

Lecture by Duncan McLaren from Open Commons 2015, Linz April 29th 2015.

Please note: this text is heavily based on excerpts from '*Sharing Cities: A case for truly smart and sustainable cities*' by Duncan McLaren and Julian Agyeman, (forthcoming from MIT Press), and we wish to thank the Press for their support.

Sharing Cities: An urban commons for the digital age

Thanks for the invitation. It's a great pleasure to be here in Linz.

My aim today is to explain the ways in which sharing is changing in contemporary cities and why this is such a big opportunity for enhancing sustainability and justice – as long as city authorities and other stakeholders act to make their cities into real 'Sharing Cities'.

In a moment I'm going to take you on a virtual tour of some of the world's leading sharing cities across the Americas, Europe and Asia.

But first, I want to zoom out briefly. Humanity is – arguably - moving into a new geological epoch, where our collective impact on the planet is so great as to be visible in the geological record, to cause mass extinctions as in previous stratigraphic transitions, and indeed to put the survival of civilisation at risk. Scientists have suggested we should call the emerging age the Anthropocene (the Age of Humans).

[IMAGE: Hong Kong]

In the Anthropocene, the future of humanity may be at risk, but it is also decidedly urban. Just over half of the world's population already lives in cities. This is set to rise by 2050 to 64% in the global South and 86% in the global North.

Fortunately, this is an opportunity as well as a challenge.

The nature of urban space enables, and necessitates, sharing - of resources, goods and services, and experiences. In cities we naturally share buildings, land, streets, air, and a range of both green and grey infrastructure (from parks to sewers). Because we share and live densely, in cities we use environmental resources much more efficiently, and the more we share the more we can enhance sustainability.

Moreover, cities are space of collaboration. Cities can only exist when different specialists work together. It would be stretching the idea of sharing to suggest that the farmers, on whose surpluses the first cities depended, were voluntarily collaborating with the temple priests and military rulers – any more than contemporary market relationships in the supply chains between cities and their hinterlands are inspired by sharing. But today's 'urban commons' of infrastructure, public spaces and services, social opportunity, and cultural interaction is by necessity as much a shared creation of the citizens as the result of city

authority planning or investment. And in modern cities we are more deeply interdependent on one another in greater numbers than ever.

Sharing is our species' evolved response to interdependence. From our earliest days as hunter-gatherers, sharing in the hunt and in its fruits; to neighbours sharing garden produce, seeds and recipes across garden walls and kitchen tables; sharing has been an intrinsic part of how we live 'together' (as sociologist [Richard Sennett puts it](#)).

[IMAGE: Sennett, Together cover]

We share a wide range of things in a remarkable diversity of ways.

We share *things* - like cars or books. We share *services* like education, healthcare, co-working spaces or places to sleep. We share our views and values, our *activities* and *experiences* (from politics to leisure). Yet we could share much more.

Our sharing can be *material* or *virtual*; *tangible* or *intangible*; it can enable *consumption*, or *production*. It can be *simultaneous* in time, as with public spaces, or *sequential* as with recycling material; it can be *rivalrous* like car-sharing, or *non-rivalrous* like open-source software; and the distribution of shares might be by *sharing in parts* (as we would share a cake) or *sharing in turns* (like a bike). Yet we could share more *often*.

We share with other *private individuals*, in *collective groups* and as *citizens* using state provided resources and services, such as green space, sanitation, city bikes or childcare. Yet we could share more *widely*.

In all its forms sharing is a product of our evolved nature as social animals. But it is as much a cultural evolution, as a biological one. [Evolutionary scientists](#) tell us that humans are 'wired for culture', rooted in our ability to cooperate in tribes and to trust and reciprocate with others in our social groups.

This underlies socio-cultural traditions of sharing that persist to this day. In fact, as [Yochai Benkler highlights](#), the traditional sharing or social economy is huge: including, as it does, most of the work done within families – caring for children, caring for the elderly, cleaning, cooking, washing – normally done by women, almost entirely unpaid, and unrecognised in national economic accounts.

[IMAGE Favela]

In large parts of the world traditional sharing in extended families remains the norm, and across local communities, gift economies based in reciprocal social obligations underpin the basics of life – water, shelter, food, clothing and care.

But I haven't come today to present a romantic and nostalgic view of such traditional communities. The heavily gendered nature of labour in what Marx called the 'reproductive economy' and what contemporary analysts have rebranded as the 'core economy' is only one unacceptable feature: such traditional communities' misrecognition of women is typically accompanied by misrecognition and mistreatment of those of different sexuality, and those of different ethnicity.

The replacement of such community based, obligatory relations of reproduction with market relations can therefore genuinely enhance important social and cultural freedoms – as long as the people involved have the necessary capabilities to flourish in the new context: adequate education, access to finance and productive facilities, genuine rights. Otherwise marketization – even in the sharing economy - can simply replace one mode of oppression and exclusion with another.

Cities have long been places where people go to escape the strictures and oppression of traditional communities, to lose and to find themselves, and to reweave the narratives of their identities. Yet cities are more than spaces where people can discover their *individuality*. In the streets, squares and parks of cities, migrants from diverse backgrounds mix and perceive our interdependence; while as incomers we typically rely also on identities and social capital shared with others from our groups of origin to make the transition to city life.

Yet in modern cities traditional socio-cultural forms of sharing have been further and further undermined, not just by social fragmentation but by commercialization of the public realm, (think private shopping malls, and ubiquitous advertising hoardings) – and in countries where the state had taken a strong role in social provision – also by privatisation of shared infrastructures and services. *Social capital* as Robert Putnam calls it, has been eroded.

There are those who see this process as inevitable and even desirable. Yet it is possible to see the benefits of new freedoms and potential for greater equality; and still regret the loss of community support structures and collective capabilities to support health and learning – and indeed to see value in the capacity of such forms of sharing to meet important human needs for social affiliation and interaction. And individualist markets simply cannot meet such needs, however hard advertisers and brand managers try to persuade us otherwise.

This is where the emergence of new peer-to-peer and forms of sharing at the intersection of cities' highly networked physical and cyber-spaces is so interesting and indeed exciting.

[IMAGE *whats mine ...*]

[Rachel Botsman and Roo Rogers](#) called it the big shift – the collision of technological change (in the form of a torrent of peer to peer social networks and real time technologies); with a global recession that fundamentally shocked consumer behaviors; against a background of pressing unresolved environmental concerns; helping generate a renewed belief in the importance of community and an explosion of 'collaborative consumption'.

[IMAGE *GOLDEN GATE*]

San Francisco is at the forefront of that wave of collaborative consumption, with a proliferation of high-tech sharing companies like Airbnb, Dropbox and Lyft both shaping and reflecting the development of new norms amongst the Millennial generation.

Many of its new businesses are commercial 'intermediaries' in the 'sharing economy' that, in one way or another, bring together peers to more efficiently share resources, access goods, and provide services. Such 'mediated' forms of sharing need not be commercial –

governments and not-for-profits can deliver them too. But in San Francisco, the commercial model, utilising technology and software from Silicon Valley, and business models underpinned by risk-hungry venture capital funds, is predominant.

In other words, San Francisco is the hotbed of the new sharing economy ...

That also makes it a hotbed of legal and social resistance to the downsides of the commercial sharing economy. For instance although the sharing economy can help increase housing supply overall, it also threatens long-time and low-income residents with gentrification and dramatically rising rents, or even eviction.

In 2014 the San Francisco City Attorney filed suit against two landlords for illegally converting residential housing to short-term rentals in order to advertise on services like Airbnb. The former residents were evicted using the Ellis Act, a controversial Californian law that allows landlords to reclaim properties but only for personal use. Another sign that the sharing economy is facilitating a shift of housing away from those in need (as well as drifting away from the values of couchsurfing, and the original idea of bringing visitors into shared homes) is the predominance of 'whole dwellings' - rather than spare rooms - and multiple listings on Airbnb. Of San Francisco's 5000 Airbnb properties, two thirds are whole homes or apartments, and around one third of hosts control more than one listed property).

This is where commercialised sharing is at its worst: when it takes socially useful (but non-market) resources out of the reach of the poorest by marketizing them. Yet commercialised sharing can bring benefits as well as risks. It is most socially useful when it draws existing, but *socially underused* resources into the market, both reducing prices and improving environmental efficiency.

Moreover, especially in already market dominated societies, it promises to help resist declining public trust and social capital, and renew values of community and collaboration. And it can do this in inclusive or 'cosmopolitan' ways (rather than reverting to exclusive ethnic or local communities).

The idea of 'interculturalism' is displacing the concept of a 'multicultural melting pot' to help interpret the sociology of cities. A healthy urban community is one in which the rich diversity of cultures is recognised, difference respected, and contact between those cultures enabled and encouraged. Even though typical social problems of the commercial realm appear in the sharing economy too, the sharing economy tends to increase intercultural contact. It is true (and worrying) that there is evidence that [black hosts in NY earn less for similar apartments shared on Airbnb than whites](#), but sharing still brings black and white people together in new interactions.

This sort of "cosmopolitan" sharing owes more to ideas of 'paying forward' through a community of weak ties than it does to directly reciprocal obligations in a strict communitarian setting. In both cases people do apparently altruistic things, with an expectation of future reward – but the motives and rewards are distinct. In the latter case it can be called *reciprocal altruism*, in the former, we call it '*karmic altruism*' – we don't know

who will do us a good turn or even when, but we can expect our 'investment in the community of altruists' to pay dividends. We may not be able to call in a debt from a specific person who owes us a favour, but we can expect to be able to call on a wide network of potential aid when we are in need.

Commercial sharing alone cannot build such networks, however, nor the shared public realm or urban commons they depend on, nor the hard and soft infrastructures and resources that are the foundation of all successful urban economies. We need to take a more reflective approach to the changing nature of sharing in modern cities.

[IMAGE Logos: UBER / AIRBNB / TASKRABBIT / LENDING CLUB]

Successful entrepreneurial businesses like Airbnb and Uber almost inevitably raise high feelings – on both sides. But we would be mistaken if we were to assume that such companies are all there is to the sharing economy, or that the sharing economy is all there could be in a sharing society. Critiques of the sharing economy raise important and serious issues – about gentrification, labour casualization and the growth of the 'precariat' – but it would be equally foolish to dismiss all talk of sharing as disingenuous neoliberalism. There are both opportunities and risks for sustainability, solidarity and justice in the changing nature of urban sharing, and these depend on details of the models and institutions involved, as well as the context.

For example, the environmental benefits of car and ride sharing depend on what it displaces (public transport or private cars), and whether it increases overall mobility and car-use; or by reducing car-ownership and making the marginal cost of car-use more real, reduces use too. Its social impacts depend on who gets access to the new services and whether drivers are empowered or exploited. All these factors are related to the ownership and business models used by the sharing organisations and the governance models that cities and businesses introduce to guide and regulate the sector. Commercial sharing models driven by venture capital – with the pressure such funding exerts to develop a profitable model ready for a trade sale or a launch on the stock exchange – seem most vulnerable to losing sight of any social purpose, and simply seeking to marketise and sweat their assets: essentially the participants.

Cooperative or collective models of sharing platform provision on the other hand, offer greater cosmopolitanism with less damage to existing social capital. This is because they offer more power to the participants (and generally) less to the platform owners.

[SLIDE 2 x 2 dimensions of sharing]

We aim to capture these different dimensions and contextual subtleties in a 'sharing paradigm', which recognises the shift from socio-cultural sharing practices to mediated ones as the central transition in contemporary cities, but also highlights a second spectrum from communal to commercial models. Each combination or 'flavour' offers different opportunities for sharing cities, has different circumstances in which it is appropriate, and different implications for governance. The slide illustrates where various concepts and discourses of sharing lie within those dimensions.

What is critical to our approach, however, is not the categorization itself, or any privileging of

one category over another, but the new ways of thinking it emphasizes in all flavours and categories: sharing resources fairly, rather than by ability to pay; nurturing the collective commons of culture and society and treating these resources, those commons and the natural world as common heritage and common property.

Once we understand the sharing paradigm as offering new ways to create and use collective commons of physical and virtual resources, spaces, infrastructures and services, a focus on sharing simply as a way of allocating access to conventional goods and services is obviously too limited.

[IMAGE Sharing cities cover]

In my forthcoming book with Julian Agyeman: 'Sharing Cities', we go well beyond the 'sharing economy', exploring approaches that are more cultural than commercial, more political than economic, and that are rooted in an understanding of the city as a co-created urban commons.

The language and discourse of the 'sharing economy' is much more significant – and dangerous - than it might first appear. It frames sharing as an 'economic' activity rather than a social, cultural or political activity. It perpetuates the myth that human society is *founded on*, and *bounded by* the economy, rather than vice-versa, and that the environment is simply a source of economic resources, rather than the fundamental space in which humans and our societies and cultures evolved and coexist.

Moreover, it primes us to seek solutions to our 'problems' in markets, in monetized exchange, in the production and consumption of goods and services, constrained by economic frames and drivers, rather than by asking searching questions about our primary needs and the diverse ways in which we might fairly and sustainably enhance human wellbeing.

Most scholars of sharing agree that a central benefit of sharing is that it allows us utility: obtaining the services goods provide without having to own them. But this is only a first step in understanding the possible contribution of sharing to human flourishing. Understanding that we can gain the benefit of consumption without ownership allows us to begin rethinking what we mean by needs, wellbeing, and 'the good life'.

In the same way as people are interested in *material inputs* to the economy only because they can be transformed into *useful products*, so we are interested in *goods* only for the *services* they provide. Effective economies turn materials into products, and products into services that people value.

But people are often only a little more interested in those services than in the raw materials. Most of us are much more interested in how those services transform into *human-experienced wellbeing or happiness*, and that - in turn - depends on our capabilities to live our lives in ways we have reason to value. Without the capabilities to transform them, neither materials nor goods nor services will necessarily deliver wellbeing or meet our needs. So the sharing paradigm begins from the question of how sharing approaches and shared resources can more directly enhance capabilities for all.

Developing and governing a 'sharing society' to such ends is no simple task. In ideal circumstances effective governance of sharing systems might emerge from the interactions of empowered equal stakeholders (as [Elinor Ostrom showed](#) in her studies of commons governance). But in the real world, governance is also actively constructed through political deliberation and negotiation in a culturally specific context.

We see this in free-market, liberal San Francisco, where rules and regulations are emerging from negotiation between businesses and the city authorities, influenced by citizen pressures. Broadly the governance system here is enabling commercial sharing, with some limited protections for social interests and individual rights – which may be significantly tightened by the outcomes of ongoing legal cases regarding the employment status of workers in the sharing or 'gig' economy.

San Francisco might be the capital of the sharing economy, but for the world's leading active 'sharing city' we need to look elsewhere. The strongest candidate for 'capital sharing city' is Seoul in South Korea.

[IMAGE SEOUL - Cheonggyecheon]

Looking back 30 years this might seem entirely implausible. In preparation for the Olympic games in 1988, 720,000 people were evicted or displaced by redevelopment in Seoul. This was no one-off; between 1960 and 1990, five million people were evicted from their homes in Seoul, many several times, often from sites provided after previous evictions.

But in more recent years the city has dramatically changed direction. The Cheonggyecheon stream is symbolic of that change. Facing growing problems from traffic pollution and congestion, in 2005 Seoul declined the option of displacing yet more people to build new highways (an approach still taken in many 'enlightened' western countries). Instead it closed a major highway, successfully slashing traffic levels and pollution throughout the district, and replaced the road with a linear public park, restoring the Cheonggyecheon stream at the same time.

Seoul is now actively working to cultivate a sharing culture – both at the public or civic level and by building public trust in sharing enterprises and organisations. Seoul's mayor, Park Won-soon, a political independent and long-standing human rights activist has piloted and promoted the city-funded 'Sharing City, Seoul' project to make sharing activities accessible to all citizens. It aims to expand physical and digital sharing infrastructure; incubate and support sharing economy startups; and put idle public resources to better use. Kim Tae Kyoon, director of Seoul's Social Innovation Division, says that the project should rebuild communities undermined by rapid urbanization and industrialization. [The ultimate goal, he says](#), is to: *"share lives among dispersed people, recover trust and relationships, and shape a warm city in terms of people's heart."*

Sharing in Seoul reflects the Korean cultural concept of *jeong*. Koreans believe that [jeong is what motivates](#) *"random acts of kindness between people who barely know each other or [even between] total strangers"*. *Jeong* is *"a special kind of love between the people and*

society. If you don't share you will be seen as a little greedy and have little or no 'jeong'.

This helpfully reminds us that in different cultures, status and recognition can be found in different ways. One of the richest possibilities in the sharing society is that we can find status, and identity in the process of sharing, and who we share with, rather than in what we have. In recent decades wealthy societies have increasingly focused on consumption (what we own, rather than the historic markers of what job we do, or where we come from) as the main mark of identity and status. Sharing can move us past such an obsession with consumption.

Establishing sharing identities seems more feasible if - as in Seoul - sharing and collaboration extends beyond consumption activities to production and governance. As well as open government and participatory budgeting initiatives, like South Korea as a whole, Seoul enjoys the benefits of co-production between the state and the third sector in producing and delivering public services including childcare, healthcare, care for the aged, library services, waste management, education, and community development. Co-production in South Korea is distinctive from recent European experience. In Europe, initiatives like David Cameron's 'Big Society' are seen as undermining state welfare systems, whereas in South Korea, co-production introduced a state welfare system for the first time. Welfare had previously been the province of individuals, families, firms, voluntary organizations and aid agencies.

Moreover – say researchers [Sunhyuk Kim and Jeongwon Kim](#) - co-production wins public support as a key element and symbolic legitimation of South Korea's still nascent democracy.

Seoul is also actively making its sharing initiatives more socially inclusive: for example by providing free second-hand smart-phones to the elderly and disadvantaged so they can access and share the same services and apps as others. In these various ways Seoul is feeling its way towards the holy grail of the sharing paradigm: making sharing the city itself, as a whole, the purpose of urban governance. But although it is the most explicit and diverse in its sharing agenda, it is not the only city we can learn from in making progress towards this goal.

[IMAGE MEDELLIN – library park]

In Colombia's second city, Medellín, social inclusion has been the critical driving factor behind a remarkable transformation of the once-murder capital of the world. Previously Medellín was home to the violent and powerful drug trafficking organization called the Medellín Cartel, headed by the infamous Pablo Escobar. By 1982, cocaine trafficked by the cartels had surpassed coffee as Colombia's biggest export. In 1991, the murder rate in Medellín reached to 380 per 100,000 people, with over 6,000 killings. Violence paralyzed the city with fear, which led to widespread abandonment of the public realm and most facets of civic participation.

After Escobar was killed in 1993 by Colombian special forces, city leaders, community activist groups, and residents collaborated to give the city a fresh start. Medellín has been reclaimed as a thriving medical, business and tourist center. The change strategy was driven by the philosophy of 'social urbanism' promoted by the Medellín Academy. From the mid-1990s this established a focus on empowering citizens, beginning in the poorest neighborhoods.

Economist Joseph Stiglitz [highlights](#) that: “*Medellín constructed avant-garde public buildings in areas that were the most run-down, provided house paint to citizens living in poor districts, and cleaned up and improved the streets – all in the belief that if you treat people with dignity, they will value their surroundings and take pride in their communities.*”

The city also invested heavily in public transit and infrastructure – including bus rapid transit, nine cable car links and a huge outdoor escalator - to connect the poor hillside comunas with the centre. The design and placement of the cable lines and stations provides affordable, quick access to amenities in the city center for residents, while also strategically disrupting drug trafficking routes. Public facilities such as health centers and schools have also been developed at the cable-car stations. Library parks such as Parque Biblioteca España have been constructed in marginalized parts of the city, providing free access to computer and information technology, and educational classes, as well as space for cultural activities and recreation. Many of the major projects (or *Proyecto Urbano Integral*) such as the Metrocable system and the library parks have been funded through revenue from the city’s public services company, Empresas Públicas de Medellín (EPM). EPM has twenty new projects planned for completion in 2015, all designed and planned through a participatory process with the community.

Medellin is leading the way in sharing the city itself, focusing its main efforts on reclaiming its public realm. Medellin was clearly an extreme case of loss of social capital and exclusion from the public realm, but crime and fear of crime contribute to similar problems in Europe and the US, where the dominance of commercial interests in shaping the public realm and urban commons is also a major issue.

Even in Europe, social inclusion remains a challenge, especially in an age of global mobility. But for decades, Amsterdam has been celebrated for its tolerance – even welcome - for difference, cultural diversity and immigrants.

[IMAGE AMSTERDAM Gay Pride]

Ethnic minorities make up almost half of the Dutch city’s residents, representing at least 175 different countries yet they are relatively well mixed into the city's neighbourhoods, with no ghettos or highly ethnically segregated districts as one might expect in the US cities. This is in part a product of active mixing in social or public housing allocation. The outcome of active social and residential mixing has been stronger social integration: incomers retain their ethnic identities but also actively identify as Dutch and as Amsterdammers. As a further anti-discriminatory measure, the city’s civil service is required to reflect the diverse population of the city. As a result of such progressive policies, minority representation in local and national government in the Netherlands is amongst the highest in the Western world.

Amsterdam highlights the potential of interculturalism, both in healthy sharing of the city and its public spaces between different cultural groups, but also in how this in turn builds trust, and makes the adoption of new mediated and online sharing more popular. Social mixing has helped maintain social capital and neighborhood trust. In this it reflects the demonstrated

effect of positive intercultural interactions in public spaces: they reduce prejudice even amongst onlookers.

As an aside, Amsterdam's perhaps also reflects an ingrained understanding of the co-created nature of its urban commons: the very structure of the Netherlands' canals and polders being a collaborative exercise of defense and reclamation of land from the North Sea.

Nonetheless, Amsterdam's collaborative economy is booming too, and there is substantial appetite for more sharing among Amsterdam citizens. [A recent study](#) found more than 80 percent thought it likely they would take part in at least one form of collaborative consumption. Respondents reported slightly greater enthusiasm for exchange modes that do not involve money (such as swapping). The study identified strong social and environmental intrinsic motives, such as 'meeting people' or 'helping out'. Older and richer people exhibited slightly less willingness to share. But, strikingly, *"the 54 non-western immigrants in the survey demonstrated the highest willingness [to share] of all ethnic groups."*

The benefits of intercultural interactions in public spaces are a form of what Sennett calls "stranger shock" (which he sees as a fundamental benefit and mechanism supporting living together in cities). Exposure to difference – in the relatively safe spaces of integrated cities - helps us widen our perspectives and our moral communities. There is a parallel in "stranger sharing". Traditional socio-cultural sharing strengthens bonds within groups – a form of 'bonding' social capital. But mediated 'stranger sharing' also promises to broaden our empathy for others, making our 'weak ties' more diverse and robust. It increases links between social groups, and even between societies, extending the power of karmic altruism beyond the local community as a form of 'bridging' social capital, between groups and cultures.

Sadly, in recent years, Amsterdam - influenced by national Dutch politics (and perhaps wider European trends) – is regressing somewhat on immigration, becoming less open. It has also backed off from its attitude to another cultural group which it previously welcomed: squatters.

Squatters and our attitude to them are symbolic for sharing cities, in the same ways as our attitudes to online counter-cultures are symbolic for sharing societies. Notably with respect to music and software, online norms are shifting rapidly. 'Piracy' is being appropriated as a proud badge of counter-cultural identity, as seen with the prominent file sharing site 'The Pirate Bay' and the emergence of political Pirate Parties in many countries. Author [Kester Brewin argues](#) that the term 'piracy' has always been a signal that *'something that should be held in common has been enclosed for private gain'*, applying as much to music and knowledge as it did to the wealth being seized from the New World by European monarchs in the 16th Century.

The continuing modern day battle over the term 'pirate' echoes the recapture of terms such as 'queer' by the Lesbian, Gay, Bi and Transgender community, as a means of in-group demarcation and bonding, and a reminder of the external threat to their culture. In this sense illegal music downloading is not just an attempt to redefine consumerism but also a way to

redefine self- and group-identity for those involved, and indeed a form of counter-cultural collective resistance. In this it is a cyber-echo of the role of graffiti in urban youth culture – an open symbol of identity and resistance that helps construct our wider cultural milieu.

But the critical urban expression of 'piracy' comes in how we treat the direct seizure of land and buildings by squatters. [Urbanist Miguel Martinez argues](#) that - rather than criminalization and resistance from authorities - *"Squats have to be recognized and supported for what they are: vibrant social centers at the very heart of the 'commons', actively including the excluded."*

In Copenhagen, the history of Christiania illustrates both the conflicts and the possibilities.

[SLIDE COPENHAGEN – CHRISTIANIA]

For many years practically autonomous, the 'Freetown' of Christiania comprises a disused military district in central Copenhagen squatted since 1971. Initial motivations for the squat included the lack of affordable housing elsewhere in the city. [Tom Freston's excitement](#) on visiting Christiania in 1972 is palpable: *"artists, feminists, hippies, anarchists ... had actually conquered a part of town, were holding it, and were living there for free ..."*

Since 1994, Christiania's 900 or so residents have paid taxes and fees for utility services and in 2012 struck a deal – as a resident's collective - with the Danish government to purchase the site for substantially below market value – raising the money through a form of crowd-funding.

In the intervening years (despite persistent conflicts over drug-dealing), residents successfully established an alternative local currency, restored the buildings, built new homes and regulated the district according to collective anarchist governance models. Today, concludes Freston: *"The Danes are proud of [Christiania] ... After all, these are people who built their own homes, who stood up to the government and criminal elements for decades, who took in the poor and disadvantaged, who were eco-friendly and racially diverse before anyone else, and who sent the world a strong image about the creativity and tolerance of Denmark."*

Counter-cultural sharing behaviors like squatting happen in autonomous or 'interstitial spaces' beyond the reach of the powers that be. As a result they can, as with Christiania, be the birthplace of more far-reaching subversive or symbiotic approaches to social transformation. The multi-level perspective on social and technological transition [developed by Frank Geels](#) suggests there is a fairly persistent 'cultural landscape' into which new ideas and technologies can introduce change in propitious circumstances, notably when social or technological innovations grow large enough in such interstitial bubbles that they disrupt existing socio-technical regimes.

[IMAGE MLP]

Such models help reveal how particular regimes can become 'locked-in' or 'locked-out', reinforced by vested interests, and by the psychological and cognitive effects of 'system justification', which encourage us – as a way to maintain a secure identity – to accept the existing system as fair and desirable. More importantly, they also help reveal the leverage

points for different approaches to transformation.

[SLIDE 3 approaches]

Revolution seeks to smash the system – directly disrupting the cultural landscape - and take advantage of the disruption and chaos that is presumed to follow.

Subversion looks for weak points in the system - particularly among the socio-technical regimes - where its own power can be used against it; Erik Olin Wright calls these ‘symbiotic’ opportunities - where existing elites at least partly share the interests of the challenging group: women’s rights have notably been pursued in such ways.

Re-invention seeks to create alternatives in the margins of the conventional economy – establishing new niches in the undertow. From squatting to time-dollars, in communes and transition towns, re-inventors meet needs in ways that are not subject to the existing norms and rules of the system.

The best opportunities for system change come from strategically combining re-invention and subversion. Such approaches – such as building a sharing society – seek interlinked opportunities to enhance wellbeing, increase justice and equity, and spread participative democracy.

So when we argue for the potential of social change led by sharing cities, we are not arguing for trickle-down from a newly fashionable niche of ‘sustainable consumption’ but instead for a bottom-up - simultaneously *counter-cultural* and *intercultural* - redefinition of consumption that is a collaborative, shared, identity-redefining, co-production of services and products supplying fundamental needs.

Squatting is not the only counter-cultural movement we can learn from. It shares a great deal - politically and culturally – with the Occupy movement, which applied similar principles of anarchist thinking in its creation of politically autonomous spaces in cities across the US and Europe in autumn 2011 and into 2012. Occupy was, of course, part of a larger trend of urban protests and occupations across the Arab world and southern Europe, starting in spring 2011: including Las Indignadas in Spain. This trend has now spun off alternative currencies and integrated cooperatives, such as in Catalunya, and even stimulated more conventional political action, notably in the growth of Podemos in Spain and Syriza in Greece. The jury remains out on whether these formal parties can avoid cooption in conventional politics, but as new political expressions of sharing and solidarity – more influenced by cooperatives than trade unions - they hold promise for a political constituency that transcends conventional definitions of left and right, as much as sharing can transcend conventional divisions of state and market.

I hope it is becoming clear that while support for the contemporary sharing economy can be a step in the right direction for cities, it falls far short of a genuine focus on sharing as a means to deliver justice and sustainability. A systemic focus on sharing can help establish a virtuous cycle - it can shift values and norms towards trust and collaboration; enable civic engagement and political activism; and rebuild a shared urban commons.

Shared production, consumption and existence create spaces within which our evolved values as reciprocating collaborators and altruists can be expressed. Born in hunting and gathering groups, trust between group members can be rekindled in such diverse sharing environments as supper clubs, maker labs, co-housing schemes and public libraries. But fundamentally, trust and cooperation depends on fairness. As [Yochai Benkler puts it](#): “*when we believe that the systems we inhabit treat us fairly, we are willing to cooperate more effectively.*” This is actually the fundamental 'grund-norm' of society: unless we believe in society, we are unlikely to indulge in pro-social behavior at all. Sharing is fundamental to reconstructing societies increasingly dismembered by neo-liberalism's ideology of market individualism in a minimal state.

Perversely, though, sharing's potential is so great because it offers symbiotic possibilities: it is not primarily a doctrine of resistance, but one whose immediate benefits (more efficient use of resources, workforce flexibility and so on) can appeal even to powerful elites, yet in practice rebuild values and norms that could transform existing power relations, if expressed politically. Such collective political expression is possible in the workplace, through cooperativism; in the community, through the reconstruction of social capital and civic engagement; and in the conventional political arenas of the ballot box and the protest march, supported by the restoration of a shared and open public realm.

At the heart of the reconstruction of collective political solidarity and the reshaping of collaborative identities lie empathy and trust. Sharing helps nurture both. Our empathy for those we share with can only grow, even if all we are doing is sitting in the front seat of our 'friend with a car' (as Lyft calls its service). But commercial sharing platforms can also easily lose trust if they ignore the inter-personal dimension of sharing. Zipcar's CEO Scott Griffith - who reportedly blames the organisation's "*save-the-world, change-the-world culture*" for the financial difficulties that led to his appointment - sought to introduce a business performance culture, and introduced more image conscious vehicles such as BMWs. Many users now treat Zipcar in the same way they treat conventional car-rental companies, with little respect for other users. As the company drifted from reinforcing intrinsic motivations, to financial and commercial ones – it reinforced consumer 'value-for-money' norms, instead of growing sharing values and trust.

Some sharing platforms - Freecycle and Craigslist for example - seem to have generated trust and effective community level governance in an emergent fashion. The members and groups involved moderate and self-police the community. In these 'light-touch' systems it seems that it is the “very lack of helpful features that signals us to activate our own methods of reassurance.” And they work, even though the conventional, physical reputational signals we rely upon in real world markets are completely absent.

More generally, the growth of trust in sharing *can* be supported by appropriate ratings schemes to provide the reputational signals that our evolved sharing habits rely on. But a push for complete security, with powerful reputational tools, insurance and so forth can be counter-productive, reducing the need for such personal trust. Research on *CouchSurfing* has

shown that while it might increase user confidence, it also reduces the strength and durability of the social relations stimulated amongst couchsurfers and their hosts.

If trust in sharing apps is to build trust in the real world, rather than just limit its decline, sharing organisations also need to show more trust. Sharing organisations (companies, charities and public sector) all work hard to build user trust in their platforms, but they also need to demonstrate trust in their users, by involving them in key decisions and directions.

As sharing begets trust, so trust begets more sharing. And every sharing organization, every platform, every human interaction can be another institutional deposit in a new 'city bank' of social capital. Where social capital is weak and consumerism dominant, commercial mediated models with formal mechanisms for building trust and reputation will be needed to extend sharing beyond family and close friends. But once that barrier is overcome, sharing offers the chance to experience empathy with, and build trust in the different others with whom we share the physical realm of the city and its underlying infrastructures and commons.

Communal sharing – whether led by public authorities, civil society organisations (or even, in extreme contexts, by companies) rebuilds civic virtues – and challenges the individualist, post-political, technocratic vision of neo-liberalism. Moreover, as the public square of collective politics is strengthened, so investments in sharing infrastructures are more easily agreed, and those investments in turn will generate more sharing and even stronger social capital. The domains of sharing and support for sharing can expand hand in hand until they encompass the urban commons and indeed the whole city.

It is in the revival of sharing and co-production of the multiple dimensions of the urban commons – through co-produced services of health and education, through co-creation of the cultural and financial commons of the city, through collaborative efforts to build grey and green infrastructures of transport, power, water, sanitation, clean air, green space, waste reduction – that the sharing paradigm can deliver the very fabric of future cities, especially in the fast-urbanising global South. In losing sight of the shared nature of these urban commons, cities have devalued them and thus also undermined their potential to support creative and productive economies. This means that cities have been forced to compete for footloose development capital, and give up political autonomy to corporate and financial interests. Too many cities are now engaged in a 'race-to-the-bottom' in social standards and environmental protection – because they focus on the sections of their economies vulnerable to international competition, instead of on the common foundations of the 'core' economy. This race is one with inevitably only few winners, and many losers, whereas sharing cities built on the 'core commons' are possible for all.

Sadly, this misdirection of effort is being aided and abetted by the marketing and discourses of the 'smart city'. This is not to suggest that smart technologies have no role to play in sharing cities, but that they cannot be expected to lead the way or show the right direction.

[IMAGE: MASDAR]

As promoted by companies such as IBM and Siemens, smart-cities discourses presume that

there is a single technological path to the future, and that countries and cities must compete to race along it as quickly as possible. They therefore subscribe to the neo-liberal ideologies of privatisation and enclosure, using openness only strategically and instrumentally. So-called 'sharing' businesses that seek to monetise our every possession and every moment of our time can fit that model: but approaches to sharing that focus on capabilities, learning and the reconstruction of community, will struggle to find a place.

Yet the technologically enabled race-to-the-bottom in which cities compete to cut tax rates, attract high tech entrepreneurs and innovators, and provide a huge precariat of 24-7 workers as somehow both consumer market and on-demand servants to the elite, is only one possible future. Escaping the 'race-to-the-bottom' first means understanding that technology is neither morally neutral, nor morally deterministic – but that it is 'morally loaded' – it creates new choices and dilemmas, including the choice to forego certain technologies. Technologies come with interests and motivations embedded, which can have serious ethical implications.

This means smart city plans must not be economy-driven and technology-led, but socially driven and ethically led. The city and the technologies must be shaped around the people, not vice-versa.

Architect [Michele Provoost argues](#) that 'smart' cities have a deliberate social dark side, that smart infrastructure is being marketed to cities intentionally to construct a privatized, commercial platform for services, health and education, intentionally replacing socio-cultural sharing and enclosing the existing commons. From this perspective the 'smart city' is platform capitalism on steroids, with every citizen as part of its captive market. Even worse, in the stand-alone model of new smart cities like Masdar, built from scratch, for all their environmental inventiveness, they provide exclusive private services only for the rich, enabling elite flight from the megacities. Masdar, still under construction, will be comprehensively planned and designed, with smart technology monitoring and regulating its functioning from a central command centre, but offers little space for diversity, community and sharing as we understand it.

[Richard Sennett wisely looks elsewhere for inspiration](#). He cites Rio de Janeiro, where, as in Medellín, *"In the past people survived thanks to the complex tissues of local life"* and now new information technologies are being recruited to help: applied to forecasting physical disasters, traffic management and crime prevention. *"The principle here is co-ordination rather than ... prescription"* says Sennett, *"But,"* he asks: *"isn't this comparison unfair? Wouldn't people in the favelas prefer, if they had a choice, the pre-organized, already planned place in which to live?"* His resounding answer is no: research shows rather that: *"once basic services are in place people don't value efficiency above all; they want quality of life. ... If they have a choice, people want a more open, indeterminate city in which to make their way; this is how they can come to take [collective] ownership over their lives."*

So what should cities do to bring the sharing paradigm into reality?

I'm going to conclude by outlining first five key principles for a such a transformation, and

then some policy directions and actions.

The first principle is that *trust and confidence* are central. The programme, spaces and platforms involved should be designed in ways that help to build trust, collectively or individually, and to enable users to obtain and signal their trustworthiness and reputation.

The second is that utilizing and stimulating *intrinsic motivations* is generally more effective for rebuilding communities through sharing than focusing on extrinsic rewards or sanctions.

Third, systems must *empower users* both to control whether and how much they participate, and to influence the overall design and rules of the system.

Fourth, systems must achieve high standards of *protection of privacy*, security of personal data and enable anonymity where appropriate. Preventing the abuse of data or personal information for commercial or surveillance purposes is critical to trust. Protecting civil liberties is essential to enable wide participation. A sharing city will understand the ethics of smart technology, and harness it to inclusive and fair sharing.

Fifth, and most importantly, systems must be designed from the outset for *justice and inclusion* in intercultural societies. They must be equally accessible and attractive to those from different groups and cultures – especially those otherwise disadvantaged. They must allow participation on equal terms regardless of background, and do so openly and transparently.

To make the transformation, an aspiring Sharing City will actively invest in public services and *enable co-production in city-led services*, protecting and enhancing public common resources, infrastructures and services, paid for through taxation or insurance. It will support education and skill development that can build confidence and practice in sharing. It will *engage the public in governance*, for example, through participatory budgeting. It will also design and ‘police’ the public realm in ways that enable participation and create physical, virtual and psychological spaces for insurgent counter-cultures and interculturalism.

A Sharing City will also *enable collaborative economy* operations in the city, reforming policy across areas such as taxation, planning and zoning, insurance and licensing; and investing its own capital, land and resources in the sharing ecosystem, to support incubators and accelerators, research, capacity-building and shared infrastructure; and particularly to provide patient non-venture finance for both commercial and non-commercial approaches to sharing, especially cooperatives. It will also regulate where needed to ensure inclusion and appropriate social protections for participants, especially against labour casualization. It will directly support *non-profit, communal sharing* as a direct or enabling intermediary or facilitator in, for example, neighbor sharing initiatives, credit union based peer to peer borrowing and community involvement in providing housing, access to land and community facilities.

And it will act as a *sharing hub*, publishing online directories, linking sharing activity operators together with one another and with citizens, perhaps also aggregating and guaranteeing reputation for its citizens, underpinned by enabling open, affordable high-speed (mobile) internet access for all residents. Sharing cities will not only actively engage with sharing in

their own city, understanding the different forms and providing discriminating support, but will also *network with other sharing cities*, enabling both local customisation and effective interoperability of sharing platforms.

The Sharing City is a new paradigm for cities, opening a genuine third way between state and market. But unlike many past efforts at social emancipation and transformation it works with both the current zeitgeist and our inherited humanity. Indeed, sharing is a critical defining characteristic of what it means to be human. Only by expressing our sharing nature more fully can we hope to flourish in the “age of humanity”. By adopting the principles and policies suggested here, Sharing Cities offer a truly just, and genuinely sustainable pathway into our uncertain urban future in the Anthropocene.

Please note: this text is heavily based on excerpts from '*Sharing Cities: A case for truly smart and sustainable cities*' by Duncan McLaren and Julian Agyeman, (forthcoming from MIT Press), and we wish to thank the Press for their support.