The walled city

Cannot one dream of a 'computer hypothesis'?

Finn Brunton

This essay is in many ways a companion piece to Gary Hall's 'Pirate Radical Philosophy' in *RP* 173 (May/June 2012). Consider it a prequel, or something akin to a video game's expansion pack, extending and elaborating on the original's materials. It is a story of the spatial history of escape routes, secret countries, renegade zones and lines of flight and circulation, and so it begins with an other-worldly, fairytale conceit: our scientist narrator, Gustave Affuelpin, has created a 'contractive beam', a matter-reduction ray.[1]

In a single August night in 1975, he silently excavates several million cubic metres of earth below the space demarcated for the construction of the Centre Beaubourg. The architects are pleased to save on the budget set aside for digging the foundation, and a concrete slab is laid to 'divide the two cultural universes'. While the Beaubourg's massive Meccano set comes together above, eighty storeys of bare concrete slabs, empty stairwells and the most minimal infrastructure for 'the circulation systems for people and fluids' are installed below. It is the anti-museum, the anti-'cultural centre': one beaubourg among others rather than the Centre Beaubourg, an underground building that can't be admired, a brutalist blank of empty rooms meant for creation rather than representation, a factory rather than a vitrine. The creator provides only space, illumination twenty-four hours a day, and 'an excessive amount of chalk'. Everything else is up to the participants. Installation art, scavenged furniture, enormous paintings, motorcycle rallies, electro-acoustic workshops, gift economies, sexual licence and many interminable political meetings ensue.[2]

This is no private pocket universe, however – not a remote Shangri-La or an autarchic libertarian space capsule. In the heart of Paris, the subterranean beaubourg is debated in *Le Figaro* and *Le Monde*, denounced in Communist Party communiqués, and becomes the lodestar of a complex post-'68 constellation of places like the Sorbonne, the Renault factory and the Coca-Cola bottling plant. (The police never show up in any significant numbers to shut down this catastrophic violation of health and safety codes in which thousands of *sans-papiers*, dissidents, radicals, recovering addicts, petty thieves and runaways all live full-time. Perhaps the contractive beam keeps them at bay. It is, in any case, not a blueprint but a fairy tale, so let it be.) The walk-on roles for existing people are numerous. Hans-Jürgen Syberberg shows up to make a movie with the painters on the 24th floor. Godard takes up permanent residence and the Bread and Puppet Theatre stage actions. Pontus Hultén – who was, in fact, first director of the Centre Beaubourg, though not a Norwegian as this novel asserts – is a sweating wreck, finally leaving his official position to 'live culture instead of angling for it in the cemetery of a museum'.[3]

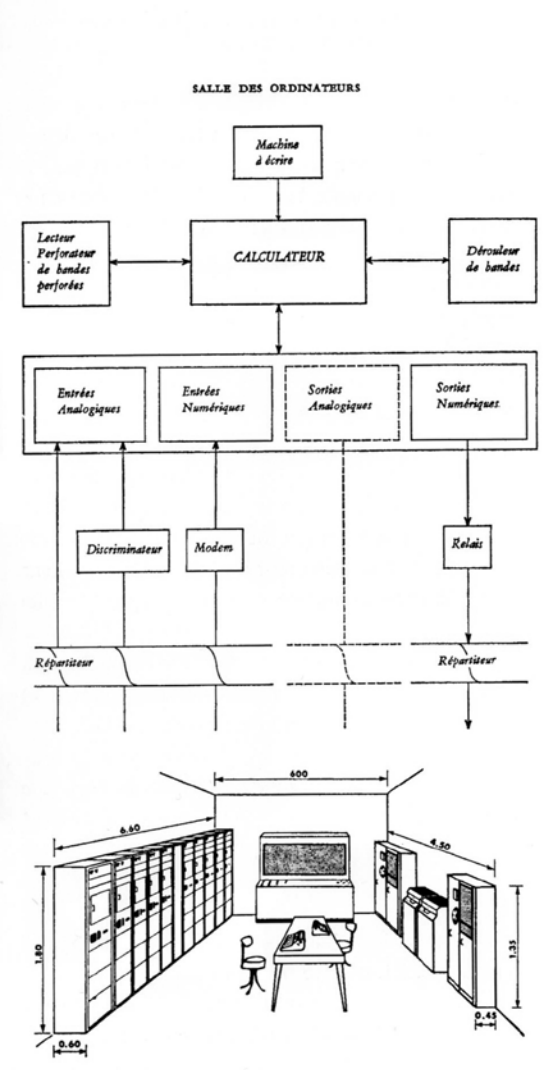
In their inverted skyscraper all is subject to question and experiment, like the Moscow Walter Benjamin documented in the winter of 1926–27. 'Each thought, each day, each life lies here as on a laboratory table', he wrote, with streetcar stops and home furnishings moving about with equal alacrity, buildings repurposed, new ceremonies invented and discarded. In a letter to Jula Radt, he put it most concisely: 'Everything is being built or rebuilt and every moment poses very critical questions.'[4] How are the beaubourgians to sleep? Should there be quiet levels, enclosed spaces, private blankets? How are the electricity and communal baking of nutritious loaves of 'alicom' to be paid for – do they need money, or some system of resource allocation? What about consistent identities? And, above all, do they need governance and a political orientation to the world above ground?

The answer to virtually all of these questions is no – or, rather, the refined *no* of faith in self-organization. 'Above all', says the narrator of various acts of negligence, 'it is important not to touch, or interfere: order and self-discipline must come from the inside'. The

question of partitions is raised. 'The ancient cities were lively precisely because they weren't planned … rooms will have double functions, there will be badly used spaces, lost corners, and we'll make changes when we think it's time.'[5] The beaubourgian method is the sustained absence of any system, plan or programme. (The arguments the beaubourgians have with outside political groups have the ring of the debates around the Occupy movement: just settle on a position, already!) It's eighty floors of rich broth from which the necessary forms will assemble of necessity. 'Theoreticians and the doctrines of self-management' make an appearance, only to be roundly dismissed in favour of autopoeisis: 'when the conditions for freedom have been put into place, things will sort themselves out.' The sociologists Yvon Bourdet and Albert Meister drop by, but have little to offer. It's a moment of gentle self-deprecation, with a deeper message, because Meister, hiding behind a pseudonym and a satirical, vanishing smile like Chris Marker's cat, is the author of the whole story. His characters do not go, Pirandello-like, in search of an author. With a laugh and a gesture to their already-existing success, they deny any claim he might make, as a sociologist specializing in participation and the organization of groups, to offer them guidance and advice. He has written a dream of the dramatic success of what he terms (writing under his own name) 'spontaneous participation', a success so total and complete – the beaubourgs become many and global, nuclei of a new society – that it has no need for sociologists like him.[6]

Appropriately for a document that mocks the credentials of its author, *La soi-disant utopie du centre beaubourg*, or *Sotto il Beaubourg*, or *The So-called Utopia of the Centre Beaubourg*, seems itself a hoax. Elizabeth Schambelan points out the 'suspicious whiff of the Borgesian' about the whole affair.[7] It is an enormously obscure book written under a pseudonym and deliberately misdated. (The preface is given ten years into the future from the actual composition, falling four years after the author's death in 1982.) It was not merely translated but 'interpreted' into English by Luca Frei, an artist with a notable history of archival and textual works excavating utopian currents – and whose name is the only one on the spine – and copyrighted to the artist and publisher alone. The answer awaits the diligent reader, but in the beaubourgian mode we will leave aside questions of attribution as those mythic artists underground did: 'It goes without saying, as with everything that comes out of here, there haven't been any rights to be paid, or copyrights to be arranged.'[8]

This matter of attribution and copyright is the crux of this tale for this essay. The experience of reading Meister's book is a strange parallax view of his imagined underworld of 1976 and the associations beginning to form on computer networks as he wrote. No rights, no copyright, no consistent names or identities, and a great mass of diverse groups (the yogis, the brass bands, the anarchists, the bakers, the engineers…) trying to form coherent relations on a common infrastructure. Computers themselves only appear in the book in their 1960s' and 1970s' cultural role of 'technologies of dehumanization, of centralized bureaucracy and the rationalization of social life' (to take Fred Turner's phrase), components in the Mumfordian megamachine that lathes humans into cogs.[9] 'I am convinced', wrote Félix Guattari, capturing a general attitude in a line that could have been murmured by Lemmy Caution in *Alphaville,* 'that all of the possible variations of another May 68 have already been run through the computers at IBM.'[10] Young engineers from IBM do in fact make an appearance in the beaubourgs' collective meeting on finances. They



propose an elaborate system of credit cards, terminals and a central computer to manage a flow of debt that could stabilize the underworld's bookkeeping. 'We had a good laugh!'[11]

And yet: 'The gigantic progress of science, notably of electronics – might it not serve as the basis of what could be another hypothesis? … Beside the *1984* hypothesis, cannot one dream of a "computer hypothesis?'[12] In 1972, four years before going underground to the beaubourg, Meister, under his own name, continued this thought with a plea: '*LET US DREAM FOR A MOMENT…*'

The *1984* hypothesis is immediately recognizable, not only from Orwell but from Deleuze's 'Postscript on the Societies of Control' and related documents. Superior information-management and communications technology precludes any need for citizens in favour of crowds of isolated individuals under permanent and pervasive access control and indirect surveillance, wholly recuperated and anticipated by predictive models (developed by sociologists!) that detect divergence and adjust accordingly. His 'computer hypothesis', by contrast, is something quite eccentric, playing out the same problems that plagued life in the beaubourg. 'Who of us has not been exasperated by the loss of time in assemblies of certain participation groups occupied with interminable discussion on the choice of means to attain goals?'[13] Could we not have a kind of *cyborg politics*, in which we can specify our goals and the machines crunch the data to determine the most expeditious path? (It is another form of the 'alliance of Eros with cybernetics' that Italo Calvino saw in Charles Fourier's visions: a vast calculus of desires, orchestrated with the impartiality of arithmetic.[14]) Or, strangest of all, consider a 'programmed' post-industrial society which permits 'zones or kernels of contestation within itself, kinds of laboratories of collective social creativity, knowing that the revolt is functional and brings a new dynamism into the entire system – such a society would come to program its change within itself.'[15] This paragraph is the whole of the beaubourg project in miniature: the wild enclave which the police don't raid, whose members and practices filter out into 'the system' around them like spores. The subterranean beaubourg is like a vast liquid deposit of social plasticity and molecular revolutions, a reservoir of alternatives; or, it's a recuperative disaster, a designated protest zone in which society's refuseniks can occupy themselves with motorbikes and murals, living on survival rations. But, as with the contractive beam, let's take Meister at his word for purposes of argument.

Whether offloaded onto decision trees, game theory and hardware, or deferred to self-organization and spontaneous order, Meister's projects share a fundamental post-'68 unease about how, precisely, goals are to be articulated and means arrived at. One of the great sociologists of participation and voluntarism remained, it seems, deeply uncertain of what forms that participation might take – how it could be directed, how it could play a political role in new technological and post-industrial systems. Facing this question, he began to theorize technically enabled associations, existing somehow on the edge, or below the radar, of existing order, with complex interfaces or membranes between. In other words, he was beginning to consider heterotopias, not utopian non-places but counter-sites to the current condition – and whether information technologies could provide a home for such alternative zones, in the airwaves and on the terminals of Paris rather than below its streets.

The heterotopia

The heterotopia starts as a radio address delivered by Michel Foucault in the winter of 1966. It is a rather playful talk in a series on literature and utopias, and lies closer to the tales told by Calvino's Marco Polo or some of Benjamin's radio addresses for children than to Foucault's formal lectures. It attracted the attention of Ionel Schein – an architect who worked with modular plastic construction, and on the architecture of oblique forms with Virilio – who asked him to deliver a revised version to the Architectural Studies Circle in March of 1967. Foucault turned the traveller's tale into a lecture while living in Sidi Bou Saïd, retaining something of the lightness of tone, the surprising humour and evocative moods. Our source for Foucault's thoughts on the heterotopia is the posthumously published, stenographic transcription of that talk.[16]

It is a document known to many readers of *Radical Philosophy*, I am sure; and if not is readily available online. Briefly, Foucault gives a capsule history of three kinds of spatiality in the West, with space acting as part of the epistemic horizon of a historical epoch – as part of what it is possible to think at a particular time. Within our horizon we can hold reasonable and unreasonable, true and false ideas or conceptions of the world, but there is necessarily an outside to our thinking, a distinction between knowledge and not-even-wrong non-knowledge. These are the fundamental operating assumptions, shaping practice and thought, and a sense of space is prominent among them. The Middle Ages, in Foucault's analysis, have a hierarchical spatiality: the cosmos is arranged into

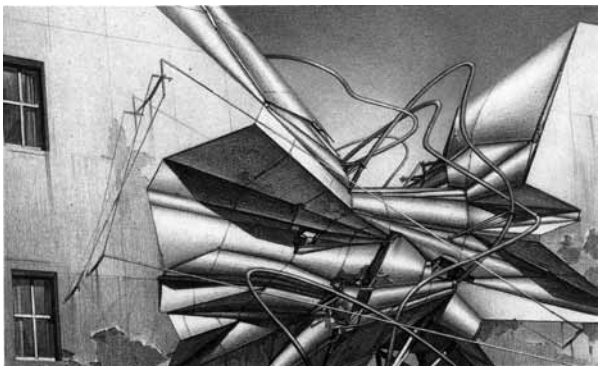
sacred and profane, protected and exposed, urban and rural modes. Our present mode of spatiality is that of 'emplacement', which is to say the position or proximity of things only in terms of their relation to other things in a network – whether as a grid, a series or a tree. This sense of emplacement is not, to be clear, our essence, or anything so metaphysical, but it is, in his words, 'our great haunting obsession': to produce this network, and to manage our society in accordance with it.

If the great motor of nineteenth-century thought lay in time – the progression of a great life, the waves and pulses of historiography – ours lies in the simultaneity of points distributed on the network. As medieval 'localization' was oriented around theology and cosmos, and Enlightenment 'extension' expressed itself in the scientific trajectories of Cartesian and Newtonian motion in arbitrary space, so our current mode is articulated most vividly in our technologies.

> The importance in contemporary technology of problems of emplacement is well known: the storage of information or the intermediate results of a calculation in the memory of a machine; the circulation of discrete elements with a random output (automobile traffic is a simple case, or indeed the sounds on a telephone line); the spotting of marked or coded elements inside a set that may be randomly distributed, or may be arranged according to single or to multiple classifications, etc.

From here Foucault speaks of social management, and an initial version of biopolitics – the work of identifying, classifying and sorting people – and describes something akin to the micro-power of *Discipline and Punish* in the system of relations that delineate different kinds of emplacements.

This is a synthetic move of remarkable and encompassing strength, uniting problems of data manipulation in the process of computing (on and off, then cutting-edge drum memory and magnetic tape) with the patterns of traffic, telephone switching systems, and so on, to give context to a discussion of demography and the human sciences. 'Time', Foucault writes, 'probably appears only as one of the various possible operations of distribution between the elements that are spread out in space.' That is, a distinctive temporality emerges from spatial ordering. Part of Foucault's subtlety was in his use of emplacement as a property of a computing machine, which is indeed expressed as a temporality – specifically in the work done in the 1950s and 1960s, so that the recording head of a hard drive can find a sector on the disc in a timely manner, which is the essence of data storage and retrieval. Following his lead in drawing these diverse zones of emplacement together, we could turn to the mathematics of queuing theory, a discipline that is applied to microchip architecture and telephony, and to the design of transport flows, hospitals, and factories. (Indeed, it is hard to imagine a more Foucauldian branch of mathematical study.) The ideas of our age of emplacement are still reaching fruition – there have been quite bizarre recent publications on determining the locations on earth whose position, given the speed of light, allows one to take advantage of the distance between different trading floors, to arbitrage the price differences between markets at the scale of microseconds.[17] This is the world rendered as a chip, seeking optimal efficiency and minimal latency in moving



signals between nodes: the world of pure emplacement.

Foucault then takes his argument further: in the spatiality of a given historical moment there also exist related but experimental spaces – heterotopias: 'Real places … that are a sort of counter-emplacements, in which … all the other real emplacements that can be found within culture are simultaneously represented, contested, and inverted.' These are not utopias, perfect non-places that entirely express the fulfilment of an ideal, but counter-sites, with a complex relationship with the dominant mode of spatialization. They provide 'a sort of simultaneously mythic and real contestation of the space in which we live'. There are heterotopias of 'crisis', places set aside for those who are in a state of crisis (or, we would say now, a liminal moment) in relation to their society – adolescents, honeymooners, pregnant and menstruating women, the dying, between-world figures like shamans and monastics, the medium in the darkened seance chamber, and so on. Many of these have now been absorbed, in Foucault's view, by heterotopias of deviation, like retirement homes and psychiatric hospitals. Theatres and cinemas, assembling and superimposing many different places and meanings, have heterotopian characteristics, as do museums and libraries with their ceaseless accumulation of time – the heterotopias of permanence – and

cemeteries, where we enter abruptly into a different order of time, an eternity always gradually decaying where our future inevitably will arrive. Carnivals and fairgrounds, likewise, expend time with a flourish of fireworks, novelties and distractions, and then up sticks and go, with nothing left behind. To Foucault's list we could add the 'heterochronism', the different order of time, of the gambler and the casino: the repetitious, infernal time of chance repeated and repeated, interrupting each hand of cards or throw of dice with another simultaneously ruinous and arbitrary, that Benjamin so carefully diagnosed. Many heterotopias involve some kind of entry or exclusion, a marker that one is entering into a different order of space.

In his abrupt few final paragraphs, Foucault, having described many different orders and forms of heterotopia, sketches out their function and purpose in relation to the dominant order of spatiality. He lays out this function as a spectrum between two extremes. The first is the space of illusion that exposes the illusory nature of 'real space' – that is, of the current model of spatiality. To step into the illusory space and be taken in by it is to bring that sense of illusion back into our relation-arranged social world at large. Foucault makes reference to 'those famous brothels' (*maisons closes*) in this light. It helps to interpret this in terms of Karl Kraus's writings on the brothels of pre-war Vienna, which every respectable man loudly denounced and quietly visited. With their luridly overdone interiors, brocades and flounces, commodity women and covert clientele from all social strata, they were simultaneously a mockery of the reputable marriage, with its virginal and undesiring bride and complex property and class transactions, and its foundation – letting the very men who prosecute and stand in judgement deal with their appetites and interests discreetly and offstage. The illusory heterotopia is the lie that tells the truth of the time, which does not necessarily mean that it threatens the current order. The truth can be very nicely contained in a 'closed house' in the centre of town, disturbing no one, visited occasionally by the powerful.

Still more striking is the other function served by the heterotopia: to act as the space of compensation. Its meticulous perfection overcomes the disorder and confusion of our own spatial regime. Everything that doesn't quite work, all the messy edges of underspecification and the foot-dragging and noncompliance, can be ironed out in the contained zone of the compensatory heterotopia. Here, it must be said, Foucault's statement segues into weirdly effusive colonial territory – especially coming from someone revising this text in a Tunisia recently liberated from the French – as he meditates on the 'marvellous, absolutely regulated' Jesuit colonies of Paraguay. But we can take his point, and consider the contemporary compensatory heterotopia of the 'zone' (Free Trade Zone, Special Economic Zone, and so on), as exhaustively chronicled by Keller Easterling.[18]

And then, with a rather sudden conclusion on boats – moving from colony to colony, and brothel to brothel – the talk is over. As De Cauter and Dehaene point out in their footnotes, the talk seems structurally unbalanced and incomplete. Foucault has laid out this spatial history, first, and presented our condition within the regime of emplacement. Then, having briefly discussed the set of relations that define any given state of emplacement, he turns with a 'But-what-interests-me' to those sites that he calls heterotopias. The various heterotopic principles and instances occupy several pages – at which point it seems natural to assume that he will bring the two pieces together, and discuss the heterotopias specific to our space of emplacement in more detail. Instead, it ends all at once, with that famous last line: 'In civilizations without boats, dreams dry up, espionage replaces adventure, and the police the pirates.' He establishes an obvious question, and then does not answer it. It is a shape awaiting its puzzle piece.

City of cyberspace

In the mid-1990s, William Gibson's cyberspace ('see-bear-espace', as he has a French speaker pronounce his Greek–Latin neologism in a later novel) seemed tailor-made to fit the missing third part of the emplacement heterotopia. 'Cyberspace' now has the superannuated air of all words adopted by the zeitgeist, having already made the transitions from striking and futuristic invention, to fashionable signifier (of raves and fingerless gloves, in this case), to common coin rubbed faceless by many hands, to amusing cliché. The original moment of its creation, though, as it was being fashioned on a Hermes 2000 typewriter in Vancouver, shows us the kernel of its genuinely heterotopian impulse beneath the retrospective fog of dotcom nostalgia. Recall that Foucault presented the boat as the ultimate image of heterotopia: a place without a place, self-enclosed and yet given over to the infinity of the sea, the reserve of imagination, and so on. The spacecraft had a somewhat similar function for decades in the American imagination, and Gibson, working on his early science fiction, was aware that spaceships were exhausted as an imaginative zone. He needed a new kind of counter-site, and he assembled

one out of three elements: vague descriptions of the Internet, the posture of kids playing arcade games, and ads for an early Apple computer. Even playing these now-primitive 8-bit games, the kids, in Gibson's words, 'wanted to be inside the games, within the notional space of the machine';[19] within, that is, in Foucault's words describing the mirror, 'an unreal space that virtually opens up behind the surface'. Additionally, the Apple computer's case conveyed to Gibson (always so sensitive to the cues of industrial design) the desire to live inside of it, to inhabit it. Cyberspace, read from its invention, is a parallel domain that people want to inhabit. Furthermore, it is one unified environment – those famous, endless grid lines stretching out forever, the unlimited subjective dimension onto which all screens face.

Cyberspace was also something of a city, with a city's jarring juxtapositions and back alleys accumulating trash and forlorn *wabi*. In 'Academy Leader', a Burroughsian vignette in a 1991 collection, 'the architecture of virtual reality' has its roots in a burned-out neoliberal Interzone (the 'underground mall in the Darwin Free Trade Zone'), rather than an immaculate spacecraft populated by level-headed, fully optimized Heinleinian engineers. It is

> an accretion of dreams: tattoo parlors, shooting galleries, pinball arcades, dimly lit stalls stacked with damp-stained years of men's magazines, chili joints, premises of unlicensed denturists, of fireworks and cut bait, betting shops, sushi bars, purveyors of sexual appliances, pawnbrokers, wonton counters, love hotels, hotdog stands, tortilla factories, Chinese greengrocers, liquor stores, herbalists, chiropractors, barbers, bars.[20]

It hosts 'zones of more private fantasy', as well, but in many ways is the culmination of a total commercial order – in Burroughs's words, describing Interzone, 'a Composite City where all human potentials are spread out in a vast silent market'.[21] In fact, the most thoroughly described Gibsonian cyberspace is by and large serving the latter function Foucault defines for heterotopias: compensation, the perfected expression of the spatial regime of emplacement. It is the perfect environment for abstract multinational capital, without any messy real-world pushback and peculiarity. All those enormous luminous geometric shapes in the Matrix that Gibson describes belong to companies, and occasionally state institutions. In one of the short stories, money itself flows through this domain as 'a pulse of condensed information', the articulated activity of enormous corporate bodies able to operate frictionlessly.[22]

This history is worth dwelling on because cyberspace became a hieroglyph before it became a cliché, an icon that provided a place for like-minded people to gather, and that shaped design projects and inspired engineers and programmers, critics and theorists. Strikingly, many of those who adopted the term, and to some degree the idea, took it up as a space of liberation, of post-national political formations, even though in Gibson's text the post-national condition has come about as a direct consequence of corporate globalization – because states are bad for business. (For all its Ballardian psychopathology and Burroughsian junky-sweat grit, *Neuromancer* is a fundamentally optimistic novel from 1984, in that it imagines a future world in which a nuclear war hasn't happened – at the price of dismantling much of the state apparatus, and any pretence of social welfare, by mega-corporations.) To take one overheated statement among many, John Perry Barlow's 1996 'Declaration of the Independence of Cyberspace' epitomizes the strange transit of the word.[23] 'Cyberspace' is now the 'new home of Mind', and the foundation of 'a world that all may enter without privilege or prejudice accorded by race, economic power, military force, or station of birth', where we 'are forming our own Social Contract'. This is a long way to come from a digital space dominated by the massive shapes of media conglomerates, biotechnology concerns, and the occasional privatized utility monopoly.

However, Gibson made a second hieroglyph later in his fiction, one that speaks to the illusion-revealing and genuinely liberating function of the heterotopia as counter-site to emplacement, one whose time for prominence and design significance has come at last. It is the Walled City. It's a construct that appears in his second trilogy of novels. Whereas cyberspace was inspired by arcade games and early Apple computers, the Walled City is an explicit descendant from photographs and stories of an existing place, Kowloon Walled City or Hak Nam, City of Darkness, a very densely populated, once unincorporated territory on the outskirts of Hong Kong – somewhere above 30,000 people living in informal arrangements in a space a bit larger than a New York City block.[24] Gibson's Walled City has no more to do with the real Kowloon than his cyberspace did with the real Internet: it is an icon, a fictional vision based on images and second-hand Usenet culture, so we can set aside the real and complex history of Kowloon to concentrate on Gibson's vision, which has a retrospective prescience akin to Foucault's.

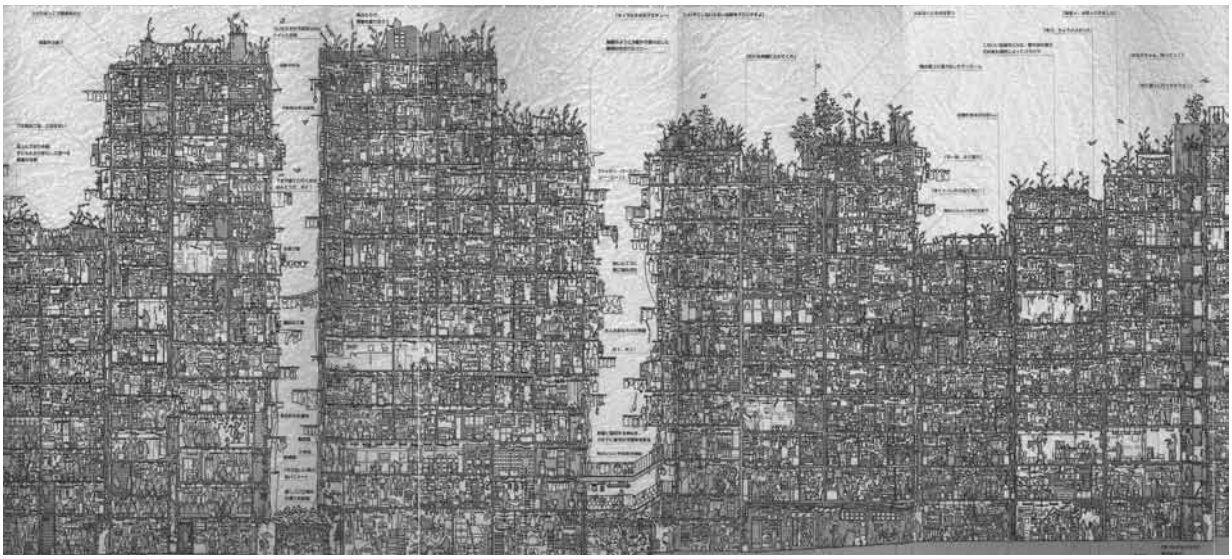
The language of emplacement is that of the grid and the arrangement of nodes, and the aspiration of

the age is *placement* in the grid. The ambitious young person wants to be or inhabit a well-connected node, whether with the pursuit of good search returns, the installation of trading servers close to the exchange, or the self-management advocated by social media entrepreneurs, configuring oneself to be a suitable tool for the network's use, generating content and always on. Explicitly against this desire stands the Walled City of Gibson's imagination, which exists 'of the net, but not on it'.[25] It is built around a central void: a black rectangle, a vacancy at the heart of the system. This is at once an architectural reference to the central airshaft in Kowloon, to the dark occlusion of the Imperial Palace at the centre of Tokyo, and to the original killfile from which the system developed. A killfile is an old-school Usenet tool, and Usenet, for readers under a certain age, was a pre-Internet system for circulating news and messages on networked computers. When participants in Usenet newsgroups were too verbose, spammy or provocative, killfiles were used by other participants automatically to delete or hide the messages they didn't want. As the network of Gibson's fictional narrative evolved towards his science-fictional cyberspace, a group of programmers banded together, building a collaborative killfile for those who wanted to maintain a measure of autonomy and secrecy on the network, a space for alternative action, a different reservoir of formalisms from which the future's shapes could develop – a silent beaubourg.

The main airshaft in Kowloon is created by building in accretive, favela style, ten to fourteen storeys up, around a small clutch of previously existing buildings – a bureaucrat's repurposed offices and outbuildings. The vacancy, the symbolic void, is the product of an archaic holdout, an anachronism, as is the dark space of Tokyo's Imperial Palace, without electric signage or exterior lights (perhaps only the flare of an occasional torch). The killfile, and the culture it nurses, is likewise an anachronism from an earlier age of the network. It is an invite-only, non-commercial, un-indexed community devoted, when we see it briefly explored in the narrative, to patient informational tasks. They have produced a place without advertising, formal addresses, central control or the elephantine tread of big corporate, institutional and state interests – an autonomous non-space 'between the walls of the world', devoted to high-bandwidth knowledge-sharing and the transaction of 'queerly occulted data'.[26]

Ultimately, in the fictional language of Gibson's story, they turned the killfile inside out, and vanished inside of it. What this seems to mean in practice is an encrypted peer-to-peer network that runs on bits and pieces of people's hardware, without Internet addresses or domain names, operating by invitation and shared consensus. In the spatial language of Gibsonian cyberspace, there's no reason for any digital environment to be visually compact, from the user's perspective, rather than stretching off forever. The programmers who built Walled City made a deliberate design choice that people's domains in the system would be very small: in homage to the actual Kowloon, to assure a certain shared culture in the inhabitants (a kind of Shaker modesty, perhaps), and as a sort of analogy for a place whose secrecy is partially the result of being small. The Walled City is 'a little place, a piece, like cloth', low bandwidth and capable of being concealed inside the data of larger files – as is currently done with digital image steganography, in which information can be cached in the least significant bits of a picture without changing how that picture looks to the human eye.[27]

> Something at the core of things moved simultaneously in mutually impossible directions. It wasn't even like porting. Software conflict? Faint impression of light through a fluttering of rags. And then the thing



> before her: building or biomass or cliff face looming there, in countless unplanned strata, nothing about it even or regular. Accreted patchwork of shallow random balconies, thousands of small windows throwing back blank silver rectangles of fog.[28]

Gibson's cyberspace begins as one kind of heterotopia and becomes another, or rather produces many others. It starts as a perfect environment, devoid of any hindrance for global corporate capitalism, and soon becomes a patchwork of other groups, forces, entities and alternative spatial and political orders: outlands, peripheries, beaubourgs, sects and subcultures, mutual aid orders and gangs, new intelligences, darknets and concealed worlds.

City of pirates

Gary Hall has already written, with great lucidity, about the complex realities of copyright, filesharing and piracy, grounded in academic publication and the existence of *Radical Philosophy* itself. I would like temporarily to bracket his argument, and indeed the whole discussion of legitimacy and the ethical valence of piracy, for reasons I will explain. (The interested reader is directed to Hall's article, and crucial texts like Lessig's *Free Culture* and *Code*, Adrian Johns's *Piracy*, Lewis Hyde's *Common as Air*, and the recent SSRC document *Media Piracy in Emerging Economies*.[29]) This is in no way to denigrate the importance of the conversation around ethics and piracy, which is significant for both practical and theoretical reasons. Every culture, every era, has its flashpoints of negotiation where statements can be simultaneously political, metaphysical, legal and technological – multilayered assertions of what is the case, and what should be. Questions of piracy, of the ownership of intellectual work, of the existence of digital objects and the governance of communication is such a flashpoint for our moment. My bracketing of this discussion takes its cue from Hall's speculative closing paragraphs, in which he raises the questions of a 'pirate philosophy'. If we assume the moves and countermoves of piracy and legislation as a given – as the new environment within which those engaged in intellectual work in and out of the university operate – what forms will philosophy, its engagement and production, take? I would like to make a similar initial step, in a different direction: let us set aside the question of the goodness of the pirates and their enemies. Let us assume that the mangle of piratical and proprietary strategies will continue. What can we say about pirate *practices?*

Pirate practices are worth studying because pirates are building Gibson's Walled City. Indirectly and haphazardly, certainly, in ad hoc arrangements and fragmentary forms, but the walls go up. It's a media history truism that the first private use of a new communications medium is always pornography. This is inaccurate and an oversimplification, but it acts as a helpful corrective for any overly grand media teleologies, which build inevitably towards some disembodied noosphere. From the dirty jokes and pranks among telegraph operators, to sexually graphic daguerreotypes and stereoscopic cards, to mimeographed fan fiction accounts of *Star Trek*'s Kirk and Spock discovering interspecies desire, and naked pictures transmitted line by line as alphabetic characters over acoustic modems: as our Eros goes, so go our mediating technologies. This maxim could be applied, with much greater force, to piracy, and the vast history of bootlegs, dupes, blank cassette tapes, unlicensed books and unauthorized translations, runs of sheet music, generations of VHS tapes, floppy discs and binary files and so on – on a slope of increasing capacity and agency for the individual engaging in duplication and circulation.

The pirates use URL-masking services that mask a download site inside an innocuous address, and throwaway accounts paid for with anonymous debit cards bought with cash. They run 'seedboxes' – private, dedicated filesharing servers – accessed remotely through Virtual Private Networks (VPNs) to encrypt and secure the traffic. They participate in invitation-only darknets and private trackers, which make files available with a social calculus of obligatory participation in return for access (a ratio of 'seeding' versus 'leeching'). The Scene, the most dedicated and technically astute filesharing specialists, maintain a complex internal order based on honour and status – which accrues from cracking difficult file protection schemes, and being the first to release something new – and on a strict adherence to agreed-upon rules for the materials they make available. The astonishingly intricate and precise .nfo communiqué from The Scene governing 'The SD x264 TV Releasing Standards 2012', for instance, which makes changes to the video encoding system for pirate releases, was hammered out by no fewer than thirteen groups, with names like BAJSKORV, LMAO, DiVERGE and LOL.[30]

In my anecdotal experience, teenagers who are otherwise quite happy to live in the complex public/private drama hothouse of Facebook begin looking into setting up VPN accounts with Swedish companies that promise zero data retention, and learning about encryption, so that they can pirate music, comics and television shows in peace. The three groups I regularly

encounter who pay a great deal of attention to the availability of public wifi access points (those, that is, whose transactions cannot be traced to your account with your ISP), to buying laptops with cash (so the MAC address cannot be connected with a person), to VPNs and data logging requirements in different countries, to encryption and deniability of network services and so on, are: enterprise and governmental security professionals, dedicated pirates, and dissident groups like Occupy and pro-democracy activists under authoritarian regimes. The technologies of secrecy are the overlap where these three disparate groups meet. Consider the Tor Project, an immensely useful and important platform for anonymous online communication, initially sponsored by the US Naval Research Laboratory and later by the Electronic Frontier Foun-

dation, an online civil liberties group. Its utility is now hampered by how slow it has become – because it has been so heavily adopted for covert filesharing. Tor, a life-or-death matter for political activists online, from Iranian protestors to WikiLeakers, picks up DMCA copyright-violation notices and takedown requests like burrs, just like any other service heavily patronized by pirates.

Whether one could build a system that could be used for secure, anonymous communication and information sharing but not for piracy is an interesting question – and, thus far, moot. Where Gibson was a bit inaccurate in his Walled City was in the absent carts full of bootleg DVDs. The denizens of his vision, between the walls of the world, were almost mystical ascetics of the network, pursuing patient attentional tasks, historically urgent espionage and uninterrupted conversations. To the contemporary reader, what's most glaringly missing is the rampant piracy that would presumably be happening. Usenet, part of the inspiration for the Walled City, has been jerry-rigged into a Heath Robinson contraption – with such arcana as sabnzbd+, SickBeard, Newzbin, yEnc, PAR files, and on and on – for moving large media files over a system meant for circulating text messages.

Paths for secure and covert communication are walked by both dissidents and pirates, and means and methods pass back and forth. There are well-meaning projects to ameliorate outright piracy whose application would be catastrophic for the safety and liberty of the network as a space for political action. Filesharing projects function in practice as Meister's beaubourgs did in fantasy – as open-ended, and in many ways regrettable, initiatives that happen to produce powerful mechanisms of autonomy and liberation. Building the sort of resilient and free infrastructure which I described in my previous essay for *Radical Philosophy*[31] – the peer-to-peer Domain Name System, the mesh networking hardware, the private cloud computing platforms – is both politically and piratically expedient. Lightened by, as Hall emphasizes, their lack of legitimacy, concealed by the triviality of making old Pet Shop Boys B-sides available for free, the pirates create both technical groundwork and informal training for autonomous global knowledge distribution.

All this begs a question of us as scholars, published writers and activists. We pay a great deal of attention to governmental attacks on network access and use – and we should – but the issue of piracy is one of the biggest sticks being used to beat covert, experimental and heterotopic network projects, the servers that host them, and the monopolistic pushovers that sell them bandwidth. Can we theorize and create a way out of existing intellectual property without a simple, crude negation? Can we avoid a move that leads to an intellectual culture of post-Fordist precarity, and unpaid immaterial labour producing content whose value will be captured by host organizations? Can we build a model of post-IP intellectual culture, and thereby take one more tool out of the hands of those who would attack our heterotopias?

Foucault waits for us, as ever, in the future where he has already arrived. In his 1975 essay 'Photogenic Painting', in which he wrote about the work of his friend the painter Gérard Fromanger, he anticipated the artwork as a 'relay' in a larger network through which images flow. Fromanger worked by projecting photographs and painting with the projection – some paintings include his own silhouette, thrown by the projector – producing something, in Foucault's analysis, close to the playful 'photo-paintings' of early photography (the painted touch-ups on negatives, the

painted scenic backdrops for staged pictures, the play between painted and photographed tableaux vivants). As with the technological status of emplacement, Foucault takes this notion in a strikingly prescient direction. Fromanger becomes the starting point for discussing the new, media-technological need to 'put images into circulation, to convey them, disguise them, deform them, heat them red hot, freeze them, multiply them'. The painting is not some eternal phenomenological object, brimming with Being, but the entry point into a bustling network – the door into the many beaubourgs under, around and outside the Beaubourg. The painting is a login prompt or a port that 'plug[s] us in to the endless circulation of images'. Any given image project is a handoff to the next, a transmission in which 'each painting is a thoroughfare, created to keep the elements in circulation'.[32]

Even as attribution is lost, the images accrue value in their movements – an understanding of the visual that clears space for the arrival of Photoshop, image macros, LOLcats, fan-subtitled videos, screen captures, animated gifs made from stereopticon slides, atemporality and the endless 'self-contained collage-like assemblage' of overlapping windows and concurrent browser tabs (to take Joanne McNeil's phrase).[33] Perhaps this can offer one way into a politically exigent pirate philosophy – value that accrues through motion and transmission rather than stability, possession and ownership. A fruitful circulation from form to form and thought to thought, flourishing on the high speed and low overhead of the covert networks and their flows of 'queerly occulted data'. The gift must move. Perhaps – though how we are to keep the lights on, print in hardcopy and afford lunch on such a system remains to be developed.

It is appropriate to give the last word to the group WeRebuild (related to the implementation-oriented Telecomix, and one element of a larger, loose cluster of net activists including La Quadrature Du Net, Anonymous and Juliagruppen), who provide an alternately serious and whimsical 37-step plan for creating your own WeRebuild movement/platform/cell/cluster.[34] Amid notes on addressing news agencies, issuing press releases, creating relationships with politicians, launching botnet raids, keeping fluid organizational structure, and the importance of faxing, they mention in passing: 'Share all data. Do not respect copyright! Do copy all floppies.' And, later: 'Share all knowledge freely with others.' And as an aspirational goal: 'Create symbols to dive in the channels', to put powerful ideas and images into circulation, like photogenic painting in realtime. Positive results from the experiment to test the 'computer hypothesis', passport holders from any number of beaubourgs or the silent gates of the Walled City, many potential, possible activists and their toolkits are already germinating in the morass of covert filesharing cultures and techniques. The handoff of an image or a file creates a path between hands that may yet link up in solidarity, resistance and the production of new orders.

Notes

1. Albert Meister and Luca Turin, *The So-called Utopia of the Centre Beaubourg: An Interpretation*, Book Works, London, 2007, p. 11.
2. Ibid., pp. 16–17.
3. In keeping with its rejection of all conventional norms, *The So-called Utopia* abandons numbering the pages after 122. The passage I quote here can be found towards the end of the book, on the page spread marked 'Cold' and 'Allarme!'
4. Walter Benjamin, 'Moscow', in *Selected Writings*, Vol. 2: *1927–1934,* Harvard University Press, Cambridge MA, 1999, p. 28; Walter Benjamin, letter to Jula Radt, 26 December 1926, in 'Moscow Diary', *October* 35, p. 127.
5. Meister and Turin, *The So-called Utopia*, pp. 42, 29.
6. Albert Meister, *Participation, Associations, Development, and Change*, trans. and ed. Jack C. Ross, Transaction Books, New Brunswick NJ, 1984, p. 5.
7. Elizabeth Schambelan, 'The View from Below', *Artforum*, October 2007.
8. Meister and Turin, *The So-called Utopia*, p. 103.
9. Fred Turner, *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism*, University of Chicago Press, Chicago, 2006, p. 2.
10. As quoted in Gary Genosko, *Félix Guattari: An Aberrant Introduction*, Continuum, London and New York, 2002, p. 12. Guattari later developed an intense interest in the potential of Minitel, the French videotex communication system, and the 'group Eros' available through the 3615 ALTER service, a critical – in both senses – networked space begun by the IT collective C31. (As I write, the Minitel system is in the process of being shut down; service will conclude on the system's thirtieth birthday, on 30 June 2012. A book on the radical and critical culture fostered by the Minitel network would be a fascinating and welcome project.)
11. Meister and Turin, *The So-called Utopia*, p. 46.
12. Meister, *Participation, Associations, Development, and Change*, p. 236.
13. Ibid., p. 239.
14. Italo Calvino, *The Uses of Literature,* Harvest, New York, 1986, p. 232.
15. Meister, *Participation, Associations, Development, and Change*, p. 235.
16. I am using the superb, limpid translation by Lieven De Cauter and Michiel Dehaene. Michel Foucault, 'Of Other Spaces' (1967), in *Heterotopia and the City*, Routledge, London and New York, 2008, pp. 13–29.
17. A.D. Wissner-Gross and C.E. Freer, 'Relativistic Statistical Arbitrage', *Physical Review E* 82, 2010. On a related note, see Donald MacKenzie et al., 'Drilling Through the Allegheny Mountains: Liquidity, Materiality and High-Frequency Trading', *Journal of Cultural*

Economy (forthcoming).

18. Keller Easterling, 'Zone: The Spatial Softwares of Extrastatecraft', *Design Observer* 11 July 2012 (http://places.designobserver.com/feature/zone-the-spatial-softwares-of-extrastatecraft/34528), adapted from *Extrastatecraft: Global Infrastructure and Political Arts* (forthcoming).
19. William Gibson, interviewed by David Wallace-Wells, 'The Art of Fiction No. 211', *The Paris Review* 197, Summer 2011.
20. William Gibson, 'Academy Leader', in Michael Benedikt, ed., *Cyberspace*, MIT Press, Cambridge MA, 1991, pp. 27–9.
21. William S. Burroughs, *Naked Lunch: 50th Anniversary Edition*, Grove, New York, 2009, p. 89.
22. William Gibson, 'Burning Chrome', in David G. Hartwell and Milton T. Wolf, eds, *Visions of Wonder: The Science Fiction Research Association Anthology*, Tor, New York, 1996, p. 551.
23. John Perry Barlow, 'A Declaration of the Independence of Cyberspace', eff.org, 9 February 1996, https://projects.eff.org/~barlow/Declaration-Final.html.
24. The best book on Kowloon Walled City is the extraordinary combination of photographs, interviews and reportage: Ian Lambot and Greg Girard, *City of Darkness: Life in Kowloon Walled City*, Watermark, Hong Kong, 1999.
25. William Gibson, *Idoru*, G.P. Putnam's Sons, New York, 1996, p. 209.
26. 'Between the Walls', in ibid., p. 182. 'Queerly Occulted', in William Gibson, *All Tomorrow's Parties*, G.P. Putnam's Sons, New York, 1999, p. 166.
27. Gibson, *Idoru*, p. 221.
28. Ibid., p. 181.
29. Gary Hall, 'Pirate Radical Philosophy', *Radical Philosophy* 173, May/June 2012, pp. 33–40; www.radicalphilosophy.com/commentary/pirate-radical-philosophy-2. Lawrence Lessig, Free Culture: How Big Media Uses Technology *and the Law to Lock Down Culture and Control Creativity*, Penguin, New York, 2004; and *Code: And Other Laws of Cyberspace, Version 2.0*, Basic, New York, 2006; Adrian Johns, *Piracy: The Intellectual Property Wars from Gutenberg to Gates*, University of Chicago Press, Chicago, 2009; Lewis Hyde, *Common as Air: Revolution, Art, and Ownership*, Farrar, Straus, & Giroux, New York, 2010; Joe Karaganis, ed., *Media Piracy in Emerging Economies*, Social Science Research Council, online, 2011, http://piracy.ssrc.org/the-report.
30. 'The SD x264 TV Releasing Standards 2012', *scenerules* 22 February 2012, http://scenerules.irc.gs/t.html?id=2012_SDTVx264r.nfo.
31. Finn Brunton, 'Keyspace: WikiLeaks and the Assange Papers', *Radical Philosophy* 166, March/April 2011, pp. 8–20; www.radicalphilosophy.com/commentary/keyspace-wikileaks-and-the-assange-papers.
32. Michel Foucault, 'Photogenic Painting', in *Gérard Fromanger: La Peinture Photogénique*, Black Dog, London, 1999, pp. 89, 90, 95.
33. Joanne McNeil, 'Overfutured', catalogue essay for *Free*, The New Museum, New York, 20 October 2010, www.newmuseum.org/free/#joannemcneil.
34. WeRebuild, 'How to Copy Werebuild', first published 29 November 2009, http://werebuild.telecomix.org/wiki/How_to_copy_werebuild.