The new construct is then trialled in the field, among a sample of severely disadvantaged men in the city of Edinburgh, Scotland. The informants are indeed found to be, by and large, wanting in these key categories of information, an epistemic pathology that reflects and reinforces their material malaise. The article concludes that the 'option for the poor'—the political duty of care for the worst off—in the twenty-first century demands new modes of State action to combat an acute and increasingly salient social problem.

Keywords

information poor; poverty; normativity; citizenship; post-industrialism

Introduction

In 'Poverty as an Industrial Problem' (1914), his inaugural lecture at the Ratan Tata Association, a youthful R.H. Tawney sought to explain the scandal of socioeconomic disadvantage amidst affluence in early-twentieth century Britain. Today, something of both the scale and sting of industrialstyle poverty has disappeared, owing largely to the welfare state that Tawney's writings helped to inspire. Yet the poor are still with us, of course, and their presence is one of civilisation's most resilient paradoxes. The aim of this article is to try to throw some light on the character of poverty in the twenty-first century, and hopefully thereby also to provide a pointer towards its amelioration. The central argument will be that a vital dimension of post-industrial poverty—not a wholly novel feature, but one which is now more salient and significant—is *information* poverty. With information becoming established as a fundamental resource in the economies, polities and cultures of advanced nations—in *information* societies—this form of deprivation can no longer be dismissed as an epiphenomenon, a sideshow. Informatisation—'the heightened importance of information, and its insinuation into all that we do nowadays' (Webster 2004, p. 2)—entails that groups lacking information are at an unprecedented disadvantage; they are missing something that it has become *normal* to possess. Hence, it would seem, information poverty must be reckoned a sociological and public-policy issue of the first order.

The first section reviews some key academic work from a range of disciplines and theoretical perspectives. Incorporating the most useful elements of the corpus, the second section presents a new conception of information poverty, namely, information poverty as a condition of being deficient in certain key datasets, what shall be referred to as Normal Democratic Information (NoDI). This is a claim about the epistemic or cognitive dimension of a recurrent social pathology; it represents an attempt to elucidate not the material underbelly of poverty—many others do that—but, so to speak, its central nervous system. The third section tests the construct using field data collected from a sample of severely disadvantaged persons located in Edinburgh, Scotland's capital city, and the fourth seeks to synthesise these theoretical and empirical findings. Finally, the article draws a simple and unabashedly political conclusion about where responsibility for the redress of information poverty lies in the post-industrial epoch—as Tawney himself would no doubt have expected.

Concepts of Information Poverty

Who, asks Barry Holderness (1998), are the world's information poor? and what precisely constitutes their information poverty? These are complex questions. A real grasp of the phenomenon of information poverty is rare, even among social scientists. It does not feature in established glossaries, such as Spicker, Leguizamon and Gordon (2007), or major monographs, such as Loic Wacquant's Comparative Sociology of Advanced Marginality (2008); nor does it appear to have achieved traction in the core journals. This is not to assert a total blackout. Veteran poverty investigator David Donnison had noted in his *Politics of Poverty* (1982) that to enjoy a decent standard of life people needed to be able to afford newspapers. Today he adds that 'families who do not have a computer will be in poverty if their children's classmates all use Google to do their homework' (Donnison 2013). Sheldon Ungar (2008) ventures close in a social-theoretical analysis of 'ignorance', but it is telling that his verdict is that this too is 'underidentified' as a 'social problem'. The singular contribution of Manuel Castells will be registered shortly. But despite these welcome flashes, there remains a clear sense that the study of information poverty occupies a nonmainstream position in the community of poverty researchers. The present section accordingly needs to reach for a range of sources from a vastly dispersed literature. It will take a 'Himalayan' approach, tackling only the significant peaks, with a view to evolving a vantage-point from which to build a new, synthetic construct.

It is necessary to begin by ascertaining what, if anything, the architects of the information society thesis had to say about information poverty. This task can be executed surprisingly quickly. The economist Fritz Machlup, widely credited with the founding text, The Production and Distribution of Knowledge in the United States (1962), did not address the issue of information poverty at all. Marc Porat's *Information Economy* (1977) refined and updated Machlup's insights. However, in its breakdown of literally hundreds of 'information policy' issues, information poverty does not figure, except by implication through a solitary mention of 'information gaps' (1977, p. 207). Nor, in his seminal essay, 'The Social Framework of the Information Society' (1980), which wove the findings of Machlup and Porat into a sophisticated sociological account, did the late Daniel Bell mention information poverty—in spite of approximately half the paper being devoted to incipient policy issues. It is perhaps disappointing that a leading social theorist, and former Marxist, seeking to make the case for information having replaced capital and labour as the crucial commodity in contemporary society, did not seem to trouble himself with the plight of those denied the putative asset.

So much for the pioneers. Thankfully, the next major exponent has demonstrated a far keener social conscience. Castells' trilogy *The Information Age: Economy, Society, and Culture*, which has been compared to the work of Weber and Marx on industrialisation, contains a restatement of the basic tenets of the original information society thesis, with some important additions in both scope and depth. The most relevant of its innovations for present purposes is its emphasis on groups which have so far failed to benefit from what Castells is not ashamed to call the information technology revolution. In particular, Volume III, *End of Millennium*, features vivid portrayals of what Castells calls the 'black holes of informational capitalism' (1998, p. 161). These refer to large sections of the developing world but also to significant pockets of poverty in developed, post-industrial nations, in the ghettos of the United States, the banlieues of France, and the like. This stratum, which he also christens the 'fourth world', is the human cost of the global information society:

It is populated by millions of homeless, incarcerated, prostituted, criminalized, brutalized, stigmatized, sick, and illiterate persons. They are the majority in some areas, the minority in others, and a tiny minority in a few privileged contexts. But, everywhere, they are growing in number, and increasing in visibility, as the selective triage of informational capitalism, and the political breakdown of the welfare state, intensify social exclusion. (Castells 1998, p. 165)

While it is not part of Castells' design to set out a formal definition or analysis of information poverty, and he does not even employ the term, this work is important for having attempted to assign the disadvantaged a central role in academic and public discussions of the societal consequences of informatisation.

Information-poverty research proper begins somewhere else altogether, with Thomas Childers' *The Information-Poor in America* (1975). Long out of print, this library and information science (LIS) product is the locus classicus of an approach that construes information poverty in terms of deprivation in particular categories of information. Childers argued that America's information poor, groups he names as blacks, Appalachians, prisoners, etc, generally inhabited a deficient, even deluded, information world:

They are often locked into their own subculture. This removes them from the flow of popular information that exists in society at large. In effect they live in an information ghetto. Their information universe is a closed system, harboring an inordinate amount of unawareness and misinformation (myth, rumor, folk lore.) (Childers 1975, p. 32)

This is not to say that they lacked access to the mass media; on the contrary, they were typically consumers of above-average quantities of media, but mainly of radio and television. The problem was that, compared with newspapers and magazines, the US broadcast media were largely 'a one-way channel emphasizing entertainment rather than information' (Childers 1975, pp. 32-3). Thus, while the economically poor are not necessarily technology poor, the information flows that they tend to consume are low value, in informational, and arguably moral, terms; they seem to confirm mainstream society's stereotype of them, as wallowing in soaps and movies. Childers helpfully specifies the types of areas of information need constitutive of information poverty, namely information about health, home and family, consumer affairs, housing, employment, welfare, the law, the political process, transport, education, and recreation (pp. 44-77; see also Lumiers & Schimmel 2004). However, the book is essentially a superior bibliographical essay, useful mainly for establishing the terminology of information poverty; its mission was not to offer anything in the way of new data or theory.

Graham Murdock and Peter Golding's paper 'Information Poverty and Political Inequality: Citizenship in the Age of Privatized Communications' (1989) has also established itself as a benchmark of information poverty research. Citing the effects of government policies of privatisation, deregulation and marketisation in which the information and communications industries were deeply implicated, these communication scholars drew attention to the plight of the information poor in the British context. Their premise was that the meaning of citizenship—the citizen both as an individual possessed of civil rights and as an agent participating in the political process—had changed. 'It is clear,' they wrote (1989, p. 183), 'that communications and information are central to the exercise of full and effective citizenship in the contemporary era'. More than ever, therefore, people need access to information and communications, in order to be knowledgeable about their rights, to be well-informed participants in politics and to be able to influence representations of themselves in the media. And such needs, they further claim, cannot be met by privatised institutions driven by market imperatives. The result of Conservative policies was that 'the poor suffer from a double disadvantage. They are priced out of the markets for new services and left with an infrastructure of public provision that is either unable or unwilling to provide the full range of resources for citizenship' (Murdock & Golding 1989, p. 184). The conclusion is stark:

Information poverty of society as a whole, generated by the growing power over information held by both state and corporate sectors, is complemented by the information poverty of lower income groups directly resulting from their material deprivation. (Murdock & Golding 1989, p. 192)

A relatively recent offering in the same vein, Pippa Norris' Digital Divide: Civic Engagement, Information Poverty, and the Internet Worldwide (2001) acknowledges the continuing reality of systemic information poverty, now of course in a situation of pervasive computerisation. The highly-cited political scientist distinguishes between several kinds of digital divide. First, there is a global divide between industrialised and developing nations. Second, there is a social divide between groups within industrial and post-industrial nations. Then there is a third kind. 'Even if we assume', she writes (2001, p. 12), 'that Internet penetration rates will gradually widen throughout society there is growing awareness that a substantial democratic divide may still exist between those who do and do not use the multiplied political resources available on the Internet for civic engagement'. And this is the case even in advanced political democracies. Like Murdock and Golding, she equates information poverty with technology deprivation, the lack of ownership of or access to computers and the internet. And her conclusion also sounds similar:

The heart of the problem of the social divide in Internet access lies in broader patterns of socioeconomic stratification that influences the distribution of household consumer durables and participation in other common forms of information and communication technologies, as well as in the digital world. (Norris 2001, p. 234)

In a situated study, 'The Impact of Social Class and Status on Citizenship Information Need' (2000), Marcella and Baxter report some large-scale surveys of the British public. A randomised sample of users of information institutions, such as public libraries and citizens advice bureaux, completed questionnaires covering numerous aspects of their information behaviour; a follow-up study involved doorstep interviews, again on a nationwide scale. At the heart of the research programme was a fairly concrete concept of 'citizenship information', defined thus:

Information produced by or about national and local government, government departments and public sector organistions which may be of value to the citizen either as part of everyday life or in the participation by the citizen in government and policy formulation. (Marcella & Baxter 2000, p. 239)

They found a depressing correlation between citizenship-information awareness and social class. For example, on the specific topics of national politics all of the 'class I' respondents (professional and managerial) declared themselves interested and over half saw themselves as well-

informed, while nearly three-quarters of class V persons (unskilled) were illinformed or uninterested. As regards local politics, legal rights, and equal rights, awareness again correlated closely with social 'status'. Perhaps predictably, it was only in welfare benefits information that class V appeared to outperform the well-heeled, but even here only half of class V called themselves well- or adequately-informed (2000, pp. 247-8). Such results demonstrate, Marcella and Baxter conclude, 'that there is a real danger of exclusion for certain groups of the population of the UK and that information policy must reflect an awareness of the most appropriate patterns of information dissemination in order to overcome barriers to access for each of these' (pp. 253-4; see also Clayton & Macdonald 2013).

Finally, no discussion of information poverty can afford to miss the distinctive work of the late Elfreda Chatman. Rather like Tawney, she was interested in the question of why pockets of poverty could coexist with abundance in the Great Society. Her answer was that disadvantaged people suffer a kind of epistemic captivity inside their own 'small worlds', subjected to the pressures and constraints that small-world norms bring. Using traditional anthropological methods, Chatman applied the theory to various real-life settings in the United States, including those of jobless mothers, university janitors and prisoners. For example, her work among inmates in a female maximum-security prison, reported in 'A Theory of Life in the Round' (1999), found that the information poverty of these lifers was sometimes voluntary, as when they chose to screen out potentially upsetting personal news from the 'outside'. It also resulted from inviolable prisoner norms about acceptable and unacceptable information-seeking behaviour. Or it could simply be inflicted from above by the prison authorities, as a form of censorship:

In a discussion I had with five inmates regarding their concerns about their future, a prisoner, in a heated tone, stated that she was highly skeptical that a prison library had no legal documents in it. She said that when she first came to the prison, they did have law books. She also indicated that these books were apparently taken out because prisoners began to read the books and realize that their sentences were excessive. (Chatman 1999, p. 210)

While Chatman was exemplary in teasing out the innerness of information poverty, some of her work arguably erred in trying to uncouple this affliction from economic poverty. Even within middle-class communities, she argued in her path-breaking study of widows in a retirement complex (1992), patterns of behaviour such as secretiveness and deception could result in information poverty. Later her team 'discovered' information poverty among feminist booksellers (Burnett, Besant & Chatman 2001); other disciples located it in fashionable sub-cultural

communities such as the body-modification set (Lingel & Boyd 2013). There is an obvious danger here. Poverty, if the word is to be used properly, is primarily about being crushed by circumstances outside the agent's control. We should be wary of the claim that 'there is no clear-cut relationship between information wealth and economic wealth' (Schement & Curtis 1997, p. 153). Similarly, while there is nothing sociologically amiss in 'delv[ing] into the evolving structures of informational stratification and class formations, into the vast middle ground between the haves and have-nots that is populated by the information have-less' (Qiu 2009, p. 8), that too does not bear upon the problem of information poverty in the present, crucial sense—information poverty as the era's characteristic form of social distress and marginalisation.

Information Poverty as Deficiency in Normal Democratic Information

Taken together, the rich and diverse body of work highlighted above provides a firm foundation upon which to build a better understanding of information poverty. The present section assumes all of its lessons, either explicitly or implicitly. However, the intention here is to evolve an original concept capable of moving forward the study of information poverty theoretically, and also in terms of applicability to both field-work and policy. A more focused, sophisticated and timely conception of information poverty is needed. Of course, this is not to herald that a final verdict is about to be achieved; nevertheless, it is hoped that the new construct will serve as a credible option, one which, even if subsequently shown to have had limitations, can assist the sociological and political reckoning of information poverty—by steering the condition onto pertinent agendas and stimulating the production of technically superior formulations.

This new construct of information poverty will be constrained in two specific ways. First, it will be confined to information poverty within *post-industrial* societies. Poverty in less developed nations is also an important, and of course far more pressing reality, but it requires a different analysis altogether. What interested and exasperated the thinkers cited above—from Tawney himself down to Golding, Murdock and Norris—is the anomaly of deprivation where it is unnecessary, among normal citizens inside the wealth-laden social structures of industrial and now post-industrial lands. Secondly, the focus here will be on information poverty as a lack of content. While technology deprivation is undoubtedly an inter-linked aspect of information poverty—it must be so, because information is always mediated by a technology of some kind—it is not the heart of the matter. The information poor are essentially those who are poor in *information*: it is this basic insight that scholars such as Childers and Chatman brought. Yet

further contextualisation is obviously necessary, because information is not homogeneous. The task for theory-construction will involve pinpointing the specific datasets that post-industrial citizens really need. After all, were information poverty about an absence of sadistic or paedophile websites, say, it would be regarded as a national virtue, not a social problem.

It seems reasonable to suggest that certain specific categories of content are especially significant in the context of contemporary and emergent citizenship. Thus, it should be possible to work up an intuitively-acceptable account of the political dimensions of post-industrial functioning, from an information-content perspective. Once such an account is in place, information poverty becomes simply the absence of such information. Here the work of Marcella and Baxter proves more helpful than that of Childers. While it is of considerable importance that there is poverty of information about healthy diets, recreational opportunities and the numerous other areas attributed to the 'information-poor in America', and elsewhere, only a fraction of these impinge directly on the core information dimensions of democracy. Assuming a modern conception of citizenship, as an ascriptive role involving both political enfranchisement and a neighbouring range of liberal rights, we have a ready-made benchmark from which to gauge the plight of the post-industrial information poor. Those rights of the citizen imply a set of supporting information requirements. The information poor the dispossessed of the information land—are short of certain kinds of democracy-pertaining information; they lack socio-political information that the rest of us take for granted. Thus, we may conclude that to be deficient in what may be summarised as Normal Democratic Information (NoDI) is the true meaning of information poverty in post-industrial society.

A preliminary itemisation shall now be essayed of the categories of information needed for normal citizenship in a specific, and to some extent typical, post-industrial democracy. Informed citizenship in the British context includes, to begin with, electoral information, including registration and voting procedures, identity and availability of members of parliament and councillors, essentials of party-political philosophical positions and policy platforms, and similar data germane to current enfranchisement. Citizenship from a post-industrial perspective also embraces a broader set of information objects whose mastery results in the state of being, in a basic intuitive sense, properly informed. These additional normal components of democratic information in the British situation, it is suggested, include a minimal competence in constitutional rights and duties, such as the law on freedom of expression and association, a grasp of current affairs both domestic and international, certain kinds of non-elementary political literacy pertaining to participation in egovernment, acquaintance with developing legal entitlements such as freedom of information (FoI) (the so-called right to know) and correlative rights of privacy and personal-data security, and

also a working knowledge of fundamental housing and welfare information, including access to relevant agencies. In lacking such resources, a range of datasets palpably constitutive of democratic citizenship, the information poor can be said to be abnormal in the sense of falling below taken-forgranted societal information norms in the relevant respects. That is, they are in need of Normal Democratic Information.

What counts as Normal Democratic Information, as with conceptions of normality in other domains, will of course vary, in its empirical details, across different contexts. It will depend primarily on the political systems and attendant socioeconomic and cultural circumstances of particular societies. The preliminary formulation given above relates to a typical newly-post-industrial mass representative democracy. In another type of society, say that envisaged in contemporary republican and deliberative doctrines of radical participatory democracy modeled on ancient Greek citystates, NoDI might also have to include an extensive political contact-book, a much greater knowledge of policy issues and of an extensive legal corpus, and even a proficiency in rhetorical skills. The meaning of full citizenship will always be a function of the characteristics of specific polities and of their level of development towards a particular politico-philosophical ideal. Information poverty is thus not an absolute or fixed quantity; it is, indeed, a new expression of what is termed relative deprivation. Information poverty as a deficiency in Normal Democratic Information thereby reflects the modern sociological understanding of poverty.

Finally, it should be noted that NoDI is a thoroughly normative concept not only in the sense that it calls into play existing intuitions about what passes for normal citizenship. It is also normative in the stronger sense of being morally evaluative. It specifies datasets that all persons in postindustrial society ought to be enabled to possess. Hence it cannot avoid being 'anchored in judgemental views of what is valuable information' (Haider & Bawden 2007, p. 548). This should not be interpreted as in any degree a weakness, however. On the contrary, it is absurd to think that all information is equal, and in practice no one actually believes such. In any domain or context, some pieces of information are clearly more valuable than others—more helpful, say, or more empowering, or more morally or spiritually beneficial. This is especially true of the political domain, the epistemic realm pertaining to informed citizenship. It will certainly not ease the plight of the poor to pretend otherwise. The conception of information poverty as needing NoDI can in this way also join the on-going scholarly effort to develop a prescriptive general social theory of the information society (e.g. Braman 2006; Wilhelm 2004).

Case Study: Scotland's Information Poor

If it is to be more than an abstraction, the concept of Normal Democratic Information needs to be tried out in concrete situations. This section accordingly reports a case study involving interviews with a presumptively information-poor systact. It is not claimed, of course, that such a sample can prove the validity of NoDI. However, it can at least suggest its utility and relevance. It is a snapshot that gives a glimpse of the condition of the poor, in relation to a vital yet comparatively undocumented form of socio-political deprivation. If information poverty thus construed is to any extent vindicated, it can help to bring into focus what ought to be one of the objectives of public policy in the post-industrial era.

The sample comprised seventeen severely disadvantaged persons, the majority both unemployed and homeless, in the city of Edinburgh, Scotland. The interviews took place in the summer of 2013 at central sites such as Princes Street, the Grassmarket, or the environs of Waverley train station, or in west end locales such as Toll Cross and Bruntsfield. The sample was purposive, followed advice from charities working with the homeless, and reflected the sole criterion of evident economic distress. Interviews were conducted one-to-one by a contracted short-term researcher, and were audio-recorded for reference, as well as being fully documented during sessions. All informants were—in police argot—male Caucasians, not through design but because men and Caucasians vastly outnumber women and non-Caucasians in the 'fourth world' of this particular capital. (Of course, men dominate the mean streets of every city, because 'one can almost say that below a certain level society is entirely male' (Orwell 1975 [1933], p. 180).) Further demographic details will be supplied shortly. The tone, style and content of the interviews owe much to the work invoked above, particularly that of Chatman, although the questions were of course adjusted to the concept of Normal Democratic Information. Responses have been anonymised to preserve confidentiality. A copy of the interview schedule can be found in the Appendix.

The informants were mostly of Scottish origin, although there were several from further afield, namely, England, Ireland and Spain. Their ages ranged, as one might expect with homeless men, from the thirties to the seventies, with the majority in their thirties or forties. As regards relationship status, all but one were single, some with failed marriages and children or stepchildren, and several now attached to girlfriends; one was still married and two appeared to be in a 'gay' relationship. Many still maintained links with their families, while a minority had lost touch or admitted estrangement. Educationally, there was great diversity, from illiteracy to a doctorate; most, however, had few if any academic qualifications. On the other hand, many possessed technical qualifications,

in reputable trades such as plumbing, building, stone-masonry and electrical work. Only one informant was in paid employment, as a cleaner (informant 9) the daily occupation of the remainder being the collection of money by selling the *Big Issue* or, the majority, direct begging. Most had been jobless for many years, several for over ten years. Although one, with learning difficulties, had never worked, the rest had all worked at one point, in their trade or else in less skilled work, such as a shop or fairground. One had once owned taxi firm, another had been a lecturer before falling on hard times. Approximately a third of the informants disclosed that they had served time in prison. As for the 'bottom line', most had a monthly income of £200-£399, although several—four, to be precise—said that they lived on, including welfare, less than £200.

These dry statistics can be fleshed out with some of the statements offered in response to a scene-setting question about their lives. A few of the informants slept in a flats or a house, usually that of partners or friends—as informant 7 put it, 'sofa surfing'. Several stayed overnight, usually irregularly, in hostels for the homeless. However, many were literally sleeping rough, either openly in the streets, or in a shed, stairwell or tent. When pressed as to where exactly he slept at night, informant 6 said simply, 'anywhere that's quiet'. Importantly, all who were literally homeless identified their homelessness as the essence of their predicament. Without a fixed abode, they believed that they stood little chance in the job market: 'no house, therefore no job' (informant 4). For all informants, predictably, the cost of living was the over-riding issue. Informant 1, a Spanish immigrant living, apparently, on £100 per month, just nodded when asked if life was a constant struggle about money. As unemployed persons, they felt themselves at the mercy of bureaucracy; informant 13 even spoke of 'stigma'. Several admitted that alcohol was a major problem. 'I always took solace in alcohol', confessed thrice-married informant 2. A few had mental health issues. However, the one area in which they were wellserved—a tribute to the National Health Service—was health; only informant 1 mentioned any difficulties accessing medical help.

So much for socioeconomic profiling, what of the sample's information needs? They are obviously economically poor, but our inquiry is into whether they are also poor in information, and if so in which ways. Asked directly if they felt well-informed about their rights and responsibilities as citizens, their deficiencies became abundantly clear. Most readily admitted to being badly-informed. Informant 2, in a typical response, said that he used to know who his political representatives were, but no longer. And like most of the others, he had not even heard of the Scottish Government's '2012 pledge'—a critical information gap, since it was a promise to house every homeless person by the end of that year. Informant 3 said that '[political information] changes that much it's hard to keep up'. Asked if he

voted, he said 'Nah, unfortunately if you're homeless and all that kinda thing the government takes your vote away'. 'I think you become more isolated and less informed about things', he added. Informant 5 concurred; he was now 'less informed because I'm on the streets basically, eh...I feel a bit out of the loop, eh'. Asked if he voted, informant 8, a cherry-picker from Kent, replied 'No, 'cause I haven't got any address, so'. Informant 12, the PhD, opined that 'there's not enough information coming out, like I've never heard of [the 2012 pledge]'. A few felt that they were becoming a little better informed as a result of the assistance of a local charity called Streetwork (informants 4 and 6). However, the vast majority were obviously under-informed politically, if not disillusioned:

Most of the politicians, they're right we're gonna do this we're gonna do that, right I'll go vote for you and that's great and then they turn around and no do it so, you know I voted for you, I gave you an extra point for your constituency and you've done exactly the opposite of what you said you would do. (Informant 13)

Probed as to how they got the government information they did actually receive, several were grateful for a familiar civic institution, the public library. 'The lady is very nice to me', informant 2 said, 'she looks after me...she'll tell me if there is something that I need to know'. Several also confirmed that they used it for the free internet access. On the other hand, informant 6 said, 'I've never been 'cause of the way I am, 'cause those places are sort of weird, eh'. To the follow-up question, 'so you don't know what's going on with the government?', his response was a categorical 'no.' Citizens' Advice Bureaus were also reported as being useful for getting information, but with caveats: informant 3 said that 'when I was there they kinda say they can help you but they can't, really'; informant 16 claimed that 'now they're needing appointments, you canny just walk in'. Voluntary-sector agencies like Streetwork and 'keyworkers', ie State social workers, also emerged as a useful conduit of democratic information.

Several had heard of the Freedom of Information (FoI) statute, and all, once they were apprised of its principle, saluted it. Several articulated its rationale cogently. As informant 3 put it, 'if I put in for a job or something and they didn't give me a reason why, you know'. Informant 12 agreed that it was a good thing, but asked pointedly, 'do you get to find out about the sex offenders list? 'Cause the FoI Act, I don't know if it covers that, like. Aye, you've got a right to know that'. Informant 15, however, was not so sure about this. 'I believe you should be able to go into all these offices and check on records and their expense account and other things', he commented, 'but there's other information I find dangerous like sex offenders stuff and criminal stuff'. However, despite the obvious political

intelligence of the informants, none had personally invoked FoI to improve his condition.

Asked about their use of mass media, responses were more or less uniform. Most read the *Metro* free-sheet or picked up discarded papers from the ground; the Sun and Daily Record were often specified. As informant 12, a man in his 40s, put it, 'we're talking away in the biblical times when I [last] bought a newspaper'. The exceptions were informant 8, who frequented a political protest site and claimed to read the i (the cheap version of the *Independent*) and informant 14, the ex-lecturer, who read the Sunday Times. Most watched television when they had opportunity; radio was seldom owned because of the cost of batteries. As regards what they consumed, politics were rarely mentioned; they tended to be more interested in crime, comedy or music. As informant 3 put it, 'I don't really keep up with that political stuff, no'. Informant 11, an environmentalist, said of the broadcast media: 'I think they only tell you what they want to tell you...I just believe in the internet, really'. A few said that they followed current affairs only in so far as they might affect their benefits. '[Regarding] this austerity programme', opined informant 2, 'I think [Prime Minister David Cameron]'s went too far...he just seems to be targeting the wrong people'. Prompted specifically on the issue of Scottish independence, a definite majority were in favour, yet only at a distance. As informant 15 explained, 'I would like independence but at the moment I've got other things to worry about'. Informant 17's attitude to politics in general was typical, 'I'm not really that interested in it. Not that I'm not interested, I've got myself to worry about and all that, so'.

Asked about new information and communication technologies (mobile phones, the internet, Facebook, other) most owned or had recently owned a mobile phone, although not normally smartphones; they accessed the internet, if at all, at the hostel or the library. Half a dozen were regular users of a social networking site. Informant 11, who lived at home and possessed a computer, waxed lyrical. 'I love it for everything', he said. 'If I need anything I want to know, I love it, there's so much information'. Informant 10, by contrast, confined himself to a few times per annum, 'every Christmas and birthdays for the family'. And informant 6, of travelling stock, pointed out that he could not use Facebook even if he wanted to, since 'I can't read and write to use the internet, eh'. Asked specifically about their take-up of egovernment services, such as online forms, the vast majority had no experience at all. At this point, informant 2 confessed 'I've never been on a computer in my life'. Informant 4 agreed that he was missing out: 'aye, 'cause you canny get on the internet all the time, eh, so you do miss out quite a lot. I think it'd be easier just the normal [paper] form'. Yet even among those most deprived in terms of access to ICTs, there was little sense that the lack of technology itself was at the heart of

their plight. It was more the absence of relevant information-content that defined the malaise of the majority. In fact, for some offline personal networks remained the most important source of information. 'My mum', informant 4 stated, 'if there's something that's happening that's quite important she'll tell us, eh, she's like the local newspaper'.

Towards the close of the interview, after all the concrete questions, the men were asked what they understood by the general idea that we are living in an information society. Some declined to answer. Several, however, made relevant, full and often insightful replies, in many cases worth quoting. Informant 10 replied 'aye, 'cause everything revolves around computers, doesn't it?' Informant 3 agreed that 'it's all computers and the internet, kids can get any information they want', but added:

I think if a lot of the younger ones that are on the street got more help, more information on what they can do and what they can't do and all that it would get a lot more of them off the street and away from the society of drugs.

Informant 11 declared that 'the internet changed the world', but also noted its dark side, showing, as others among the sample often did, an altruistic concern for children:

It's a bit scary for like the young because of making them grow up too fast you know...the computer's a bit dangerous for the young, so much information. I don't think it's right to fill up children with too much information 'cause they have to have their childhood.

Informant 4 opined that the online world was overwhelming and confusing for the disadvantaged. 'I think', he said, reprising the theme of printed versus online information, 'it'd be a lot easier if even if it was just a couple of leaflets'. Informant 7 had this poignant message:

It's lost a lot of people a lot of jobs, you know. Obviously things evolve and technology evolves but for example my job at the paper mill it was there for 100 years, but then along came emails and computers so nobody needed paper so you know....nobody writes letters anymore, so.

Informant 13 made a similar point about the automation of a baked bean factory: 'there's one guy behind a keyboard and there's another guy with the security thing, and that's like two folk in the whole plant'. He added the witty sound bite, 'it's all viral now'. Informant 14 acknowledged that this might be called the Information Age, but noted astutely that it could equally be called the Car Age, Manufacturing Age or Space Age. It was left to informant 15 to bring high theory back down to earth. 'I know', he said, 'it's

out there, I mean I see it everyday; I just, like I say I'm homeless, I've got no, I've no reach to all this stuff, it's not there for me'.

The Patho-Epistemic Condition of Post-Industrial Poverty

It is important to be clear that poverty is being examined here under one relation only, the situation of the poor viz-à-viz certain kinds of key information. This is not a matter of general ignorance, a different order of issues belonging to the sociologies of education and knowledge. It is not the absence of a rooting in formal education that is the issue in the present context. In fact, most of the interviewees had benefited from a sound elementary Scottish state education. Nor is it a lack of general knowledge, the command of a wide portfolio of facts about the natural and social worlds. The context is rather an accelerating and to some extent disintegrative process of societal informatisation. Our inquiry then is about specific information deficiencies which define the patho-epistemological condition of the 'have nots' of the information society—the so-called 'info poor' (Haywood 1996). And it is also not about all departments of information, but solely information entities presumptively integral to citizenship in a well-ordered post-industrial democratic polity. It is suggested, therefore, that, in so far as this can be done by what admittedly is only a local study, the field-work has largely corroborated the NoDI hypothesis. The rationale and significance of this inference will now be outlined.

Picking up scraps of news from free-sheets in the gutter; gorging on crime and soaps rather than information programmes when televisionviewing opportunities arise; estranged from the public information utilities—'weird, eh', 'they kinda say they can help you but they can't, really'; utterly alienated from politics, except the politics of poverty, of benefits; being for the most part blissfully unaware of FoI, the twenty-first century constitution's very right to know; also cut off—one might almost say, using Robert Fortner's (1995) troubling term, 'excommunicated' from the nascent network, the matrix, of the electronic national information infrastructure; and so on and so forth; this is palpably not the stuff of normal democratic citizenship. Leaving aside the outliers—in particular, déclassé informant 14 and home-possessing informant 11—it is safe to conclude that the members of this systact, part of the worst-off stratum in an advanced social-democracy, are desperately short of certain categories of vital information, information proper to normal citizenship in a modern polis. The system has evidently failed the informants, not just in the traditional sense of material deprivation but in contemporary terms of the informational State's prime duty to secure the distribution of political and social information, to everyone and especially to those who need it most.

The responses confirm information poverty's basic sociologicalstructural determination, that is to say, its systematic link with economic poverty, vindicating Golding and company's mapping of information poverty onto generic poverty. In other words, information poverty should continue to be understood as a component of a deeper 'social crisis' (Schiller 1996). The informants are deficient in Normal Democratic Information mainly because they are deficient in housing, jobs and income; they are cognitively or epistemically challenged because they are materially or physically challenged. The key axis remains the real-virtual one. It was their lack of a permanent physical address and, relating to that, a job and a steady cash flow, that induced their information crisis. Without a home, and therefore both the status and logistics for formal correspondence and the whole legal side of employment, these men find themselves in a vicious circle of job- and document-deficiency. Nor can they vote—say for parties which might address the Unemployment Crisis—for, to quote informant 10, 'you need your own tenancy to have the right to vote'. Moreover, as the ultimate irony, their homelessness was the main reason why the salvific information contained in the 2012 pledge, the Scottish National Party's laudable commitment to house everyone by the end of that year, was hidden from them.

The data also suggest, at the microlevel, patterns associated with a subculture of poverty. The general aversion to institutions, whether libraries, hostels or job centres, or the democratic parliament itself, while understandable, is of course self-defeating, since these are the amenities that define and secure citizenship. We find perhaps too many signs of the mentality of Childers' ghetto and Chatman's small world. The respondents have essentially adopted their own behavioural norms, including information-avoidance norms, and make little genuine attempt to reconnect to the Great Society. These post-industrial paupers are thus to some extent like Rousseau's slaves, not wanting to be 'free'. Yet it would be utterly wrong to condemn them Victorian-style as ignorant wretches. What emerged instead was the sense of a fundamental disconnect between their intelligence and their information. Despite being, in most cases, homeless and in all cases largely severed from the mainstream flows of political life, the respondents were well aware that informatisation is a determining factor in the modern world. They readily acknowledged the new socio-technical reality, including the fact that, to quote informant 10 again, 'everything revolves around computers'. They realised that they were supposed to be part of an incipient post-industrial economy where information replaces hard goods—not least the man who used to work in a paper mill until the disruptive advent of email. There was a consciousness—often agonistic—of

the ubiquity of electronic information flows, the expensive digital communications circuitry constitutive of the global information society.

Indeed, the informants could articulate as eloquently as anyone some of the key tensions and paradoxes of the Information Age. One, as we saw, pointed to the danger of children being 'filled up' with information too soon, another to the potential 'addictions' spawned by the Net, while a third referenced the Orwellian concept of Big Brother and a fourth the risk of 'too many people knowing your business'. It may be that these latter references to privacy are particularly significant. Personal privacy is still important to people, not least to these urban outcasts. Perhaps the preference for sleeping rough can even be understood as privacy-oriented, in that the invisibility and freedom of the street seem more attractive to some than the sanitised regimentation of the hostel. A popular dislike of institutions has been encountered since at least as far back as William Booth's Salvation Army (1890). His subjects and ours treasured an anonymous lifeworld outside the system, outside the machine. But with that comes an informational price, a being outside-the-loop. Our men surely knew the value of democratic information—what FoI potentially offered them, the importance of being abreast of egovernment, etc-but their predicament, both physical and epistemological, both imposed and self-chosen, prevented its realisation. Hence they are, and without intervention are likely to remain forever, far from liberal-democracy's traditional ideal of the informed citizen, and very far also from normal membership of an emergent information-based society.

Conclusion: the Option for the Poor in an Information Age

The informatisation of poverty is an inevitable development of the coming of post-industrial society. While the condition of information poverty probably defies perfect representation, this article has attempted to clarify it through the articulation of a new concept that incorporates and synthesises elements of outstanding previous work. It has focused theoretically a vital aspect of the condition as it impinges upon a heavily disadvantaged systact within an economically and politically advanced post-industrial society. Specifically, it has argued that a deficiency in what has been termed Normal Democratic Information (NoDI) is a distinctive and to some extent measurable symptom of poverty in such a society, and it has sought to demonstrate this empirically, albeit using a localised sample. More important than any theory-development, we have heard the voices of the information poor themselves, men who do not share in the information benefits enjoyed by the well-heeled in the postmodern polis.

Only one further point remains to be made here. Information poverty, thus defined, is a political scandal. It is reprehensible, even absurd, that in an information society—a society that by definition is awash with information—there should be those, even allowing for elements of individual choice and agency, who go without prime information. There is an unavoidable implication for the public politics of information: the State is now duty-bound to involve itself more fully in the relief of this type of poverty. There is no avoiding this conclusion, because it is demanded by the logic of informatisation. There must now be a right to information, in Hegel's strong sense of a moral principle backed up by power. For information has become a constitutive element of the meaning of citizenship in a modern polity. Now, therefore, in the post-industrial epoch, we must ensure that the worst off are properly informed. Or to import the language of liberation theology, this is part of what the 'preferential option for the poor' (Groody 2007) should mean for those who languish in the margins of advanced democracies.

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Appendix

Interview Guide

A. Demographics

Please tell us a bit about yourself.

- 1. Age: teens () 20s () 30s () 40s () 50s () 60s () 70s () 80s ()
- 2. Sex: Male () Female () Other ()
- 3. Relationship status: Single () Married () Other
- 4. Education and qualifications
- 5. Occupation (and how long employed or unemployed)
- 6. Income (and main income source)
- 7. Please tell us a little about where you live (and how long)
- 8. Can you identify any factors which you feel make your circumstances different from those of other people (for example, financial hardship, employment opportunities, crime, health facilities)?
- B. Information and Media
- 9. Do you feel well-informed about your rights and responsibilities as a citizen (including political representation [councillors, MSP, MP, MEP], party platforms, do you vote, 2012 pledge)?
- 10. In what ways do you get hold of government information (including public libraries, CABs, leaflets, other)?
- 11. Can you tell us anything about the Freedom of Information Act (including your attitude to the so-called 'right to know')?
- 12. Please tell us a bit about your use of mass media (including specific newspapers, magazines, radio, television)
- 13. Which political issues have interested you recently (local, national and foreign)?

- 14. Do you have access to new media (mobile phones, the internet, Facebook, other)?
- 15. Are you able to take advantage of egovernment services like online forms?
- 16. Are personal networks still an important source of information about being a citizen (family, friends, other people in the same [socioeconomic] situation)?
- 17. Is there anything else you think is relevant to understanding your situation with regard to surviving in the Information Age?

Thank you.

* A Scottish Government pledge to house every involuntarily homeless person by the end of 2012