

## Towards a new Technology of Community<sup>1</sup>

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I want to share a bit about the work of my organisation. For a decade now, we have been working through research, advocacy and practice – trying to influence development processes and policies at local, national and global levels – towards a more equitable information society.

We have been looking at participatory approaches, at community-owned communication and informatics; looking to strengthen local public systems – local government, local schools – through the use of open source tools; researching on governance and democracy; and calling for a democratic framework on global Internet Governance.

The overlapping scales of our work speak to the necessary connections we see – the dots we believe must be joined in making up the story of technology for change; one that is normative but also dynamic and responsive to the fast moving contours of a field that, as was pointed out yesterday, is the stage where the future of power lies.

In terms of the design of our field interventions – we have helped communities set up telecenters, used community media extensively as pedagogic tools, built our own open source IVRS platform for voice SMS, undertaken GIS-based mapping of resources, public infrastructure, welfare allocations to households, claimed local public information – aggregated it, made it intelligible and accessible. The processes of such techno-social design have privileged certain social principles – the telecentres are managed and co-owned by the village women who are located at the bottom of the caste hierarchy. They are also the poorest. Sometimes these management committees coopt local government extension workers. The centres are run by a young woman that the committee of women identifies. The centres are located in those parts of the highly segregated living spaces of the Indian village, that the elite would normally never visit – because that is where the lower castes live. The idea is to address the pre-existing architectures of power – gender, age, caste, class hierarchies and indeed, the hierarchy between the state that obfuscates information and the marginal citizen-subject whose very life depends on the information, on knowing and owning the means to know. These journeys are essentially micro-local experiments in democracy – explorations in what kind of techno-social configurations of being and becoming are essential.

Needless to say, this process is fraught with dilemmas and contradictions.

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1 This talk draws on my chapter in the book *Labouring Women*, a collection of research papers and essays that came out of a conference in JNU New Delhi, India, 2014.

Where participation begins and where it ends, how community autonomy should be privileged at all times, even if we have project deliverables, and how women we work with must steer their emancipatory journey and what this can then mean to our own values about democracy and feminism; about the demands we make on the time of community members under enormous economic distress, the tensions that come when we need to shut a telecentre down or when a young woman infomediary in the telecentre is bullied and beaten by her husband who does not want her to play a visible, public role, and many more. The design of democracy as our experiments are – is also slippery – the closer you think you are to the perfect model, things may just fall apart.

One thing that our work has reaffirmed is that transformational design – or design to influence change is inherently destabilising. Its constructive chaos may or may not shift the equilibrium of power, but it debilitates the arrogance and impunity of local power. And of course there is no other way but to keep at it.

The other thing that we have learnt is that the local – as political geographers have taught us – is constituted as much by the global. Translocal imaginaries and conceptions of technology impinge upon the logical ends to which any emancipatory design can actually go. As one of the papers articulated so simply and powerfully yesterday – the most idyllic village – is likely to light up on the dashboard of the political party or the telecom – just as your own once-nondescript broadband infrastructure, is beginning to make waves.

It is at the intersection of these two dynamics – the appropriation by communities of a new techno-social democratic fabric and its inescapable imbrication in the warp and weft of the politics of the technological commons – that I would like to locate my reflections for today. These are rooted very much in my training as a feminist from the global south to see the larger structures of economic justice as critical to any here and now intervention.

I will ask and attempt to answer the following questions:

1. What do we know about our collective techno-social condition? Or in other words what is the current design of technology and how does it structure society?
2. What do we know from alternative practices of technology?
3. What frameworks allow us to reclaim the commoning configurations of digital space?

### What is the current design of technology and how does it structure society?

The Internet as we know, bestowed upon free market capitalism its biggest gift so far – the uncontainable frontiers of a space that is borderless and absolute, upon which the super-structure of the capitalist economy is building its citadels. This resource – the digital commons – has come to play a key role in the juggernaut of neo-liberal capitalism. Neo-liberal enterprise deploys the material substrate of the digital commons – converging upon natural resources and the productive

capacities of societies – to extract profit. This “unholy marriage”<sup>2</sup> between contemporary capitalism and the Internet privileges a small global elite. Vast regions, and peoples are colonised for its reproduction; and the unconnected who are left behind as the non-datafied, unreached are at risk of redundancy (as Castells has argued in his trilogy).

While enclosures operated over land, today they operate over human civilization, its culture and knowledge. The Internet, constituted broadly by the physical layer – spectrum, cables, wires and fibre; the logical layer of software applications and technical protocols; and the content layer of information, knowledge, expression and culture is a new paradigm for the production and dissemination of cultural works and knowledge. The Internet has revolutionised the non-rivalrous circulation of 'immaterial' content online thanks to peer production / non-hierarchical cooperation.

However, the virtual is a conflictive terrain. The expansion of the digital commons is predicated upon the very nature of information – which is reproducible ad infinitum at a marginal cost. Thus co-produced, the digital commons assumes characteristics of an 'inalienable public good'. However, a new mode of capitalism that seeks valorisation for owners of network infrastructure, online platforms and digital content, pursues relentlessly, the commodification, degradation and enclosure of the digital commons.

Theorists like Michael Bauwens use the term “netarchical capitalism” – to describe the workings of the Internet-enabled economy that uses various forms of ‘consumer aggregation’ that were hitherto difficult to achieve. Bauwens describes how;

Google owns search algorithms and the vast machinery of distributed computers. But, just as crucially, its value lies in the vast content created by users on the Internet. Without it, Google would be nothing substantial. And the ranking algorithm is crucially dependent on the ‘collective wisdom’ of internet users..... Ebay, sells nothing; it just enables, and exploits, the myriad interactions between users creating markets<sup>3</sup>.

Unlike pre-digital times, the new capitalist class does not have to worry about capital; by owning the platforms, it just needs to extract rent through the collaborative labour of platform-users. The 'prosumers' whose labour feeds the economy are the 'becoming precariat', selling themselves to various networks, and generating value for companies.

As the informational network annexes everyday spaces through its platforms, it impacts material economies and social processes alike. In the workings of the network economy, command over production is substituted by command over markets. Powerful transnational corporations today wield inordinate power by monopolising information ownership. The takeover by Monsanto (an agricultural company) of Climate Corp – is a rather telling example of this. Monsanto's access to

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2 <http://monthlyreview.org/2011/03/01/the-internets-unholy-marriage-to-capitalism/>

3 [http://p2pfoundation.net/Netarchical\\_Capitalism](http://p2pfoundation.net/Netarchical_Capitalism)

farm data constitutes privileged access to the information it needs for social control of agriculture. In the network economy, financial architectures become more important than the organisation of production. Uber, is a classic example offered by the market pundits to demonstrate 'sharing as the new owning'. The so-called 'sharing economy' is but a superstructure built on “nothing”<sup>4</sup> and dominated by a few companies. In their book *Empire*, written in the mid 90's, Hardt and Negri qualify the ruthless privatization and proprietization of the commons – shared forms of “knowledges, information, communications networks, affective relationships, genetic codes, [and] natural resources” – as “neofeudal” whereby the fortunes of the economy are increasingly held by a select few.

The rampant subsumption by netarchical capitalism of the material and immaterial commons, is also defined by a discursive slippage and for those of us who are in the business of communities, technologies and change, this is very significant. Influential economic theories since the late 90's introduced the notion of ‘social capital’ and the importance of ‘community’ and ‘trust’ at the very moment of the so-called triumph of the market<sup>5</sup>. The wreckage of the new capitalist crisis of 2008 required a creative response, a new strategy to save neoliberalism from its own excesses. The pro-capitalist commons is a slippage – a semantic colonization of the political notion of the commons to further what political philosopher George Caffentzis calls “neoliberalism's Plan B”. This is the idea of a pro-capitalist commons – however antithetical that might sound – that proponents see as the necessary intermediary between a stalled and successful neoliberalism.

Caffentzis traces this slippage to the call by neoliberal actors for the mobilization of “community” or “civil society” as a key mechanism for saving the capitalist economy from its own demise, a practice that I think is loud and clear with respect to civil society in the digital arena. In promoting sharing, collaboration and cooperation, the idea that common ownership can deliver greater economic equality, is completely obscured. And yet, the term “commons” has always had “a special resonance in political theory” embedded with themes of “equality and inclusiveness”<sup>6</sup>.

Philanthropy in the 'sharing economy' is the pro-capitalist commons' blue-eyed boy. Promoting entrepreneurial imaginaries of poverty alleviation that transfer burdens on the poor, crowdfunding portals present a new commons for competitive fund raising connecting givers with receivers. These portals feature images of emaciated third world women farmers waiting to be rescued by the largesse of those who want to 'adopt-a-woman' to do their bit for promoting social enterprise.

What we see is that adaptations of capitalism are rooted in particular sets of representations that carry performative force. Old ideas – commons, sharing, community and more – don't seem to make the same sense to everyone anymore.

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4 <https://www.v4c.org/en/andrew-keen-internet-not-answer>

5 The Future of ‘The Commons’: Neoliberalism’s ‘Plan B’ or the Original Disaccumulation of Capital? George Caffentzis

6 Common Ownership and Equality of Autonomy, Anna di Robilant, McGill Law Journal / Revue de droit de McGill, vol. 58, n° 2, 2012, p. 263-320.

The network economy that undergrids the de-territorialization of capital and financialization of economic activities, provides the technological architecture key to control the architecture of value<sup>7</sup>. Through the techniques of topographical survey, land apportionment, architectural design, land use regulation, and digitisation of land records, we see global capital annex and enclose local resources for its profiteering<sup>8</sup>. This is critical for those of us from developing countries where civil society may be less clued in about the implications of digitization and datafication. Big data for example, transfers control of people's destinies to faraway corporations and global number-crunching firms, undermining the ethics of locality.

Bottom of the pyramid strategies, including micro-credit for Third World women, emerge as crucial manifestations of a 'neoliberalism from below', mopping up poor women as agents of further enclosures. M-money, propped up as an empowerment tool for women in Africa, has not altered the material conditions of poor women who remain entrenched in local exploitation<sup>9</sup>. By privileging geographies of value, autonomising labour, and making the small perpetually vulnerable, the dominant network economy expands its enclosures. Deploying the meme of openness, it holds up free choice, competition and innovation, continuously fanning the fear of being unconnected.

So, what we can conclude about the structures of our collective condition on the planet is the following, even though common-ownership regimes in the network society hold out the promise of realizing a variety of desirable values: democratic and responsible management of natural resources; participatory production of diverse cultural artifacts and information; and efficient use of scarce resources, participation in the (pro-capitalist) commons has come to represent a new form of social control in which 'access' to digital technologies acts as a political instrument of discipline.

### So what do we know from the alternative practices of technology?

Of course, as actors seeking change, there is no doubt that we need to problematise community, autonomy and agency, as network capitalism redefines collectivity and commoning. Notably, feminist readings of Third World women's movements trouble the unequivocalism of New Movements theories (such as Castells' Networks of Outrage and Hope), which claim that new forms of social movements are interwoven inextricably with the creation of autonomous communication networks supported by the Internet and wireless communication. Silvia Federici for instance, counterposes that the most radical confrontations in contemporary history are not created by the intellectual or cognitive workers or by virtue of the Internet's 'multitude' but have been fought by rural, indigenous, anticolonial, antiapartheid, feminist movements. One might add that

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7 Wealth of networks, Yochai Benkler

8 Capitalist Formations of Enclosure: Space and the Extinction of the Commons, Alvaro Sevilla-Buitrago, 2015

9 Nduta Mbarathi and Kathleen Diga, Paper presented at the workshop on 'Inclusion in the Network Society', Bangalore, India, 2014

the debate here is not whether the Internet and digital technologies can play a potentially progressive role in radical struggle. That would be a false problem. The question here is how the struggles against the take-over of life by corporate greed and the impunity of the state, struggles for dignity, livelihoods and global justice, are not flattened out in the discourse. Indeed it is through the continuing struggles of ordinary people that the logic of neo-liberal economics and network capitalism is being challenged today. Such radical politics does not arise because of the Internet.

Organisations of marginalised women have deployed technologies in many ways. They know that data is political. The activists of the Right to Information movement in India – the poor and illiterate wage labourers digging trenches in public work sites – have always kept their own personal record of their work days. Women have dropped pebbles in pots and used chalk to draw a line on the walls of their hut – one each for every day laboured. They have known that they need this data to fight the corrupt local bureaucracy who would deny them their wages.

The radical techno-social practices of communities claiming their rights point to four interrelated domains of claims making:

1. Reclaiming social reproduction as the site of struggle
2. Claiming citizenship and pushing the boundaries of the rights discourse
3. Forging solidarity to produce memory with struggle
4. Restoring justice to the struggle or speaking truth to power

In their effort to preserve and nurture traditional agriculture, women's collectives of Deccan Development Society, in Andhra Pradesh, South India, have fused social and media practices – carefully building seed banks, holding travelling exhibitions of local seed varieties and creating a local deliberative commons through their own radio station to share stories and foster community. In the 1980s, in the city of Bombay, the women of Mahila Milan – the women's wing of the National Slum Dweller's Federation made a radical claim. They asserted that housing was a women's issue (implying women's central role in household reproduction), while violence against women was a community issue (with wider social justice implications). Through these scalar imaginaries, urban poor women made their claim to the city, as legitimate rights-holders of the city's commons. In the city of Cuttack, in 2010, the women of Mahila Milan undertook a GIS mapping of the slums and drew their own plans for revisioning their homes in the urban renewal plan.

Using video as an important pedagogic and archival tool, women in the villages where we run the information centres have held discussions, planned campaigns and shared new strategies with their peers in neighboring villages. These are not just films about vital public information, but about struggles and victories; moments of conviviality and solidarity. The video – on tablets or laptops or

on big screens in the village – is a useful tool to present non-normative ideas about women's right to play public roles, their right to challenge domestic violence and their right to enter the offices of the local government without fear.

In the media-dark villages of north and central India, women reporters are bringing out a newspaper with stories of local development. Combining infographics based on macro data about the region and local stories that they have gathered, they have constructed high quality evidence for the local community on the status of their women and girls.

Development is a complex terrain with contesting claims. I share these stories of women's struggles not to romanticise the idea of a collective nor to essentialise women, but to highlight that the struggle against the coercive power of the state and capital, are as alive as they are uphill.

These struggles belie the Marxian ideal – the “technologistic concept of revolution, where freedom comes through the machine”

- They teach us how lived experience legitimises an indivisibility of rights – how freedom is inseparable from food and housing; food from livelihood; and livelihood from life and freedom.
- They articulate alternative visions of a 'sharing economy' that is situated in a relational, interdependent ecosystem, where resource ownership and use are two mutually sustaining sides of collective life.
- Finally, these movements and struggles complicate the simplistic discourse of development, by making legible the civilizational injustices of private property regimes.

So – my final question here is, what frameworks allow us to reclaim the commoning configurations of digital space?

The expanding circuits of netarchical capitalism embrace our life and sociality, like a mobious band that has no other side. Through its discursive power and semantic enclosures, it takes control over material and immaterial spheres of life, resisting easy cognition of the specific workings of its power. And yet, the 'network condition' also confers the ability to connect and communicate with people globally, self-organise, share experiences, build solidarity and co-produce knowledge resources and commons at scales previously only possible through hierarchical and capital intensive, ways.

The project of emancipation in the network society must hence reclaim the anti-capitalist commons. As we have seen in grassroots women's movements, struggles to reclaim control over the material conditions of reproduction and generate new forms of cooperation outside of the logic of capital and the market, are part of a long history. The contemporary terrain of such regenerative

politics spans many movements – open source software, urban farming, open science, alternative money and more. This struggle over competing values calls upon our collective will to explore institutional structures outside of the structures of capital.

As a social system, the Internet represents the technological commons, but is also the means through which commoning itself can happen. By providing the material means for commoning, the Internet can sustain social reproduction that is outside of capital and its impulses. However, contrary to over-zealous and celebratory claims, connectivity is nowhere close to ubiquitous nor is it spreading as fast as many believe. Some 90 percent of population in low income countries and over 60 percent globally are not online yet<sup>10</sup>. As a global community, we are indeed very far from the goal of equitable access. The Internet's information resources may be non-rivalrous, but as a physical material infrastructure, it is still excludable.

Digital citizenship can only obtain in an Internet that is a socio-cultural commons for communities and solidarities. The privileged discourse of freedom cannot, in and of itself, foster a sociality of the network that allows everyone to become digital commoners. The communitarian rewards of the Internet as commons – whether the Internet can generate the civic republican outcomes of participation, deliberation, knowledge production, and responsibility – are yet to be explored fully. But this field of possibilities, is intimately connected to the basic question of effective access to technology, but also to the *affective-relational* and *spatio-scalar* architectures of the Internet.

- Property regimes of affect and relationality reflect not merely a crisis of ethics, but of the very social fabric of our shared lives. The subjectivities and inter-subjectivities that the Internet commons as an emancipatory space must foster requires new imaginaries of the Internet.
- Unless the digital commons can generate a new 'technology of community', one that valorises a place-based commoning, the Internet dream cannot be realised. Global capital's undying instinct for abstracting the local into its value chains of exploitation, through scalar hierarchies that aggrandise some territories, raises deep questions about the ethics of globalisation and of our digital futures. An ethics of place in the network society must enable the socio-material links, the memories and connections, that give the marginalised an Arendtian “place of their own” in the networked world, while supporting new encounters and solidarities. These ethical explorations warrant a new “counter-theory of commoning fusing the spatialities of the material and immaterial commons”<sup>11</sup>.

The governance problematic of the Internet arises in its unique nature and significance. Whereas its global nature demands global oversight and regulation, strong political economy considerations operate to prevent a transnational, global treaty on the Internet. The uniqueness of the Internet also

10 Global Information Technology Report 2015

11 Capitalist Formations of Enclosure: Space and the Extinction of the Commons, Alvaro Sevilla-Buitrago, 2015



implicates socio-cultural, economic and juridical regimes at the interstices of local, national and global scales – from telecommunications, intellectual property, to privacy, intermediary regulation, and more. Conventional theories on commons ownership are hence rendered inadequate to address its commons nature and significance. Further, varying conceptions of the Internet – as markets, as the frontier of freedom, as a deliberative public, etc. are seen as requiring different systems of rules.

A resolution of Internet governance exhorts us to think metaphorically; do we seek “bridges”<sup>12</sup> of mini publics or do we seek a set of “nested clubs”<sup>13</sup> for our collective futures? Or to put it differently, what kind of an Internet can enrich our life worlds? Scholars like Morozov have urged that we think of a social ownership model for data. A regime that where data is held in collective trust is perhaps the only option that can redeem our datafied, propertized cyborgism. An important corollary here is that the world urgently needs another kind of datascape – data that is not for sale, is respectful of privacy, and typifying a new imaginary of the digital which values representations from the margins.

The collective wisdom to build a digital commons across multiple scales may not match capital's know-how to manage its empire on a planetary scale. But the consequences of blind-siding the life world in the primary pursuit of a perfect economics, may well be irreversible. Unlike modern capital, post-modern netarchy may not discriminate between the male master and his female slave. In a datafied universe, everyone is sold.

To me, this design challenge is about new symbols and metaphors; it is also about how we can make multiple mini-publics that connect into a global democracy and a citizenship for all. Now, if this is not a grand challenge for the designers working towards a unified theory of technology and community, I can't imagine what else would be.

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12 [www.acme-journal.org/vol11/MerlaWatson2012.pdf](http://www.acme-journal.org/vol11/MerlaWatson2012.pdf)

13 <https://www.cigionline.org/publications/2012/10/internet-global-commons>