

**Open Cities: Crucibles for democratic change by Gregory Hadfield**  
**Guimarães, Open City Project**

**October 2012**

“Man is by nature a political animal,” wrote Aristotle nearly 2,500 years ago. The ancient Greek philosopher believed human beings are social creatures suited to living in a “*polis*” or city-state – large enough to be sustainable, but small enough for lives to be lived on a human scale.

Ancient Athens had a population of roughly 250,000, similar in size to my home city of Brighton on the south coast of the England; more commonly, Greek city-states had populations no bigger than that of Guimarães.

Despite its size, a [male] citizen could comfortably walk across Athens between sunrise and sunset, bumping into people he knew or recognised, many of whom took the day-to-day decisions that affected him and his community.

Frequently, he – or certainly people just like him – were directly responsible for such decisions, either individually or collectively. Quite literally, Athens was ruled by the *demos*, for the *demos*; Athens was “the Athenians”.

In this essay, I seek to argue that the internet has changed everything, everywhere. That the full profundity of its impact has yet to be felt, or even imagined. That associated technologies have the potential to usher in a new era of democratic engagement, especially in cities – and most of all in those cities bold enough and determined enough to be crucibles of concentrated change.

The ingredients necessary for change exist and, as we shall see, individual elements have been implemented in various contexts and countries around the world – often only in part, in isolation, or in discrete domains removed from formal democratic processes.

“The future is already here,” wrote William Gibson. “It’s just not evenly distributed.”

Specifically, I want to focus on open data and the context in which connected cities can self-consciously create, curate and share data to drive innovation, increase collaboration, and fuel more responsive applications and citizen-centred services.

### **Athenian democracy**

I reference ancient Athens because, despite all its flaws, it epitomises the spirit and promise of “Gov 2.0”, a disappointingly deficient description of how technology might re-energise and re-engineer government and governance – and much more – in democratic societies.

For the minority who were male citizens – not women, slaves, nor foreigners – Athens was a remarkably “open” city, not only politically, but also culturally and socially; as a result, it prospered and the greatest philosophers, scientists, writers, and artists were attracted to it from across the Greek-speaking world. Significantly, it was the Athenians who created

dialogue as an art form; they cherished conversation, debate and argument – as community resources.

In fifth-century Athens, democracy was exercised and experienced as a way of life, viscerally as well as intellectually. To borrow the words of John Dewey, the American philosopher and educationist, democracy was a habit rather than an occasional duty. The results were gloriously pervasive.

A pivotal mechanism was *sortition*, or election by lot, which “translated equality of opportunity from an ideal to a reality” [in the words of Sir Moses Finley, the ancient historian]. By blind chance, regardless of wealth or status, an Athenian citizen could find himself – temporarily, at least – holding high office and discharging enormous responsibility. A key feature was modest payment for office-holders, enabling poor men to sit in the *ekklesia* (council) and in jury-courts, or to hold whatever office fell to them by lot.

In such a nascent direct democracy, technology did not need to be anything other than rudimentary. (One of my favourite ancient mechanical devices is the *kleroterion*, a primitive lottery machine whereby jurors were chosen randomly from a panel of 6,000 volunteers.)

Several thousand citizens routinely and directly participated in the work of government: in the assembly, the council, the courts, and the large number of rotating offices. Indeed, this concept of “amateurism” was central to the definition of a direct and diverse democracy. There were no political parties; no governmental apparatus; no entrenched, obscure, silo-ridden bureaucracies.

Just imagine what the ancient Athenians would have done with the internet.

## City 2.0

Tim O’Reilly has described “Gov 2.0” as “[a chameleon, a white rabbit term](#)” that seems to be used by people to mean whatever they want it to mean”. In essence, it covers everything from the mundane – in a literal, not a pejorative, sense – to the sublimely disruptive, in four important areas: representation, deliberation, participation-*cum*-collaboration, and delivery of government services.

Its vocabulary and scope, however, are often inadequate, incapable of capturing fully the all-embracing shift in relationships that has already begun – between the state and citizenry, between businesses and customers, between employers and employees, and between individual citizens.

The “2.0” trope is itself misleading: the future is not engineered in private and then released in versions. The future is in a permanent state of beta; its reality – and its disruptive potential – is iterative, continuously created and re-created.

What I want to highlight are the possibilities that await “City 2.0”, the city whose democratically-accountable and/or publicly-funded institutions come together to catalyse an environment and a culture where openness becomes the default setting – where

transparency is endemic, not only as an end in itself, but also as a way of achieving greater collaboration and innovation in every aspect of life.

Cities already dominate the planet: more than 640 million people live in the world's 300 largest cities; by 2050, 70 per cent of the world's population will live in cities.

Cities have existed for 6,000 years, yet we live at a singular juncture in human history and technological development. Ours is the first generation to have the technology to enhance, enrich and exploit the complex network of relationships within cities – as well as the connections between cities.

The most successful cities will be the ones that are the most *connected*, where digital technologies are seamlessly and intensively integrated into everyday life, as omnipresent and as invisible as the air we breathe. Where democratic opportunities, are “frictionless” and implicit, rather than engineered and explicit.

It will be a difficult journey, particularly for politicians and bureaucrats programmed to resist the inexorable shift in knowledge and power, from hierarchies to networks, from institutions to citizens. Marshall McLuhan's words have never been more apposite: “Our Age of Anxiety is, in great part, the result of trying to do today's job with yesterday's tools and yesterday's concepts.”

### **Digital by default**

Pericles, the great leader of fifth-century Athens, recognised the unique adventure his fellow citizens had embarked on. According to Thucydides, Pericles said: “Our constitution does not copy the laws of neighbouring states; we are rather a pattern to others than imitators ourselves. Its administration favours the many instead of the few; this is why it is called a democracy.

“If we look to the laws, they afford equal justice to all in their private differences...if a man is able to serve the state, he is not hindered by the obscurity of his condition.”

[It is no coincidence that all these sentiments found substantial echoes in Abraham Lincoln's Gettysburg Address.]

I do not seek to argue the internet is the “killer app” that will automatically lead us into a new Periclean age. Technology did not create the world's first democracy; democracy creates the technology it needs to sustain itself and achieve its goals. We must resist the temptation to imagine a geeky, technocratic, elitist, utopian – or dystopian – vision of a future that, thankfully, never arrives. Certainly never in the way predicted.

Clearly, the straightforward business of government must take place online as well as offline, as openly as practicable: bureaucratic transactions, paperless voter-registration (as recently [introduced in California](#)), candidate registration, petitioning, protesting, voting, video-streaming and transcribing of parliamentary debates and council meetings, access to politicians and officials, and so on.

As we seek to make democracy “digital by default”, it has to be a priority to digitise existing mechanisms of government and governance, to supplement – and to provide alternatives to – the traditional channels of participation, engagement and influence.

I’m sure we can agree that all this is necessary. But it’s not sufficient.

## **Obama administration**

Let’s fast forward from ancient Greece to the 21<sup>st</sup> century and President Obama’s first day in office when, in an historic memorandum for the heads of executive departments and agencies, he promised to strengthen democracy by adopting an unprecedented level of openness in government.

Specifically, he promised to establish a system of transparency (to promote accountability), public participation (to enhance the effectiveness of government), and collaboration (to engage citizens in the work of government).

For me, transparency is a necessity because it is an essential precondition for the more pragmatic and productive areas of participation and collaboration. Transparency helps to hold institutions and individuals to account; more potently, however, it can be a trigger to harness the “wisdom of the crowds” as part of a collaborative approach to policy development – or to self-organised protest against policies that are inimical to the wider public.

For that, we need to create a more open society as well as more open government: Society 2.0, not just Gov 2.0.

In the four years since President Obama’s directive, there have been a number of high-profile initiatives by the United States government as well as by skilled civic organisations such as the Sunlight Foundation, OMB Watch, and The Centre for Responsive Politics.

They include websites such as [USASpending.gov](http://USASpending.gov), a single searchable website that includes every Federal financial award; [OpenSecrets.org](http://OpenSecrets.org), which tracks money in politics and its effect on elections and public policy; and Josh Tauberer’s [GovTrack.us](http://GovTrack.us), which was launched in 2004, initially as a hobby, and was the first website worldwide to provide free, comprehensive legislative tracking for citizens.

## **Open source**

Openness, however, is about much more than transparency. As Clay Shirky said in [a recent TED talk](#): “Transparency is openness in only one direction. Being given a dashboard without a steering wheel has never been a core promise that democracy makes to its citizens.”

In contrast, true openness is a two-way exchange: open governance is about government being open to external ideas and innovation as much as about making its own information and processes open.

Shirky highlighted the work of the open-source programmer community, for its methods as well as its achievements. In particular, he referred to Git, the version-control system used by developers: a large-scale, low-cost distributed means of facilitating cooperation, without controlled coordination.

Such tools could be adopted for democratic purposes (for framing laws, for example), Shirky suggested – while cautioning against expecting change to happen any time soon: “The people experimenting with participation don’t have legislative power. And the people with legislative power are not experimenting with participation.”

Unsurprisingly, in such a period of transition (and because of economic austerity as much as in spite of it), it is easy to find examples of progress: *ad hoc*, tactical, and isolated – rather than scalable, strategic and coherent.

In Iceland, as it recovered from the financial crisis that saw the collapse of its banks and government, social media was used to encourage citizens to share ideas about what a new constitution should contain; the previous one was based primarily on Danish laws. Similar experiments have been tried in Egypt and Finland.

In the case of Iceland, its constitutional council posted draft clauses on its website every week, allowing the public to comment underneath or join a discussion on the council's Facebook page. It also had a Twitter account, a YouTube page where interviews with its members were regularly posted, and a Flickr account containing pictures of the council's 25 members at work.

"I believe this is the first time a constitution is being drafted basically on the internet," said Thorvaldur Gylfason, a council member. "The public sees the constitution come into being before their eyes ... This is very different from old times where constitution-makers sometimes found it better to find themselves a remote spot out of sight, out of touch."

Even though the technology was more “Gov 1.5” than “Gov 2.0”, more Facebook than Github, it was still a welcome development – particularly since citizens were involved at the start of the process and not at the end. Citizen involvement at the beginning is an absolute requirement of genuine collaboration and co-production (rather than simple transparency or mere “consultation”).

## **Open publication**

There are still challenges, even with transparency and accountability. Transparency requires publication – and publication requires redefinition.

In a digital-by-default democracy, we need to redefine publication as the availability online in non-proprietary, machine-readable formats, in the most timely manner possible, without restrictions on use and re-use. In other words, not just transparent, but open.

In this area, an excellent example is [legislation.gov.uk](http://legislation.gov.uk), which makes the entire corpus of UK legislation since 1267 accessible as linked data via a high-quality, technically-sophisticated

API. How long, I wonder, before a government creates a wiki-esque “draftlegislation.gov.uk”?

[As an aside, while researching this essay, I sought a digital copy of my home city’s local bylaws. A search on [the city council website](#) produced this information: “A hard copy of the bylaws which are still in force in Brighton & Hove is held in Jubilee Library, Brighton. They are on the library catalogue and are kept for reference only on the upper floor. Enquiries: 01273 296955.” We have a long way to go!]

At the same time, governments around the world have made increasing amounts of data openly available: [data.gov.uk](#), one of the largest data resources in the world, with nearly 9,000 UK datasets; [data.gov](#), in the United States; and many more – including Portugal’s open-data portal ([dados.gov.pt](#)).

## Open government

The hackneyed choice between “small government” or “big government” is obsolescent, if not obsolete. The choice is not binary; the challenge is *better* government, *different* government. Two things, I think, are clear: if government – at any level – is a platform, then it is an open platform; and what government should do alone is that which only government alone can do. Everything else is a collaboration.

We have grounds for optimism, always. We have evidence that technology can extend and enable possibilities; in the language of software engineering, we have “patterns” (pointing to the way ahead) and “antipatterns” (highlighting ineffective or counter-productive methods and models).

We also have hopeful signs of political leadership, nationally and internationally: top-down commitments that, I hope, will inspire bottom-up action. It is just over a year ago since the launch of [The Open Government Partnership](#) (OGP), comprising countries and civil society organisations that believe tapping into the expertise of citizens and businesses will result in better decision-making; its first two co-chairs were President Obama and Dilma Rousseff, president of Brazil.

Already, with support from 57 countries, it claims to have had an impact on the lives of nearly two billion people – 30 per cent of the world’s population. In September, as the UK took over as a co-chair, it listed some of the highlights of progress by participating governments. They include:

- in [Bulgaria](#): the government is publishing daily budget spending reports with the recipient of each payment and what it is designed to achieve;
- in [Croatia](#): companies of special state interest are required to publish annual business activity reports;
- innovative public accountability mechanisms have been developed: a new “openness barometer” in the [Slovak Republic](#); a “governance observatory” in [Peru](#); and a “public scorecard” in the [Dominican Republic](#).

So how do we achieve the democratic, bureaucratic, and organisational transformation that gets us from where we are to where we want to be? Technology is only an enabler, not an end in itself. There is no roadmap, no project plan; there are only principles and processes.

## **Gov.uk**

As I write, the UK's Government Digital Service (GDS) – under the inspirational leadership of Mike Bracken, its executive director – has released from beta the single domain for government services: [www.gov.uk](http://www.gov.uk).

In little more than a year – employing user-centred design, agile methodologies, and open-source software (like Iceland and an increasing number of governments) – the GDS team, a team that has attracted some of the nation's most talented “*goverati*”, has led the way by example.

No matter how impressive is the deliverable – a website that makes life easier for citizens who undertake 1.5 billion transactions with government every year – the most inspiring aspect of the GDS achievement is the manner in which it has been achieved: openly, citizen-centred, iteratively, collaboratively across and beyond government, and economically.

Today, when we talk of communities, we often refer to communities of practice, communities of interest, and of purpose. Too rarely, do we recognize explicitly the persistent value generated by communities of place: the physical intersection between the global and the local; the neighbourhoods where even today most of us work, shop, enjoy leisure and seek pleasure; where we feel at home, where whatever happens is happening in our “backyard”, where even the mundane is significant.

## **Open cities**

In this final section, I would like to outline briefly a few specific developments that signpost the future for progressive cities open to becoming crucibles for global change.

### *Open data*

The creation of repositories for city-specific open data, of the sort that already exist in [London](#), [New York](#), [San Francisco](#), [Chicago](#) and scores of [other cities](#) around the world has generated enormous potential.

A primary audience for these data-repositories, I believe, are the entrepreneurs and civic activists who are willing to work with public organisations to create innovative applications and services that improve the lives of the rest of us.

To a degree, we have seen what this approach can achieve in competitions such as [Apps for Democracy](#), [Apps for America](#), or [Big Apps 3.0](#) in New York. In a similar vein, we should be heartened by the sort of “crowdsourcing” that has been adopted by the [Simplex Programme](#) in Portugal, whereby civil servants as well as citizens are invited to suggest initiatives to simplify government and service delivery. Too often, public and private organisations overlook the potential for innovation from within.

## *Civic data*

As a former journalist, I have argued that [city newspapers have a role to play](#), not only in the creation and curation of city-data repositories, but also in building the applications and services using the data such repositories provide.

The civic data I'm talking about has greatest value when it's free. It's about schools, catchment areas, and property prices; it's about bus times and bus-stops, taxi ranks, car parks, and traffic congestion; it's about energy use, CO2 emissions, and carbon footprints. Literally, the list is endless.

Over many years, [mySociety](#) in the UK has created tools for local civic engagement. The most notable include [FixMyStreet](#), a tool to enable the online reporting of graffiti, fly-tipping and broken paving stones, and [FixMyTransport](#), a way of reporting, viewing and resolving public transport problems. Much as I admire them, however, I am always frustrated that none of them has reached critical mass at the local level I inhabit.

Unfortunately, no city authority has decided to use some or all of these tools as part of its strategy to improve services – in the way many have, for example, used Facebook or Twitter as part of their social-media strategy. As a result, there has not been widespread adoption of citizens in any single city (impressive, though, the number of users might be across the country).

## *User-generated data*

[Open 311](#) and its recent – and most impressive – implementation [in Chicago](#), announced in September by Mayor Rahm Emmanuel and his chief technology officer, John Tolva (it is worth noting here the potency of mayors in concert with chief technology officers, chief information officers or chief innovation officers) is a new service-request system – available by phone, SMS, email and Twitter – which allows citizens to make and track non-emergency requests for help or information (removal of graffiti, mending of potholes, repairing of non-functioning street-lights, and so on).

Chicago's 311 call centre receives an average of 3.9 million service calls annually; nearly 40 per cent are either duplicates or citizens checking on the status of a request. Uniquely, by allowing residents to check service-requests online, the city can reduce the obvious inefficiencies and improve waiting times.

Importantly, developers are allowed to access the technology platform and develop innovative applications to further revolutionise the user-experience. The openness of the system enables them to build new applications to submit service-requests – including location and photo details, thus encouraging accurate and detailed reporting of issues to city departments.

More interestingly, however, the data generated by citizens seeking a service can identify gaps in provision, build a knowledge base for immediate use, and inform strategic solutions in the longer term. In other words, the mass of data can give a voice to the voiceless – as

evidenced by a remarkable article in Wired magazine in November 2010 headlined: [What 100 million calls to 311 reveal about New York](#).

The very act of articulating an individual need can trigger a citywide effort to meet that need; collectively, the aggregated requests openly articulate the shared needs of the city – thereby informing efforts by the wider community to satisfy them. Already there are pilot schemes in Chicago, New York, Philadelphia and Boston, where predictive intelligence and analytics might identify needs and priorities in advance.

### **Information is empowering**

This essay has focused a lot on data. I hope, though, it has shown that the central issue is not about the data, nor about the technology. It's about meeting the needs of citizens, offering solutions to problems, and providing answers to questions.

In conclusion, let me make one more crucial point: the demand for open data is a transitional demand. It forces every government, institution, organisation and businesses to re-imagine its mission and purpose: to serve the user, the customer, the employee, the citizen, the individual. It forces us all to prepare for a future, in which it is not information that is power, it is the provision of information that is powerful. More importantly, it is the provision of information that is empowering.

Just as nobody could have predicted what could have been achieved in the first 50 years of the internet, what could be built with HTML and hypertext, so nobody can foresee what will result from open data, linked data, and the new “semantic web” technologies.

An open-data city is a citizen-centred city, a collaborative city, a democratic city. The opportunities are endless – and, after 6,000 years, we're only just at the beginning.

---

*Gregory Hadfield was the first national newspaper journalist to leave Fleet Street for the internet in the mid-1990s. A former news editor of The Sunday Times, he is the founder of the UK's Open-data Cities Conference and director of strategic projects at [Cogapp](#), a digital agency.*

*This paper (Open Cities:Crucibles for democratic change by Gregory Hadfield has been commissioned by Watershed as part of Open City, a project that is part of the Cidade (City) Programme for Guimarães, Portugal – European Capital of Culture in 2012.*

*As part of the Open City strand, [Watershed](#) has curated a series of [artistic interventions](#) as well as commissioned [think pieces](#) which will explore the concept of openness in relation to city development. Open City provides the opportunity for Guimarães to establish a leadership role for open city development. It is a knowledge exchange programme that will help to re-draw approaches to city-making and change the ways we plan, deliver services and engage communities.*

*This work will be both published online and presented in Guimarães, providing the context and the content for a symposium to be held in the city in November 2012.*

[www.watershed.co.uk/opencity](http://www.watershed.co.uk/opencity)

