From SimCity to Smart City. Modelling and Government in the Epistemology of Architectural Power

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The article discusses simulation as a particular logic of neoliberal governance, by exploring the connections between modelling and government in city simulation games and smart city projects. Rather than being a simple visual representation of cityscapes, city building video games like SimCity should be understood as a pedagogical and programmatic formulation of the "smart" paradigm of city planning, in which a data-driven managerial epistemology, imposed on all kinds of city services and experiences, is increasingly used to validate and enforce a biopolitical government of life. Both representations and constructions of the city in city building games and discourses around smart cities take place in a zone of indistinction between the design of urban spaces and the government of the community and follow a logic of simulation by which actual city practices and dynamics are supposed to function according to the models that make them liable to control. Simulation in city builders and smart city planning, then, names the operation in which the very relation between architectural forms, their meaning, and their uses becomes operative and is turned into an instrument of government.

— BIOPOLITICS
— CITY-BUILDING VIDEOGAMES
— PERFORMATIVITY
— SIMULATION
— SMART CITIES.

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Architecture as Somatechnics

Looking back at the project of a structuralist semiology of architecture, approached from different angles in the volume curated by Charles Jencks and George Baird on which this issue is casting a retrospective look, we are invited to the difficult task of considering the socio-political, technical, and epistemological transformations that have traversed the past fifty years and how they have impacted ideas and practices of architecture. Where Martin Pawley (1992) proposed to put functionalism to the test of time, pointing out the brief life of any organisational schema that could grant the unity of design and use which defines the functionalist ethos, the same applies to the systems and categories through which architecture itself, its meaning and power, has been built and interpreted.

A recapitulation of these changes is of course impossible here but, roughly, I think we can individuate the field where they have taken, and are still taking, place by drawing three sets of interconnected tensions. In epistemology, the tensions between the emergence of feminist, postcolonial, and queer deconstruction and the rise of a new biopolitical essentialism and identitarianism. In politics and society, the tensions between radical forms of democracy and autonomy, on the one hand, and intensified forms of capitalist precarisation and the neoliberal paradigm of government, on the other. In the domain of technics and the body, the tensions between the competing ideas and practices of community, politics, and ethics that belong to political ecology (Robbins 2012) and those that follow what the collective Tiqqun (2020) called the *cybernetic hypothesis* (that is, the applications of the digital revolution in management, communication, and logistics to a further extension and centralisation of power).

In all these fields, architecture is interpellated as a practice that manifests and intervenes in the relation between structures and forms of life. Specific configurations of architectural and urban space, like the nuclear family apartment or the commuter town, shape how bodies appear and disappear, how they thrive, survive, or die, and how they belong, or not, together. Single structures and infrastructural nodes, like the central mall *Les Halles* or the peripheral large-scale market of *Rungis* in Paris (TenHoor 2007), the *megabassin* in Sainte-Soline (Cuvelier 2023), or the roundabouts (see Bonin and Liochon 2021), act as instruments of governance and are taken as sites of resistance. *Construction* as such is understood as the material and discursive medium where the Western split between *nature* and *culture* is reaffirmed or suspended (see Descola 2013), where the fluid components of the post-Fordist class structure are rearranged (it is the case, for instance, of the formation of the white middle-class suburb, or of Airbnb gentrification), and where the strange hybrids between exploitation and ecology that characterise "sustainable" capitalism are put forth. Architectural practice is confronted at the same time with an intensified locality and globality. It has rediscovered its cultural and environmental contingency but also faces its progressive "dematerialisation" in its increasing convergence with logistics (see Quet 2022) and in its interdependency with information technology and the digital media landscape.

In these respects, contemporary capitalist architecture presents itself first of all as a *somatechnics*, a practice investing «the inextricability of *soma* and *techné*, of the body (as a culturally intelligible construct) and

the techniques (devices and hard technologies) in and through which corporealities are formed and transformed» (Sullivan 2014, 187). Coherently with these evolutions, the theory of architecture tends to shift from the interpretation of buildings understood as works on the model of art history, towards a combined analysis of the constructedness of bodies and the embodied use of space.

Paul Beatriz Preciado's study of Playboy architecture (2019) is, I think, paradigmatic of these new forms of architecture and ways of thinking about them. By presenting Hugh Hefner's project of an integrated architectural and media environment radiating outward from his hypermediated bed in the Playboy Mansion, through the magazine, the clubs, and the television productions, Preciado has found a way to address the "becoming-image" of architecture as well as its power as an instrument for the staging and shaping of the gendered, racialised, and sexualised body. «If you want to change a man, change his apartment. If you want to modify gender, transform architecture. If you want to modify subjectivity act upon interior space» (Preciado 2019, 84): thus, Preciado synthesises the particular complex of architecture, media, and the body that Hefner's project put in place. From this perspective, architecture appears not as the art of constructing buildings, but as a complete biopolitical technique of the body, which transforms lives performatively by ways of reorganising space.

> Well before the poststructural and linguistic turns in the interpretation of gender identity, *Playboy* defined and understood masculinity not as biological or psychological but rather as determined by architecture and spatial segregation. What Playboy put forward was not so much what we could call with Judith Butler a «performative theory of gender» but rather a pop theory of gender and sexual identity as determined by the theater (the spatial and visual relationships) where gender and sexual identity are performed. This performative theory of space is in a sense a result of the incubator model according to which architecture is a biopolitical, surrogated womb where the process of becoming male or female is fully achieved. (Preciado 2019, 33)

Preciado's analysis of Hefner's pornotopia stresses its performativity, and may suggest to see architecture as a medium which has a series of effects regardless of its content (see McLuhan 1994) and, conversely, to understand the media as an extension of an architectural principle to the organisation of bodily, perceptual, ideological, and experiential space. (CD)

(CD) CARLO DEREGIBUS
While loving Preciado's book, I think we should remember that the "apartment for playboy" was like a description of an ideal paradise, remote from any realistic application. The readers should have dreamt about it: playboys were for adults what superheroes were for kids, their house being like the Batcave. And even if Preciado's text is so famous, it is quite strange to me to consider that it is paradigmatic of these new forms of architecture: as Norberg-Schultz has highlighted, these have always been the forms of architecture, changing according to time and place and the relative society.

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What I found paradigmatic about Hefner's mansion in Preciado's reading is how the boundaries between architecture, audio-visual media, and body performativity are blurred. Hefner did live in a model house fashioned after his ideal of a wholly porno-graphic life, where all is excitable, all is visual, and every experience is recorded and sold.
In this sense, Hefner is perhaps closer to a Sadean monk (adding technology and spectacle) than to a Bruce Wayne figure, but the comparison is interesting...

This biopolitical intensification and expansion of architecture was anticipated in the *Meaning in Architecture* volume in Pawley's contribution on the Memory House (1992, 147-180). Pawley envisaged a self-contained, private environment that would track, record, and preserve all moments and aspects of ordinary domestic life in order to protect this experience, that the author saw as the only remaining form of independence and self-realisation in post-war Western capitalist society, from the alienating pressures of the public. As Baird perceptively noted in a marginal comment to Pawley's article, however, this tentative recovery of alienated experience through a continuous archive may act, and indeed has acted in the meantime, as a Trojan horse that extended the grasp of both State power and corporate power over precisely that libertarian private sphere that Pawley wanted to preserve. The portable memory device that Pawley also imagined, with considerable foresight if misplaced optimism, has found today its form in the hyperconnected smartphone, which functions indeed as a mostly disciplinary device of self-expression and in ways that are largely integrated with capitalist production and aligned with neoliberal consensus. A thoroughly traced and tracked life is not a fuller life, but a fully «simulated [life, that is only] less painful» (see Pawley 1992, 177) to live in the measure that it offers less resistance to its discipline. Both Pawley's memorious technologies and Hefner's pleasure media-house operate by elaborating a model of living in artificially controlled material and perceptual environments that work at once as experimental simulations and incubators for new forms of (the government of) life.

The same situations that prove the cosmological dimension of architecture also prove its somatechnic power. Writing about a technique of religious and cultural cleansing conducted by Salesian missionaries among the Bororo, where they forcibly restructured a village into a different configuration in order to disrupt the social organisation that they sustained, Lévi-Strauss noted that the configuration of human dwellings expresses and supports a whole structure and perception of the world and is thus inseparable from the life and form of social relations themselves (see Choay 1992, 33). A similar rupturing of the physical and social structure of space characterises the Israeli strategy in the occupied territories at least since the 1990s (Baylouny 2009, Handel 2014, Bromley 2021, Miaari & Milosav 2023).

This capacity to operate on political life through a management of space and how bodies are distributed in it, individuates in turn a zone of

indifference between the dimension of meaning and language and the operations of government. Thus, understood as performative biopolitical and thanatopolitical technique, architectural power has not only a systemic dimension in the contemporary neoliberal management of social life, but a central place in the archaeology and the epistemology of government in general (see Ingraham 2023, 19-20).

Coherently with this, the question of meaning in architecture shifts from topical theories of representation to a general theory of performativity and performative power. Where structuralist approaches to signification in architecture focussed on the relation between signifier and signified and, more interestingly, *langue* and *parole* (that is, architectural and social forms and their contingent uses), a post-structuralist approach to architecture takes place instead at the level of the specific, «operative» (Agamben 2017, 650, 744), power that structures themselves have to produce (and destroy), discipline and punish, the gestures and the lives that they are organising. Model cities, and models of behaviour and interaction, as we will see, in this sense never simply describe, but operate and decide upon the use of space and over the use of bodies.

It is to this conception of the disciplinary, biopolitical, power of architecture and its relation to a general theory of performativity and operativity that I want to contribute. In the three short sections or scenes that will follow, which will connect some of Deleuze's and Baudrillard's reflections on simulation in epistemology, the modelling of city life in videogame city simulations, and data-driven management in the smart city imaginary, I will briefly explore simulation, not as the matter of an accurate or inaccurate representation or reproduction of city life, but as an operative relation that is established between modelling and government that I think is fundamental to contemporary capitalist architecture and urban planning. Videogame city simulations and smart cities are obviously very different, but share a common principle: the SimCity gameplay is built around *smartness* (efficient management that deals not only with city spaces, but with city life itself, including aspects of its politics), while, on the other hand, smart cities pursue in more practical and serious ways the very modelling of the city offered by city simulation games as a divertissement.

Certified Copies

In an essay on Plato, Gilles Deleuze (1983) pointed out how the world of the Greek philosopher was not divided simply in originals and their copies, but in true (*eikones*) and false (*simulacra*) copies of ideas (also see Smith 2006). What is at stake in simulation is not the resemblance or dissemblance of a representation to an original object, then, but the conformity or lack of conformity of a real object to a model of what this object is supposed be and of how it is supposed to work. In this sense, simulation names the correspondence of identity and design: it is not the matter of the image that falsifies the real thing, as it has often been interpreted, but of the seal that authenticates an object, or a person, within a given system of understanding and signification. Reading Deleuze suggests to understand simulation not as a relation of semblance and succession, but as a power of certification.

Resemblance is not, for Deleuze, the relation between the copy and the original, but, more fundamentally, the relation between the thing and the idea, and there are false copies and true copies only because the object as such is always already a certified copy of the idea. The same, Deleuze suggests, is true for human beings: «God made man in His own image and to resemble Him» he continues, «but through sin, man has lost the resemblance while retaining the image» (Deleuze 1983, 48). From this theological standpoint, people are infamous and faulty copies of a "divine" model of the human: original sin is a sort of counterfeiting and a wayward deviation from a design that is presented at once as nature and as law.

Foucauldian discipline – the power-knowledge that judges and regulates bodies and performances against a naturalised and normative order of things – can be seen in this sense as a secularised version of providential economy (see Tzonis 1972, 20). Then, a similar sorting of the submerged and the saved takes place through a series of techniques and apparatuses that decide upon the precarity, the vulnerability, and the disposability of lives against the standard of State-sanctioned hegemonic norms.

From this perspective, simulation is not the breaking of the seal of authenticity, resulting in a chaotic profusion of semblances and a loss of reality and referentiality (see. Baudrillard 1994, 2), but the force of the seal itself, by which a certain identity, finality, and function is imposed on people, and a consensual mode of understanding of the world is established as a binding measure of human lives. In this "operative" ontological paradigm, as Giorgio Agamben puts it, being «is what it has to be and has to be what it is» (Agamben 1997, 650). Following on this principle of correspondence, the operation that distinguishes the real thing from the simulacrum is not of the order of representation, but rather of that of commandment. In this sense, the regime of modern simulacra does not simply consist in the proliferation of *fakes* that could be judged in relation to an objective *reality*, but rather in the intensification and autonomation of the processes by which operative knowledge about lives and senses of reality is produced. The power of simulation is thus, on the one hand, to construe the real in a certain way, and, on the other, to produce real effects from this very modelling and categorisation – «only what is effective, and as such governable and efficacious, is real» (Agamben 2017, 650). (CD)

In the opening passage of Jean Baudrillard's *Simulacra and Simulation*, the French philosopher famously inverted the relation between the simulacrum and the object: in simulation, a map no longer is an abstraction of the territory, but is understood a program that engenders it (1994, 2).

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I always wonder, reading Agamben, how this asymmetry between the producer of the effects and the affected entity can be accepted: let's say that something is real only if its effective, but effective on what? On "reality"? In this case, "reality" too should be effective to be real, therefore starting a incomplete, circular reference that in my opinion can find a solution only in the systems theory approach. And this, I think, strongly affect the simulative approach to architecture and its relation with "the real", being precisely at the centre of the meaning issue.

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The way I see it, the core of the argument is first to be understood through the idea of performativity and in particular, taking Judith Butler as a well-known reference, of "performative power" (Butler 1993, 170 and following).
If we take one paradigmatic case Butler (1990) discussed in Gender Trouble, the link between efficacy and "realness" seems clear to me: only a successful, reiterated, performance of gender norms can produce the sense of this gender being a (pre-discursive) reality.
On his part, Agamben seems to me to stress how, in the kind of modernity he wants to analyse, every action and every aspect of life is reduced within the paradigm of operativity, meaning in the end that only the governable tends to be attributed the status of reality.
Thus, Agamben thinks the "ungovernanable" in a way that is somewhat close to Butler's understanding of "trouble", also as an epistemological category.
The point, for me, is to avoid referring to an impossibly prediscursive "reality," and rather to study and question the authorities, the powers, and the processes that name it. In my view, this does not produce a circular argument, but is merely a way of stressing the increasing impact that offices, models (including simulations), norms, and spectacles have under late capitalist biopower.

CARLO DEREGIBUS
Thanks, now I got it.

The simulacrum «comes first» and «commands», as it were, not images that copy the original objects, but real objects themselves. In simulation, a virtual idea or design, scripted in all its parts and reduced to its functions within a system of management, does not simply substitute the "real" object, but invokes it, interprets it, materialises the rules and the categories that explain it, and thus exerts a formative power on it (see Certomà 2015). Gender assignation can be taken as a contemporary paradigm of this precession of simulacra, where a prescriptive form of life and of the body anticipates, regulates, and disciplines the formation of bodies themselves and the very unfolding of the possibilities of living.

Thus understood, simulation is one of the fundamental operations of architecture and urban planning as well. Architectural somatechnics operates on bodies and people through the various categories of the population, and through ideals like the «urban bachelor» for Hefner, the «commuter» and the user of services, or «the terrorist» or «the criminal» in the case of law enforcement. These abstractions, structured by the interests of capitalist economy and neoliberal governance, and often informed by colonial, racist, and heterosexist assumptions, in turn precede and materially shape people's lives themselves. In this way, simulation and modelling provide an interface for the exercise of government, structuring the "reality" of lives and gestures by the terms through which they become available for its action, treating bodies as passive objects of enforcement and reactive

sites of managerial direction. In various contexts, techniques of simulation serve to certify and naturalise the inscription of social, political, and ecological practices within an instrumental and economic cosmology from which popular and democratic agency, and with it the full presence of human beings, tends to be completely banished (see Bookchin 1974, 123) [FIG. 1].

A significant part of Haskell Wexler's docudrama-form critical response to Marshall McLuhan's media theory *Medium Cool* (USA 1969) is dedicated to the organised re-enactment and simulation of an anti-war protest in the Emergency Operation Headquarters of the Illinois Army National Guard, set up for the purpose of studying and developing techniques of crowd control in response to Black Liberation movements and the opposition to the Vietnam war. In the scenes, soldiers dress up as "hippies" and play out with their comrades the whole course of a demonstration that is eventually repressed with tear gas and bayonets. Here, simulation entails a way of producing a particular know-how and perfecting techniques of repression, and even allows to take a grotesque enjoyment in their staging [FIG. 2].

Sierra Pettengill's more recent *Riotsville* (USA 2022), made with footage shot by the US Army, similarly focuses on a simulated city in Fort Belvoir, Virginia, one of the constructed environments set up for the training of police officers after the Watts uprising of 1965. The same kind of project is still being pursued today in the US, in the wake of the protests against the police killing of George Floyd, with the contested project of building a police training compound in the Weelaunee Forest near

[FIG. 1] *Medium Cool* (Haskell Wexler, dir., USA 1969). Digital still.

[FIG. 2] *Riotsville* (Sierra Pettengill, dir., USA 2022). Digital still.

Atlanta, Georgia, dubbed «Cop City» (CrimeThinc 2022, Akbar 2023). In these cop cities, performances of riots are turned into training "sandboxes" and into spectacles that the cadres of law enforcement direct and enjoy as spectators. In this context, the "playful" appropriation of the gestures of protest by police officers inscribes these gestures in a situation and a program that is eventually aimed at their suppression: it is in this form, here, as it loses the liberating potentiality of staging and becomes completely instrumental, that the simulacrum really substitutes for the original.

The hollow facades of life-size model towns like these, show all too apparently the logic of simulation as an operative governmental interface: cop cities treat urban space as a strategic composition of crowd behaviours, levels of engagement, and lines of sight, that can be dealt with through the disciplined use of force. All other elements of dynamics of the city that may be relevant to the politics of life are, by this very gesture of simulation, not so much negated than subordinated to the force that this model can exert: in dealing with protesters during a demonstration, indeed, the police first of all performatively shifts the level of the confrontation from the political to the military. Simulations in general structurally exclude many factors, and whatever they include, they include instrumentally: they are not a *description* or a *map* of the city, but a model and a series of operations that are conceived for its management and government. From Haussman to Le Corbusier, to redlining and the fragmentation of space in the occupied West Bank, we have a long history of the intersection of modern techniques of policing with the sphere of urban planning and architecture (see Lorinc 2022).

These model cities for law enforcement are, of course, an exceedingly simplified case of city simulation, but a clear and paradigmatic one

all the more. A similar logic of reduction and efficient modelling can be found at work in all the other, more complex and nuanced, structures, infrastructures, and environments that constitute the city: from housing to commuting, education, pollution, access to clean water, distribution of workplaces and so on. Whenever a top-down management or a centralised somatechnics of life is imposed upon and against more autonomous, democratic, and grassroots forms of dwelling in and transforming the city, it has to recur not only to precise maps of the city but to dynamic and workable models of urban life itself.

This imperative, I think, finds two complementary faces in the imaginaries of city building video games and those of the smart city. Bringing together the digitally simulated city and the ICT managed city, then, I want to show that their common operative logic is a central element in the epistemology of architectural power and a founding principle in the systems of governance that characterise the neoliberal city. Classic city builder games like *SimCity* (Maxis, 1989-2015) or *Cities: Skylines* (Paradox Interactive, 2015-2023) literalise this principle by offering us the imaginary power to shape urban space and urban life through a panoptical interface that we can manipulate almost without friction. By making the forces that shape city life visible exclusively in terms of their management, as an articulation of needs and services, of biometrics and ergonomic technological solutions, city simulation games not only materialise and popularise some of the principles of contemporary technocracy and capitalist urban planning, but in a sense anticipate the idea smart city – a city that is, indeed, at once conceived and ruled as a live complex of information – precisely as a simulacrum.

Managing Happiness

When talking about city-building simulations, the authors of «SimCity and Black Box Simulations» suggest to make a distinction between the level of variables that the players manipulate and the level of «baseline assumptions» that structure the simulation and that, all while constantly interacting with them, the players cannot modify (Anonymous, 2017). The radius of effect of a school building in Simcity4, for example, is part of the level of variables – as the players can adjust it, up to a point, by the allocation of funds. The correspondences that the game establishes between the education level of the citizens and types of job demands, instead, is hard coded and the players cannot change it. At the level of its baseline assumptions, the game is significantly biased (see Friedman 1999), from its problematic race blindness, to the ways in which the gameplay systematically forces cities into constant expansion. What matters to me here is how Simcity and similar games propose a managerial model of the city that is, so to speak, less traditionally *economic* than biopolitical: production, for instance, is almost completely absent as a concern of the games in the series, and jobs themselves are treated as a *service* that must be provided in order to have thriving residential and commercial areas, and as a factor that produces certain kinds of "pawns" (the units of population in simulation games) by assigning them to different socio-economic classes. SimCity games frame every aspect of life as a tension between life needs, services, and budget, and favour a logistic rather than a social organisation of space. Coherently, the greatest emphasis in a game

like SimCity4 is put on the management of traffic, but SimCity pawns only ever commute to and from work and never visit each other: the simulation squarely puts commuting over community.

The particular way of framing simulation that a game like SimCity mobilises depends on the articulation between the realism of the graphics, that produces an impression of fidelity to the real and provides visual pleasure of a spectatorial kind, with a fundamentally ideological set of baseline assumptions that produces a specific "literacy" about city life. Quite clearly, city-building games are not simulations of actual systems, as may be used in experimental science, or, as we have seen, in law enforcement, but rather didactic representations of theoretical systems: as we play, we are not learning much about how cities actually work, but we are rather learning the language of urban planning; we are not really invited to question how or whether the simulated city represents a real one, but only rehearsing and naturalising a particular discourse about city management. As in Deleuze, the most important question of resemblance here is not that between buildings and their digital image, but that of the relation that virtual and real cities have to the models through which they are understood and governed.

Yet, the modelling of social dynamics that is the real object of the game remains largely inaccessible to the players. This becomes potentially problematic when simulations are taken uncritically as educational tools. If some scholars take the simulation of the city in games like SimCity at face value (see Jackson 2008, see Lukosch et al. 2017), other scholars, like Julian Bleeker (2004) and the authors of the article on Black Box Simulations, instead, are more critical. Bleeker stressed how SimCity, notably by avoiding questions of race, puts forward a neutralised ideal of the city that fits with neoliberal ideology, and the authors of Black Box use the case of Magnasanti – a SimCity3000 city built for maximum efficiency by Vincent Oscala – as a way to expose within the game itself the implications of the game's baseline assumptions. According to the authors, Oscala's work makes evident how SimCity3000's simulation model is based on three fundamentally neoliberal, biopolitical and necropolitical, principles: growth, the partition of the city in isolated and self-sufficient enclaves, and the maintenance of only the barest levels of satisfaction and life expectancy for the inhabitants [FIG. 3].

Backed with enough police stations, and libraries, this dystopian city constitutes a perfectly stable, perfectly immobile confinement system, which was able to run without disturbances for 50000 game-years before Oscala pulled the plug on it. Through Magnasanti, what we see is how, beyond the benign interface and pleasing graphics of the Maxis series, lies in fact something close to the most violent implementations of neoliberal governance and the capitalist rationalisation and precarisation of life. Magnasanti is the threshold on which the model of SimCity becomes visible as such - where the visual representation of the city, that is, begins to resemble the structure of the program itself.

One of the most interesting aspects of the modelling simulation of the city in video games are the ways in which they attempt to integrate politics. I do not have the space to go into details here, but very consistently throughout the city simulation genre, protests, political activities, and city activities in their complex, are not seen as independent forces that shapes the city, but only appear as a response to other game dynamics that are regularly economic or administrative in nature. Problems of the city as they are reflected

on the population usually take the form of dissatisfaction, of needs not met, which may then lead to demonstrations if the dissatisfaction reaches critical levels, or, when coupled with low income, to crime. In the city builder genre as a whole, politics is never the expression of an agency, but only a symptom of bad management.

Even when games implement a political model in the simulation, they reduce political practice to the matter of the pawn's allegiance to a set of factions. It is the case of the *Tropico* series (PopTop Software 2001-2019), which puts the player in the role of the dictator ruling over a "banana republic" and is much more straightforward (and, yes, funny) in its representation of capitalist and authoritarian violence. The game defines a set of needs, likes and dislikes for the factions (ecologists are unhappy when certain industries are built, militarists are happy when there are many military buildings, which makes intellectuals unhappy, and so on) and this set of needs influences, among other things, each faction's relation to the player's avatar, which will in turn determine the results of periodical elections that decide (in case no fraud is committed) whether the player may go on playing the scenario. The model is much more articulate than SimCity's, but the taxonomic and instrumental framework by which pawn *happiness* is categorised, calculated, and managed remains the same, and remains fundamentally incompatible with a proper, political and philosophical, understanding of the intimate relation between politics and the city.

When Agamben (1999, 78) describes the fundamental belonging of human beings in language as a dwelling, he is using an implicit politico-architectural metaphor to name the openness and the inseparability of language and the human. Such metaphor is already at work in our very category of «politics» (from the ancient Greek *polis*) naming at once a structure of urban space and an idea of community. Politics, for Agamben, rests in the very openness and potentiality of dwelling, in the fact that the gestures to which human lives are consigned are not reduced to the expression of a pre-existing and separate being and, we can add, that the common use of spaces cannot be reduced to the enforcement of a plan or the realisation of a divine or natural design. Working in this direction, Camillo Boano (2017) has traced some of the possible connections between Agamben's philosophy of inoperativity and the politics of architecture. As Rancière has also argued, from a different but compatible standpoint (1999, 68), the perfect correspondence between nature and law that characterises the Platonic ideal of the city constitutes the paradigm of an identitarian negation of politics. In his view, politics is the manifestation of an experience, a voice, and an agency that are incommensurable with a given «distribution of the sensible» (Rancière 2013, 7) – that are, that is, *unmapped* and in conflict with the very principles by which a given model of reality is constructed and enforced. In this sense, we can argue that both Agamben's and Rancière's conceptions of politics entail a suspension of the operative power of architecture to construct and simulate "the city".

This conception of politics as potential dwelling and as emergence of dissensus defines very precisely the limit of simulation games and of the logic of simulation in general. Politics cannot truly enter the simulation because it is a force that invests the very baseline assumptions through which a situation, real or imaginary, is understood, and violates the principle of correspondence that is precisely what guarantees the conformity of what is

being simulated to its design. However precise the modelling and the feedback mechanisms that are put in place in order to trace and make manageable social and political practice, between simulation and politics, between design and use, there can only be a tension.

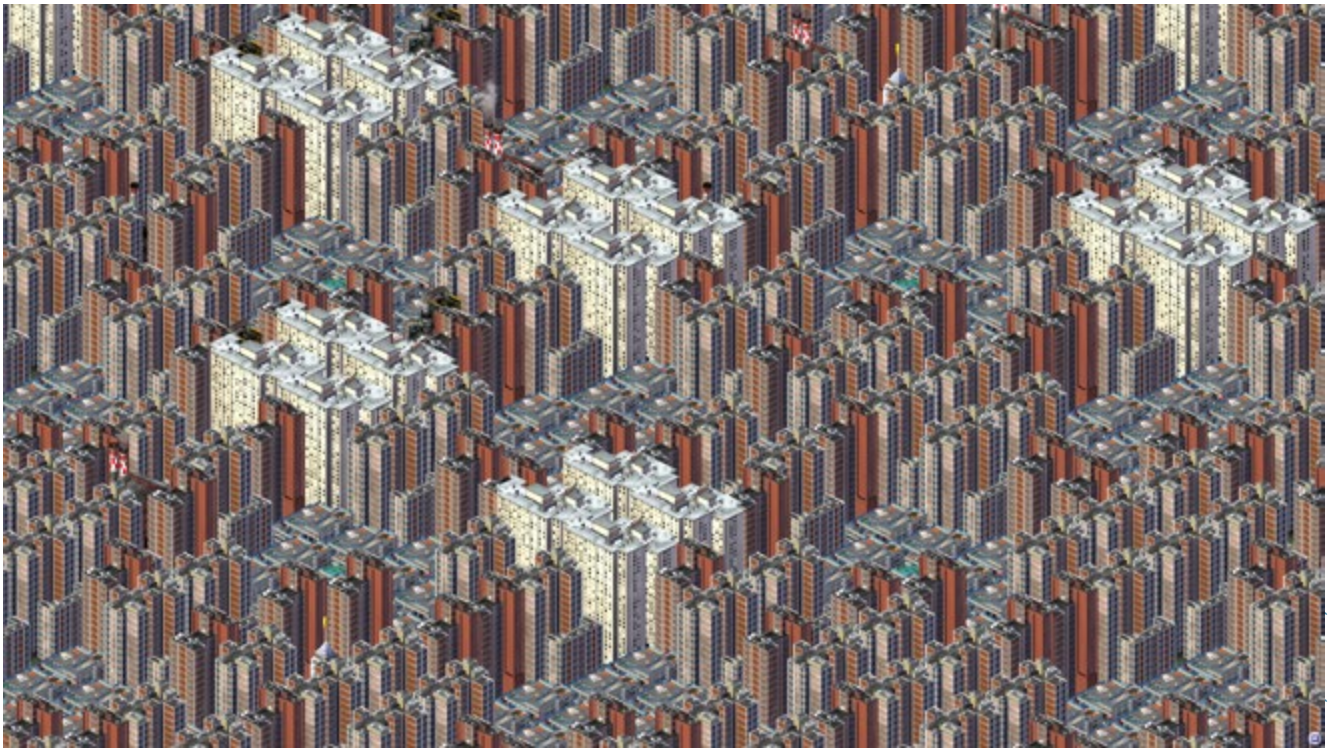
It is precisely this tension, structurally impossible in city simulations conceived like SimCity, that the *smart* model of urban planning sets itself to manage and, ideally, smooth out or erase.

Smart Cities

The simulated city of city builders video games can be taken as one of the seminal models of the "smart city", both in the more direct sense that these games propagandise the same kind of "intelligent planning", over politics, as the driving factor of city formation and organisation, and because both simulated and smart cities are conceived as a network of calculable needs and infrastructures. The SimCity model, as we may call it, a decade before the idea of smart city began to acquire the present currency, stressed very precisely the "smartness" of governance (the efficiency of its operations and the supposed "neutrality" of its logic) and promoted and naturalised its language [FIG. 4].

Despite many interventions that stress the elusiveness of the term (Joss 2019, xvi), under the label "smart cities" we can easily find a coherent understanding and theory of the relation between the city and its government. The smart city is a conceptual construct and a series of practices

[FIG. 3] TheMurderousCricket, *Saving Magnasanti*. https://community.simtropolis.com/journals/journal/5969-saving-magnasanti/



[FIG. 4] Smart Cities Infrastructure IoT. *Les Smartgrids* (2018). https://les-smartgrids.fr/smart-city-iot-choix-reseau-1-2/

situated at the convergence point of cybernetics and systems theory, the digital revolution, law enforcement, architecture, and urban planning. The concept integrates the extension of digital monitoring and remote control into a city-wide «internet of buildings» (Doherty, 2023) with a reinterpretation of city life itself on the model of new media social and communicational networks. If the smartness of smart cities often stands as short for digitally interconnected and efficiently managed, however, it also becomes a euphemism for panoptically controlled, centrally administered, and intensively policed urban spaces and, as such, it belongs to the longer history of the production and naturalisation of social inequalities through the management of city spaces – see, for example, June Manning Thomas's recent work on structural racism and city planning in the US (2023). One of the first implementations of smart technologies can indeed be considered the combination of biometric systems for the management of the population with new mass media surveillance technologies – for example, through the establishment of CCTV surveillance networks (see Donovan 2015; Amnesty International 2023).

It is important, I believe, not to separate the securitarian dimension of city smartness from all the others in which this paradigm is meant to answer specific problems like traffic or energy conservation. Smartness entails not only planning for profitable optimisation in the context of privatisation, or the efficient management of shrinking resources in the context of austerity and scarcity, but the architectural and technocratic management of matters that have immediate political innervations, and includes, through ICT-powered techniques of surveillance, segregation, and counterinsurgency, the management of political unrest and political life as such.

In this sense, smart city discourse may in fact be seen to repropose for

the 21st Century the ideas that ergonomics and the science of work proposed at the beginning of the 20th (see Rabinbach 1990, 287-288) which aimed at the solution of social issues through technical means. With smartness, we have an ergonomic imaginary applied not just to the organisation of production, but, like in SimCity's happiness management, to the solution of the logistics and the efficiency of life itself. As even March and Ribera-Fumaz, defending the democratic possibilities of the smart city, acknowledge: «proponents of smart cities forward an epistemological perspective that frames urban problems as engineering and technical challenges» (March & Ribera-Fumaz 2019, 229).

Alberto Vanolo (2017), from a critical and more theoretical position, has outlined four imaginaries of the smart city: smart cities built from scratch, as programmed environments; smart cities as dystopian securitarian cities; smart cities as the realisation of neoliberal digital participation, where pro-active citizens become citizen-sensors; and smart cities as part of resilience management in the context of ecological crisis. I think that SimCity in particular, and the city builder genre more broadly, integrate all these aspects and, as such, can be seen to have had a formative influence on smart city imaginaries, both in a genealogical and in an archaeological sense.

Smart projects regularly involve improving energy efficiency and mobility solutions through the use of ICT, but also the formation of «big data platforms to create database of large-scale, real-time data» about city life (Haarstad & Wathne 2019, 107). This third point is what is closest with the logic of governance in simulation games, which makes it the matter of establishing a feedback system network, on the lines of Wiener's cybernetic theory (1989, 24-26), in order to create an effective interface for control. The two city imaginaries – the sim and the smart – meet in the managerial interface that both, in their different way, establish. The smart city and the simulated city rest on a comprehensive, real-time, and reactive map of city dynamics: one, by constructing a representation of the city out of the very principles of urban planning, thereby consensually confirming them; the other, by going through considerable efforts to deploy networks of data collection devices and feedback sensors in order to produce an operational and workable simulation of real cities that would make them more *programmable*.

Smart cities and city simulation games address how digital technologies fit in the convergence of architecture and biopolitical government that, I think, is characteristic of the field of tensions in which contemporary architectural theories and practices are situated. Simulated and smart cities alike reinforce the neoliberal model of city politics, where discriminations and structural violence are made to disappear, by «cosmesis» (from the etymological root of *cosmos* and *order*) or police; where extensive and exceptional powers are held by unquestionable economic forces and actors and overseers who are placed significantly beyond democratic accountability; and where more and more aspects of city life are reduced within a calculable economy of commodities and needs.

Even a brief glance at the logic of simulation in city simulation games and smart city discourses, such as the one I propose in this article, suggests, I think, to shift our attention toward the performative dimension of meaning in architecture, where signification is less a matter of encoding and decoding specific meanings and more a matter of understanding the power of the fact

of language (of structures, forms, and models) as such. In contemporary discourses and imaginaries of urban planning, in particular, modelling becomes a prime instrument of government and government is exerted more and more through direct techniques of power-knowledge rather than through political means articulated on the model of dialogue and persuasion. (CD) City simulation games and smart city plans meet precisely where this force of modelling and interpretation impacts bodies directly: where economic management and architectural planning not only share a problematic proximity to corporate and State power, as they obviously did before, but become direct instruments and media that shape how lives are lived and understood.

In relation to politics specifically, then, as we have seen, city simulation games and smart cities work together at reducing the gap that exists between real cities and their model, closing the potentiality of the relation between words and things into a factual and consensual order, as suggested by Agamben and Rancière, respectively. With a sleight of hand, politics proper, as a disagreement on the base principles that regulate the understanding and the formation of the social-architectural, cosmological, space itself, is erased from the scene of the *polis*. SimCity simulations and the smart city, in this sense, are developments and intensification of the inurbane cities Bookchin described (1974), and occupy the same zone of indifference between the management of systems and the government of the community that defines the contemporary neoliberal order.

(CD) CARLO DEREGIBUS
However, it seems to me that two different scales are here compared, the architectural and the urban ones. I'm not saying that the meaning of architecture is a matter of encoding and decoding, I agree with you, but at the same time, at the architectural scale, the same logic that influence urban planning concretise into a building and its features, and this level enriches or, probably, masks the meaning dimension you're highlighting.

CARLO COMANDUCCI
This is a fair criticism, I think. In the situations I was considering, I did see a characteristic tendency to conflate architecture and urban planning, as well as both with a broader field of disciplinary techniques. I believe it is interesting to note and theorise this convergence, but I agree that one should also pay attention to the ways in which these various levels diverge and are articulated.

CARLO DEREGIBUS
Looking at the intermediate dimension – the masterplans scale – your point is very clear indeed.

Bibliography

Agamben, G. (1999). Kommerell: or, On Gesture. In *Potentialities: Collected Essays in Philosophy* (77-85). Stanford, CA: Stanford University Press.

Agamben, G. (2011). Nudity. In *Nudities* (53-90). Stanford, CA: Stanford University Press.

Agamben, G. (2017). *Homo Sacer: The Omnibus*. Stanford, CA: Stanford University Press.

Akbar, A. A. (2023). The Fight Against Cop City. *Dissent,* 70 (2), 62-70. https://www.dissentmagazine.org/article/the-fight-against-cop-city/

Amnesty International. (2023). Automated Apartheid: How facial recognition fragments, segregates and controls Palestinians in the OPT. https://www.amnesty.org/en/documents/mde15/6701/2023/en/

Anonymous. (2017). SimCity and Black Box Simulations. *Infra-stories*. Wesleyan University. https://infra-stories.wordpress.com/2017/05/16/simcity-and-black-box-simulations/

Baylouny, A. M. (2009). Fragmented Space and Violence in Palestine. *International Journal on World Peace* 26 (3), 39-68.

Baudrillard, J. (1994) [1981]. *Simulacra and Simulation*. Ann Arbor, MI: The University of Michigan Press.

Bleecker, J. (2004). *The Reality Effect of Technoscience*. Doctoral dissertation, University of California Santa Cruz.

Bonin, L. & Liochon, P. (2021). The Roundabout as a Place of Struggle: Establishing a Place and Facing Repression. *Espaces et Sociétés* 183 (2), 115 to 130.

Bookchin, M. (1974). *The Limits of the City*. New York: Harper Colophon.

Bromley, R. (2021). Fragmented Spaces/Broken Time: Restoring the Absence of Story in the West Bank of Palestine. In *Narratives of Forced Mobility and Displacement in Contemporary Literature and Culture: Border Violence* (181–231). Cham: Palgrave Macmillan.

Butler, J. (1990). *Gender Trouble: Feminism and the Subversion of Identity*. New York: Routledge.

Butler, J. (1993). *Bodies that matter, on the discursive limits of "sex"*. New York: Routledge.

Certomà, C. (2015). Expanding the 'Dark Side of Planning': Governmentality and Biopolitics in Urban Garden Planning. *Planning Theory*, 14 (1), 23–43.

Choay, F. (1992) [1974]. Urbanistica e Semiologia. In C. Jencks & G. Baird (edited by), *Il Significato in Architettura* (30-44). Bari: Dedalo.

CrimeThinc (2022). The City in the Forest: Reinventing Resistance for an Age of Climate Crisis and Police Militarization. https://crimethinc.com/2022/04/11/the-city-in-the-forest-reinventing-resistance-for-an-age-of-ecological-collapse-and-police-militarization

Cuvelier, A. (2023). Sainte-Soline: Repenser Notre Rapport à l'Eau. *Multitudes* 2 (91), 19-28.

Deleuze, G. (1983) [1969]. Beyond Platonism. *October*, 27, 45-56.

Descola, P. (2013) [2005]. *Beyond Nature and Culture*. Chicago, IL: The University of Chicago Press.

Doherty, P. (2023). *Smart Cities: Reimagining the Urban Experience*. Milwaukee, WI: Quality Press.

Donovan, K. P. (2015). The Biometric Imaginary: Bureaucratic Technopolitics in Post-Apartheid Welfare. *Journal of Southern African Studies*, 41 (4), 815–833.

Friedman, T. (1999). The Semiotics of SimCity. *First Monday*. https://firstmonday.org/ojs/index.php/fm/article/view/660/575

Haarstad, H. & Wathne, M. W. (2019). Smart cities as strategic actors Insights from EU Lighthouse projects in Stavanger, Stockholm and Nottingham. In *Karvonen, A. et al. (edited by). Inside Smart Cities: Place, Politics, and Urban Innovation* (102-116). London: Routledge.

Handel, A. (2013). Gated/gating Community: The Settlement Complex in the West Bank. *Transaction* 39 (4), 504-517.

Ingraham, C. (2023). *Architecture's Theory*. Cambridge, MS: MIT Press.

Jackson, M. (2008). Making Visible: Using Simulation and Game Environments Across Disciplines. In Davidson, D. (edited by). *Beyond Fun: Serious Games and Media* (7-16). Pittsburg, IL: ETC Press.

Joss, S. (2019). Preface. In Karvonen, A. et al. (edited by). *Inside Smart Cities: Place, Politics, and Urban Innovation* (xvi-xix). London: Routledge.

Lorinc, J. (2022). *Dream States: Smart Cities, Technology, and the Pursuit of Urban Utopias.* Toronto: Coach House Books.

Lukosch et al. (edited by). *Simulation Gaming: Applications for Sustainable Cities and Smart Infrastructures*. Conference proceedings. 48th International Simulation and Gaming Association Conference. Cham: Springer.

March, H. & Ribera Fumaz, R. (2019). Barcelona: From corporate smart city to technological sovereignty. In Karvonen, A. et al. (edited by). *Inside Smart Cities: Place, Politics, and Urban Innovation* (229-242). London: Routledge.

McLuhan, M. (1994) [1964]. *Understanding Media: The Extensions of Man*. Cambridge, MA: The MIT Press.

Miaari, S. & Milosav, D. (2023). The Effect of the Separation Wall on the West Bank Labour Market. In A. H. Sa'di & N. Masalha (edited by) *Decolonizing the Study of Palestine: Indigenous Perspectives and Settler Colonialism after Elia Zureik* (269-294). London: I. B. Tauris.

Pawley, M. (1992) [1974]. La Casa del Tempo. In C. Jencks & G. Baird (edited by*), Il Significato in Architettura* (147-180). Bari: Dedalo.

Preciado, P. B. (2019). *Pornotopia: An Essay on Playboy's Architecture and Biopolitics*. New York: Zone Books.

Quet, M. (2022). *Flux: Comment la Pensée Logistique Gouverne le Monde*. Paris: Zones.

Rabinbach, A. (1990). *The Human Motor: Energy, Fatigue, and the Origins of Modernity*. New York, NY: Basic Books.

Rancière, J. (1999). *Disagreement: Politics and Philosophy*. Minneapolis, MN: University of Minnesota Press.

Rancière, J. (2013). *The Politics of Aesthetics: The Distribution of the Sensible*. London: Bloomsbury.

Rancière, J. (2009). Contemporary Art and the Politics of Aesthetics. In B. Hinderliter et al. (edited by), *Communities of Sense: Rethinking Aesthetics in Practice* (31-50). Durham and London: Duke University Press.

Robbins, P. (2012). *Political Ecology: A Critical Introduction*. Malden: Wiley-Blackwell.

Smith, D. W. (2006). The Concept of the Simulacrum: Deleuze and the Overturning of Platonism. *Continental Philosophy Review* 38, 89–123.

Sullivan, N. (2014). Somatechnics. *Transgender Studies Quarterly* 1 (1-2), 187–190.

TenHoor, M. (2007). Architecture and Biopolitics at Les Halles. *French Politics, Culture & Society* 25 (2), 73-92.

Thomas, J. M. (2023). Racism and US Urban Planning. In Mahmoudi et al. (edited by). *Infrastructure, Wellbeing and the Measurement of Happiness* (63-85). New York, NY: Routledge.

Tiqqun. (2020) [2001]. *The Cybernetic Hypothesis*. Pasadena, CA: Semiotext(e).

Tzonis, A. (1972). *Towards a Non-Oppressive Environment*. Boston, MA: i Press.

Vanolo, A. (2017). Politica e Cittadinanza nella Smart City: Alcune Riflessioni sugli Immaginari della Città Intelligente. *Rivista Geografica Italiana* 124, 1-16.

Wiener, N. (1989) [1950]. *The Human Use of Human Beings: Cybernetics and Society*. London: Free Association Books.