Introduction

Architecture has a long tradition to be thought in relation to the human body. But saying for example that architecture ‘has a body’ and a body ‘has an architecture’ historically separated forms from their internal relationships. Secondly, both are usually held as static things. Often falling back on reducing the (changes of) built environment to a representation of (a changing) social reality, this representational mode of thinking deteriorates problems of transformation, as for example the process of modernization. Against those representational models of thought the following paper will assume the built environment as explicitly productive. Poststructuralist thinkers have initiated a widespread refraction of these separate realms of bodies and relations, form and meaning, while connecting the processes how bodies take form, and how relations come to matter. More than tooling this concept of morphogenesis for architectural design, form-taking crucially affects architecture theory and history in its conceptualization of the formation of bodies and their ability to change.

In this line of thinking the essay approaches both architecture and humans as bodies, and reposes their changes as a matter of becoming. Such a post-human and new materialist take would theorize form-taking on the same plane of composition: Bodies, more than static delimited objects, are dynamic material configurations. Their material configurations constantly re-configure in performances describing all phenomena called life. Be it viral, human, architectural, political, or cosmic, all bodies manifest ecologies that constantly reconfigure matter (in the processing of matter organic and mineral compounds, liquids, solids and suspensions, signals and information) that affords change. In an environment that shapes forms of life that in return shape their environment, bodies ‘change’ in a two-fold adaption to, and of, a likewise changing environment.

However, this understanding is itself a modern product. Medical knowledge, problematizing the well-being of the human body, and the subsequent fields of biology and ecology developed in tandem with an emerging concern to make the city a healthy environment. The massed milieu of city’s has historically often proven unstable, triggering pestilences and outbreaks of diverse kind. As an interface between the fields of care and design, clinic conceptions of the body gain increasing importance to understand, theorize and transform the city.1

Helpfully today, recent biomedical and ecological knowledge enables a different conception of these transformation processes in retrospect. In our post-anthropocene age, we finally recognize urban bodies as specific anthropogenic ecologies. Over modern times cities have proven to become the preferred human habitat. The modernization of the built environment can thus be rethought as a consolidation of novel ecological communities, and as a rather problematic one so. The growth and flux of modern times repeatedly challenged the biological homeostasis of
these communities, a situation that—more than a question of risk— is maybe best rendered in terms of stress. Modern conditions triggered a significant response changing the physical structure of cities, transforming their medieval bodies into a metropolis’ configuration, while therewith transforming the life within.

Eventually, it was ecological thinking that challenged us to understand how change does not happen ‘in’ an environment. All that happens matters as a change ‘of’ environment. Unfortunately, architecture yet precisely lacks a reciprocal theorization on how its steady transformation of the built environment matters in return. The following is certainly only a first step searching for resonances between related theoretical accounts from ecology, biology, physics, and semiotics, to unfold the complexities entailed by such a perspective. The built environment is in fact both the territory, at once expression of modernization. This paper will theorize this double articulation from an ecosystemic perspective, in asking how the modern environment arranged the conditions for an urban form of life to take form. Concerned with modernization as a major phase of (self-) transformation, the following targets at architecture in two directions: first, in its relations to individuals; second in terms of its own individuation, i.e. its becoming-modern.

Inception: A Triptych of Clichés

The last century has composed a detailed clinical picture treating the metropolitan body. This symptomatology documents in numerous studies the technologies deployed in the reconstruction of its resource flows, its revolving modus operandi, and its unfamiliar appearance. In the prominent case of Paris studies rendered the becoming-modern of the city by giving attention to three different forms of modernizations, and to such an extent that they turned into clichés: [fig. 1]

1) In terms of the modern body, the most worn-out cliché of modernity might be Foucault’s analyses of the spatial dispositive of containment at work in modern institutions and their cascading deployment towards a cellular organization of the build environment. Given the formal emphasis in the past discourse on his concept of biopolitics it seems indeed important to reemphasize the eco-systemic genealogy, which brought about Foucault’s thinking through Canguilhem’s philosophy of biology, Haeckel’s concept of ecology as the study of ‘conditions of existence’, back to Virchow’s multicellular theory of the state organism. From the organism to its cells, from the body to its milieu, what remains invaluable in this changing epistemology are Foucault’s observations concerning the individuation of bodily and spatial formations, and their capacity of fabricating new forms of life.

Authors started to elaborate on the wider entanglement between Biopolitics and the Emergence of Modern Architecture as for example Sven-Olov Wallenstein in his eponymous book, by detecting how architecture in its becoming-modern withdraws from symbolically representing a given order and discovers its potential to itself become a tool for ordering, and for shaping new forms of life.3

2) The life-sustaining circulatory systems of the city were for long addressed separately through the emerging frameworks of infrastructures and planning. Marking Haussmann’s renovation as the second big cliché, studies charted the impact of restructuring the medieval city by means of specialized networks that channel and manage material flows. Cutting a long story short: infrastructure thinking gave us an intricate insight to disciplinary environments. It makes evident that ‘containment’ is less an issue of mere enclosure, but rather of engineering the flows of resources and desires that allows the city to grow and reproduce, to maintain their structures, and to respond to their environments. Infrastructures concretize how relationships are drawn and interdependencies are produced. Thinkers continue to liaise effectively with this
modernization regarding the cities changed organization, describing the role of infrastructure as the management of transformation in pursuit of a new network paradigm.

3) In regard to psychological modernization most authors and artists have started imaging the desubjectivation of citizens and their alienation in becoming urban forms of life. The former city right had bound together a social body. The rules of urbanity cut this relationship asunder, forcing urbanites to become a mere part of the physical processes of city-life itself. Walter Benjamin left us his description how ‘the domestic interior moves outside’ and he characterized the figures and figurations of this process. Covering formerly open-air public space, to ease – say control – the environmental conditions for the economic exchange of goods, the Parisian arcades became the third cliché. Taken as some compensating sphere, the emergence of the bourgeois intérieurs and arcades, the passages couverts, were pictured as the generation of new typologies of accumulation, and elaborated on widely regarding an emerging class consciousness and new spaces of self-definition at the beginnings of the consumption-oriented environment of Europe’s capital cities.

Those three images are, rather significantly, widely mistaken as three separable pieces; at best they are held as complementary forms of modernization, due to different interdisciplinary interests between architecture theory, philosophy, social sciences and literature. Taken apart in different fields and from different perspectives, they formed a great body of knowledge constantly added to. But while being a contingently obligatory, but not logical or necessary cascade of events, those aspects were hardly exposed together, as a strange triptych.

If we link the aspects, we can quickly recognize the manner in which they depict (new) forms and their (new) interaction, more than asking how they take form. Since ‘[t]he constituted does not resemble its process of production, its constitution’ these images of thought fail to arrive at a basic understanding of the effectuating operating forces in what conditions those forms to take form. But approaching modernization precisely from the point of view of form-taking renders a critical blind spot at the very intersection of the three clichés. And, as I want to argue, it is precisely this blind spot that manifests the singularity of modern architecture. In order to reveal this scotomic error regarding architecture, a non-representational theory formation becomes necessary to see architecture as a material practice within an ecology of mutually co-determining factors – and not the determinant, nor the (over-) determined thing in a state of affairs. This conception would however be the basis to understand the formation of modern space as a specific ecology, and to shed light on its constitution. As a result, instead of simply connecting what was happening, it might be more interesting to ask, what’s going on in what’s happening?

My interest lies in the wider morphogenetic landscape of modernity. This provoked me to reconsider the clichés as interdependent surface effects caused on the same engineering strata of modern subjectivation. To arrive at this lower strata one would require a theory that interlinks the disciplinary dispositive within the disjunctive production of modern space, with the engineering of resource flows and connections of infrastructure, and the constitution of spheres of consumption, in the self-alteration of the same urban body. Thus it will be necessary to merge the three layers on the same level, by understanding that they, first of all, present material practices. From there, when taken as one piece – a morphogenetic map of modernity – we can close the triptych and fold its aspects for the sake of form-taking. This two-fold implication will conclude this paper.
Immunization as an immanent practice

In the following three parts I will introduce three notions of related morphogenetic processes – traversing the clinico-legal, material-discursive, physical-conceptual, ecosystemic-semiotic fields – that allow us to reconceptualize the formation of modern bodies (i.e. both humans and architectures). Let me start by bringing together the three aspects of modernization through what they form at base. Not to be mistaken as an analogous or super-structural principle, but as a common pattern of morphogenesis, enclosures, infrastructures and interiors perform a progressive internalization of externalities.

This first step will introduce a new concept opening the adaptation of bodies beyond biopolitical terms of normalization. To bring the spatial institutions of modernity (containment) and its spaces of circulation (infrastructure) on one plane, it will be necessary to reframe Foucault’s notion of biopolitics and its concern with its impact on the individual body (i.e. from its militant disciplinary dispositive and the formal structures, practices, institutions, architectures) by redirecting the discussion about the constitution of individual bodies and enclosures towards the questions how their (let’s call it) ‘togetherness’, their ensemble is made possible. This possibility is no question of a virtual condition, but one of its actualization as a world. Deleuze and Guattari posed this as a problem of consistency.6 The resulting question is thus, what constitutes the (re-established) homeostatic conditions of modern heterogeneity, without fully neutralizing it?

Roberto Esposito’s affirmative take on biopolitics offers the most promising considerations in this regard. Whereas Foucault problematized biopolitics in terms of the individual and its body, Esposito approaches existential territories (to use Guattari’s term) where ‘community is the condition.’7 A matter of heterogeneity then, he connects and extends well-known thoughts in postmodern critical (and clinical) thinking through the clinico-legal concept of immunization of which he finds ‘the most refined articulation’ in Niklas Luhmann’s account on social systems.8 Constituting a ‘specific form of modernization’, Luhmann had described a strangely immunitary logic at work between systems and environments. Esposito repeats this diagnosis in his recent work *Terms of the Political*, to describe how in this modernizing process ‘the problem of systemically controlling dangerous environmental conflicts is resolved not only through a simple reduction of environmental complexity but instead through its transformation from exterior complexity to a complexity that is internal to the system itself.’9 Seeing biopolitics from this perspective, Esposito no longer constricts modern individualization to shaping docile bodies by larger socio-economical power relations. This take enables us to understand the individuation of society, i.e. both its own becoming-modern and the formation of individual subjectivity, through the plasticity of heterogeneous assemblage as a system or ecology itself.

While asking ‘[w]hat is immunization, if not a progressive interiorization of an outside?’10 Esposito poses a monstrous transdisciplinary problem, and architectural concern. A first complication would derive from rethinking how the interiorizing agency of architecture participates in this system, instead of merely housing or giving form to it. But this agency might easily be instrumentalized in a (bio)politicization of architecture, similar to Pier Vittorio Aureli’s more Agambian take.11 Esposito unfolds some thought regarding this interiorization, worth quoting at length, which would cross such perspectives:

To this first strategy of interiorization, however, which is activated by an immunitary process, a second one is added, which is much more laden with consequences for environmental difference – namely, its complete inclusion within the system or its objective elimination. This development in Luhmann’s thought, which occurs when he adopts the biological concept of autopoiesis, shifts the lens from the defensive level of systemic
government of the environment to an internal self-regulation of systems [...]. The system reproduces itself in increasingly complex forms, such that it constitutes the very elements that compose it.12

The image we have all been told that the immune system be some sort of military device within our bodies is seriously out-dated. First, the idea that antibodies flow within our vascular and limbic systems, in-between our flesh and bones, controlled by our cognitive apparatus, follows a conception that separates mind, body and metabolism, whereas they are assembled on the same plane of composition. Second, illnesses are still held as something that happens ‘to’ a body, or ‘within’ it, instead of taking it as a non-homeostatic problematization ‘of’ its inherent heterogeneity.

More than reacting to some state of exception, immune systems build up a milieu of experience and patterns of responsiveness. Immune systems ‘operate without communication’ as Luhmann claimed.13 Since the material flows of signalling substances operates on the same ontological plane, on which the forms are assembled, there simply is – thinking par le milieu – no different medium with which communication could be transmitted. In this regard one of the most important features for immunological responses relies on the body’s ability for so-called Self/Non-self discrimination and its capacity to recognize patterns of potentially pathogenic development. As such, the concept of immunization calls for a complete refraction of the paradigms of the pathological/normal. The object of such a material practice is thus no longer a matter of normalization; immunity rather features some calculated sort of laissez-faire. Even more than Maturana and Varela term of autopoiesis, and Luhmann’s modification of it as a general systems concept, immunization not only addresses how a system reproduces itself, how it leads a life, but also how it actually negotiates difference.14 In this Deleuzo-Guattarian perspective, we have to insist that

Difference is difference in degrees of ‘power’; in interpreting this term we must distinguish the two French words *puissance* and *pouvoir*. In social terms, *puissance* is immanent power, power to act rather than power to dominate another; we could say that *puissance* is *praxis* (in which equals clash or act together) rather than *poiesis* (in which others are matter to be formed by the command of a superior, a sense of transcendent power that matches what *pouvoir* indicates for Deleuze). In the most general terms Deleuze develops throughout his career, *puissance* is the ability to affect and to be affected, to form assemblages or consistencies, that is, to form emergent unities that nonetheless respect the heterogeneity of their components.15

By echoing this distinction Esposito’s affirmative account tells apart the Foucauldian notion of biopower into a politics of life (‘biopotenza’ in his terms) from a politics over life (‘biopotere’). This helps us to push past the conceptual transition we underwent from modern defense-thinking – a construction of stability that power is concerned with – towards contemporary issues of control, with the potentials and incapacities of internal self-regulation within permanent change. In line with the new self-conception derived from the anthropocene hypothesis, this adds a far-reaching ecosystemic aspect to Michael Hardt’s statement, how the global society of control has produced ‘a world with no more outside’.16 Immunization calls ‘into question the very ideas of any outside.’17

**Arrangement as a productive formation**

Immunological thinking addresses biopolitics no longer in terms of containment and normalization, bodies and societies, individuals and power, and heterotopias, but as a matter of inclusion and differentiation, embodiment and assemblages, heterogeneity and self-regulation, and ecologies. It addresses the body’s immanent capacity for
adaptation and self-transformation as a responsive form of embodiment. Immunity does not operate through barriers of separation between inside and outside (catchword: ‘defense’) where the filtering of relations is not a filtering of pre-existing elements. Instead it produces new limits as filters of relations (‘control’). Thus material-discourse practices are themselves boundary-drawing agencies. This brings us to a second point.

The modern role of ordering of the built environment has sufficiently been described by analyses following Foucault. An important step to understand architecture as a transformative practice was made with realizing how architecture in its becoming-modern stops to symbolically represents a total order, but become itself a tool for ordering a given totality. The ‘role’ of ordering continues to underlie power structures, albeit they are themselves forms, not conditions. To credit that architecture does not represent social reality, but how it produces it in the first place the following concept targets at bulldozing – a kind of theoretical Haussmannization – the historically elevated stand of forms.

A series of authors from Deleuze onwards challenged us to think relations as prior to their relata, which only emerge as a secondary effect. To overcome the dualism between matter and meaning recent theories of new materialism (a term coined by Manuel DeLanda and Rosi Braidotti in the late nineties) take up this relational ontology by theorizing precisely their irreducible entanglement. Karan Barad’s agential realism, that blurs classical distinctions between ontology, epistemology and ethics, offers the most provocative thoughts in that regard. Her book Meeting the Universe Halfway postulates how material arrangements attain a fully-fledged agency in producing reality and meaning. In her reading, spanning the physical-conceptual to the material-discursive, Barad initially criticizes that

If Foucault, in queering Marx, positions the body as the locus of productive forces, [then such a theory] would necessarily take account of how the body’s materiality [...] and how other material forces as well [...] actively matter to the processes of materialization.20

As Foucault’s ‘largely postrepresentationalist account’ fails to outline how bodies come to matter, Barad approaches the body by relating it to experimental set-ups. She brings its materiality on a performative level. It is Niels Bohr’s philosophy-physics and its ‘proto-performative’ take on experimental apparatuses from which she derives a new theory formation.21 Apparatuses are not mediating devices or laboratory instruments to discover reality, but they become constitutive of creating new phenomena. She cites Ian Hacking to remind us that

Most experiments don’t work most of the time. To ignore this fact is to forget what experimentation is doing. To experiment is to create, produce, refine and stabilize phenomena [...] But phenomena are hard to produce in any stable way. That is why I spoke of creating and not merely discovering phenomena.22

In this reworking these relationships, she posits that apparatuses are not ‘static arrangements in the world’, with which to detect or record pre-existing phenomena of reality. Instead, she reformulates how apparatuses become ‘dynamic (re)configurings of the world’. Thus they produce differences that matter as observable phenomena. Agential realism challenges us to rethink morphogenesis as phaenogenesis at once. In claiming that arrangements become ‘the material conditions of possibility and impossibility of mattering’ Barad provokes a wholly new perspective on material practices and bodies, that allows us to conclude on this second point of material arrangements.23

Barad reposes how the material configuration of experimental set-ups produces physical
phenomena, enabling new epistemic realities. By theorizing that (and how) new material forms cause new phenomena, can we not rethink the emergence of new social realities in the same way? My (architectural) interest in this kind of etiology of material arrangements lies precisely in the aspect of configurings within semiotic systems, of which I consider the built environment to be one. Agential realism enables us to reposit and re-theorize, how processes of subjectivation, the de- and resubjectivication of modernity become actually configured by the physical arrangement of the modern city. For me, the notion of arrangement does not denominate some state of constellation. It names a two-fold dynamic of becoming: first, an adaptation to a given condition, and second, an alteration of the environment that constitutes those conditions. How does a body arrange itself to new and challenging conditions (i.e. the emerging socio-political and economic conditions encountered in modernity), and how does that cause an altered physical arrangement of a new life-world within these conditions? Thus likewise to Barad it involves an ethical dimension.

While Deleuze and Guattari have already laid out such an arrangement theory in *A Thousand Plateaus*, for a strange reason precisely this part of their work has received little attention. The next part will retrace some implications of their work, as they gave us exactly the two crucial examples we need: the Panopticon and the DNA.

**Stabilization as an expressive becoming**

From the idea of experimental arrangements as phenomena-producing material configurations, we arrive at a third and very crucial refraction of modernization processes. With the growth of modern times change presented a steady process. As said in the beginning, in ecology change does not happen ‘in’ an environment, as rather ‘of’ it. Given that modernity is frequently rendered a period of massive change, we do actually ignore its massive attempts of stabilization, and precisely the stabilization of its transitional environment (i.e. migration, resource scarcity, etc.). Through Barad’s agential realist understanding of Hacking’s take on experimentation, it is – contrary to the transience of modernity – the processes of stabilization that precisely appears to us as modernization. This means that architecture needs to be reconsidered as a fundamentally transformative practice, but only in order to stress how during modernity and its steady change, its transformative function became to make cities more stable. In this becoming-modern, the fundamental ecological question was how the modern city could form a new homeostasis. **How can a thing become stable?**

A theory that epitomizes this problem is of course Deleuze and Guattari’s concept of *agencement*, or assemblage. Their metaphysics of difference approaches the problem how things and their meaning can change in reverse, following Gilbert Simondon’s impulse that the metastable process of becoming is nothing to be explained, but an answer. The key moment for approaching the ‘genesis of form’ is in *A Thousand Plateaus*. Here they synthesize a complex approach that aims to deep-six the representational form-content dualisms. Allow me to refer to the full complexity of their concept of a process of ‘double articulation’, before outlining this two-fold genesis of geological, biological formations as much as social ones. In their geo-philosophical perspective Deleuze and Guattari place all geneses within one material realm. Located within the formations of historical sediments – so-called strata – and their persistent creation of order (stratification), anything new can only form from a pre-existing stratum. They describe this formation as an extraction of an existential territory from a surrounding milieu. Territories are territorializations of a milieu. This process defines a content, as it ‘concerns the materiality of a stratum: the selection of raw materials out of which it will be synthesized.’ But here Deleuze and Guattari stop the trend to think this territory already as a form. Instead, in pursuit of a non-representational account on these processes,
they revise that form can only arise from (and thus be juxtaposed to) unformed substances. Thus in their words, it is the process of territorialization in, and by which substances merely articulate a form. This is the so-called first articulation.

This selection features some ‘instance of intentionality’ (to use Guattari’s term), which must be seen as another articulation; a second articulation that concerns the expressivity of the stratum. Territories produce codes in a process of ‘folding’ or self-reference. Territories are only expressed, and thus actualized, by the codes they produce. The selected content articulates itself in its expression. But crucially, also expressions can consist of both formed and unformed substances.

Louis Hjelmslev’s tetravalent sign model, which broke up Saussure’s bilateral signifier/signified model, had reweaved the relationships between the notions of form and content, substance and expression. Deleuze and Guattari finally understand this interrelated genesis as a semiotic system, producing meaning through material practices. Hjelmslev’s net offers Deleuze and Guattari the two-fold structure of stratification: In this matrix a substance of content articulates an assemblage’s chosen material; a form of content articulates an assemblage’s chosen order or hierarchy; a substance of expression in which an assemblage articulates its structure; and a form of expression in which an assemblage articulates its organization. [figs. 2-3]

To bring us back to the form-taking of the built environment, Deleuze himself already described an architectural function in this process. On the one hand, in its irreducible state of things, every ‘form of content’ can be considered an ‘architecture’. But beyond this conception, Deleuze defines – the other way around, – built architecture precisely as a form of content. First in A Thousand Plateaus and later in Foucault he uses the prison as an example of a form of content, reciprocally co-emerging with the emerging diagram of surveillance societies.

The content has both a form and a substance: for example, the form is ‘prison’ and the substance is those, who are locked up, the prisoners [...]. The expression also has a form and a substance: for example the form is penal law and the substance is ‘delinquency’ in so far as it is the object of statements.

Here we face something else then Foucault’s post-representationalist prisoner/prison relation, designed according to Bentham’s diagram of panopticism as a sociopolitical, normalizing, separating and individualizing instrument. Deleuze and Guattari completely re-pose these relations. They approach the prison not in terms of individual bodies in relation to each other as a totality. [figs. 4-5]

They theorize a form-taking whole, in which a spatial arrangement gains a ‘function’ by how it arranges a multiplicity. They rethink it in terms of a collective body, by way of arranging the material relations in its compound: here as an arrangement that locks up (territorializing, content, passive), those who are to be locked up (folding, expression, dynamic), it draws together a state of affairs whose relations actually produce, or actualize relata as forms and their statements (i.e. the prisoners). Their troubleshooting of the Foucauldian system therewith recovers the full range of ecological and economical dimensions in the problem of arrangement. The full implication on the question, how things can get stable at all is given in their second example of the DNA. Here the form of content is given as the spatial configuration of proteins. It configures its productive potential, but even more importantly, it also lays out its reproductive capacities (or call it ‘continuous production’ to not fall back on an identitarian schema). Hence ‘form of content is reducible not to a thing but to a complex state of things as a formation of power (architecture, regimentation, etc.). An assemblage hence maintains some eigenstate of affairs producing and enacting
<table>
<thead>
<tr>
<th>content (sedimentation)</th>
<th>expression (folding)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>substance</strong></td>
<td></td>
</tr>
<tr>
<td>substance of content</td>
<td>substance of expression</td>
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<tr>
<td><strong>form</strong></td>
<td></td>
</tr>
<tr>
<td>form of content</td>
<td>form of expression</td>
</tr>
</tbody>
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**SC chosen materials**

**SE chosen order/hierarchy**

**FC (spatial) Structure**

**FE organization**

Figs. 2-3: Matrix of stratification (redrawn after Deleuze and Guattari, A Thousand Plateaus, 43ff).

<table>
<thead>
<tr>
<th>Panopticon</th>
<th>DNA</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC</td>
<td>Amino acids</td>
</tr>
<tr>
<td>Prisoner</td>
<td>A, C, D, G</td>
</tr>
<tr>
<td>SE</td>
<td>Nucleotide sequencing</td>
</tr>
<tr>
<td>Delinquency</td>
<td>ACDDGCAA...</td>
</tr>
<tr>
<td>FC</td>
<td>Proteins (spatial figuration)</td>
</tr>
<tr>
<td>Prison</td>
<td>DNA (Fold on itself)</td>
</tr>
</tbody>
</table>
those phenomena that ensure its own continuance. And a becoming describes precisely the experimentation to arrive at such.

**Refractions: The three syntheses of modernization**

Here, I want to return to the specific organization of modernity. Cutting across my discussion up to here, the process of stratification helps us to conceptualize the immanence of bodies’ or ecologies’ heterogeneity. It gives us another take on bodies or ecologies as performative embodiments, as a field of intensity (territory) in a steady process of (de-/re-) territorialization. The process of territorialization refracts the discussed process of immunization and the problem of a body’s self-regulation as a site of production (1). Through this lens we can see the boundary-drawing agency of material practices, as the de- and re-territorializing processes of permanent reconfiguration. Embodied ecologies, atoms, waves, humans, cities are the phenomena-producing arrangements of the first articulation. Bodies are no forms, neither are ecologies or architectures. **Articulated in** a form, bodies are products, while at once they remain a productive site (2). Their form of content is becomes a two-fold formation of power. The second articulation, in which those bodies expresses themselves, the articulation which constitutes its subjectivity, is a completely different matter. More than being simply productive, they adapt to reciprocate a reproductive metastability. As a recursive practice, this is a matter of folding (3). This act of folding, allows us to finally close a loop to the beginning, pertaining to immunization and the folding processes of its progressive interiorization of an outside.

My argumentation up to here was aiming at precisely this close loop, in the hope to share a certain astonishment. As much as Esposito conceptualizes immunization as the privation of persons from too much community, Deleuze conceptualized the fold as a relationship of oneself to (and ‘over’) ones ‘self’ by producing a controlled (or dominated) interior. Therewith Deleuze explicates these folding processes at the very heart of the formation of capitalist subjectivity, regarding the problem, how to ‘have’ means to fold that which is outside inside. From this perspective, is it not astounding that architecture (i.e. its stabilizing techne, its interiorizing function, its transformative agency) was never really addressed from an ecosystemic perspective on reproduction; as a continued production. It is my opinion that precisely here, at the intersection between architecture, philosophy, sociology, and ecology, a blind spot had emerged regarding the double articulation of modernity in built space. In their project on *Capitalism an Schizophrenia* Deleuze and Guattari have critically disassembled the body of capitalism, in which they outline the three syntheses that compose the ‘transcendental conditions’ of capitalist existence, which they located on each a semiological, physiological and psychological register. If we – as I have argued throughout – take all bodies on the same plane of material composition, then this ‘body of capitalism’ must be articulated in the urban territories and articulate itself in their processes of territorialization (political economy). Let us hence take a second look at the triptych presented before:

The abovementioned post-human understanding of bodies as heterogeneous assemblages and the concept of immunization, will refract the cliché on the modern spaces of enclosure. Modern spaces of enclosure do not in any way represent anything, also no diagram of forces. Rather, its inclusive development – as a diagram – constitutes the material condition of modernization. Beginning with the *inclosure* of common land in industrializing Britain, to the cellular building types across modern Europe, one can recognize a clear pattern of discretion as the spatial counter-actualizations to the formation of modern subjectivity. The morphogenetic hypothesis of the following is thus, extended from Foucault, that modernization has produced the individual as a discrete self, through configuring a likewise
discretely organized modern world. Therefore the Foucauldian cliché would require reformulation not in merely terms of individuals and spaces of enclosure and spheres, but in terms of assembling a heterogenous (as Peter Sloterdijk has put it) foam-like body without organs that produces a matrix of surplus appropriation, and of circulation and distribution. It performs what Deleuze and Guattari call a *disjunctive synthesis*, or a synthesis of recording, ‘of distributions and of co-ordinates that serve as points of reference.’ The cellular organization of modern space, its signifying totality, puts its co-emerging individuals in a relation of non-relation. Forming a body without organs, this synthesis gives the semiotic register of modernization. But, as Steven Shaviro describes on Deleuze’s three syntheses, 

In order to function, the disjunctive synthesis must be preceded by a connective synthesis, a synthesis of production, or ‘of actions and of passions’: a fuel upon which the body of capital is able to feed. And it must be followed by a conjunctive synthesis, a synthesis of consumption or consummation (consommation), ‘of sensual pleasures, of anxiety, and of pain’: a spark of self-enjoyment that discharges tensions and reboots the entire reproductive process.

Thus, let us see the other two clichés from this perspective. The abovementioned agential realist take on material set-ups for the production of social reality refracts the cliché of the infrastructural installation of urbanity as a synthesis of production. Infrastructuralization presents a matter of internal re-relation and re-arrangement, a distribution of inequalities, in both terms of spatial form-finding and adaptation to constraints. While looking at Haussmannization from the perspective of morphogenesis then, the emergence of infrastructure is less significant, than the economies and ecologies that develop along with its fabrication. With the internalization of externalities, new filters of economical relations are drawn, while earlier formations of customs are vanishing. In this connective synthesis, the construction of new infrastructure majorly altered the city. However, to read Shaviro’s words in relation to Haussmanization, the ‘first synthesis, the connective synthesis of production, can be identified with the actual labor process: that is to say, with “purposeful activity” that transforms the world.’ Therewith it concerns the physiological register of modernization. While considering the city as an organism, it propels the totalization of production: ‘Capitalism’s command is utterly simple: connect deterritorialized flows of labor and capital and extract a surplus from that connection. Thus capitalism sets loose an enormous productive charge – connect those flows! Faster, faster! – the surpluses of which the institutions of private property try to register as belonging to individuals.’

Finally, the abovementioned relationship between folding processes at work in capitalism and the interiorizing function of architecture thus will refract the Benjaminian cliché on modern subjectivity as a conjunctive synthesis. ‘For Kant, the world emerges from the subject’; but for Deleuze and Guattari, as for Whitehead, ‘the subject emerges from the world.’ From a morphogenetic perspective on the individualization of society, what has produced the modern individual is the segmentarity of modern society and its space. It conditioned a wide-spread promotion transforming feudal subjectivity (of subsistence) through preservation and production towards an urban subjectivity (of growth) beyond forms of surplus accumulation and value creation: consumers. This synthesis thus finally forms the psychological register of modernity. The production of new sorts of desiring-machines (passages, boulevards, parks, cafés, interieurs) marks a synthesis of consumption, in which ‘something on the order of a subject can be discerned.’ All it can do is to consume. But other than Benjamin’s flâneur, the subject of the conjunctive synthesis is ‘a strange subject, […] with no fixed identity, wandering about over the body without organs, but always remaining peripheral to the desiring-machines, being defined
by the share of the product it takes for itself, [...] being born of the states that it consumes [...].

**Conclusion: The double articulation of modernity in built space**

The three concepts of immunization, arrangement and self-regulation have allowed us to rethink the clichés of modernity from immanent and transversals perspectives regarding the morphogenesis of modern space. These refractions however also point us thus to a two-fold process of form-taking, that furthermore inflects these clichés in two directions: modern architecture’s relation to individuals, and both their process of individuation, or becoming-modern. Thus I want to conclude this paper by folding the triptych along these interpictorial lines of thinking, and therewith end with the triptych’s two-fold back face. [fig. 6]

In the triptych, a first crease can be made between architecture and its relation to individuals. When folding onto another the Foucauldian and Haussmannian depictions of modernity both focussing on the reconfiguration of public spaces and buildings, and their impact on individual bodies, what see how both neglect the individual sphere within the collective body. Itself confined to institutions and their spaces of enclosure, recent discourse eventually blinded out, how alongside the new infrastructures a much more powerful assemblage of subjectivation has taken form over the course of modernity. What has strangely been paid rare attention to is, how – with a cellular logic akin to barracks, schools, hospitals, etc. – over the course of modernity also modern living, apartments, have also taken form alongside Haussmannian infrastructural works. Opposed to Benjamins’s abovementioned thought that ‘the domestic interior moves outside’, I am rather interested in looking at how processes of interiorization condition a remnant domesticity to take place within an emerging form of dwelling and that mutually takes form with a new urban subjectivity of an emerging bourgeois and individual form of life. A space from which labor and production became increasingly outsourced elsewhere, the modern form of living became the prime arrangement of reproduction. Apartments, would need to be fundamentally addressed in relation to the constitution of capital(ist) cities and the subjectivity of its urban population. Becoming-modern is not a matter of being confined. The modern apartment became the very arrangement of an emerging urban form of life trying to ‘define’ itself by producing new filters of relations to themselves, to each other and to other agents within the same consolidating milieu of the modern city. Hence let me pose the entire question regarding modern ecologies in a very blunt way: As the most significant concretization of modernization in built environment, is it not the apartment that effectually arranged the modern world?

A second crease can be made between the Foucauldian and Benjamins clichés. Inflecting over processes of individuation, this fold would problematize the role of architecture in the configuration of modern subjectivity. In this picture, we find Caillebotte’s young man looking at the renovated city as a rather lonely figure that recalls Balzac’s description of the monadic universe of the Bourgeois. Opposed to Benjamin’s abovementioned thought that ‘the domestic interior moves outside’, I am rather interested in looking at how processes of interiorization condition a remnant domesticity to take place within an emerging form of dwelling and that mutually takes form with a new urban subjectivity of an emerging bourgeois and individual form of life. A space from which labor and production became increasingly outsourced elsewhere, the modern form of living became the prime arrangement of reproduction. Apartments, would need to be fundamentally addressed in relation to the constitution of capital(ist) cities and the subjectivity of its urban population. Becoming-modern is not a matter of being confined. The modern apartment became the very arrangement of an emerging urban form of life trying to ‘define’ itself by producing new filters of relations to themselves, to each other and to other agents within the same consolidating milieu of the modern city. Hence let me pose the entire question regarding modern ecologies in a very blunt way: As the most significant concretization of modernization in built environment, is it not the apartment that effectually arranged the modern world?
Notes
1. One of the big historical complications in (mis-)understanding the body was its assumed unity, rendering the city (and the state too) an organism, while foregrounded its system of organs (institutions) and their vital functions, its concerns for hygiene and contamination, its well-being, its identity, its autonomy.
2. Stress, against today’s conception that renders it some psychological imbalance, has an important physiological function. Bodies respond to stress by running programs of stress processing systems, as a systemic response to something increasingly happening, hitherto unencountered, yet unresolved. Stress presents a body’s method of reacting to events or long-term environmental conditions that challenge its internal stability. As a process of self-adaptation, long-term stress not only affects brain functions; it crucially generates lasting changes in its structure and new behavioural patterns. See e.g. J. Douglas Bremner (et all.) ‘Structural and functional plasticity of the human brain in posttraumatic stress disorder’, *Progressive Brain Research* (2008) 167, pp. 171-86. But more than suggesting that modernity is a kind of stress disorder (although I like the idea), my intention is to foreground that bodies possess a capacity for self-adaptation to changing environmental conditions.
10. Ibid.
11. Aureli’s posits that ‘Through its act of separation and being separated, architecture reveals at once the essence of the city and the essence of itself as political form: the city as the composition of (separate) parts.’ The city is here envisioned as a struggle-some ‘condition where parts are separated yet united by the common ground of their juxtaposition.’ Pier Vittorio Aureli: *The Possibility of an Abolute Architecture* (Cambridge: MIT Press, 2011), pp. x-xi.
18. Wallenstein, *Biopolitics and the Emergence of Modern Architecture*, p. 20
23

20. Ibid., 65. Emphasis in the original.
21. Ibid., 67.
26. The geological term conceptualizes dynamic intervals in a material environment, characterized by their internal consistency that distinguishes them from other strata.
35. Ibid.
39. Ibid.

**Biography**

Robert A. Gorny is founder of relationalthought.com, a nomadic architectural agency established in 2010 that challenges the modes in which our built environment is composed. He recently finished his post-professional studies at the Berlage Center for Advanced Studies in Architecture and Urban Design at Delft University of Technology. After receiving his Diploma degree in 2009 from the State Academy of Arts and Design Stuttgart, he was as a long-term freelance collaborator for SMAQ – architecture urbanism research in Berlin, working also on independent projects, writings and art installations. Currently he acts as guest teacher at the Chair for Methods and Analysis and as research assistant at the Berlage, both within the Faculty of Architecture (TU Delft), where he prepares his doctoral research on the ‘Genesis of Apartments’. 