ISTANBUL TECHNICAL UNIVERSITY ★ GRADUATE SCHOOL OF SCIENCE ENGINEERING AND TECHNOLOGY

CRISIS OF (POST-)CRITICAL
A REALIST PERSPECTIVE

M.Sc. THESIS

Mohammad AZAD KANAANI

Department of Architecture

Architectural Design Programme

JUNE 2018

TABLE OF CONTENTS

Page

1. Introduction

Modernity subjected human society to two intertwined axes of transformations: first, the general process of socio-economic and technological development (known as modernisation) and second the various cultural and/or 'subjective' responses to this process of modernisation (known as modernism) (Cunningham & Goodbun, 'Marx, architecture and modernity', The Journal of Architecture, vol. 11, n. 2, p 169-185). Architectural experience of modernity contains shared spatio-temporal form of both transformative changes as well. In a sense, it was the essential contradictions in both of these axes that fueled the emergence of critical architecture (and thinking). Contradiction between mass production and production by mass on one hand, and on the other, contradiction between transient (spatial) experience of modernity and traditional experience that occurred in longevity.

Modern architecture (as famously represented in CIAM manifesto), importing Kantian idea of (autonomous) critique as reflection upon essential (universal) conditions and limits of possible knowledge, rationalized and standardized architecture as a technical-informational objective (Rendell & Hill, 'Critical Architecture', 2006). In this technical agenda architects positioned as technocratic elite to translate methods from industry and then impose them into society through medium of architecture. Since priority was efficiency (getting much outputs from limited resources), modern architects managed to form standard prototypes, originally came from dictates of existing technology and industrial assembly line, to frame a high-quality mass production process which is managed to satisfy needs of as greatest number of population as possible. In this top-town reading of architecture any racial, national, gender or other distinction in any aspect of society was considered as irrational subject.

To exceed this linear narration, critical architecture (in general) confronted Hegelian understanding of critique, as reflection not only on essential but also on historical restrictions and social structures that constrain human thought, with Kantian idea of critique as self-reflection. This new narration engendered architecture to open up to oppositional dialectics especially in an interdisciplinary manner (e.g. dialectic between form and culture or politics) to question existing and demand alternative forms of social intervention (Rendell, 'Introduction' in Crtitical Architecture, 2006, p. 1-8). Along this shift to dialectical critique, two theoretical strains maintained their directing role in how critical (and even post-critical) architecture has been understood. First, critical theory of Frankfort school (specially Adorno and Benjamin) by uncovering fundamental contradictions in conditions of architectural imaginations and inspiring bunch of progressive trends in architecture. Second, structuralism of Althusser (and Barthes) which was imported into architecture by Tafuri and shaped (positively or negatively) all various narrations of critical architecture from 70s until now.

Jeremy Till (2011) defines critical architecture as architecture which possesses social conscious and intends social transformation (Till, 'Spatial Agency, Other Ways Of Doing Architecture', 2011). If we accept this minimal definition, Modern architecture cannot be considered as critical. Since although modern architects widely heeded social conditions specially mass-production need as an answer to World War destructions, their social agenda was efficiency reforms, which were simply designed to make what is already being done more effective. However, following up Till's definition, we can position different approaches to critical architecture possibilities. From skepticism of Tafuri and Jameson's minor revisions to it, critical theory itself and movements such as Archigram and Superstudio who referred directly to it, different narrations of critical architecture represented mainly by Eisenman-Hays and Koolhaas-Tschumi, to recent insurgent practices of neo-Deleuzians, all can be included under critical architecture discourse.

However, despite all these theoretical and practical attempts intended (or pretended) to interrogate stablished social relations and architectural norms, critical architecture today has lost its insight on what it demands in both strategies and objective stages, so that some critics, recently, consider it as crisis in critical architecture itself (Lahiji, 2014, 2016; Hartoonian, 2015; Ockmann, 2014). As Crawford (2009) explains, critical architecture concerns has been so distant from economic, political and social reality that architectural production faces; and concludes that architecture has never been critical. (Crawford, 'Agency and Architecture: How to Be Critical?', in Footprint, n. 4, 2009, p. 7-20).

In 1973 Tafuri, the Italian architect and critic, declared that architecture qua architecture (a cultural product located as 'superstructure') fails to reflect upon and seek alternative within social structures (as 'base') that condition its production (Tafuri, 'Architecture and Utopia', The MIT Press, 1976). In his rigorous critique, since architecture deals with economic, technological and legal structures which themselves are not architectural, "The mass of architects shouldn't worry, they should just do architecture." (Tafuri, 'There is No Criticism, Only History', Design Book Review, 9, 1986, p. 11). This classical Marxist critique that devaluates critical paradigms as deluding ideological veils has never found a significant respond in critical architecture theory, while its rough reality has always been standing in the background.

In its tragic history, while critical architecture has strived for distancing itself from both Kantian autonomy and Tafurian hetrotonomy, it has desperately failed in both. The ambition of releasing architecture from conditions of technocratic governments and commodifying market forces (Eisenmann) did not reach more than production of symbolic and social capital, and entering into the inner circles of capitalist corporations while equipped with a hidden agenda to challenge dominant economic and social order (Koolhaas) ended up in complicity with neo-liberal forces abandoning ideas of radical aesthetics or spatial manipulation.

But, this is only one side of tragedy in critical architecture story. By the mid-1960s, the discipline started to liberate itself from distanced reflection and negative critique (of criticality) and replaced environmental immersion and pragmatic engagement instead. Triggered essentially by rejecting sterility and negativity of (American) critical, post-critical totally assaulted any critical agenda for architecture, and refashioned it as a mere expertise relied on technological innovations. In this sense, it was just inversion of "fictional" criticality promoted by Peter Eisenman and Michael Hays developed in Eastern coast of the United States. Against oppositional dialectic and distanced reflection of critical attributed mainly to Derrida, post-criticality relied originally on Deleuze's non-dialectical theory- driven by concepts like rhizome, fold and virtual- to alternate 'indexical', 'dialectical', 'representational' (critical) architecture with a 'diagrammatic', 'atmospheric' and 'experimental' one. This allowed architecture to concern merely relationships within architecture and omit encounters between architecture and the world outside (language, unconscious, gender, class, etc.).

Although this paradigm has been abandoned in the last decade, even by its once proponents, it provided strategies and ingredients for the emergence of "new" paradigms in architecture. This "new agenda", incorporated to the post-structuralism's new turn toward ontology, shifted from theory as irrelevant to theory as ontology, and founded it on a specific narration of reality: a flat ontology with homogenized objects, which follows (is correspondent to) natural laws. Following this ontological view, new emerged trends such as "new pragmatism", "new materialism", "parametricism", claimed to redeem the given (premised) nature of architecture, and liberate it from distortion or alienation by constraints of plan, outcome, critiques, etc. Denying any idea of difference or struggle (among identities, agents, and values), the "new agenda" provided the opportunity for architecture to refashion existing concepts of human and architecture, and instrumentalise them according to managerial and entrepreneurial principles of neoliberalism. (Spencer, 'The Architecture of Neoliberalism', 2017)

Reviewing critiques on literature of (post) critical architecture and its legacy today, a frustrating disposition comes to notice: crisis, whether explicitly uttered or relegated to silence. Fraser, in 2006, mentions what we witness is a particular moment in architectural discourse: post-critical has been abandoned even by its formerly proponents, at the same time the shortcomings of previous models of critical architecture have also become evident. (Fraser, 'Introduction: The Cultural Context of Critical Architecture', in Critical Architecture, 2006)

This description of architectural predicament fits well with Gramsci's narration of crisis: "The crisis consists precisely in the fact that the old is dying and the new cannot be born" (Gramsci, 'Selections from the Prison Notebooks', 1971, p. 276). While "new" currents have seized values of architectural discourse and practice all over the world, critical camp has not been able to exceed interpretive reports of some casual experiences or disciplinary revisions of previous paradigms.

In the last decade, some attempts are made by a new generation of critical thinkers to transcend this cul-de-sack and reclaim critical capacities of architecture (among them Martin, Aureli, Fraser, Dovey, Lahiji and many others). To do this, they have attempted to re-problematize architecture and redefine its disciplinary meanings and borders and form a new critical agenda. In this new current, concepts like reality, space and agency has gained an unprecedented notice, while it seems holistic implications of these terms has remained relatively unexplained and underdeveloped. As I will argue, although promising in some aspects, these new rhetorics suffer an ontological deficiency to comprehend the depth of crisis that architectural praxis is involved, as in most cases (if not all) restore the same theories that they want to transcend as something new.

In this thesis, I posit that on one hand critical paradigm being taken up by structuralist view of architectural production has lost insight on opportunities of architectural agency. On the other hand, post-critical architecture, along devaluation of architectural agency by critical paradigm, has defined architecture as expertise of managing architecture's components rather than its relation with large concepts of society or politics. By borrowing concepts from

Critical Realism philosophy, I will argue that literature of (post) critical architecture is insufficient to provide a robust abstraction of architectural reality, since aside from ambiguity and arbitrariness of referent concepts and paradigms, a holistic view of 'causation' in both material and social domains of architecture has not been born yet, and this is where crisis of both paradigms lie. While critical paradigm dissolves architecture in macro concepts of history or society, post-critical makes this conflation reverse by breaking down architecture to its micro constituents. To support this claim, I will analyze main summits of (post) critical architecture's history: 1. Critical theory of Frankfurt school itself (which aspired some groups such as Archigram and Superstudio), 2. American narration of critical architecture (mostly promoted by Eisenman and Hays, and focused on aesthetic implications) 3. European criticality (mostly promoted by Koolhaas and Tschumi, and focused on practical implications). 4. Post-critical and "new" ontology. Through discussing main assertions and implications of each, I will apply a retroductive method to reach from symptoms of crisis to underlying structures and mechanisms that generate it. I will come to conclusion that the crisis of (post) critical architecture lies in the fact that it fails to comprehensively conceptualize stratified reality of architecture consists of all material, social, political and psychological domains. So that, while critical trends suffer from absence of ontology, post-critical paradigm involves a flawed ontology.

2. Literature Review

In 2009 AHRA (Architectural Humanities Research Association), a non-profit academic organization which supports interdisciplinary scholarship in architectural humanities, dedicated its first volume to “Critical Architecture”. This edited book contains original commentaries of some prominent scholars in architecture and urban theory, presented at the ‘Critical Architecture’ conference in 2004 at The Bartlett School of Architecture, UCL. This volume is among other scholarly attempts by some most reputed theorists in architecture and urban theory, mainly in Eastern coast of United States and Western Europe, to outline a new socio-political agenda for architecture in the conditions of new millennium.

In ‘critical architecture’ volume Jane Rendel, the main editor of book, introduces critical architecture as questioning disciplinary (autonomous) norms and methods structured by ideological apparatus, and instead demanding inter-disciplinary creative alternatives for the purpose of social transformation, be it by architectural criticism (self-reflection) or architectural design (embodiment). Regardless disagreements (even in that volume) on what type of practices can be considered as a critical project, there is a consensus on vitality of inventing a new mode of criticality.

A review on literature concerned with ‘critical architecture’ signifies a turmoil on the very foundations of its rhetoric. Whether openly uttered or tacitly acknowledged, the main theme of most (if not all) of these discussions is a flaw inside critical architecture discourse, and the necessity of revisionary or reinventory changes to resurrect a socially equipped discipline. Lahiji in 2014 puts, from the 1980s to the present, “in the “postutopian” condition”, the neoliberal ideologists from inside the discipline managed to evacuate it from socio-political dynamics and align the discourse with the agenda of contemporary postmodern capitalism and to conform its institutional, discursive, and non-discursive apparatuses (Lahiji, ‘Architecture Against the Post-Political’, 2014). It is not just radical critics like Lahiji who discredit critical content of architecture discipline. “Instrumentalized in theory and practice for managerial and entrepreneurial principles of neoliberalism” (Spencer, ’The Architecture of Neoliberalism’, 2017, p. 50), an exchange driven system, architecture as commodity and architect as labor (Schneider, ‘Beyond Discourse’, in Footprint, 2009), complicity with dominant economic forces of capitalism (Fraser, ‘Beyond Koolhaas’, in Critical Architecture, 2006), “thoroughly disempowered and ineffectual discourse if not entirely irrelevant” (Martin,’ Critical of What?’ in Constructing a New Agenda, 2010, p. 352) are only some of critiques made upon narrowed sociopolitical dimensions of current dominant paradigms, even if they pretend to be critical.

To confront this situation, while some scholars take a reconciliatory and more pragmatic path (e.g. Arie Graafland) and invite for bridging between new advances (especially in digital innovations) and critical thought, some others (e.g. Jeremy Till) incorporate to theoretical foundations of these new paradigms (such as ANT) but desire a distinct output (social transformation) through substitution of their tools and strategies. There are also few scholars in this new generation of critical thinkers who urge for coming back to the capitalist relations of production all along the complex process of architecture as departure point of analysis. In their view this insight on political economy of architecture allows for subversive intervention in (spatial) distribution of resources (Joan Ockman can be named as distinguished exponent of this approach). Considering the whole spectrum, we notice some key concepts has gained an unprecedented centrality and resonation in recent discussions. Among them three interconnected concepts, 'reality', 'space' and 'agency' located at the core of these revisionary attempts, so that further ramifications are mostly relied on managing how to deal with these concepts in the first place. For instance, different ideas of architectural agency, whether it is agency of architect, architecture or user, has led to different narrations of how architectural transformative action might be. As such, confronting these multiple approaches to "criticality' on their different narrations of 'reality', 'space' or 'agency' will be a sensible starting point to situate current challenges.

2.1. Reality:

'Reality' might be the most echoed concept among contributors of critical literature in last fifteen years. Some most prominent scholars inside the discipline has asserted vitality of restoring this core concept, albeit from different points of view. Arie Graafland urges for reclaiming reality as 'ground' or 'context' of architecture against increasing dominance of cyberspace in recent years. Reinhold Martin's project turns around juxtaposing reality with seemingly incongruent concept of utopia to coin the synthesis of 'utopian realism', which is an open-ended reconsideration of reality and never-ending challenge of (oppressive) status qua to demand some other, possible worlds. And Joan Ockman, despite utopian nature Martin's 'reality', accentuates on reality as intrinsic constraints of capitalist relations in architectural production (echoing Tafuri and Marx), and based on her analysis tries to draw an outline for a possible critical trajectory.

2.1.1. Graafland and Reality as Pragmatism:

Arie Graafland, as a key figure in architectural theory and notions of projective (post-critical) practice debates in Delft School of Design, involves the critical/post-critical discussions to reconcile these two (presumably) paradoxical paradigms. His idea of 'realism' gets essentially shaped in its relation with new intelligence based technological currents in architecture, which, in his view, invade the 'reality' of architecture's 'ground' or 'context'. While, as Graafland posits, architecture as a profession always requires to observe the constrains of reality. (Graafland [2006], 'On Criticality' in Constructing a New Agenda, 2010)

Graafland, following cultural theorist Timothy Luke, addresses three natures through which we occupy and conceptualize space: first nature involves "terrestriality," the basic elemental characteristics and physical geographies of the bioscape/ecoscape/geoscape; second nature includes "territoriality," the physical and social built environment in technoscape/socioscape/ethnoscape; and third nature concerns "an informational cybersphere or telesphere" that gives rise to digitalization of architecture, and stems from Deleuzian notion of the virtual (Ibid). Attributing the first and second natures as 'ground' for architecture, Graafland explains that in recent post-critical trends the third nature largely penetrates the first and second ones and dissolves any notion of ground or context. This detachment from reality predisposes architecture to be easily subsumed by aesthetic formalism disconnected from historical, cultural and phenomenological concerns. Graafland argues that our current condition of postmodernity, what he calls aesthetic modernism, although presupposes autonomous (aesthetic) subjects with depth and reflection, but the dominance of "image in contemporary information and communication structures entails not an aesthetic subject, but reflexive objects" (Graafland [2006], 'On Criticality', in Constructing a New Agenda, 2010, p. 404). He continues that functional differences of objects has also been taken up by their aesthetic character in representation. As such, one step further from Marxian resistance with aesthetic depth, he claims, today we have "disappearance of that subject of resistance in the circulation of images in contemporary information and communication structures." Graafland concerns that this tendency leads to priority of (aesthetic) architectural object over experiencing subject and so, fading the concept of gender, ethnicity, class, or any notion of 'difference' in architecture; "proliferation of (digitalized) image tends to flatten out the subjects of our time" he states (Graafland [2006] , 'On Criticality', in Constructing a New Agenda, 2010, p. 404)

To resist this situation, Graafland challenges Michael Speak's (one of key protagonists of post-critical paradigm) argument for "exhaustion of continental theory" and necessity of replacing it with technological intelligence. He introduces post-critical narration of 'fold'[1] as problematic, for disregarding 'real' differences in environment and dissolving ground of architecture (Ibid). In this attempt, Graafland still remains a Deleuzian but refers to non-aesthetic readings of Deleuze, especially recent developments of his inheritors like Latour. Influenced by Lash and Latour's assertions on reflexive[2] (self-reflective, self-conscious and transcendental) knowledge, Graafland calls for 'reflexive architecture', an architecture "addressing its own foundations reflexively". Reflexive architecture, he demands, to evolve from interaction between discourse and profession, between university and designers. While he recognizes the former as lacking "the means to apply their theoretical constructs to the real world", the latter he admits lacks "the focus [and] the time for extended experimentation" (Graafland [2006], 'On Criticality', in Constructing a New Agenda, 2010, p. 401)

[1] Fold (a Deleuzian term) is an unstable dynamic space prior to coordinates, in which differences affiliate in a creative and constitutive manner. Fold is the locus of event, it is the inflection point between maxima and a minima. Post-criticality applies this concept to redefine architectural 'image' as a virtual (non-representational), dynamic (temporal) and nondeterministic concept that frames (builds territory) the space that different forces meet each other.

[2] Reflexive Knowledge, which is a modern approach to social sciences propounded mainly by Giddens and Bourdieu, refers to taking account of itself or of the effect of the personality or presence of the researcher on what is being investigated. Reflexivity implies instantaneous feedback as an unconscious relation that exists between an entity and itself, so urges for applying positive feedback loops capable of responding to changing conditions in real time. In reflexive knowledge, 'making' as contributing to reflection occupies a central position

In this pragmatist proposition, Graafland attempts to distance architecture from 'negation' of criticality too (a Marxian tradition of critical theory developed by Adorno and Tafuri and applied by figures like Eisenmann), since it is retrospective, problematic, and cannot be easily related to a messy, projective and creative practice of architecture. However, aware of outcomes emerge from discarding critical thinking , alternates criticality with a form of 'critique' which is not purely 'negative' but 'productive', which 'assembles' not 'debunks', and at the same time is not 'obsessed by instrumentality' but appreciates 'culture' too. This is what Graafland calls a realist attitude and names it "architecture of the street" (Ibid). By 'architecture of the street', born in a Latourian discourse, Graafland mainly appeals to reclaim architectural facts and renew empiricism (what he calls realism), while addresses sophisticated tools of architectural deconstruction and architecture's social construction.

2.1.2. Martin and 'utopian realism'

Reinhold Martin, a renowned figure in critical architecture theory, incorporates into concept of 'real' in architecture from a critical point of view. As a younger generation of critical/post-critical debates, he challenges the newly arisen slogan of realism, as primacy of architectonic production veiling the objectionable status of their social and political context. In his argument, Martin attributes 'reality' shift to post-critical paradigm- "another name for the so-called post-critical is realism"- intending to liberate architecture from difficult questions of power relations or conflicts of interest, and to pave the trail for 'professional realism' of architecture (Martin [2005], 'Critical of What? Toward a Utopian Realism', in Constructing a New Agenda, 2010). In this sense, despite Graafland that considers reality as a 'ground' for criticality to be possible, Martin identifies this 'shift to reality' as affirming conservative and oppressive socio-political conditions in which architecture is produced.

Martin goes further in his analysis of "realist" discourse. He addresses Latour's ideas on 'theory' as driving force for 'realist' (what Martin equates with post-critical) trends in architecture. Latour, to alternate "epistemology infused by the spirit of revolt and radical politics", proposes a new realism founded on ever-contestable "matters of concern" rather than indisputable "facts" (he is not moving away from the facts, but directs attention toward the conditions that made them possible) (Martin [2005], 'Critical of What? Toward a Utopian Realism', in Constructing a New Agenda, 2010). In this "new" realism (also known as 'new empiricism' or 'new pragmatism'), Latour denounces critique –as a Marxian code- for its oppositional dialectic and replaces instead “a vaguely postmodern version of American pragmatism” and through this (allegedly) resolves what used to be called capitalism’s contradictions. As such, what Graafland infers as a trajectory to “new” mode of criticality, Martin recognizes as mere acceptance of status qua. He provides examples of practices by some dominant (post-critical) architects to illustrate this reality. Among them are those associated with designs for the World Trade Center, specifically the group collectively known as United Architects, includes figures such as Farshid Moussavi, Alejandro Zaera-Polo and Greg Lynn. Martin explains how their seemingly progressive projects consent objectionable political status of their context (Martin, ‘Critical of What? Toward a Utopian Realism’ [2005], in Constructing a New Agenda, 2010).

But Martin’s engagement in reality doesn’t end in a merely negative approach. Reality for him is not obligations of architecture profession or disciplinary assumptions, but the power relations that through architecture recognize territories, boundaries and bodies (Martin, ‘Utopia's Ghost’, 2010). He emphasizes the reality of economies of representation and production that enmesh architecture and direct it toward immediate demands of marketplace. He urges to avoid the (post-critical) mistake that reality is entirely real (pre-existent, fixed, and exempt from critical enquiry), and questions the post-critical call of ‘reality’ by, “which realities you choose to engage with, and to what end?” (Martin [2005], ‘Critical of What? Toward a Utopian Realism’, in Constructing a New Agenda, 2010, p. 360). Martin’s alternative for these orthodoxies of professional realism, is ‘utopian realism’, which, he believes, can open new trajectories of thought and provide the foundation for a new mode of architectural practice. Although he avoids to precisely define ‘utopian realism’ or to prescribe any strategy in the field work, regarding ‘utopia’ he identifies it as ‘nowhere’ and at the same time ‘everywhere’, it is “nowhere” not because it is ideal and inaccessible, but because it is also “everywhere”: “Utopia’s ghost has also managed here to preserve something of its otherworldliness, its sense of being nowhere. It does so to the extent that in the project nowhere is to be found almost everywhere, though in a different form in each case” (Martin, ‘Utopia's Ghost’, 2010, p. 176). This definition stems from Derridean concept of ‘specter’, “a ghost that infuses everyday reality with other, possible worlds”, what Martin believes despite post-critical ‘realism’, the architectural realist fantasies of exotic forms “dedicated to a fundamentalist oligarchy”, is never quite dead (Martin [2005], ‘Critical of What? Toward a Utopian Realism’, in Constructing a New Agenda, 2010, p. 360).

However, instead of grounding in “postmodernism’s withering utopian impulse”, Martin tends to progressive efforts in realpolitik arena (with some like Edward Said) and their attempts to redefine political (and critical) relevance of academic discourses. For him the problem is not that (architecture) discourse has become political or critical (what post-criticality posits and is against), but the problem is that it is not critical enough (Martin, ‘Utopia's Ghost’, 2010). As such, ‘utopian realism’ seems to be an open-ended, constant and critical reconsideration of reality, which violates disciplinary codes and oppressive norms and engenders architecture for a powerful and effective role in the socio-political realm.

In this sense, utopian realism is an alternative for mainstream ‘critical architecture’ (represented by Eisenman) as well. Martin differentiates between two strains of criticality: political critique and aesthetic critique. While attributes the former to historian-critics such as Tafuri, he associates the latter to architects like Eisenman, and explains how this aesthetic reading of criticality led to Oedipal desire in post-criticals to assault any critical content of discipline and by that kill their father figure. In Martin’s estimation, aesthetic criticality led to “aesthetic as politics”, and, not so much different from its post-critical successor, promoted seemingly progressive images, while conservatively affirmed and even reinforced social norms of American capitalism dead (Martin [2005], ‘Critical of What? Toward a Utopian Realism’, in Constructing a New Agenda, 2010)

2.1.3. Ockman and Reality of Production Relations

Joan Ockman may provides the most frustrating and at the same time the most cogent account of architecture’s reality today. While her core problematic can be summarized in question of “how to move beyond Tafuri?”, her account is deeply influenced by Tafuri’s theorizations on social entanglement of any architectural practice. Ockman, echoing Tafuri’s “devastating” analysis, asserts that ‘architecture’ to be reflected needs initially an immediate and necessary qualifier appendix: ‘under capitalism.’ ‘Architecture under capitalism’, as she notes, is “ a handmaiden of hegemonic power” and “functions as an ornament of the real estate industry” while “continues to have an oblivious or predatory relationship to increasingly fragile environmental and material resources”. (Ockman, ‘Afterward’, in Can Architecture Be an Emancipatory Project?, 2016, p. 145-147). For Ockman architectural reality is the structures that lie behind this situation and drive its reproduction.

Ockman positions these structures in political and economic realms and without intending to overlook the significance of political, asserts the primacy of economic structures. She claims that autonomy of political is an illusion, since in modern (capitalist) society it is capital that over-determines social relations ,including politics. She denounces critical paradigms in architecture grounded in autonomy-of-political notion (advocated by some like Aureli) as nostalgic wishes roots from communist ideologies of 1970s, while today fall in the trap of same logic of capitalism they attack. Since, politics carry its own ideologies, contradictions and problematics, Ockman claims, those who gave primacy to it to oppose the spectacular architecture we have around, do not so much succeed to reconfigure the spectacle in a critical manner (e.g. Supersudio)

Ockman also rejects performative "socio-spatial" practices, celebrated in the name of "radical" or "insurgent" architecture, for their impotence to detach from larger socio-economic context of their emergence, especially when it comes to built environment where, as she puts, material production becomes a priority. Therefore, while pretend to be revolutionary or transformative in socio-political spheres, they get easily assimilated in capitalist system, especially in current society of media reign. As such, Ockman discredits prescriptions of insurgency as short-lived mobilities fashioned by new spirit of capitalism, but deprive institutionalised strategies to resist against social systems of domination in a prolonged and effective manner. (Ockman, 'Afterward', in Can Architecture Be an Emancipatory Project?, 2016)

Ockman identifies modern architecture not a product made by sole architect, but as a resultant of multi-authorial processes, led by constellation of immaterial (mind) and material (manual) labor in multiple sections of human society. Moreover, this multi-agent practice emerged from complex social and economic relations, has been subjected to managerial shift in our post-critical era; so that once architectural dimensions of production (such as program, organization, etc.) has been surrendered to engineers, developers and various consultants of real estate industry (Ockman, 'Foreword' in The Architect as Worker, 2015). Ockman's insight for architectural practice in such reality, is to, rather than illusionary architectural activism through opportunistic cynicism of leftist "hopes in design" or neo-avant-garde adventures, critically analyse the situation in most acute manner and at the same time stay alert to unpredictable possibilities which system might provide (Ockman, 'Afterward', in Can Architecture Be an Emancipatory Project?, 2016). Along this, Ockman calls for two major shifts in architectural knowledge and practice: regarding knowledge she urges for transformation of architectural consciousness toward a truly avant-garde architecture. Avant-garde not in the sense of 1960s or today's "cutting-edge" fashion but as an army for "reconnoitering uncharted territory and reporting back to the rest of the troops" (Ibid, p. 156); architects who operate creatively and critically in both material and immaterial sections and are aware of their social and professional responsibilities. Regarding practice, she limits borders of critical architecture practice to redistribution of planetary resources, in the sites which architecture is a necessity not a luxury. Necessity not in the sense of grand narrations of Modern architecture, but as engaging in contexts of inequality and difference, practices like constructing for deprived groups, needy institutions or damaged urban fabrics and so on. Following Gramscian 'optimism of the will', Ockman hopes architects can re-imagine the "conditions of existence" through penetrating the dominant mode of production (Ibid, p. 154). As such, despite Martin's call for Realpolitik to re-define the socio-political potency of current architectural possibility, Ockman tends more to teleological schema of 'praxis' Marxism, that history becomes the process of confirmation of subjective knowledge or class consciousness. Along this, her main concern is how to incorporate theory to architectural practice, or, as she admits herself, shift from philosophy to strategy.

2.2. Space

Despite sociology or history that concerned geographical space from 60s onward and got subjected to "spatial turn", spatial thinking is not a newly discovered idea in architecture discourse. (Stanek, 'Architecture as Space, Again?', in Spéciale'Z, 2012). From 19th century in German architecture, to early 20th century interwar period among architecture historians (who considered space as a guideline for architectural knowledge) and avant-garde architects (who applied it as an alternative for stylistic approaches), space occupied a privileged place. However starting from 1960s the status of 'space' in architecture discourse has been subjected to questioning from inside the discipline. As Robert Venturi argues for analyzing architecture as system of signs and symbols rather than space and program (Venturi, 'Architecture as Signs and Systems', 2004). Meanwhile, and interestingly from 1960s, spatial thinking haunted social science debates and affected theoretical contributions of critical thinkers like Lefebvre. It was following this 'spatial turn' in social sciences that critical architecture discourse re-encountered the idea of space, and its vitality as a pathway to open-up to the social world expelled outside architecture's disciplinary borders. In this new spatial turn, despite early 20th century architectural paradigms which instrumentalised space as a privileged medium for architecture to engage socially, space is known as a social product- as Lefebvre posits that "(social) space is a (social) product" (Lefebvre, 'The Production of Space', 1991, p. 26). In this sense, there is a consensus among critical architecture thinkers today that 1. (architectural) space signifies a dynamic process not a fixed product. 2. (architectural) space is produced in a multi-agent manner not by a sole architect. 3. (architectural) space has a political and contradictory character in which various agents cooperate, compete and struggle.

Kim Dovey (2006), as one of the figures advocating "spatial turn" in architecture, asserts inevitable social nature of architecture, and argues that any critical proposition of architectural practice in the first place needs to concern architecture's position in the broader field of social relations and the way it engages in surrounding and affecting practices of power (Dovey, 'I Mean to be Critical, But . . .', in Critical Architecture, 2006). He questions (allegedly) critical narrations of architecture which identify criticality as just imagination and construction of buildings controlled by elites, while exclude social practice and social critique necessities. As he posits, social critique of architecture operates along not only 'formal' dimension of architecture, but also, and more importantly, a closely related yet distinguishable dimension of 'space'. While formal dimension find architecture as a 'text' which conveys 'meaning' through 'representation', spatial dimension identifies architecture as a 'program' which forms structures through which architecture's 'use' in everyday life is mediated. Regarding critical concerns architecture as 'text' allows transgressing the fixed identities and meanings, and 'space' allows it to engage in transgressive social actions. Dovey refers to critical thinkers like Foucault, Lefebvre or Deleuze to emphasize the role of transgressive spatial practices in reshaping the social world. He asserts these two formal and spatial dimensions must be seen integrated in a critical project, since they produce and reproduce each other. Spatial structures "frame" and "write" representations, while they themselves are infused by narrative interpretations (Dovey, 'I Mean to be Critical, But . . .', in Critical Architecture, 2006, p. 254). As such, Dovey considers 'spatial' (and social) as indispensable dimension of critical architecture[3] and warns that exclusion of space will lead nothing more than stylistic approaches consenting production of symbolic and social capital and reproducing the very social relations they pretend to resist (he illustrates Eisenmann).

Jeremy Till (2011), incorporating to this 'spatial turn' in architecture, argues that today since architecture is enmeshed in wider spatial forces of social, global, ecological and virtual networks, it has to deal with multiple and often conflicting forces of this networks rather than self-reflexive language of a (presumed) autonomous expertise (a notion that he dates back to Renaissance) (Till & Awan, 'Spatial Agency: Other Ways of Doing Architecture', 2011). Till follows Lefebvre's notion of space as a social product, and taking 'architecture as space' identifies 3 significant implications of this new paradigm 1. Architectural production is a shared enterprise not authorship of genius architect . He refers to Latour's theory on multiplicity of agents, humans and non-humans, in emergence of any social phenomena, and invites architects to leave the myth of 'power of individual architect' and instead accept their role as one agent interacting with many others in a complex network 2. Architecture is a dynamic, temporal and continuous process not fixed to single moment of completion of a 'building'. This process extends from intention to adjustment, action, occupation and unfolding over time 3. Architecture is intractably political and cannot be neutral (even if it pretend to be), since it is always charged with the dynamics of power. Architecture is part of spatial production and profoundly influences and is influenced by social relations, from the very personal (phenomenological engagement with stuff) to the very institutional (dynamics

[3] He explains that architecture is a "collective" practice whether in production or consumption stages, referring to Benjamin's idea on "architecture as a social art", and Bourdieu's notions on architectural production through habit and habitus (as socially structured dispositions and rules that frame everyday life) and their link to discursive field (institutionally structured fields of power)

of power played out in space) scale (Till & Awan, 'Spatial Agency: Other Ways of Doing Architecture', 2011).

As such, Till believes that 'spatial turn' deploys and develops architectural thinking and practice in a way that addresses social and political concerns with capacity of transformative action in those realms. He proposes some alternative methods (such as mutual knowledge), strategies (such as insurgent actions) and tools (such as crowdsourcing) which allow architectural (spatial) agency to produce effects empowering others to take control of their built environment. In other words architectural agency doesn't intervene directly in the world to exert its power, but empowers multitude of others (not just clients and developers) to fulfill their desires in a long-term and of course contingent manner. Therefore, in Till's narration, architectural space signifies to physical, social, metaphorical and phenomenal spaces, and 'architecture as space' not only liberates architecture itself (from its traditional and oppressive assumptions and conventions) through spatial solutions (effecting agency of non-humans), but also plays a liberating role in (at least some realms of) society through effecting actions and visions of humans. For instance, he considers 'social structures' as a site for architectural (spatial) agency in which architecture can intervene stablished 'connections' inside the structure and realigns it through practices like squatting movements or transgressing hierarchies (Till & Awan, 'Spatial Agency: Other Ways of Doing Architecture', 2011, p. 57). Till identifies 'physical reality', 'social structure', 'organizational structure' and 'knowledge' as possible sites of architectural agency, at the same time that admits these sites and boundaries are contextual and constantly under negotiation.

This expanded field of architectural object is where architecture encounters disciplinary contradictions. As Stanek (2012) argues, multiplicity of spaces in which people live, including pragmatic, perceptual, existential, cognitive, abstract and expressive spaces, charges specific disciplines to account for each distinct meaning of space (Stanek, 'Architecture as Space, Again?', in Spéciale'Z, 2012). If architectural space is one among many other spaces, then division of labor entails ontology of spaces to illuminate relationship between various spaces. A platform in which architecture will position at the end of hierarchy of power relations, and be reduced to "one of the numerous socioeconomic products perpetuating a political status quo" (Stanek, 'Architecture as Space, Again?', in Spéciale'Z, 2012, p. 51) On the other hand, if architectural space encompasses all other spaces, each are produced by enormous variety of agents, then architecture's disciplinary crisis is inevitable, since considering architects' very least influence among other agents, they will be responsible for something they cannot control.

Stanek's proposition, to avoid reduction or crisis, is to move beyond this bipolar image and define architecture not equal to but 'within' the processes of spatial production, while itself is a multidimensional product. He suggests architecture discipline to take distance from the notion of 'architectural space as a realm for architectural competence', and instead seek for architects' multiple engagements with other agents in all stages of process of architectural production. As he emphasizes, architectural discourse should be restricted to architectonic objects like 'buildings', 'streets' and 'parks', but not as reified typologies rather, as "constructed in collective processes operating on various scales and various facets" as part of the social production of 'space' (Stanek, 'Architecture as Space, Again?', in Spéciale'Z, 2012, p. 52)

David Cunningham (2016) also mentions complex (multi-agential) nature of space and architecture's limited influence on process of its production (Cunningham, 'Architecture, the Built and the Idea of Socialism', in Can Architecture Be An Emancipatory Project?, 2016). For him too this reality can lead to seemingly inevitable dichotomy of architecture, either receding to disciplinary protectionism and confirming architecture's "sublime uselessness", or claiming a wider remit and taking responsibility for what architects do not control. However, Cunningham distinguishes a third possibility which moves beyond Stanek's proposition on limiting the discipline to processes of architectural construction. Grounding on Adorno's ideas about 'autonomy' of artwork, Cunningham mentions contradictory situation of architecture: while entangled in social relations, it marks social separations exist within the contradictory reality of capitalism. This architecture's potential convinces him to calls for rethinking traditional categories of architectural judgement which if not break the division of labor, at least will allow to interrogate spatial processes, the very disciplinary borders and labor divisions through which non-identity of architecture (an institutionalized discipline considering architecture as merely building production) operates today. As such, for Cunningham any progressive architectural paradigm "have to interrogate exactly what and where the borders defining its 'object of study' might be" (Cunningham, 'Architecture, the Built and the Idea of Socialism', in Can Architecture Be An Emancipatory Project?, 2016, p. 36). An approach which entails ontological investigation.

2.3. Agency

We are witnessing a particular moment in architecture discourse. After years of asserting architecture's disciplinarity (by both Critical and Post-critical trends) and saturating it by abstruse post-structural theories referring (mainly) to Derrida and Deleuze, architecture hardly can deal with its own problematics in a meaningful manner; what has been noticed as a crisis in critical architecture (and generally architecture discipline).

To tackle this crisis architectural theorists attempted to re-problematize architecture and its disciplinary meanings and borders to redefine its critical potentials respecting status quo. In this regard, we can recognize an echoed paradigm shift from building as a static object to space as a dynamic entity with social and political implications (this spatial turn is not unprecedented in architecture, but differs in posing a fundamental challenge and affordance to contemporary architectural research, as a response to the fundamental economic, political, technological, and cultural transformations). In this regard, Dovey (2006) argues that social critique of architecture operates along two distinguishable yet integrated dimensions that reproduce each other: form and space (Dovey, 'I Mean to be Critical, But . . .', in Critical Architecture, 2006). In formal reading, architecture is considered as a which represents some meanings and affects through contemplation. In spatial understanding, architecture is considered as programme which mediates use (everyday life/ spatial flows/ function) through spatial structure and affects through engagement. As Dovey claims, spatial concern enables exceeding aesthetic and spectacular and involving directly in social relations (Ibid).

Following this spatial turn, a new paradigm gets increasingly used in architecture discourse: agency. Agency, defines architecture as space (with its social and political implications), and its agency as spatial agency which, despite building's, is temporal and dynamic (with continues process of production, from intention, adjustment, then acting otherwise and unfolding in time). As its promoters define, architectural agency is acting in a transformative manner to effect social change.

Architectural agency, following Giddens view on intractable tie of agency with power ("agency is possibility of doing otherwise" (Giddens, 'Sociology', 1989, p. 258), tries to effect change through empowerment of disadvantaged or 'other' sections of society, to 'take control' over their environment (Schneider & Till, 'Beyond Discourse: Notes on Spatial Agency', in Footprint, 2009). In this sense, architectural agency is participative (not opportunistic) and pro-active (not re-active); and architect rather than lonely agent of change is one agent among many others in a network of actors (including non-humans), so knowingly and actively gives up his authority (by this, Agency moves beyond centrality and authority of architect that both Critical and Post-critical approaches are based on). This non-authoritarian narration of architecture (in a sense) roots from a paradigm shift in social sciences to suspect Euclidian knowledge in favor of mutual and practical one, admitting that part of knowledge is incorporated in encounters and not directly accessible to actor's consciousness. Architectural agency asserts inadequacy of discursive knowledge (leaned procedures) in which discourse learns from discourse itself in a closed circle. Instead, it offers an interactive knowledge allowing discourse to learn not only from itself but from transformative action too, believing that discursive and practical knowledge are by no means mutually exclusive (Schneider & Till, 'Beyond Discourse: Notes on Spatial Agency', in Footprint, 2009). In this sense, agency can be considered as a pragmatic approach to critical treatment with society, while possesses a vital difference with (new)pragmatism promoted by post-critical view. As Jeremy Till (2011) remarks, spatial agency, despite post-criticality that follows a pragmatic laissez-faire attitude, contains ethical concerns and intends (social) transformative action. As such, basic principle of architectural agency is purpose to transform the given. (Till & Awan, 'Spatial Agency: Other Ways of Doing Architecture', 2011)

Agency defines architect as an agent of spatial, social and political transformation not a neutral expert, and architecture as an inherently social and political discipline, and therefore immanently critical; whether by negating a position or confirming it. In agency, architecture critically engages with formations of its context in a transformative manner and aspires an emancipated society.

3. Devising a Method

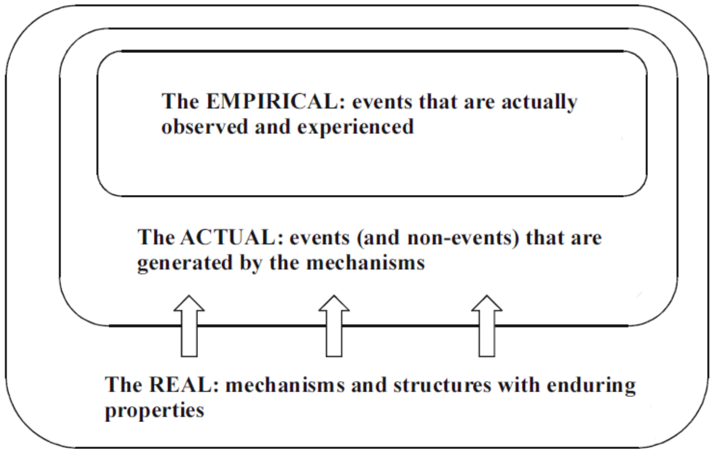
From discussions concerning architecture's critical potential today, what I covered some most echoed ones in literature review part, we can infer a crisis in/of architecture discourse; that the content of discipline fails to deal with both it's own internal problematics and externally raised challenges. This thesis takes crisis in (post) critical architecture as hypothesis and asks, what underlying causes (or in Critical Realist term 'generative mechanisms') produced this crisis? To develop research question and try to provide an appropriate answer, this thesis will explore assumptions about nature of architectural reality as interpreted inside the discipline, and beyond that will trace the concept of 'reality' in philosophy and social science, where it is originally constituted. In this sense, this thesis, in general, can be categorized as qualitative research which reflects upon ontological assumptions and epistemological fallacies of discourse to reach a (supposedly) better explanation of crisis involved (post)critical architecture.

This thesis will follow a Critical Realist approach. Its theoretical assumptions, mode of reasoning, data collection and theory evaluation will be extracted from philosophy of critical realism. In case of following qualitative research orthodoxies, this thesis would have to follow either inductive or deductive reasoning (regardless strategies each of them might require for data collection). However, considering essential deficiencies of both inductive and deductive modes (which restrict 'reality' to a set of observations, so reduce causal laws to "constant conjunction of events") and also their inappropriateness for nature of this research (which takes 'crisis' as subject matter), I will apply a method of analysis advocated by Critical Realism called retroduction. To grasp meaning and implications of 'retroductive' reasoning, we first need to understand philosophy of Critical Realism especially its ontological account.

3.1. Introduction to Critical Realism

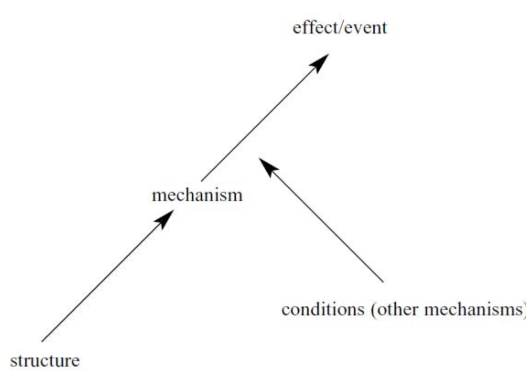
Critical Realism is a relatively new philosophy of (natural and social) science (emerged from 70s), which despite much of western philosophy starts with the question of 'being' rather than 'knowing' (Clark , 'Critical Realism', in The SAGE Encyclopedia of Qualitative Research Methods, 2008). According to Critical Realism there is an external reality that exists independently of human perception, and scientists in principle are able to gain access to this reality (Bhaskar, 1975; Archer 1995). In this sense, it opposes Hume and Kant (and their successors in form of positivism/empiricism and constructivism/interpretivism respectively) who restrict reality to empirical events and found all scientific knowledge on human sensory experience. Kant starts philosophy by asking what must priori categories be like for a knowledge to be possible. Bhaskar (the main protagonist of Critical Realism) makes this question upside down, and asks: "what must reality be like for science to be possible?" (Bhaskar, 'A Realist Theory of Science', 1975-2008, p. 23). Critical Realists refer to our capability as human beings to perceive objects and events, a capability which changes over time as we learn more about our surrounding world. Same as scientists that need to be trained to make their observations correctly. The corrigibility of our perception from the world outside, the intelligibility of scientists' experiments, and successful occurrence of science imply existence of a domain separated and independent of our perception. As Bhaskar (1975) puts there must be enduring entities, physical (e.g., atoms or organisms), social (e.g., the market or the family) or conceptual (e.g., categories or ideas), observable or not, that have powers or tendencies to act in particular ways (Bhaskar, 'A Realist Theory of Science', 1975-2008). Critical Realists call this enduring entities as 'intransitive' dimension of knowledge. Intransitive dimension refers to structures that are independent of subject matter and explain the essence of an object and its stability and durability. Confronting intransitive part, there is transitive dimension of science that is dependent to conceptual systems and practice of science by human, it is social and historical, however following its (intransitive) object of study is structured and layered. According to Bhaskar existential intransitivity is a priori condition for any investigation to be possible (Bhaskar, 'Dialectic: The Pulse of Freedom', 1993-2008). As such, Critical Realism gives primacy to ontological investigation and argues that we cannot reduce statements about the world (ontology) to statements about our knowledge of the world (epistemology); A conflation which Bhaskar calls "epistemic fallacy". Bhaskar (1998) criticizes both positivism and constructivism, for (despite their seeming opposition) committing this reduction of reality to human knowledge, whether that knowledge acts as container or lens for reality (Bhaskar, 'Philosophy and scientific realism', in Critical realism: Essential readings, 1998, p. 16–47). This analysis gains paramount importance in current situation of discursive controversies where (as I will argue in next chapter) the reality of architecture seems to be lost and intelligibility is only pursued in the interrelation of multiple knowledges.

In conceptualizing reality, despite naïve realism which focuses merely on empirical engagement with the world outside, Critical Realism advocates a stratified and differentiated account of reality. Bhaskar, distinguishes three realms of reality: the real, the actual, and the empirical. The real refers to domain of underlying structures and mechanisms that possess the power to cause changes in actual (and empirical) realm, while is independent of it. The actual realm refers to events and outcomes that do (or do not) occur in the world, regardless they are experienced by human or not. And the empirical domain refers to human experiences and observations of the world (Collier, 'Critical Realism, 1994, p. 130). These distinctions originate from transcendental arguments mentioned above, that we cannot reduce causal mechanisms to events, and events to the observed ones. Critical Realist ontology defends existence of an objective reality made of both events and their underlying mechanisms, mechanisms that produce certain causal powers, tendencies, or ways of acting, and by that give rise to those events. In this sense, Critical Realism aside from positivism and constructivism confronts "new" ontologies too. These newly fashioned ontologies (that are dominating architecture discourse too) advocate a flat account of reality made of homogenized (material or non-material) objects, with no underlying mechanisms. What they perpetuate as ontology, in contrast to depth ontology of Critical Realism, is a shallow investigation of reality which doesn't plunge deeper than the 'actual' (whether actualized or remained virtual) domain, and hence unable to coherently conceptualize causality (this will be discussed in 6th chapter).



This stratification of reality also implies that science is not readily available in observable events, rather it is an achievement gained through social practice of science, which is attempting to reach behind usually misleading representations of objects. As such science neither mirrors (represents/ resembles/ reflects/ corresponds) the world (positivist notion), nor is separated from it (constructivist notion), but it refers to it. As Bhaskar (1975) puts: "knowledge follows existence, in logic and in time" (Bhaskar, 'A Realist Theory of Science', 1975-2008, p. 39). There is an inner link between knowledge and real object, and it is object and its structural properties that lead methods and concepts of study (not arbitrary choice of researcher). The value of a knowledge in Critical Realism is measured by its "explanatory power", as Bhaskar (1989) puts: "theory Ta is preferable to another theory Tb (even if they are incommensurable) if Ta can explain under its description almost all the phenomena Tb can explain under its description plus some phenomena that Tb cannot explain" (Bhaskar, 'Reclaiming Reality: A Critical Introduction to Contemporary Philosophy', 1989-2011, p. 15). In a Critical Realist view, science helps us to get closer to reality, to gain more developed explanation of casual mechanisms driving events and phenomena. However, as Sayer (one of Critical Realism's main protagonists) points out, knowledge is always fallible and theory-laden too (Sayer, 'Method in Social Science', 1992, p. 4). But if knowledge is about detecting necessary relations of objects, if events come from objective structures and mechanisms raised by them, then where this fallibility come from?

According to Critical Realism, unlike natural sciences in which scientists are able to isolate one specific mechanism or causal law to create succession of events, in open systems like society a complex of mechanisms and powers are conflated one another and its not possible to easily distinguish them. As Collier (1994) explains, laws cannot be conceived as general regularities that function everywhere, but as powers or tendencies (mechanisms) that depending on conditions within which they operate, may or may not be actualized (Collier, ‘Critical Realism, 1994). Mechanisms are ““nothing other than the ways of acting of things” (Bhaskar, ‘A Realist Theory of Science’, 1975-2008, p. 14). The effect of a specific mechanism is not equal in all occasions. There might be a mechanism that produces effect but due to other neutralizing mechanisms and their counteracting effects it is not get actualized. At stake here is to notice that entities, with relatively enduring nature and structures, produce specific types of mechanisms (tendencies). We might can remove that mechanism (by creating counteracting mechanisms), or even transform the structure itself, but we cannot change the law ruling that mechanism. Science’s job is to detect those structures and mechanisms to provide a better explanation of phenomena. As such science is not a process of derivation (or falsification) of immutable general laws, but a constantly developing process of unveiling increasingly deeper structures and mechanisms. Its criteria of rational appraisal and development of theories “cannot be predictive and so must be exclusively explanatory” (Bhaskar, ‘The Possibility of Naturalism’, 1979/1989/1998/2005, p. 21).



Critical Realism is skeptical toward ‘general laws’ (Maxwell, ‘A Realist Approach for Qualitative Research’, 2012, p. 9), and opposes concepts of truth and falsity for “failing to provide a coherent view of the relationship between knowledge and its object” (Sayer, ‘Method in Social Science’, 1992, p. 4). In this sense, Critical Realism rejects objective knowledge and accepts epistemological (but not judgmental) relativity and possibility of multiple legitimate accounts and interpretations; At the same time that advocates objective reality and its referent role as a ground for choosing between competing theories. It argues that ontological realism and epistemological relativism are compatible, if we do not collapse epistemology and ontology one into other.

3.2. Critical Realism and Methodology

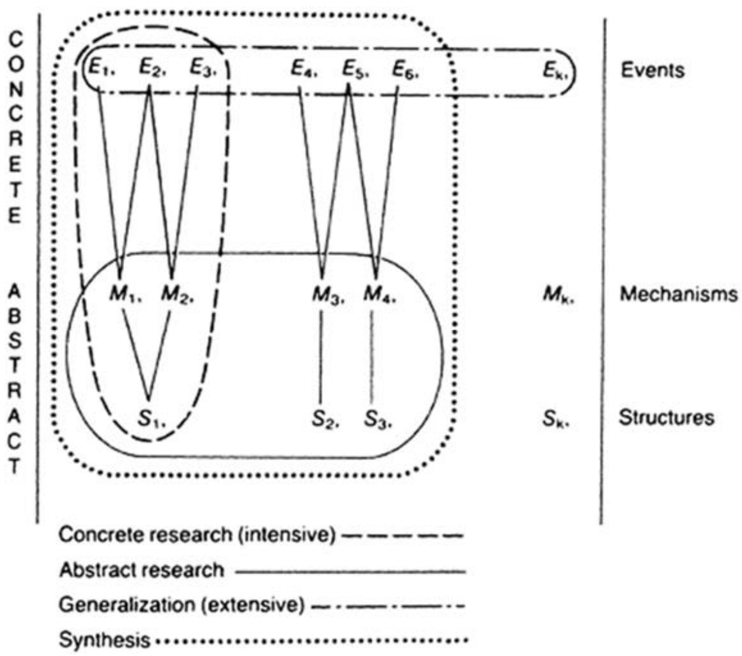
Critical Realism is a meta-theoretical framework giving rise to specific ontological and epistemological accounts. It also defines a general methodological approach in which emphasis is on identification of underlying mechanisms. However, it is not associated with particular set of methods (Fletcher, 'Applying Critical Realism In Qualitative Research', in International Journal of Social Research Methodology, 2016) and can be used in both qualitative and/or quantitative researches (M. Clark, 'Critical Realism' in The SAGE Encyclopedia of Qualitative Research Methods, 2008). Despite being a relatively new theory, Critical Realism has been taken up in various disciplines including: Marxism (Brown, Fleetwood et al. 2002), geography (Proctor, 1992; Pratt, 1995; Yeung, 1997), economics (Lawson, 1997; Fleetwood, 1999), sociology (Layder, 1994; Archer, 1995; Sayer, 2000), international relations (Wright, 1999), linguistics (Nellhaus, 1998), history (Steinmetz, 1998), social work (Houston, 2001), ecology (Trosper, 2005), environmental studies (Bania, 1995), information studies (Wikgren, 2005), media studies (Lau, 2004), management (Ackroyd & Fleetwood, 2004) and research methods in general (Sayer 1992; Layder 1993). Despite this wide acceptance of Critical Realist philosophy and in general realist commonsense in much of qualitative researches, as Maxwell (2012) puts, the influence of Critical Realism on qualitative research has still remained narrow (Maxwell, 'A Realist Approach for Qualitative Research', 2012, p. 6). In architecture studies (not in geography or environmental science) also, Critical Realism has largely been unnoticed, and except some scattered researches in housing realm, (in my knowledge) there has been no application of Critical Realist method in architecture discipline.

For Critical Realism there is an intimate relationship between philosophy and methodology. Dobson (2001) mentions that "critical realism does not see philosophical issues as operating at a higher plane than methodological issues" (Dobson, 'The Philosophy of Critical Realism', in Information Systems Frontiers, 2001, p. 200). Method is not merely an instrument of data management or analysis, but it conveys some hidden assumptions, preferences and values before the research get started. As Maxwell (2012) point out, epistemological and ontological perspectives are not a set of "foundational" premises of governing qualitative research, but as "resources" for doing it (Maxwell, 'A Realist Approach for Qualitative Research', 2012, p. 13). Bhaskar (1989) himself conditions success of philosophy to its success as "underlabourer and occasional midwife" to the research process, and beyond that, argues for philosophy's role on outcomes of the research (Bhaskar, 'Reclaiming reality', 1989-2011, p. 19). He

(1991) puts: “critical realism is a philosophy for, not just of science” (Bhaskar , ‘Philosophy and the Idea of Freedom’, 1991, p. 141)

One of the major implications of Critical Realism for qualitative research is relegitimizing ontological questions about the phenomena we study. If concepts refer to real phenomena rather than abstractions of sense data (Positivism) or purely our own constructions (Constructivism), then the question would be to what phenomena do these concepts refer, and what is the nature of those phenomena? Sayer (2000) distinguishes two different types of research designs in this regard: intensive and extensive. While extensive research seeks to identify regularities and patterns, intensive research attempts to obtain in-depth knowledge of a specific phenomena for the purpose of causal explanation (Sayer, ‘Realism and Social Science’, 2000). I believe this methodological insight is what architecture discipline has lost for decades, (starting from its Modern condition), what has led to accumulation of theories with least capability to conceptualize the nature of architecture. Through discussions I reviewed in “Literature Review” chapter, we can reach some patterns of resonated concepts like reality. However, despite nominal similarity of these concepts, their referent phenomena varies depending on scholars’ theoretical mindset and references. In this sense, even in seeking reality, architecture discourse as a whole perpetuates a post-modern situation (as if reality is not really “real”), in which depth of reality has overshadowed by width of discourse. In my view, what discourse vitally needs today, is to shift referent of its investigation from mental states (concepts, meanings and intentions) to the “reality” of architecture; To, instead of ‘extending’ bulk of discourse, ‘intensively’ excavate its depth, and approach in an explanatory manner to mechanisms and causal powers running this reality. In this sense, more than methods we need methodology, more than descriptions we need explanation, more than data we need clarity, more than means we need values and more than abundance we need measure. That is not to say these are mutually exclusive concepts, but to designate primacies of architecture research especially in current situation of its disciplinary crisis.

Critical Realism’s method for intensive design of a research retroductive reasoning. Retroduction is a “…mode of inference in which events are explained by postulating (and identifying) mechanisms which are capable of producing them…” (Sayer, ‘Method in Social Science’, 1992, p. 72). In retroductive analysis we postulate a hypothetical mechanism(s) or structure(s) that, if they existed, would generate or cause the observed phenomenon which is to be explained. So, we move from observations of empirical domain to possible structures of the real domain. These structures can be physical, social or psychological, and may not be directly observable unless through their effects (such as social structures). In inductive method, however, researcher tries to derive general causal laws from a set of successive atomic observations, and deductive reasoning is applying (or testing) already extracted general laws ("covering laws" to borrow a Popperian term) into empirically similar events. Critical Realism opposes both, for being concerned with movements at the level of events (whether from the particular to the general or vice versa) and disregarding the reality of underlying causal or generative mechanisms. According to Critical Realism comparison in domain of events is impossible, simply because in underlying level of the real they are generated by distinct set of mechanisms.



In Critical Realism the only way to identify mechanisms is (retroductive) abstraction. But abstraction itself doesn't prove that the structure or mechanism exists. Furthermore, we might have competing abstractions of single observation. Concerning this, in the next step we need to eliminate some explanations and support others. This selection occurs through testing in experimental activity or by the power of an explanation to predict other phenomena or events. Bhaskar (1994) summarizes this process as: Description, Retroduction, Elimination, and Identification (DREI) (Bhaskar, 'Plato etc', 1994-2010, p. 24)

3.3. A Method for Situating Crisis

In this thesis I take crisis of (post)critical architecture as hypothesis. As illustrated in literature review part, on one hand we have a conflation of multiple approaches to (im)possibility of critical architecture, and on the other they only compete at the level of mental concepts that do not necessarily refer to a common entity. Beyond these, the desperate condition of critical project which is openly or implicitly expressed by most of its contributors, that "the old is dying and the new cannot be born", are convincing enough to presuppose existence of a crisis. So the question of a realist research would be where this crisis come from? Or what structure(s) or mechanism(s) generate or cause this crisis?

Inductive and deductive methods, aside from essential deficiencies for a deep analysis, are especially inappropriate with regard to nature of this study which takes discipline's crisis as subject matter. For absence of consensus among theorists on nature of crisis involved (post)critical architecture, we hardly can reach regularities inside the discourse. Also there is no general law (theory) at hand to measure various narrations of crisis by referring to it. In this sense crisis exists not merely as crisis 'in' discourse, but crisis of managing this crisis too, that is crisis 'of' discourse.

Critical Realism considers crisis as an "important potential source of retroductive insight and hypothesis generation" (Jessop, 'The Symptomatology of Crises, Reading Crises and Learning from Them: Some Critical Realist Reflections', 2015). Bhaskar (1979) puts: "in periods of transition or crisis, generative structures, previously opaque, become more visible to agents" (Bhaskar, 'The Possibility of Naturalism', 1979-2005, p. 52). Accordingly identification of crisis and its generating mechanisms is the entry-point for any prospective transformative action. To apply retroductive reasoning we need to postulate mechanisms that if existed would generate the phenomenon we are observing (or we are able observe). Regarding crisis analysis we can take symptoms of crisis as observations and try to abstract underlying structures and mechanisms that explain emergence of these symptoms. Despite "new" ontologies that dissolve any idea of necessity in an absolutely contingent relations, Critical Realism argues that mechanisms produce 'necessary' forces through which phenomenon 'tends' to emerge in a specific form. So, as far as these mechanisms remain activated, or not counter acted by other mechanisms, the events of actual level will not undergo any change. Here Critical Realism opposes Structuralist notion of a-historicity and non-transformability of structures, which will be discussed in chapter four.

Architecture, from a Critical Realist perspective, is made of layers of reality, whether social or material, discursive or non-discursive (in Critical Realist term intransitive and transitive). The crucial point is that relation of these two sides, is neither interrupted nor one-way, but they dialectically affect each other. "Discourse can be differentiated from the realm of extra-discursive practice, placed in dialectical relation to this wider realm of social relations, and analysed as a possible causal mechanism in the generation of social phenomena, alongside these other mechanisms, as a way to better determine discourse's actual effect on events". In Critical Realism, not only we can talk about objects meaningfully, but we can talk about meanings objectively. Not only non-discursive mechanisms affect discourse, but in return, discourse affects the way that material domain is formed and managed. As such, crisis of (post-)critical discourse is interconnected to and interdependent with non-discursive and material reality of architecture. This notion stems from Critical Discourse Analysis (CDA) paradigm (which itself is based on Critical Realist philosophy) that discourse is intransitive (or enduring) enough (at a specific time) to be studied as a causal object. If mechanism as Demetriou (2009) suggests is "that aspect of structure of a thing that grants a certain power to the thing", then it can be attributed to discourse too (Demetriou, 'The realist approach to explanatory mechanisms in social science: More than a heuristic? In Philosophy of the Social Sciences, no. 39, 2009, p. 444). Mechanism, Wight (2004) argues, can be any real entity- whether an institution, an agent's psychological or biological condition, or a discourse- that is "the operative or motive part, process, or factor in a concrete system that produces a result" (Wight, 'Theorizing the mechanisms of conceptual and semiotic space' in Philosophy of the Social Sciences 34, 2004, p. 288)

To apply critical discourse analysis, in chapter four I will trace deficiencies of critical architecture discourse in its metaphysical foundations, and in chapter five will support intelligibility and legitimacy of identified discursive mechanism by illustrating its power to explain crisis of three main narrations of critical architecture we have witnessed by now. This method will be applied in chapter six to analyze post-critical discourse as well, and explain what is lost or mis-conceptualised in architecture discourse that generates at first crisis of discourse itself and in beyond that affects crisis of architecture in whole.

4. Ideology and Loss of Reality

In this chapter I will argue that current discussions on both critical and post-critical trends are framed by Tafuri. Tafuri defined (in my view distorted) a platform, standing by now, on which (post-)critical paradigm originally grew, while excluding what remained underneath (in this sense Tafuri's analysis that focused on ideology was itself ideological!). More specifically he confused the question of "what architecture is?" with "how architecture is defined?" so deviated the discourse from "reality" of architecture to architecture as "ideology". While critical trends remained Tafurian even in attempting to move beyond him, post-criticals misused Tafuri to outline a distorted narration of architecture's reality.

To elaborate this thesis, I will trace Tafuri's idea on architecture to Althusser's analysis on ideology and, through Critical Realist insights, will try to disclose the primary fault deviated (post)critical architecture discourse.

4.1. Tafuri and Architecture of Ideology

Tafuri (1935-1994), the Italian architecture historian and critic, provided an enduring and haunting critique of contemporary architecture discourse, a critique that after decades still preserved its valid and of course fatal status (Ockman, 'Afterward', in Can Architecture Be an Emancipatory Project?, 2016, p. 145-147). Fatal in the sense that estimates any critical agenda for architecture as 'anachronistic hope in design'.

Tafuri's influence on critical architecture discourse, specially on figures that seize, even today, the dominant narrations of critical architecture, can be dated back to 70s and a journal called "oppositions" published by IAUS (Institute for Architecture and Urban Studies) in New York from 1973 to 1984. Considering its editorial team (Peter Eisenman, Kenneth Frampton and Mario Gandelsonas) and its contributors (among them Rem Koolhaas, Joan Ockman, Bernard Tschumi, Michael Hays and Tafuri himself) the journal occupies a turning point in formation of critical architecture discourse, as we know today. Although Tafuri and his application of 'European Theory' was not the only strain to be studied (there were varying preferences from structuralism, formalism, to Frankfurt School) but Tafuri's notion on 'historical determinism' and its antagonism to 'architectural formalism', was the main theme of discussions. So that, in two symposiums formed in 1981 and 1982 by 'Institute of Architecture and Urban Studies' called 'architecture and politics' and 'architecture and ideology', Tafuri's work was at the focus of study.

Today we can claim majority of critical and even post-critical discourse contributors have defined their projects in relation to and influenced by Tafuri's analysis, whether by confirming or refuting it. As Eisenman and Hays apply Tafuri's pessimism to justify their notion of architecture as merely self-referential project and critical architecture as architectural criticism. Or Koolhaas, as rebellious disciple of Tafuri (Wallenstein, 'Architecture, Critique, Ideology', 2016, p. xxx), who tries to breach the (Tafurian) notion of architecture dissolved into the structure of the metropolis, 'the Metropolis as the essential site of capital', through suggestions of operative criticality for architecture. Or Tschumi who defines architecture as a form of knowledge in and of itself, a knowledge with critical potential, to reject Tafuri's idea on modern architecture as a form of historically generated 'ideology'. Tafuri's influence can be even traced in post-critical paradigm, which in a sense recovers his idea on impossibly of critical to celebrate "end of theory" and dissolve the discipline in technological intelligence.

As a new Marxist, Tafuri, in his analysis of modern architecture, essentially followed Hegel and specially Marx's distinguish between base (which comprises the forces and relations of production such as division of labor) and superstructure (which includes culture, art, institutions, rituals, etc.), in which the former determines the latter. As Marx advocated absurdity of aesthetic utopianism, since image (form) can't bring liberated society, Tafuri explained that architecture qua architecture (located as superstructure) fails to reflect upon and seek alternative within social structures (as infrastructure) that condition its formation (Tafuri, 'Architecture and Utopia', 1976). Hence, he considered attempts such as modernist Avant-gardes and utopians as deluding ideological veils expanded through some dialectical tales but fail to reflect upon social conditions of architectural production.

The concept of ideology lies at the core of Tafuri's critique on modern architecture and nature of architecture history. By emergence of capitalist modernity, architecture, which was only a matter of design and building, appeared as a set of institutional and ideological meanings and produced its own structures and discourses (Cunningham, 2016), structures that were related to and emerging from general structures of capitalist society (Cunningham, 'Architecture, the Built and the Idea of Socialism', in Can Architecture Be An Emancipatory Project?, 2016). Tafuri's analysis considers these discourses as historically and ideologically generated narratives, formed around bourgeois culture to disguise 'objective' history and actual materiality of architecture.

From Tafurian perspective, the role of ideology in architecture is to function as dominant determiner of architectural production and representation. This domination happens through internalizing and legitimizing the values of sovereign social class that possessing power.[4] In return, determined by ideology, architecture and planning function as a mediator allowing reflecton upon ideological dominance enabled their production. The significant result would be that architecture is a legitimacy tool in hands of power not a transformative action.

In his theory, Tafuri limits knowledge to cultural analysis and equates architectural knowledge to ideology study.[5] It is ideology that produces architecture, and architecture

[4] Sargin (2007) explains this occurs in two phases: first internalization of ideological preferences of power holders in ordinary people, by the agency of agreed places with dissolving in the dynamics of life. Second aesthetisation of representations to symbolize subjects of beauty and ugliness and legitimize preferences of sovereigns.

[5] Cultural analysis concentrates on the political dynamics of contemporary culture, its historical foundations, defining traits, conflicts, and contingencies (Simandan, D., 2010).

functions merely as representation of ideology. This relationship that Tafuri establishes between ideology and architectural production follows an Althusserian thread. Althusser theorized the close relationship between ideology and power, in which “Ideological State Apparatuses” (such as schools, political parties, literature, art) engage in formation of its favored culture to reproduce conditions of its own production. (will be discussed in next section)

Tafuri believed that autonomy is an illusion, since architecture is inescapable from capitalist social relations, and as long as exploitive nature of capitalist system is prevailing it is impossible for architectural design to transform lives of ordinary people (Tafuri, ‘Architecture and Utopia’, 1976). In other words since in metropolis, the resistant subject is dissolved in structural totality of production system, any utopian aspiration will end up in planification of capitalist system, while covering this fundamental function behind its manifestations and purity of forms. Therefore, utopianism has no choice but to retreat to pure architecture, to ‘form without utopia’, and consent the role of ‘sublime uselessness’ in capitalist society (Tafuri, ‘Architecture and Utopia’, 1976, p. ix). Calling critical architectural attempts as ‘anachronistic hopes in design’ (ibid, p. 182), for Tafuri the only critical potential for architecture is unconscious embodiment of social conflicts taking place in underlying structural level. As such, Tafuri replaces critical architecture with critique of architecture, and then converts critique of architecture to critique of social systems chained architecture. In Tafuri’s words: “one cannot ‘anticipate’ a class architecture (an architecture ‘for a liberated society’); what is possible is the introduction of class criticism into architecture” (Tafuri [1968], ‘Theories and History of Architecture’, 1980, p. iii)

4.2. Suspended Disciplinary Borders

Manfredo Tafuri is considered as crucial starting point for missed reflection on history of theories that framed architecture discourse. Jameson (1982) explained that Tafuri was one of few thinkers which engaged in the concept of history rather than a representation of history; so he realized Althusser's proposition to exceed the crisis of historical representation (Jameson, 'Architecture and the Critique of Ideology' [1982], in Architecture Theory Since 1968, 1998). In doing so, Tafuri proclaimed a sense of necessity, necessity of failure, of unresolvable contradictions and a determined destiny for (critical) architecture: "Architecture as politics is by now such an exhausted myth that it is pointless to waste anymore words on it" (Tafuri, 'The Sphere and the Labyrinth', 1987, p. 8)

For architecture discourse, it has been hard to move beyond Tafuri's robust and devastating analysis, what tragic failure of utopians along several decades of progressive ideas can attest it (disappointment of movements like Superstudio, Archigram, etc). However, some minor critiques from inside of the discourse are made against his determinism. Cunningham (2007) argues that Tafuri takes political action as direct and total transformation of social relations, while critical (self-critical) architecture can possess a political role by exposure of its own intrinsic limits, in writing and practice (Cunningham, 'Architecture as Critical Knowledge', in Critical Architecture, 2006). This is a form of social intervention, however mediated. This critical potential of architecture is what Jameson asserts as dialectic between autonomy and heteronomy in locus of architecture. He believes that architecture is not created through expressive causality of underlying political and economic levels, losing all its constitutive autonomy, but possesses some extent of autonomy to consciously articulate social conflicts and with that play a political role (Jameson, 'Architecture and the Critique of Ideology' [1982], in Architecture Theory Since 1968, 1998). Another distinguished critic of Tafuri is Joan Ockman. While she (2016) considers Tafuri's analysis as essential to understand so-called critical or radical trends, describes it as absolutionised conception of political practice, which disregards possibilities that some specific 'sites' and 'methods' might provide for critical architecture (Ockman, 'Afterward', in Can Architecture Be an Emancipatory Project?, 2016, p. 145-147). As discussed in previous chapter, Ockman still keeps hope to architectural praxis (a Gramscian optimism) through focusing on 'where architecture is a necessity not a luxury'. In these conditions of deprivation (illustrated in marginalized groups, needy institutions or damaged urban fabrics) architecture can intervene in 'redistribution of planetary resources' and through this run an emancipatory project (ibid).

In general, while post-critical trends have embraced Tafuri as an excuse to discard any idea of criticality, critical discourse's encounter with Tafuri has always been contradictory. His analysis kept living in background of their critical endeavor and appraised for its rigor, at the same time that they always scrambled to move beyond or alleviate its harshness by resourcing to competing theories outside the discipline. Explained paradigms in previous chapter are some examples of attempting to exceed Tafuri's conclusion. Critical architecture discourse, in general, is dependent on managing Tafuri's proposition. Without that, crisis will be indispensable element of any paradigm assigns a social or political role to architecture. The question is, are current critiques raised inside the discourse sufficient to deal with Tafuri?

My proposition is, to address this question, we need a disciplinary leap to discuss Tafuri's concept of ideology in a metaphysical level; following Tafuri himself who relied on theoretical foundations produced in philosophy and social science realms. Here, I am against Tschumi that propounds architecture as "a knowledge in and of itself" (Tschumi, 'Architecture and Disjunction', 1994, p. 102). Tschumi's notion implicates 'nature' of the discipline, which in his estimation, being developed in its philosophical, social and cultural demands slowly over centuries, now is capable to deal with its own 'social, spatial and conceptual concerns'. This idea is widely absorbed in architecture theory especially within academy, which undertakes the role of guarding disciplinary borders. In my view, such an approach suffers from some essential fallacies. First, it provokes the illusion of disciplinary autonomy. While we know, at least in its current situation, architecture discipline is widely affected (if not subsumed) by advances in disciplines like computer science. Secondly, it supposes that closed loop of discourse learning from itself is sufficient to deal with new problematics raised inside and outside the discipline. While, architecture not only has been radically challenged in its foundations from outside the discipline (Doucet, 2009), it is also unable today to reflect upon its own internal conditions too. As Coleman (2014) argues, despite "theory boom" in architecture that began from the 1970s, we witness inverse relation between the theory explosion in architecture and the declining influence of its own earlier literature (Coleman, 'Lefebvre for Architects', 2014). That is to say, difficulty or inability of architecture to think its own thoughts requires thoughts from outside of the discipline to herald the potential for disciplinary renewal. Moreover, idealizing architecture and locating it beyond historical and social conditions is not compatible with the fact that architecture's disciplinary borders and it's 'objects of study' are under suspicious today (From a realist perspective asking about 'architectural objects' is an ontological question and unavoidably historical and fallible). This argument entails an extra-architectural discussion on Tafuri's propositions.

Miller (2014) explains that Tafuri gathers up innovations of Marxist thought including Lukács, Benjamin, Adorno and Debord; And attributes his formulation of ideology to Althusser: ideology as the normal unthematized background of lived relations to the social order, the "imaginary relation of individuals to their real conditions of existence" (Miller, 'The Historical Project of Modernism', in Filozofski vestnik, 2014, p. 83–101). Tafuri's affinity to Althusser is accepted among critiques. Sartarelli (1998) mentions that Tafuri's structuralism came from Althusser and Barthes philosophy (Sartarelli, in 'Architecture Theory Since 1968', 1998, p. 2). This goes along with Jameson's (1982) writings that introduce Tafuri's 'concept of history' as Althusserian (Jameson, 'Architecture and the Critique of Ideology' [1982], in Architecture Theory Since 1968, 1998). Accordingly, in following section, I will try to elaborate Althusser's idea on "idology" and analyze it from a Critical Realist perspective. According to Critical Realism, Althusser mistakes object itself with our knowledge of that object, while object exists independent from our perception. Through this analysis I am going to uncover pitfalls in Tafuri's conception of architectural object, and illuminate where the crisis of critical originates from. In following sections, I will argue that this fallacy of reducing ontology to epistemology, not only deprives critical discourse from comprehensive abstraction of architectural reality, but also leaves the door open for post-critical trends driven by flawed ontologies (generally known as "new" ontologies, such as Actor-Network-Theory, Object-Oriented-Ontology, etc). This story looks very like Althusser's relationship with post-structuralist theory. While Althusser intended to reorient Marxism to its materialist foundations, he triggered emergence of post-structuralist idealism. Looking from Critical Realist perspective, this fate stems from the fact that alternative for ontology is not non-ontology, it is implicit and flawed ontology.

4.3. Althusser and Theory of Ideology

Building his theory of ideology, Althusser moved away from that of the early Marxism which is an “imaginary construction” of hidden reality, as a “false consciousness”, a “distorted knowledge”. For Althusser, due to our reliance on language, it is impossible for us to access the “real conditions of existence” (Althusser, ‘Ideology and Ideological State Apparatuses’, 1970). We only can come close, through a rigorous “scientific” approach, to perceive the ways that we are inscribed in ideology by complex processes of recognition.

Althusser sympathizes Marxian analysis when considers ideology as a set of class-related ideas which serve to legitimize exploitative relations of production and perpetuate class interests. However, for Althusser more important than its function, is the mechanism of ideology (“generative mechanisms” to borrow a Bhaskarian term) and the manner it should be explained. Athusser in “For Marx” (1965) identifies ideology as a knowledge, which merely reproduces already present premises without any real change. He distinguishes between ideological and scientific knowledge, and posits while theoretical ideologies (such as empiricism, pragmatism, rationalism) constantly constrain and threaten science, the “epistemological break” that exist between science and pre-scientific ideologies (like religion, ethics, political ideologies, etc) leaves those (non-theoretical) ideologies self-constitutive and intact. The outcome is occupation of objective social dimension by ideology that is “omni-historical”. That is not to say that sciences cannot influence nonscientific social realities but that this influence is possible only if sciences are accompanied with social movements and political forces. According to Puehretmayer (2001) Althusser intends to say that firstly, “we can never become the fully inidividuated, autonomous subject projected by rationalist philosophies”, and secondly, “no social formation can exist without a social organization of production, and corresponding ideological forms” (Puehretmayer , ‘Critical Realism, Cultural Studies and Althusser on Ideology’, in ‘Debating Realism(s)’, 2001). Althusser denounces idealism as bourgeois ideology, and credits Marx for part of his developments grounded in breaking Hegelian dialectic[6] and providing a new materialist non-ideological theory of science (Althusser, ‘For Marx’, 1965). At the same time, he criticizes historical materialism too, for not conceiving that even Marxist parties cannot do without ideology: “ideology is indispensable” (Althusser [1965], ‘For Marx’, 2005, pp. 233, 235).

[6] A threefold method of argument relies on a contradictory process between opposing sides of thesis-antithesis and production of synthesis that unifies the first two. Hegel’s dialectics leads to a linear evolution or development from less sophisticated definitions or views to more sophisticated ones later, so that history is an intelligible process moving towards a specific condition -the realization of human freedom.

This analysis reminds architectural utopian trends such as Archigram and Superstudio aspired a non-capitalist society, however, in a retrospective look, we can consider their utopic wishes as self-deceptive and naïve ideological veils that ultimately reinforced and reproduced the relationships they sought to displace.

Althusser attributes some other essential and absolute traits to ideology. As one of his fundamental estimations "ideology is profoundly unconscious" (Ibid, p. 233) - this implicates the key topic of 'agency and structure' that Critical Realists have widely theorized about, that which I will address it in following pages. In his own words: "Ideology is a system of representations which in the majority of cases have nothing to do with 'consciousness': they are usually images and occasionally concepts, they are perceived-accepted-suffered cultural objects and they act functionally on men via a process that escapes them. … Ideology is an objective social reality, the ideological struggle is an organic part of the class struggle" (Ibid, p. 233). This takes Althusser to another key trait of ideology, which is formation of subject through lived experience: "Ideology is the 'lived' relation between men and the world. … in ideology men express the way they live the relation between them and their conditions of existence: this presupposes both a 'real' relation and an 'imaginary', 'lived' relation" (Ibid, 233). 'Real' relation signifies to the relation between men and their conditions of existence, and 'imaginary' relation is the way they live that relation. In short, for Althusser, it is ideology that besieges our relation to the world outside.

In 'Ideology and Ideological State Apparatuses' (1970) Althusser addresses the relationship between state and ideology. He argues that any social formation in order to survive needs, alongside production, to reproduce its conditions and relations of production. He attributes the central force - and object - of this process of reproduction to the state. Althusser explains that there are two types of mechanisms at play in this reproduction: "repressive state apparatuses" like police and court which dominate through physical coercion, and the other, "ideological state apparatuses" which dominate through cultural institutions like media, school, family, etc. In Althusser's analysis, gaining the sense of free will and voluntary agreement of majority is crucial for reproduction of class domination, and relatively autonomous Ideological State Apparatuses run the central mechanism of this consent.

In second part of 'Ideology and Ideological State Apparatuses' Althusser addresses the theory of 'ideology in general'. Here, Althusser elaborates one of core mechanisms of ideological domination, which is constituting human subjects through pre-existing categories: "Ideology interpellates concrete individuals as concrete subjects" (Althusser [1970], 'Ideology and Ideological State Apparatuses', 2014, p. 190). In other words, ideology works by means of making the subject to recognize itself in a specific way, and at the same time securing that specific nature as the only natural and obvious one for itself. In a sense subject loses all its free will except that of dissolving his will in a higher authority. Therefore, in Althusser's narration human beings identify themselves through an imaginary concept of their own subjectivity represented by ideology to them. They believe they act freely while they bear ideologies of a big authority without any resistance or transgression. (Critical Realists severely criticize this notion since it leaves no room for contestation and agency)

4.4. Althusser and Critical Realism

Althusser, in some part of his career, intended to construct a relatively coherent Marxist philosophy (Reading Capital, 1970). Although he abandoned eventually this ambitious project and followed a different path, his self-conscious defense of scientific character of Marxism, his critiques over 'crisis of Marxism' and his contributions to Marxist epistemology absorbed by next generation of Marxist theorists (Ferretter, 'Louis Althusser', 2006). For Althusser 'crisis of Marxism' stemmed from absence of an adequate theory to actively and analytically respond socio-economic crises around. Pursuing such a respond, Althusser was concerned with scientific and philosophical dimensions of Marxian theory and the relationship he could develop between them (Resch, '.Althusser and the renewal of Marxist social theory', 1992).

Critical Realism as a recent Marxist philosophy has widely been in dialogue with Althusserian made problematics on Marxist theory. Boyle (2014) posits that Althusser's critique disposed Marxist tradition to repose the question of Marx's scientific character; and this question was taken up and successfully recuperated by Critical Realism (Boyle, 'Epistemological Problems and Ontological Solutions', in Sraffa and Althusser Reconsidered, 2014, pp. 183 – 237). Conceiving knowledge as a product made through a process, existence of underlying structures operating independently of our conscious intentions, and critique of empiricism, pragmatism and individualism are some similarities between Critical Realism and Althuser's philosophy. Roy Bhaskar (the main protagonist of Critical Realism), same as Althusser, started his career with the aspiration of utilizing philosophy to defend a revolutionary (Marxist) science and contribute emancipatory project of working class. Puehretmayer (2001) claims, "roughly one could say that Bhaskar has supplemented Althusser's theory of epistemology (which he has adopted) with a new theory of ontology" (Puehretmayer , 'Critical Realism, Cultural Studies and Althusser on Ideology', in 'Debating Realism(s)', 2001, p. 1)

Althsser opposed empiricist theory of knowledge as a process takes place between a given subject and a given object, through which subject makes abstraction of object to penetrate the phenomenon (external layer) and reach the essence (internal part) of the object. For Althusser this method makes knowledge of the object as part of the object itself, while 'object of knowledge' is totally separate from 'real object' that may exist in the external world (Scott, 'Sociological Theory: Contemporary Debates', 2012, p. 184). Althusser, referring to Marx, argues that not only ‘real object’ and ‘object of knowledge’ themselves, but their processes of production also are distinct from each other. While former is totally produced through concrete processes in reality, the latter is abstract and lies wholly in the realm of theory. Albritton (1999) mentions that Althusser “in order to break with all copy theories[7] of knowledge, argues that knowledge involves a process of production that starts with ideological abstractions and ends with knowledge” (Albritton, ‘Dialectics and Deconstruction in Political Economy’, 1999, p. 29). In this framework, abstractions as raw material of knowledge are never found in ‘concrete’ reality, rather they are always governed by structures, and are pregiven (Althusser calls them “generalities I”). Albritton continues: “a science emerges when a determinant theoretical practice effects an epistemological break with previous ‘scientific’ ideologies (generalities I). The new science produces an object of knowledge that is in some sense adequate (or at least more adequate) to the real object” (Ibid). It seems that Althusser does not build a strict relationship between ‘real object’ and ‘object of knowledge’, and assumes that the object produced in process of knowledge is completely theoretical (“partly scientific (being the outcomes of previous iterations) and partly ideological”). As such, Althusser denies any inner link between knowledge and real object: knowledge is not discovered, but rather produced (Althusser, ‘For Marx’, 1965)

Bhaskar, not only includes ‘real object’ in his theory of science, but precedes reality to conceptual systems trying to investigate it (“being/existence has primacy over thought”). Bhaskar, despite Althusser who asserts on unbridgeable gap between ‘real object’ and ‘object of knowledge’, defends an inner relationship in level of methods between ontology and epistemology. (Ontology and epistemology are equivalent to ‘real object’ and ‘object of knowledge’ respectively). Bhaskar takes ‘real object’ as ‘intransitive’ and ‘object of knowledge’ as ‘transitive’ dimensions of knowledge. Intransitive dimension refers to structures that are independent of subject matter and explain the essence of an object and its stability and durability. Transitive dimensions are dependent to conceptual systems, however following their object of study are structured and layered. According to Bhaskar existential intransitivity is a priori condition for any investigation to be possible (Bhaskar, ‘The Possibility of Naturalism’, 1979). Theory for him is basically produced to explain causal mechanisms that are responsible for perceived behaviors of objects. Bhaskar argues that both

[7] Copy theories refer to empiricism, historicism and theories alike which define knowledge as generating mirror of the object by subject. Through this process, they seek to reach one-to-one correspondence between science and reality. Althusser argues, on the contrary, that the relations are, in principle, relations of dislocations: each has its own time and rhythm of development.

concepts and content of science are produced along social scientific practices in their interaction with (real) object. So that, it is object itself that leads methods and concepts produced to know it (Asadpour, 'Critical Realism and Marxism', 2014). As such, in Critical Realism science is neither a mirror of object (what empiricism believed), nor completely separate from it (what Althusser believed).

Separation from reality takes Althusserian theories to consider the process of knowledge as persistent production of new objects. While according to Critical Realism what is produced is another 'transitive' object along former ones, and always subjected to modification or replacement by another one, but the (real) object remains independent and intact, and that is exactly why we can talk about development in science. Losing the idea of reality Althusser, to distinguish between science and ideology, relied on Marx's philosophy (dialectical materialism) and the 'epistemological break' (in Althusser's estimation) it had made with prehistory of science. But founding on Marx's science (historical materialism) was the only way for Althusser to prove Marx's broke with his former ideological prehistory and establishment of a new philosophy. In other words Althusser extracted philosophy from (within) Marxist science, and then applied that philosophy to legitimate Marxist science. What Boyle (2014) calls "vicious circulatory" in Althusser's philosophy (Boyle, 'Epistemological Problems and Ontological Solutions', in Sraffa and Althusser Reconsidered, 2014, pp. 183 – 237). That which makes it so difficult to separate ideological and scientific practices. Bhaskar, to sidestep any debilitating circularity, initiated philosophy of Marxism within the natural science (not Marxist science), and through this differentiating intervention, delivered realist criteria for scientificity (epistemological criteria). In other words through shifting from significance of experiments (epistemology) to nature of scientific discovery (ontology) he allowed development of a coherent epistemology.

Regarding ideology, Critical Realists consider it as a "system of errors", including fallacies (epistemic fallacy, ontic fallacy …) and conflations (upward, downward and central), in theorization (Archer, 'Culture and Agency', 1996). Critical Realists believe science emerges from ideological contexts, but cannot be reduced to ideology. Bhaskar accepts the necessity of 'ideology critique' as part of a holistic analysis of scientific practices (Bhaskar, ' Philosophy and the idea of freedom', 1991), however, he distinguishes the epistemological aspects of the sciences from the sites of their production. According to Critical Realism, science is both a human product and an objective means of appropriating reality, and there are 'epistemological criteria' (in Bhaskar's term), emerged from 'intrinsic conditions' of ontological and epistemological investigations, allowing to differentiate epistemological and ideological science. These 'intrinsic conditions' are grounded in philosophy of science of Critical Realism (in Althusser what we have is a philosophy within (Marxist) science).

Collier (Bhaskar's assistant) mentions that ideologies are not just mistakes, but they function in the interest of a particular social system (Collier, 'Critical Realism', 1994) However, this is a simple relation between institutions and beliefs about them, not as Althusser believes as constitution of subjects through mediating between their imagination and real conditions of existence. Bhaskar in "Dialectic the Pulse of Freedom" (1993) differentiates two general and narrow concepts of ideology. General sense of ideology is "generated and reproduced and/or transformed at the intersection of power, discursive and normative social, material, inter- and intra-subjective relations", and the narrower concept is "embodying categorical error… [like] the view of war as a game or women as inferior to men" (Bhaskar, 'Dialectic the Pulse of Freedom', 1993-2008, p. 111). Bhaskar, like Althusser, believes explanatory critique alone is not sufficient to break ideologies. But, despite Althusser who dissolves human agency in social and historical structures, he posits that "a type of agency… [which is] transformed (autoplastic), transformative (alloplastic), totalizing (all-inclusive and auto-reflexive) and transformist (oriented to structural change, informed by explanatory critique, concrete utopianism and participatory-animating/activating research) praxis/politics" can bend social relations and interests underpinning ideologies (Ibid, p. 111). Bhaskar defends a form of agency which he calls "transformational model of social activity" (TMSA) (Ibid). TSMA is formed by dynamic relationship that exists, in Critical Realist view, between structure and agency.

Critical Realism opposes both individualist and holist conceptions of society as methodological conflations. Archer (1996) considers them as "upward" and "downward" conflations and fundamentally inadequate to theorize social phenomena. In the first case, society disappears and is replaced by some notion of aggregated individual action; in the second case agents disappear and the human individuals do no more than act out the imperatives of social norms and structures (Archer, 'Culture and Agency', 1988/1996). Archer positions Althusser in second category and denounces his conceptualization of social structure. For Archer concept of structure must be based on interaction of social groups not on "operation of the necessary conditions for the existence of the capitalist mode of production" as Althusser suggests (Ibid, p. 47). She considers ideology as "an objective form arising from the requirements of production and not the creation of a particular class for the subordination of others" (Ibid, p. 47). In this regard, Joseph (1998) confronts TSMA with Althusserian account of agency that "reduces agents to mere bearers (träger) of structures" (Joseph, 'In Defence of Critical Realism', in Capital & Class, 1998, p. 82). According to Critical Realism, structures are placed in intransitive part of knowledge but it doesn't mean that they exist independently of agents they govern. Structures as a given contexts pre-exist and condition activities (struggles) of agents, but they themselves are the product of past activities (struggles), so to be reproduced they are reliant on activities and can change along them. As such, in TSMA agents do not create structures but reproduce or transform them. Agents are limited within structures, but they are not simple bearers of these structures (what Althusser claims), rather, along (mostly unconscious) reproduction of structures they have the *potential* to consciously transform them. Bhaskar (1998) argues "society is both the ever-present condition (material cause) and the continually reproduced outcome of human agency. And praxis is both work, that is conscious production, and (normally unconscious) reproduction of the conditions of production, that is society" (Bhaskar, 'Societies', in Critical Realism: Essential Readings, 1998, p. 215)

In Cultural Studies researchers with Critical Realist insights, analysis based merely on structure and ideological institutions is not sufficient for explanation. Aside from meaning intended by producer or 'objective meaning', we need to include the actual meaning produced, conveyed and consumed by audience as a part of analysis. Since "audience is not a passive recipient but an active participant in the creation/production of meaning" (Puehretmayer, 'Critical Realism, Cultural Studies and Althusser on Ideology', in 'Debating Realism(s)', 2001, p. 8). Morley (1997) defending this integrated manner of analysis states "it is possible to recognize the necessarily constructivist dimension of any research process without claiming that audiences only exist discursively. To argue otherwise is to confuse a problem of epistemology with one of ontology" (Morely, 'Theoretical Orthodoxies', in Cultural Studies in Question, 1997, p. 134)

In my view, confusing ontology with epistemology, or reality with discourse, is the fatal fallacy which Tafuri (by following Althusser's structuralism) committed, and this flaw infected all architectural thought since then. Initiating by Tafuri, problems of Althusserian theory propagated in architecture, and sedimented at the heart of architectural thinking, while architecture's disciplinary content was inadequate to provide appropriate theoretical tools to excavate this inheritance. In the next section, I will try to disclose the main problematics raised from Tafurian/Althusserian thought in (post)critical architecture and took it into crisis.

4.5. Tafuri and Loss of Architectural Reality

It is interesting that today to deal with crisis of discipline we still return to Tafuri, while Tafuri himself was the greatest harbinger of architecture's crisis. Tafuri positioned crisis in essential capabilities of architecture, claiming that there is no proposal that architecture can make and cannot be assimilated or corrupted by capitalist structures. He considered 'meanings' of modern architecture as ideologically generated discourse formed around bourgeois culture, and as a historical materialist, intended to replace this modern 'meaning' with 'objective' history and actual materiality of architecture. Therefore, he highlighted the socio-economic and political conditions of architectural production, and concluded that utopian architecture is an "ideological veil". As such, Tafuri same as Althusser, relied on an epistemological argument of Marxism philosophy to justify Marxist science, and then applied that science to legitimate the philosophy which he had started from. This conflation lies in absence of ontological insight to ask what architecture is, independently from what modernity requires it to be. Llorens (1985) mentions this "unbridgeable gap between the epistemological and the ontological realm" in Tafuri's analysis, represented in his description of the relation between the spirit of capitalist rationality and architectural ideology. So that Tafuri's reader finds spirit of capitalist rationality "rather stupid". Since on one hand it "clears the ground of social reality and breaks all their defined confines", and on the other hand tries to "positivise this negative thought into utopia" (Llorens, 'Manfredo Tafuri: Neo-Avant-Garde and History', in On the Methodology of Architectural History, 1981, pp. 82-95). According to Llorens the "irreconcilable duality between 'reality' and 'appearance' that lies at the heart of Tafuri's approach" causes such inconsistent conceptions: "'utopias' are, in early stages, the necessary form of expression of progressive thought, while they become 'ideologies' in those stages where the thought they express or determine plays a socially conservative function" (Ibid). Here what differentiates between "progressive" and "ideological" for Tafuri is not utopia itself, but the way capitalism defines it. Tafuri by over-emphasizing on ideology, bypassed architectural object in favor of his Marxist view, and took ideology, rather than architecture in 'real', as 'object of study' on architecture.

From a Critical Realist perspective what is lost in Tafuri's account is "reality" of architecture, architectural object not as we know but as it is (or could be). That is not to say that architectural object (reality) is ontologically equivalent to objects of natural science. According to Critical Realism social objects are dependent on processes trying to know them, and also on concepts and activities made along, but it is objects' structural properties that determine methods and concepts of study, not arbitrary choice of researcher (Asadpour, 'Critical Realism and Marxism', 2014).

As I discussed in second section of this chapter, Tafuri's ideas has been criticized from inside the discipline. However, the ground they are standing is itself Tafurain. They either do not engage in ontological problematics or provide epistemological answers for them. As long as discursive confrontation with Tafuri is limited to descriptive critiques like 'absolutionised', 'pessimistic', and objections alike, without explaining mechanisms that (de)generated Tafuri's analysis, transcending Tafuri's impasse seems to be impossible. In my view, prior to Tafuri's theoretical propositions, we should focus on the method he applied to reach his insights. As Critical Realism suggests, methods as "transitive" objects of knowledge are always partial and biased, and contain some hidden preferences right from the beginning of study.

According to Critical Realism, science is both a human product and an objective means of appropriating reality. As Boyle (2014) puts Althusserian structuralism was responsible to provide a coherent account of these 'mechanisms of appropriation', and without that "it was a short step into the 'postist world' of unrestrained discourse" (Boyle, 'Epistemological Problems and Ontological Solutions', in Sraffa and Althusser Reconsidered, 2014, p. 214). Benton (1984) discloses Althusser and his followers' role in generating pressure toward post-structuralist relativism: "starting in epistemology immediately foregrounds the need to ensure some correspondence with external reality, and having failed to deliver this, many of Althusser's erstwhile followers took this as a 'sign' to abandon 'objective knowledge' as a legitimate intellectual pursuit" (Benton, 'The rise and fall of structural Marxism', 1984, p. 179). In my view, this analysis perceptively explains the link between Tafuri and post-critical architecture too. If the relation between architecture knowledge (signifier) and architecture (signified) is arbitrary, then intelligibility can only be found in the interrelation of various knowledges, be it computational science, psychology, media, and so on, that has congested architecture discourse today. However, this doesn't make architecture ontology free, rather through these new discourses architecture is defined through a specific narration of reality: a flat ontology made of homogenized objects, with no underlying mechanisms. As I will argue in following chapters, Critical Realism strongly opposes these flat ontologies, and explains that social phenomena (including architecture) is made of heterogeneouss agents (possessing unique properties as emergent phenomena) and underlying mechanisms that operate in four dialectically interdependent planes: (a) material transactions with nature (ecological aspects),

(b) social interaction between agents, (c) social structure proper and (d) stratification of embodied personalities of agents (psychological aspects).

In sum, Tafuri's contribution although enlightened capitalist structures of architectural formation, deviated discourse from reality of architecture, so: 1. prevented discipline to gain a holistic insight on stratified reality of architecture, specially in architecture's current multi-agential condition and complexity of power relations. So, deprived critical trends to define new borders of architectural 'object' and new si(gh)tes of architectural agency, to try to activate possibilities lied in various layers of architecture's reality (material, social, political, etc). 2. neutralised discourse to embrace any arbitrary narration of reality and predisposed architecture to get refashioned according to neo-liberal agenda. As he famously put: "The mass of architects shouldn't worry, they should just do architecture" (Tafuri, 'There is no criticism, only history', an interview with by Richard Ingersoll, in Design Book Review, no. 9, 1986, pages 8–11). This loss of reality (and its consequent outcomes) led to a predicament in architecture discourse, which I call 'crisis of (post)critical'.

5. Three Summits of Critical Architecture

In this chapter I will try to illustrate how 'loss of reality' has distorted critical discourse of architecture and corrupted critical attempts in their ultimate complaint with the order they aspired to overcome. Following Critical Realist method for identifying legitimacy of an explanation, this chapter is dedicated to test whether 'loss of reality', as an abstracted law in a retroductive manner, has the power to explain the crisis in different narrations of critical architecture. For this I will address three main summits of critical architecture discourse: Frankfurt School and pertinent movements of 60s avant-gardes, American criticality represented by Peter Eisenman and Michael Hays, and European criticality that is mainly led by Rem Koolhaas and Bernard Tschumi. (Titles of 'American' and 'European' refer to geographical origins that protagonists of each strain emerged from, that which interestingly correspond with theoretical alignments too).

While two latter narrations have originally raised from a Tafurian ground, 60s avant-gardes followed a utopian vision and were aggressively attacked by Tafuri for disguising ideology in a utopian veil. Despite this difference, as I will argue, both Tafuri-raised and non-Tafurian paradigms, shared the common fault of dissolving architecture's reality in subjective interpretations of a discourse which itself is evacuated from objectivity (whether stemmed from Althuser's structuralism or Frankfurt School's critical theory). Two strains of American and European criticality both emerged from Tafurian concept of 'architecture as ideology', and in seeking an answer for 'impossibility of critical' they propounded distinct solutions. While American criticality focused mainly on theoretical and textual possibilities and pursued criticality in formal construction of meaning, European narration concerned more operative and pragmatist implications of criticality and engaged in circles of capitalist production with a hidden critical agenda.

5.1. Frankfurt School and Formation of Critical Architecture

Frankfurt school produced possibly the most significant cultural narration of Marxism called critical theory. Adorno and Benjamin as two major figures of critical theory have widely influenced progressive ideas in theory and practice of architecture by now. While Adorno's theorisations on "negativity" of artwork was taken up by intellectual and textual trends like what we witness in Eisenmann, Benjamin's ideas on art production led to collective utopianism in architecture as a social and experimental practice.

Critical theory, in general, criticizes all forms of essentialism that claim possessing the truth (in architecture criticizes any approach that claims a nature for architecture), and intends to reach a more humane, more just, and more emancipated society through unravelling the given social conditions then commitment to its radical (transformative) change. Regarding autonomy (the capability of architecture to release itself from external forces which intend to cast or constrain its nature, and return to its own internal traditions) both Adorno and Benjamin believed that architecture has an autonomous moment; So that at the same time that it's not entirely autonomous from social structures, it is also not entirely heteronomous by externally determined forces surrounding it. Adorno considered this autonomous moment as an opportunity to mark social separations exist within contradictory reality of capitalist modernity. Benjamin, however, concerned social implications of this autonomy and argued that due to its mimetic relation architecture allows critical reflection upon its social conditions.

Dividing architecture's process into two production and consumption stages, we recognize a significant difference between Adorno's and Benjamin's views, that historically raised distinct narrations of critical architecture. Adorno, despite Benjamin, believed that what artist produces (not the process or means of production) matters most and the work of art must perpetuate "negativity" and avoid easy consumption. From an Adornoean perspective although this negation and distanced reflection will not change the reality of architecture in capitalist condition ("it can only rattle its chains in vain as long as it remains trapped in an entangled society"- Adorno,1997, p.17), it can at least interrogate the real divisions under which the non-identity of architecture with building production operates today.

Adorno identifies a fundamental contradiction in utopian intentions: "[Nothing] can smooth over the contradiction. On the one hand, an imagined utopia, free from the binding purposes of the existing order, would become powerless, a detached ornament, since it must take its elements and structure from that very order. On the other, any attempt to ban the utopian factor, like a prohibition of images, immediately falls victim to the spell of the prevailing order" (Adorno, 'Functionalism Today', 1965, pp. 16–17). From this perspective the fundamental contradiction is most clearly visible in architecture: architectural imagination is developed in the same society that chains it to the conditions of production. Adorno along with his "negative dialectic" calls for "purposelessness" ('sublime uselessness'- neither 'exchange' nor 'use' value), since in a capitalist society genuine 'functionality' or 'use' is dependent upon a moment of autonomy, and functionalism itself is not able to create another purpose/value (to replace exchange value). In other words, since in capitalist society even use value is assimilated in capital accumulation, any purpose for artistic (architectural) production must be negated. This narration of critical practice leads to a form of individualistic intellectualism which is hostile to mass culture and their daily life, seen in Eisenmann and other adherents of aesthetic criticality. This approach to critical architecture has been widely denounced in recent discussions of critical discourse. For instance Hilde Heynen (2006) posits, criticality cannot just be reduced to the packaging aspects of a building and its representational potentials, but a critical treatment of social reality inevitably operates at various levels simultaneously, such as: 'who is building and how?' 'who will profit from this development? 'what is its impact on the public domain?' (Heynen, 'A Critical Position for Architecture?', in Critical Architecture, 2006, p. 49).

Benjamin, despite Adorno who gave the priority to product, believed that the means by which the art work is produced (mechanical reproduction) matters most. However, focusing on production side of an art work, Benjamin has theorized on how it is consumed too. In fact, this is the characteristic of Benjamin's vigorous view that considers art work as a continuity from production by mass (in a collective and non-avant-garde manner) to consumption by themselves (in a simple and easy manner through habit); a holistic view which collapses the wall existed between production realm (collective practice) and cultural realm (perception) (Benjamin [1934], 'The Author as Producer', in Understanding Brecht, 1973).

Benjaminian discussions in architecture realm have been concerned with modern architecture and its social role, experience and its crisis in modern epoch, and urban environment and the way it's received by human. Benjamin explains how traditional auratic (sacred, authentic and authoritarian) art has been replaced by modern non-auratic one and created a double-edged sword in its social role. While accessibility of means has enabled masses to engage in (collective way of) production and represent their culture and everyday life through social art, mechanical way of production has led to capitalist mass production of commodified art work for "culture industry" and created a transient and momentary experience which strongly conflicts with traditional experience of artwork that occurs in longevity. (Benjamin [1936], 'The Work of Art in the Age of Mechanical Reproduction', in Illuminations, 2007)

Benjamin believed that architecture (qua architecture) is already a dialectical image, a locus of dialectic between autonomy and heteronomy. It is neither totally determined by heteronomous forces such as technical, functional, or economic requirements, nor wholly separated from these external forces trying to cast or constrain it; but through an 'autonomous moment' architecture can critically reflect upon its social conditions. Benjamin argues that this reflection occurs through architecture's 'mimetic relation' with its social and historical context. Mimesis, as a key term coined by Benjamin, is imitation through representation and expression. It is not just related to rational production but an adaptive behavior prior to language that makes architecture similar to the society that it emerges from. In this sense, architecture as a social text resembles and represents the contradictions that exist in the society, and with that, provides consciousness and reflection over social conditions, and ultimately leads to their transformation. Regarding architectural production, Benjamin believed that architecture has always been a social art produced by mass, so it is inherently resistant to auratic appreciation. Identifying architecture as a "living force" produced for its use value, he writes "architecture has never been idle", but a collective practice of production and reception with a liberating potential (Benjamin, 'The Work of Art in the Age of Mechanical Reproduction', in Illuminations, 1973, p. 233). For him, liberating potential of architecture can simply get activated through engaging the mass in the process of architectural production, and providing collective ownership of means of production for them.

Relying mainly on non-auratic character of architecture, Benjaminain trends such as Archigram and Superstudio aspired a non-capitalist society by engaging the mass in the process of production, possession and organization of social space. Their utopian wishes was laid on visionary images of a life "never aestheticized nor abstracted and never technologically sanitized" (Deamer, 'The Everyday and the Utopian', in Architecture of the Everyday, 1997, p. 196). The utopic "new man" was also defined as a body of an ordinary simple life who is technologically advanced but programmatically primitive. This group of 60s avant-gardes, identified utopia in opposition to reality, and reality was the experience of a world objectified by "false epistemology of positivism". The main concern was distortion of concept of (everyday) individual that was degraded to object of modern (capital) apparatuses like architecture. To liberate society they promoted some collective and decentralized performative practices, not merely in the realm of manifestations like images or manifestos, but in the form of behavioral operations in new spaces of resistance too. In their estimation, this would make architecture not of buildings or things but of bodies, ordinary individuals of everyday life. This faith to individual subject, as Deamer (1997) points out, was a reaction not only against modernity's capitalism and globalization but totalitarianism of post-war era too (Ibid). So that despite their different nationalities and diversity of scales and motifs, all these groups shared an underlying theme of culturally inscribed everyday body.

This conception of utopia and centrality of human body can be traced especially in Marcuse's writings. Marcuse another key figure of Frankfurt school, as with other thinkers of this school, criticized instrumental reason and rationalized epistemology of modernity, and advocated instead sensual epistemology and authentic desires of ordinary subject. For Marcuse utopia lies on negation of rationalized reality, and utopian thinking is thinking the unreal. In this account, the sensuous body is the essential locus for this dialectic between affirmation and negation, reality and utopia, society and self. And that's why it positions at the center of sixties negative operations. They considered performative practices of everyday as representation of refusing rationalized reality, while same as Marcuse, and generally all Frankfurt School members, admitted that this negation may or may not lead to change, but without that there is no hope.

Utopian project of this group has been criticized inside the discipline mainly by Tafuri and his followers. From a Tafurian perspective, expectedly, utopic wishes of these avant-gardes are self-deceptive and naïve ideological veils that perpetuate values and interests of sovereign social class, and ultimately reinforce and reproduce the relationships they sought to displace. Today, architecture's non-auratic character, as cornerstone of Benjaminian platform, is violated by overwhelmingly iconic treatment of architecture dominating contemporary understanding of architectural practice and meaning. Architectural expertise, in global perspective, is defined by (seemingly) genius figures in power producing aesthetized brand images for (both material and immaterial/conceptual) market, in which even (sublime) uselessness serves for production of exchange value (uselessness that Adorno believed could be a resistance against commodification of architecture). Looking from Tafurian perspective, since architecture is enmeshed in its social structures which are not architectural themselves, first step for changing reality is to reflect upon social conditions of production such as division of labor (in which architect himself positions as an immaterial labor) that sustain this reality. In this view, any other initiatives (what Tafuri calls anachronistic hopes in design) will not exceed a false reconciliation under capitalism relations, a reality that tragically experienced by Benjaminian attempts tried to dissolve auratic architecture simply by decentralization of production.

Looking from a Critical Realist perspective, this 'ideology critique' is necessary but, as Bhaskar says, as part of a holistic analysis of scientific practices. We should distinguish the epistemological aspects of the sciences from the sites of their production, what is absent in Tafuri's blanket rejection of utopia. Critical Realism would agree with Structuralist point of view that social relations, that which utopians demanded to replace, are not separated from social structures. However, social structures themselves are in dialectical interaction with social relations while laid in different layers of social reality. According to a Critical Realist analysis tragic failure of sixties utopians stems from lack of concept of reality and disregarding its causal mechanisms, not necessity of dissolution and reconciliation of any utopian imagination under impenetrable structures, as Tafuri claims.

Following Frankfurt school, these neo-avantgarde groups took reality equal to positivist interpretation of it, then denounced this rationalized objective thinking as instrumentalised knowledge for social institutions like architecture developers. At stake was concept of experiencing individual being distorted to objects of experience by positivist approach (in this sense unlike structuralists their subject of critique was not limited to state but all social institutions). To resist this alienation, Critical Thinkers denied the idea of (real) object and identified science as merely subject product (what is called epistemic fallacy in Critical Realism). For them objectivity was a myth, since object itself is embedded in historical and social processes. Following this doctrine, utopian architecture movements shifted from traditional practice of architecture of objects (buildings) to architecture of subjects (bodies), and this occurred through culturally inscribed performative practices of daily life. As Deamer (1997) points out "the object of architecture became the subject himself" (Deamer, 'The Everyday and the Utopian', in Architecture of the Everyday, 1997, p. 198). In dissolving objects in subjects of everyday life, they actually reduced reality to empirical level of human experience and this hindered their utopic ideas to develop a holistic conception of causal mechanisms engaged in architectural production (according to Critical Realism any emancipatory project relies on detecting and then removing intruder mechanisms). This made their alternative imaginations illusive, regardless to availability of resources and far from feasible and plausible circumstances; A concreteness that Bhaskar's utopianism offers for any counterbalancing actualism (as imagination of alternative) to be real (possible). Hence, these utopians bound their hopes to some performative, individualized and temporary actions with no power to influence structures that operate in duration. As I explained in fourth chapter, following Critical Realism architectural reality can be analyzed according to structures and mechanisms operating in four dialectically interdependent planes: (a) material transactions with nature, (b) social interaction between agents, (c) social structures and (d) stratification of embodied personalities of agents. Aside from visionary conception of social relations and social structures, utopian architecture groups neglected the reality of agents (bodies) as stratified personalities that are inherently historical and dialectical. Marcuse positions body somewhere between two extremes of culture and biology. However, for him, it is biological drive of body that becomes a cultural one. As Jameson (1982) posits these utopians premised "an eternal human nature concealed within the seemingly 'verifiable' and scientific data of physiological analysis" (Jameson, 'Architecture and the Critique of Ideology' [1982], in Architecture Theory Since 1968, 1998, p. 442). What discredits their project to be really critical.

5.2. American Critical and Aesthetization of Politics

American critical as the most echoed narration of critical architecture, mainly developed by Peter Eisenman and Michael Hays in eastern coast of the United States – generally "critical architecture" refers to American narration of it. Their conception of critical architecture originally stemmed from a specific reading of Tafuri's ideas on ideology. As discussed in fourth chapter, Eisenman and Hays, among other key figures of critical architecture, were deeply influenced by Tafuri during 70s and 80s discussions. Hays' association with Eisenman and their interest in Tafuri, which led to publication of his essays in Eisenman-sponsored journal 'oppositions', suggests a Tafurian lineage for American critical architecture. Thus, "a critique to Hays became a critique to Eisenman, and therefore to Tafuri" (Sabini, 'Re-setting the Critical Project', in Re-Building, proceedings of the 2010 ACSA Annual Meeting, 2010, p. 386).

In his book 'Theories and History of Architecture' ('Teorías E Historia de la Arquitectura', 1968) Tafuri argued that value of a work, whether architecture or critique, can no longer be judged by merits and faults of everyday life. But it must be evaluated based on its relation to larger ambition of framing theoretical aspirations, and it is accessible to critic only through a 'provisional suspension of judgement'. This attitude was made in the context of ideological expert knowledge and disjunction between aims and achievements, goals and realities in project of modernity. Tafuri emphasized that suspension of judgement doesn't mean that judgement must be "eliminated in a relativist limbo", rather to contest "the dogmatic attitudes of critiques that are considered absurd" and "to rethink the intrinsic meaning of criticism itself" (Ibid, p. 13). Here we can lucidly realize Althusser's concern on ideology and his call for 'epistemological break' to differentiate between ideological and scientific knowledge.

Responding Tafuri's call Eisenman and Hays, as two father figures of American criticality, offered architectural production to be separated from conditions of technocratic governments and also commodifying forces of capitalist market (Cowherd, 'Notes on Post-criticality: Towards an Architecture of Reflexive Modernisation', in Footprint 4: Agency in Architecture, 2009). The idea was that through setting apart from 'corrupting forces of capitalism' (Tafurian notion) and impurities of social conditions, they can construct a rigorous theoretical framework for architecture. Following Tafuri's warnings on instrumentalising critique (as he states in an interview in 1992, "History is not an instrument of politics. History is history"), such a theory of architecture was not a way to approach practice or a particular political agenda, but it was a theory for theory itself. As such, American criticality returned subject of critique from external social conditions to internal (self-referential) assumptions of discourse. It positivised Tafuri's 'critique of autonomy' to 'project of autonomy', and turned 'critical architecture' to 'architectural criticism'.

Critical architecture historically has concerned two semi-separate domains of criticality: formal construction of meaning through representation, and spatial mediation of everyday life through production. What American criticals pursued was to exclude spatial and programmatic dimension of architecture and retreat to its purely formal implications. In other words, in their Tafurian inscribed attempt to resist ideology of culture, architecture needed to become a self-referential text for everlasting contemplation and critique. Hays (1984) in a seminal article entitled 'Critical Architecture: Between Form and Culture' defined critical architecture as "resistant to the self-confirming, conciliatory operations of a dominant culture" (Hays, 'Critical Architecture: Between Form and Culture', in Perspecta 1984, p. 15). This assertion on cultural critique in American criticality, was compatible with the idea of architecture's 'autonomous moment' advocated by Frankfurt School thinkers. The notion of autonomous moment implied that architecture is not entirely determined by heteronomous forces such as technical, functional, or economic requirements, so it can critically reflect upon its social conditions (Heynen, 'Architecture and Modernity: A Critique', 1999).

In general, American criticality is based on application of critical theories made by three main figures:

1. Tafuri: following Tafuri's position on architecture as ideology, American criticality aimed to somehow positivise Tafuri and provide a critical history for architecture which is capable to resist values of dominant culture. By defining design as a form of discourse, American criticality turned architecture to a self-referential project in which autonomy of architecture is identified and relied merely on its aesthetic (self-)critique potentials, and critical architecture got equated to architectural criticism in level of form. This was along Jameson's (another successor of Tafuri) idea that ideology can be displaced by a text (form) which is mediating ('transcoding') underlying political and economic instances. Influenced by Jameson's idea, Hays embraced 'mediation' as invention of a set of (formal) codes which can articulate a distinct type of objects or 'texts', such as political ones (objects were equated to texts). This equating formal representation of politics with political engagement of architecture created conflation of aesthetic and political critique in critical architecture. As such American

criticals collapsed political project in project of autonomy, while dialectical tension of these two sides was disregarded (Martin, 'Critical of What? Toward a Utopian Realism' [2005], in Constructing a New Agenda, 2010).

2. Adorno: following Adorno's "negativity" and his call for resistance of artwork to easy consumption, American criticality was built on an individualized and intellectualist oppositional from which was hostile to mass culture and their daily life; that which , according to critics, propelled it toward production of symbolic capital and meaning market.

3. Derrida: following Derrida's textualism ("there is no meaning outside the text") American criticality splits programme (space) and text (form), working on an architectural language which is not representing any external reality, and produces its meanings without referring to any system of values. According to critics, such inaccessible private language protected text (form) from criticism.

Hays argued that aside from resistance to conciliatory representation of external forces (ideological values) critical architecture needs to oppose dogmatic reproducible formal system too (unconscious dogmatic form). He positioned critical architecture somewhere between these two poles of culture and form, resistance (to ideology) and opposition (to dogmatic form) (Hays, 'Critical Architecture: Between Form and Culture', in Perspecta, 1984). However, in practice, American criticality focused on formal critique and abandoned social concerns (Heynen, 'A Critical Position for Architecture?', in Critical Architecture, 2006). Hays praised Mies van der Rohe for actualizing architecture's formal autonomy: "Distinguishing architecture from the forces that influence architecture – the conditions established by the market and by taste, the personal aspirations of its author, its technical origins, even its purpose as defined by its own tradition – became the objective of Mies. To achieve this, he placed his architecture in a critical position between culture as a massive body of self-perpetuating ideas and form supposedly free of circumstance" (Hays, 'Critical Architecture: Between Form and Culture', in Perspecta 1984, p. 22). His conception was that formal autonomy (consciously autotomized form) could resist against values of dominant culture and save architecture from being ideological, however, as Dovey (2006) posits, by confining critical architecture to its formal dimensions, he drove social engagement of architecture to complicity with capitalist order. According to Dovey many of these 'critical' products "can now be seen as little more than stylistic effects that reframe and reproduce the very social relations they were conceived to resist" (Dovey, 'I Mean to be Critical, But . . .', in Critical Architecture, 2006, p. 253).

American criticals were obsessed by an individualized elitist outlook hostile to mass culture and everyday life. In their narration of criticality, architecture's social status was not a determining factor, so that concepts like "resistance", "opposition" and "difference" signify merely to intellectualised formal domain. Heynen (2006) considers this slip as breaking from most essential aspect of critical theory, which is "to assess discourses and facts from the point of view of their relation to social reality" (Heynen, 'A Critical Position for Architecture?', in Critical Architecture, 2006, p. 50). Heynen claims that through this slip "Hays prepares the ground for a free-floating, utterly disconnected, completely intellectualised discourse and practice of 'critical architecture', such as that of Peter Eisenman, which seems quite remote from the intentions that inspired the work of the original protagonists of critical theory" (Ibid). It seem Heynen blames Hays and Eisenman for a guilt they were not originally responsible for. There are many others among critical thinkers today who denounce American criticality for deviation from original critical project and alignment with global empire (among them Martin, Aureli, Fraser, Dovey, Lahiji and many others). But is their rhetoric so much different from what they pretend to oppose? In my view, deviation has occurred but on a ground which itself was distorted. To neglect this fundamental paradigmatic distortion will be reproduction of same mechanism that took American criticality into crisis. This essential deviation made by Tafuri's doctrine that architecture is ideology. Distortion lies not in identifying architecture as (non)ideological, but in reducing architecture to culture (discourse), in constraining borders of architecture to borders of our conception of it. American criticality strived for moving beyond Tafuri and breaking ideological reproduction of architecture under capitalist structures. To do so, it resorted Adorno's idea on possibility of autonomous moments in locus of architecture, and accordingly propounded formal critique as a trajectory to formal autonomy. This formal critique mediated political critique and since -according to Derrida- there was no meaning outside the text, it (supposedly) functioned as a political intervention too. This outline relied merely on textual mediations, however, reproduced Tafurian impasse (ideology?) that architecture is nothing more than culture, so indirectly confirmed that architecture cannot resist being ideological.

In Critical Realist term, this crisis lies in conflation of (architecture's) reality with our knowledge of that reality ('epistemic fallacy'). A fallacy in which Tafuri, Adorno and

Derrida align together. As I argued in 4th chapter Tafuri (following an Althusserian view of Marxim), bypassed architectural object and took ideology, instead of architecture in ‘real’, as ‘object of study’ on architecture. This move pushed architecture discourse to seek for possibilities in level of the discourse itself not in stratified reality of architecture as an emergent phenomenon. As long as criticality is imagined to be found inside the discourse not in referring to an external (independent) reality and its causal mechanisms, crisis of critical will be inevitable. While critics to American criticality involved themselves to this fault, crisis is no more solely exist inside the critical project, but it is crisis of managing the crisis too. That which takes crisis ‘in’ critical to crisis ‘of’ critical.

5.3. European Critical and Fifth Columnist Agenda

Bernard Tschumi and Rem Koolhaas are the main protagonists of a mode of critical architecture which we can call European. The title European as an approximate categorization simply signifies to where its proponents originally *emerged* from, at the same time that interestingly associates with their shared paradigmatic preferences – this shouldn't be conflated with the fact that they gradually concentrated more on the United States rather than Europe.

Tschumi and Koolhaas were among scholars gravitating and contributing to discussions took place in Institute for Architecture and Urban Studies (IAUS) and published in Oppositions magazine in 70s. Considering its directors (Peter Eisenman, Kenneth Frampton and Mario Gandelsonas) and other contributors (among them Joan Ockman, Michael Hays and Tafuri himself) the journal occupies a turning point in formation of critical architecture discourse, as we know today. Although Tafuri and his application of 'European Theory' was not the only strain to be studied (there were varying preferences from structuralism, formalism, to Frankfurt School) but Tafuri's notion on 'historical determinism' and its antagonism to 'architectural formalism', was the main theme of discussions. So that, in two symposiums formed in 1981 and 1982 by 'Institute of Architecture and Urban Studies' called 'architecture and politics' and 'architecture and ideology', Tafuri's work was at the focus of study.

Tschumi and especially Koolhaas inscribed various lineages into their work, what makes it difficult to associate them with a single approach to critical architecture. While in some ways they have contributed to critical discourse to exceed Tafurian impasse of "architecture as ideology", for some they have paved the way- through replacing critique made by external theory with a critique subsumed into and produced entirely by practice- for emergence of post-critical paradigm. Koolhaas (1995) states "in the deepest motivation of architecture there is something that cannot be critical" and characterizes architecture as "a surfer on the waves of societal forces" (Koolhaas, comment made during a discussion forum, Anyplace, 1995, p. 234). However, several OMA projects, such as the Seacenter for Zeebrugge, critically interact with their social and urban context, what makes it questionable to incorporate Koolhaas into the post-critical party.

Tschumi opposed (apparently) Tafurian delimitation on architectural knowledge (architecture as ideology) and introduced architecture (itself) as a particular form of knowledge: "Architecture itself goes beyond the mere process of building. The complex cultural, social, and philosophical demands developed slowly over centuries has made architecture a form of knowledge in and of itself" (Tschumi, 'Architecture and its Limits I', in Theorising a New Agenda for Architecture', 1996, pp. 152). In his definition, critical potentials of architecture, rather than 'negative' application of self-critical theory, is tied up with 'positive' engagement with 'real conflicts' concerning the 'nature and definition of the discipline' in and of itself, as well as of its openness to 'social, spatial, conceptual concerns' (Ibid, p. 154). As I argued in fourth chapter this narration supposes architecture as a discipline discursively and causally 'autonomous' from external world (whether developments of other disciplines, or external mechanisms which effect architecture's formation and get assimilated in architecture as knowledge and norm without being critically questioned).

Koolhaas, same as Tschumi, was determined to architectural practice while concerned to find some way around Tafuri's theoretical impasse. Despite American mode of critical architecture which retreated to sterility of "representational and rhetorical" design codes, proponents of 'European' criticality demanded a method of design which engages dirt of real world problems at the same time that is aware of and critical to architectural and urban consequences of capital ideology. This hybrid method, called 'operative criticism', presumably enabled them to subvert one-way relation of critical theory and practice (that practice follows theory) and through this transgress Tafurian made limits of the discourse. Their project was not to refute Tafuri's subjective approach, but to oppose his weak argument for being founded on a limited idea of what architecture is, and on a "crude opposition to a suspiciously singular and monolithic enemy named capitalism" (Fraser, 'The cultural context of critical architecture', in The Journal of Architecture, 2006, p. 318).

For Tafuri architecture was ideological instrument of capitalist (social, political and economic) realities and its only function was to organize the unity of production cycle. In his estimation inside this cycle of production 'imagery resolutions' of architecture are doomed to fail, since they remain in aesthetic (formal and stylistic) realm disjoined from social one, and also their suggestions are piecemeal while system (social) change needs to be total. Koolhaas aimed to concretize Tafuri's highly abstract theory by integrating the formal and social realm through expansion of architecture's (modern) function, not through form but through program (Jameson, 'The Cultural Turn', 1998). Program was strategies deployed to generate form from the analysis of a contextual experience, and For Koolhaas, it had the potential to shape the social realm. In this sense, Koolhaas starts from where Tafuri left up.

Hsu (2010) points out that Koolhaas was “precisely and purposefully” relied on same tools of art, language and history which were formulated by Tafuri and shaped his enduring paradigm of criticality, but intended to steer the discourse to opposite direction of what Tafuri led (Hsu , ‘The Operative Criticism of Rem Koolhaas’, in ReBuilding: Proceedings of the ACSA Annual Meeting, 2010). As Koolhaas himself puts: “Arrival of the Floating Pool: After 40 years of crossing the Atlantic, the architects/ lifeguards reach their destination. But they hardly notice it: due to the particular form of locomotion of the pool—its reaction to their own displacement in the water—they have to swim toward what they want to get away from and away from where they want to go” (Koolhaas, ‘Delirious New York: A Retroactive Manifesto for Manhattan’, 1978, p. 390).

In his program, Koolhaas identified an extra opportunity in structures asserted by Tafuri, a potential for mediation. Mediation between cultural abstraction (of Tafuri) and concrete construction of real world, that which, as Jameson explains, “capable of translation in either direction: able to function as a characterization of the economic determinants of this construction within the city fully as much as it can offer directions for aesthetic analysis and cultural interpretation” (Jameson, ‘The Cultural Turn’, 1998, p. 182). Koolhaas described one of his projects McCormick Tribune Campus Center as “positioning each programmatic particle as part of a dense mosaic” so that “our building contains the urban condition itself” (Koolhaas’ comments at https://arcspace.com/feature/mccormick-tribune-campus-center webpage, created in 2012). It seems what Koolhaas points out is not a simple representation of urban condition, but the specific relations that his design established with existing structuring principles of the building. In other words, he has transformed that specific social system into a formal category, not to aesthetize it, but to mediate in itself the very structures of relations that a social system manifests at the level of form. This move makes architecture and space a metaphor, a symbol that is liberated from architecture theory or even architect’s point of view and implicitly mediates the urban condition. “It is the new language of space which is speaking through these self-replicating, self-perpetuating sentences, space itself become the dominant code or hegemonic language of the new moment of History” (Jamesom, ‘Future City’, 2003) – here we can recognize why Koolhaas has been accused for sparking post-critical shift. European criticality, theorized practices that structured the ‘real’ (environmental system) rather than applying pre-existing theories capable of enacting capacity of architecture to resist the ‘real’. It redeemed possibility of critical practice from external critique and propounded instead interactive transdisciplinary mediation between different cultural forms of critical practice (writing, film, installation, etc.)

In their post-Tafurian paradigm, despite accentuation on 'reality', production of knowledge was still based on a cultural-epistemological interpretation of architecture. They relied on terminology of continental critical theory blended with post-structuralism and psychoanalysis in the work of figures like Michel Foucault or Gilles Deleuze (Fraser, 'The cultural context of critical architecture', in The Journal of Architecture, 2006) to oppose Tafuri's distanced and unifying manner of reflection, and replace it with shifting subjective experience. In this move from modernism's unity of thought to multiplicity of postmodern subjectivity, studying (difference between) cultural contexts gained primacy in architectural knowledge. Each context required specific parameters to engage in, and the theory produced through this practice was specific as well. Tafuri would reject this "operative criticism" as incorrect use of theory by architects to distort history and justify their works, while the whole process still reproduced under established values. For him architect could not be a thinker and contribute to real change since he is "anchored to his little discipline: questions of design"(Tafuri [1968], 'Theories and History of Architecture', 1980). Operative criticism "accepts the current myths, immerses itself in them, and evaluates architectural production by the yardstick of the objectives that have been achieved but that it proposed itself" (Ibid). Koolhaas however saw infinite potentials for modern architecture beyond Tafuri's apocalyptic view. In his book 'Delirious New York' he introduces Manhattan between 1890 and 1940 as "catalogue of models and precedents: all the desirable elements that exist scattered through the Old World finally assembled in a single place" (p. 17). Koolhaas approaches "operative criticism" with his specific method called "retroaction", in which an event is registered only through a later occurrence that recodes it. Retroaction is a technique to systematically assemble historical fragments in new combinations, to get rid of "the fact that all facts, ingredients, phenomena, etc. of the world have been categorized and catalogued, that the definitive stock of the world has been taken" (Ibid, p. 241). It is a "conceptual recycling" that "proposes to destroy ... the definitive catalogue, to short-circuit all existing categorizations, to make a fresh start" (Ibid). As such, despite American criticality which positivizes Tafuri through negation, resistance, opposition to capital forces in the level of form, European one tries to reach this positivity through deconstructing supposed rationality of cities (like New York, Manhattan and Los Angles) and apply architectural projects to detect and exploit these cracks exist on latest mode of capitalism. In Eropean narration “the iron cage of an oppressive status quo becomes through Koolhaas’s sublime descriptions the terrifying splendors of the real, a real in which there is no situation rotten enough for not containing a new positivity”(OMA, L’architecture d’aujourd’hui, 1985, p. 238)

But how they identify possibilities within the capital city even in its residues? How Junkspace, the worthless of city “turns into something” as Koolhaas claims? The answer lies in their incorporation to the idea of unconscious. In distancing from rationality of modern city, Koolhaas was concerned about “discovering” the flip side, the unconscious dimension of modern movement. Formulating his tactic of criticality, Koolhaas applied Surrealist ‘paranoid-critical’ method and introduced architecture as a form of Paranoid Critical activity. The paranoiac-critical method is a technique developed by Salvador Dalí in response to "fundamental crisis of the object" in mid-1930s. According to Dali the object is not totally fixed and external to human mind, but it is extension of subject’s self; and the meaning conceived from it is result of evocation of mind through an unconscious act. This interpretation of reality enabled Koolhaas to propose other ways of formulating historical discourse and analyze cities not solely as a form of modern movement but also a texture containing post-modern concepts of type, narrative and symbol. So, while Tafuri asserted on crisis of critical practice in result of necessary contradiction between utopian image and reality, Koolhaas “reinforced [reality] as a translation of the process of paranoic activity itself, i.e. the attempt to organise and materialize irrational thought into concrete form” (Eckhard, ‘A Concrete Fantasy: Edward James’ Las Pozas’, 2017). As such, opposition got converted to interaction and architecture that was an ideological corpse got interpreted as a living complex.

Despite his distinct propositions, Koolhaas essentially followed the same method (reduction) which Tafuri applied to interpret reality. Tafuri, following structuralism of Althusser and Barthes, conflated reality and knowledge and identified modern architecture as a language whose content (meaning) is lost. In his anthropomorphist account, reality and language correspond each other, so that structures of language are structures of reality as well. The architect’s only remaining task, as Hsu (2010) mentions, was “to assemble the exterior marks or visual aspects of that language into assemblages that could invoke only loss of meaning” (Hsu , ‘The Operative Criticism of Rem Koolhaas’, in ReBuilding: Proceedings of the ACSA Annual Meeting, 2010, p. 384). But if architecture is a set of signs assembled by human mind, then it is possible to change reality simply through reassembling of those signs and creating new meanings; what Koolhaas seems to be committed by resorting Surreal idea of unconscious. In Koolhaas' hybrid method, structure of language, which were conceived as structure of reality through Structuralism, was identified as structure of unconscious through a Surreal move. Koolhaas decoupled the basic dual relationship supposed between object and word by adding the common denominator of metaphor, to which both of former ones refer. This allowed architect to provide multiple alternative readings of history, beyond oppositional and conflictive bipolars of reality (language). What Koolhaas did with Manhattan. (he presented it as a fiction made of constellation of historical fragments, a model of surreality in which various lineages are inscribed through an structurlist logic).

Tafuri corresponded reality with language, and Koolhaas took one step further and converted language to unconscious. While from a Critical Realist perspective object is neither word nor fantasy, it is object in-itself (not for-us), independent of human mind. What Koolhaas did, in my view, was resonating the fault that Tafuri initially committed, that object is free-floating and arbitrarily interpreted object of human mind, whether this interpretation occur through reflection or as Koolhaas does through vision. If reality is transformed into ideology, what remains for intellectual work is involvement in the field of language, shifting the critique of ideology to ambiguity of reality. That which took Koolhaas to fantasy of paranoid-critical method, to "systematize confusion and thus to help discredit completely the world of reality" (Dali describing his paranoid-critical method, 1930). This loss of (architectural) reality, a reality which is independent of our conscious and made of stratified structures and mechanisms, as I argued in chapter four, is the main reason for crisis of critical architecture, and without robust conceptualization of this reality crisis is inevitable. Koolhaas conceived "surreal play of tensions between the universe of signs and the domain of the real" as a "magic reversal" to "turn all that garbage of the present system to our advantage" (Koolhaas, in "Finding Freedoms: Conversations with Rem Koolhaas", El Croquis 53, vol. 11, 1992, p. 19). However, as Fraser (2006) perceptively argues regarding both Koolhaas and Schumi, what they offered was an isolated symbol of critique rather than a critical architecture that hints at changes in meaning through radical aesthetics and a spatial manipulation of the building programme. In a retrospective look their tactic of blending into muddiness of global capitalism while being equipped with a hidden critical agenda came across as "a resigned reaction to the impossibility of ever challenging the dominant economic forces of capitalism" (Fraser, 'Beyond Koolhaas', in Critical Architecture, 2007). After all, fantasy cannot transform underlying structures and mechanisms constitute realness of reality.

6. Post-critical and Flawed Ontology

6.1. Post-Critical and Denial

From the early twentieth first century we witness emergence of a new paradigm (originally in America) known as "post-critical", "new pragmatism" or "projective", which rejects any critical or oppositional agenda for architecture and beyond that calls for abandoning theory itself entirely, since as Speaks (2008) claims theory stifles innovation Speaks, 'Intelligence After Theory', in Perspecta,Vol. 38, 2006, pp. 101-106). Post-critical architecture takes "technological intelligence" as an alternative to theory and replaces 'indexical', 'dialectical' and 'representational' approach of (American) critical architecture with a 'diagrammatic', 'atmospheric' and 'experimental' one; what convinced critics to consider it as essentially oedipal. Today, what is known as parametric or computational design, trends that increasingly define the norm of architectural expertise and seize architectural firms, find their roots in post-critical narration. As post-critical promoters such as Somol, Whiting and Speaks invite, in these types of design, emphasis is on productive potentials of internalized technology (networks, production systems, mass customization) and relations "within" architecture rather than architecture's relationship with the world outside (namely social and political realms).

To grasp post-critical and its branches such as computational architecture, we need to trace its theoretical roots. In his seminal book 'Earth Moves', Bernard Cache (1995) tries to import Deleuzian concept of "Fold" into architecture. Fold (a Deleuzian term) is an unstable dynamic space prior to coordinates, in which differences affiliate in a creative and constitutive manner. To deal with the fold, Cache redefines the meaning of architectural image. For him image is a virtual (non-representational), dynamic (temporal) and non-deterministic concept that frames (builds territory) the space that different forces meet each other, and with this allows reaching "multiplicity" in architectural production. This definition of image is completely against critical theory's narration of it which is a locus of dialectic between two opposites (such as past and present) and runs by "negation". In other words, while critical thinkers negatively try to reach a hypothesis through a dialectical process, post-criticals positively embrace differences as heterogeneous elements to produce something ever-new. For post-criticality, despite critical view, architecture is not a representation or resemblance of an exterior reality (Platonic practice) seen in deconstructive approach, but as

not necessarily

so does criticality — modern.

Speaks says an "actualization of a virtual" to create new, experimental and unpredictable form, that which virtual is the hinge point (inflection image) where heterogeneous forces relate (not oppose as critical theory demands) each other. By this new definition of architecture, Cache aims to develop the concept of "non-standard" architecture which refers to use of computational tools and digital techniques for architectural conception and production. In non-standard architecture objects are not drawn, but calculated by computer and produced by digitally controlled machinery; so, while they are all different, follow the same morphological theme. These objects, called "objectile", rather than traditional mass-produced objects, are created in a dynamic "mass customization" process and fit in settings of their environment. This replacement of mass production with mass customization seemingly releases digital architecture to be oppositional in its production stage and excludes it from critical theory's criticism of capitalist mass production for "culture industry".

latour and amny others, not deleuze …

baroque, the fold

Today the emblem of post-criticality, that (critical) theory is an obstacle for architecture, has been put down even by it's once promoters. However, the ontological shift that it initiated, marked a turning point on architectural thinking and practice. Deleuzian currents such as 'actor network theory', 'object oriented ontology' and 'new materialism' flowed into architecture theory to apply the idea of 'fold' in formation of a 'new architecture'. Fold, emerged from Deleuze's book 'A Thousand Plateaus', privileged smooth space and continuous variations over striated space and bipolar oppositions in variety of fields such as geography, technology, mathematics, politics and art. So-called progressive figures in architecture realm (such as Zaha Hadid, Patrick Schumacher and Alejandro Zaera-Polo) incorporated, stylistically or programatically, into this turn allowing them to exceed constraints of 'negativity' and open up architecture to emerging complex (multi-factoral) situations. Generally, this turn was embraced by architecture discipline as an opportunity to extricate itself from entanglements of (post)structural linguistics and semiotics and engage instead in 'reality' of architecture's production. In a broader look all 'actor network theory', 'object oriented ontology' and 'new materialism' can be considered as 'realist' movements.

Text

6.2. Ontological Shift

by attributing agency subjectivity to the object

These 'new' realisms, despite their different genealogies, was grounded on shared fundamental shift of concern from subject to object, or we might put from human to non-human. They all subscribe to general principle of dehumanization, albeit in different forms of anti-humanism, trans-humanism or post-humanism (Porpora, 'Dehumanization in theory', in Journal of Critical Realism, 2017, p. 354). Strengthened by recent psychological findings and developments in computer science especially artificial intelligence, as Porpora (2017) argues, these new paradigms incorporated to "alternate form of realism" distinct from that of Critical Realism. Porpora claims that these new realisms have implicitly and some explicitly borrowed from Critical Realism, however lost humanist orientation of it (Ibid). Among these post-human theoies there are Actor Network Theory (ANT), Affect Theory, Assemblage Theory, New Brain (neuro) science, Feminist New Materialism and Varieties of Speculative Realism (object oriented philosophy and pan-psychism). Through this 'new' realist current, rationality as reasoned behavior of mind, and characteristic of human identity, was equated to non-rational processes of neuro-networks. Mind itself considered nothing more than neurophysiological processes that can be studied in mechanistic (purely physicalist) manner (Ibid). In this sense, domination of computation dissolved human mind in a computational model of brain.

no, calculus is rational. but not linear.

Being imported into architecture, 'new' realism shifted the discourse from epistemological interpretations of critical paradigm to ontological enquiry of post-criticality. In fact by collapsing subjectivity into interaction of objects, and subject into a raw material which can be computed, managed and produced, no centered subject of reflection remained to send or receive semiotic codes. Architecture, as Spuybroek posits, has 'survived semiotics and deconstruction. And criticality too' (Spuybroek, 'The Sympathy of Things', 2011, p. 264); and theory needed for its 'new' agenda derived from theorists like Latour and Delanda who shared hatred of criticality. Latour, for example, in his article 'Why Has Critique Run Out of Steam?' in 2004 argued that critique and its negativity has 'run out of steam' in any sense and 'critical theory has died long ago'. These theorists were in turn built on a specific reading of Deleuze in which all its Marxian residue was totally washed away (Albert, 'A Thousand Marxes', 2004). The core Idea of this paradigm seems to be refusal of thinking and talking about macro totalities such as society, human, capitalism, in favor of interactions of micro components gathered in form of complex and self-organized networks. De Landa in his 'assemblage theory' (also known as 'new materialism') identifies all modes of organizational processes as 'isomorphic' operations that occur at different biological, geological and social scales. In this 'flat ontology', causal agency flows between different 'singularities' without any external encompassing force to direct them towards a predetermined end (De Landa, 'A New Philosophy of Society', 2006). This flat ontology applies to Latour's actor-network theory as well, in which autonomous elements (actors) – whether human or nonhuman, macro or micro- constantly interact each other in a symmetrical manner within non-hierarchical and de-centralized networks. These flat ontological models again can be traced in my view in a Delezian concept called 'rhizome'. Rhizome is a (decentered and open) assemblage made of networked, transitory and undetermined connections between heterogeneous and divergent objects (whether they are concrete, abstract or virtual) that disapproves structured, hierarchical and representative (analogous) way of thinking, offers instead, an openended system of thought and disparate systems of knowledge that produce creativity and newness. (Colman, 'Deleuze Dictionary', 2010, p.234).[8] Spencer (2017) argues that flat ontologies that identified domains of cultural, social or political as extension of biological and material processes provided postist architecture a rationale to transcend reflections of criticality and politicality and reorient itself toward neoliberal managerialism (Spencer, 'The Architecture of Neo-liberalism', 2017, p.51). This is disclosed by Zaera-Polo, one of harbingers of 'new' architecture, as he embraces this flat model and argues: "In fact, it may be good to stop speaking of power in general, or of the State, Capital, Globalization in general, and instead address specific power ecologies comprising a heterogeneous mixture of bureaucracies, markets, antimarkets, shopping malls, airport terminals, residential towers, office complexes etc.' (Zaera-Polo, 'The Politics of the Envelope', 2008, p. 101).

what else ??

'New' architecture replaced representational meaning (whether conveyed through textual, cultural, or aesthetic manner) and interpretation of perceived signs with performance of materials and also the affect that their assemblage create. Affect that is produced through environmental immersion, as Zaera-Polo explains, is "an uncoded, pre-linguistic form of identity that transcends the propositional logic of political rhetorics" (Ibid, p. 89). This primacy of sensible experience through fabrication of 'atmospheres' over linguistic or representational meaning again traces back to initial Deleuzian turn through post-criticality and its attempt to undermine mediation –as a question of architecture's status in social and

[8] New realism seems to be in common with rhizomatic model which disapproves structured, hierarchical and representative (analogous) way of thinking, however some argue that unlike new realism Dleuze's rhizome didn't propound a flat ontology, since it distinguished between human and non-human (Ansell-Pearson, 'Deleuze and New Materialism', 2017).

try to understand why.

networks … computer is a reality, etc

political relations- in favor of immediate spatial reception. Deleuze in his assemblage theory, identified assemblage as a function of producing (specific) affects and effects (Livesey, 'Deleuze Dictionary', 2010, p.18). Today, 'affect' aligns with managerial techniques to steer (now objectified/reified) subjects or even produce new subjectivities. Departed from any signifying content affect persuades us just by the affective feel of a message or its producer, a bodily feeling which is independent (or prior to) our cognition. Barber (2006) argues that 'postist' architecture ignores political, environmental and activist resistance dimensions of Deleuze and reads him exclusively as a theory for the production of (presumably) non-oppositional affect and the impoverished concept of 'social engagement' and production of affect (disciplinary flexibility as merely re-inscription of disciplinary autonomy) (Barber, 'Militant Architecture', in Critical Architecture, 2006). Patrik Schumacher, one of key figures advocating 'new' paradigm, points out this move and identifies contemporary architecture as a task of 'channelling bodies' and 'guiding subjects' through the design of environments (Schumacher, 'The Autopoiesis of Architecture', 2012, v.2, p. 135).

6.3. Oldness of New

However, the claim to be non-critical, has not saved post-critical architecture from critiques and reproaches which mainly point out its contradictory character that denies theory, criticality and politics while it is involved in all, whether by confirming or refuting an approach. According to critiques made inside the discipline, post-criticality relies on illusion of proceeding without theory (theory like memory never disappears- Cowherd, 2006), so surrenders architecture to technological innovations and requirements of free-market hegemony. Even from Deleuzian prespective, as Barber (2006) explains, post-criticality reads Deleuze and Guattari exclusively aesthetic and ignores political dimensions of his theory (Barber, 'Militant Architecture', in Critical Architecture, 2006). Spencer (2017), in his provocative book 'The Architecture of Neoliberalism', introduces 'new' agenda not a return to an ontological truth as it pretends, but implementing imperatives of financial capitalism. He explains that alongside the advent of its "new spirit", capitalism abandoned Fordist production, and turned to a network-based, non-hierarchical and de-centralized production mode founded on employee initiative and participation. In this way, capitalism got transformed and legitimized as an egalitarian project for accentuating auto-poetic interaction and spontaneous selforganization model (reminder of Schumacher's influential book 'The Autopoiesis of ArchitectureHowever'). However, to 'control the uncontrollable' it "transferred constraints from external organizational mechanisms to people's internal dispositions" (Ibid, p. 79). In other words, the raw material of production shifted to subjectivity itself on which techniques of management and organization must be invested to maintain and reproduce neo-liberal economy. Spencer argues that architecture same as a wide range of social, economic, political, institutional and commercial fields, refashioned its discipline according to concepts of 'new' paradigms, allowing it to instrumentalise theory for production of a fetishized architecture which accords with managerial and entrepreneurial principles of neoliberal apparatus: "architecture now manages theory, at the same time as it turns towards theories of management" (Ibid, p. 51).

this is important because not non-hierarchic.

eisenmann. classicism.

Among critiques raised inside the discipline, a powerful one emerges from a Benjaminian paradigm. Accordingly, despite all its avoidance to be critical, post-critical architecture in its consumption after realization interferes with a key Benjaminian concept: effect. Post-critial architecture, as its promoters admit as well, is essentially an attempt for production of effect through replacement of judgement (distanced reflection) with experience (environmental immersion); effect which is (presumably) neutral and avoids any oppositional or political they dont claim its neutral ….

role. But how this “effect” works? And is it neutral as post-criticals claim? Effect, or reception in distraction, is a key concept for Benjamin in analyzing environmental experience. He explains that environmental reception occurs in two different ways: use (in a tactile manner) or perception (in an optical manner); however, in both of them reception is held within the idea of habit and its relation to distraction (a non-disruptive manner) (Benjamin [1936], ‘The Work of Art in the Age of Mechanical Reproduction’, in Illuminations, 2007, p. 240). This absorption in distraction, by virtue of distracted evaluating attitude, produces an absent-minded criticality which although is momentary, it has the potential to be extended in duration by existence of mass (collective consumption) in the urban environment, as Rice posits according to Benjamin (Rice, ‘Critical Post-Critical’, in Critical Architecture, 2006, pp. 261-268). In other words, environmental ambience produces a canonical value in user’s mind which is unavoidably political and releases a non-reflective critical attitude. This formation of absent-minded evaluation attitude gains more importance reminding that for Benjamin, perception is not reception of raw materials organized by subject, but engagement with already organized materials which are active in perception; And post-critical organization is made in an expert-driven managerial process, not in a collective social one as Benjamin demands. As a result, this character of producing absent-minded criticality, despite being denied by post-critical, makes architecture a judgmental project and entails critical questioning.

Post-critical’s respond to these critiques is ignorance and labeling them as irrelevant or outdated. However, as I argued, ignoring to be political itself is a political act which favors dominant order. It seems postist call for replacing oppositional thinking with non-dualistic and interactive understanding of reality fails to justify its own legitimacy. Porpora perceptively takes notice on contradictory nature of postist paradigms, since “the non-binary has meaning only in relation to the binary, the non-binary itself is the top of a binary opposition” (Porpora, ‘Dehumanization in theory’, in Journal of Critical Realism, 2017, p. 355). As such, while ‘new’ realisms invested mainly on rejection of priori attributions such as duality (which identify it as difference in size/degree not in kind) in favor of a flat ontology, in both theory and practice they perpetuate these priori categories. To put in the context of this thesis, while critical architecture involved in crisis, in my view, in result of not addressing ontological question of causality, post-critical architecture simply leaves the crisis in place by raising a partial ontological account.

how is critical not engaged in the ontological question?

because it ontologizes the social?

problem of legitimization of critique. this is what apriori refers to.

short circuit

6.4. Deep against 'New'

'New' realism/materialism, shares Critical Realism's concern on reality independent of culture, language and epistemology. Along with (or following, according to Critical Realist theorists) Critical Realism, 'New' realism incorporates to ontological turn from anthropocentric and subjective interpretations obsessed by (post) structuralism to scientific and objective investigations of the world (of course with some significant differences). It emphasizes a now banal Critical Realist notion that object/matter is not passive and inert but active and creative and contains causal agency. At first glance, these paradigmatic shifts seem to be an adequate response to crisis of critical architecture which, as argued in previous chapters, stems from lack of conceptualization of objective reality and its causal relations. However, what we witness is simply archiving concept of crisis as a merely discursive phenomenon and (supposedly) transcending it through incorporating discipline to scientific investigation of actual objects and particles. And following this, aligning architecture with imperatives of financial economy and global market. If crisis of architecture emerges from its entanglement in broader field of social relations, then 'new' shift is reinforcing the crisis rather than contributing to its resolution. But how is this explainable?

From a Critical Realist view, these 'new' paradigms, generally labeled as 'new materialism', develop a flawed ontological account initially by collapsing all heterogeneous objects/agents in a flat network, which is made of symmetrical objects and is free from any external force or mechanism. Let me remind that Critical Realism offers a stratified ontological account, stratified in two senses.

the principles of stratification need to be regarded "critical" as well.

First, that reality is made of three distinguishable domains: the real, the actual, and the empirical. The real refers to domain of underlying structures and mechanisms that possess the power to cause changes in actual (and empirical) realm, while is independent of it. The actual realm refers to events and outcomes that do (or do not) occur in the world, regardless they are experienced by human or not. And the empirical domain refers to human experiences and observations of the world. According to this model, causality can only be attributed to the real domain of mechanisms and structures not conjunction of events. These structures are made of objects but are not reducible to objects or an assemblage of them (Bhaskar puts the real includes the actual but is not exhausted by it). In Critical Realism, knowledge is knowledge of deep structures that produce causal powers and give rise to events and experiences within a specific context. Without these structures explaining the essence of an

this is the key in deleuze, to counter the actual and the real, not the actual and the possible.

hence the focus on "novel possibilities" ….

object and its stability and durability science will make no sense. In this sense new materialism is an 'actualist' ontology which conceptualizes causality in interrelation of (supposedly) autonomous and atomic objects. Delanda (2011) explaining realism argues: " if causality is considered to be an objective relation of production between events, that is, a relation in which one event produces another event, then the philosophy will tend to be realist or materialist" (DeLanda, 'Emergence, Causality and Realism', in The Speculative Turn', 2011, p.385). Actualist ontology of new materialist paradigm is quite clear here. In critical realism, however, no event is a cause for the other, but both emerge from underlying mechanisms which might put them successively. Meillassoux (a leading figure of new materialism) tries to solve this by defending an absolute form of contingency, that there is infinite possibilities in causal relations. He justifies this by "if the necessity of the causal connection cannot be demonstrated, then this is simply because the causal connection is devoid of necessity" (Meillassoux,' After Finitude: An Essay on the Necessity of Contingency', [2006] 2008, p. 19). It seems that Meillassoux's proposal involves new materialism in a deeper inconsistency. If realism initiates from the notion of an external and anterior reality, then it cannot imposes limits of mind to limits of reality (which seems to be a return to Kantian fallacy). According to Critical Realism there are contingent relations as there are necessary ones too. It is true that there is no necessity on what will emerge from a causal relation, but it doesn't mean that what happens in universe is totally unintelligible or open to any possibility. If we identify underlying structures (through a retroductive method) we can predict what mechanisms will be in effect and how the phenomenon will inclined to be. This is what makes science intelligible. If everything is contingent then what is science about?

meillassoux takes it beyond the level of "relations"

to start from relations
this is what gives the flat ontology…. relations between what? one cannot have relations without items.

only if one totalizes the social and does not care about the legitimization.

This difference between flat and deep ontology is exactly what differentiates 'network' and 'context'. While context embeds or contains objects and their behavior, network is based on relationship of connection. It doesn't seem that superiority of one of these models is a matter of choice. Critical Relist Elder-Vass convincingly argues that "if irrefutable evidence was produced that precisely the sorts of things that materialism specifically excludes were actually causally effective, then materialists would have to admit defeat", then continues "there are true facts about the world, the referents of which are not actual things or events" (Elder-Vass, 'Materialism and critical realism' in materiallysocial.blogspot.com/2015/11/materialism webpage, 2015). Material obsession crystalizes in neo-materialist methodology as well. New Materialism as realist paradigm

measurability
quantum theory

seems to in agreement with Critical Realism that the world exists independently of human perception, and it is possible for human to know the world as it is in itself (not as it is for us). The significant difference emerges where New Materialism tends to reduce knowledge to direct investigation (of natural objects) by individuals while Critical Realism, and this is a provocative thesis of Bhaskar, considers knowledge as socially mediated (whether through concepts, history, language, or the social). In other words, according to Bhaskar, at the same time that science discovers (structures and mechanisms of) reality as it is independent of our existence, it does so through social and collective process of scientific practice. As such knowledge is concept and context dependent at the same time that it is knowledge of real object.

Second type of stratification is inside objects. Reminding four planar model of social entities (including (a) material transactions with nature, (b) social interaction between agents, (c) social structures and (d) stratification of embodied personalities of agents), in Critical Realism causal powers of a layer are generated by those located at lower levels. For instance, social layer emerges from physiological layer and physiological layer in turn emerges from physical one and so on. In this stratified ontological model 1. Reality cannot be reduced to fundamental levels of interactions of particles like basic laws of physics. Higher layers 'emerge from' lower ones and possess distinctive properties and powers which are not totally explainable through properties of lower layers and therefore are not reducible to them. As Archer puts "Irreducibility means that the different strata are separable by definition precisely because of the properties and powers which only belong to each of them and whose emergence from one another justifies their differentiation as strata at all" (Archer, 'Realist Social Theory', 1995, p.14). 2. Although higher layers are mainly affected by underlying ones, this effect is not one-sided and causality can flow from higher mechanisms downward the hierarchy too. For instance social layer that is located at higher level than psychological one, once formed, affects dispositions of individuals who constitute the society, or emotional dispositions can affect central nervous system and alter respiration patterns of body.

this is a cycle.
this is an ecology.

the strata are permeable

Analyzing reality through decomposing it to its constituents in post-criticality, is the other side of critical's fallacy which dissolved reality in holist idea of social or linguistic structures. Critical Realism opposes both individualist and holist conceptions of society as methodological conflations. Archer (1996) considers them as 'upward' and 'downward' conflations and fundamentally inadequate to theorize social phenomena. In the first case, society disappears and is replaced by some notion of aggregated individual action; in the second case agents disappear and the human individuals do no more than act out the imperatives of social norms and structures. (Archer, 'Culture and Agency', 1996).

This distinct narratives of reality applies to human as well. New materialism identifies human as assemblage of biological underpinnings, in which dualities like mind-matter, conscious-unconscious or inside-outside (as priori categories) are thoroughly imbricated in one another. As Braidotti stresses "embodiment of the mind and the embrainment of the body" (Braidotti, 'Nomadic Theory: The Portable Rosi Braidotti', 2011, p. 2). In this account human is treated at the same level of non-humans and its agency symmetrical to agency of any other object. Critical Realism, however, identifies a distinct ontological value for human beings. It is not simply because of ethical concern for human compassion or fellow-feeling, but arguably for its emergent entity from not merely material but social and historical structures that allow him to develop a particular series of causal powers, distinct than non-human actors. These structures, which are necessary conditions for science to be possible, cannot be detected through actualist ontology of new materialism, but demand a depth ontology to be abstracted.

genealogies

Critical Realists consider new materialist ontology as conflation of causal and human agency, for not moving beyond actual face of reality. Elder-Vass addresses decomposition of actor to swarm of entities by Latour and introduces his approach as "primarily to place the contributors to action outside the actors, rather than examining how the actors themselves could ever come to act" (Elder-Vass , 'Searching for realism, structure and agency in Actor Network Theory', in Actor Network Theory, no. 53, 2008, p. 20). In this realist and emergentist account of human being there still is a relatively enduring 'I' as source of experience and action. Without this conscious and intentional subject, human agency will not exceed affirmative participation in pre-existing structures and colluding dominant order, what new architecture intends to perpetuate. Bhaskar's "transformational model of social activity" which refutes structuralist determinism, can also be an alternative to neo-materialist account of agency which denies individual's power to do otherwise, to transform the given. TSMA is formed by dynamic relationship that exists, in Critical Realist account, between structure and agency. Structures as a given contexts pre-exist and condition activities (struggles) of agents, however they themselves are the product of past activities (struggles), so to be reproduced they are reliant on activities and can change along them. As such, in TSMA agents do not create structures but reproduce or transform them.

art
poetics
persona

the important question is "how to form a social identity". nm goes for "imaginaries" and "accounts".
cr wants the recognition of an outside "guarantee"/ "guarantor". it wants no place for negotiation. but then what is this site of "critical discourse" ?? what if not a market place ?

crisis refers to time, to history. it presupposes "ages" or "epoch" or "periods". the great duration….
how can history and science relate…. nature as a subject

7. Conclusion

In 2014, Zaha Hadid, architect and founder of international giant firm Hadid Architects, when questioned by an interviewer about more than 500 migrant labors who died working on her al-Wakrah project in Qatar, commented: "It's not my duty as an architect to look at it. I cannot do anything about it because I have no power to do anything about it". Hadid was not an individual case denying relevance of anything-but-internalized-disciplinary-codes to architecture, but she was an icon for a system of thought (generally known as post-critical) which is dominating architecture education and practice today in all over the world. Architects are active participants of financialization of cities, territorialisation of urban spaces, social cleansing projects and social inequalities expansion. In current institutional and sophisticated state of architecture, it is much convenient to sympathize this current than to oppose it. However, even if we consent architecture's abdication of social responsibilities, a fundamental question will be still standing: where do architecture's borders lie? Or, what architecture's objects of study might be? An answer to this question is tacitly an answer to architecture's critical potentials too.

how could architecture possibly be outside of economy?

even in the sacred it is a "bargain" ….

In this treatise, firstly I tried to elaborate literature of a new generation of architects who admit shortcomings of critical architecture thought at the same time that scramble to invent a new mode of criticality. A comparative reading of this new rhetoric, will soon discover a turmoil on the very key concepts of it: reality, autonomy, agency, and even criticality itself are still subjects of arbitrary disputes. It is turmoil in a sense that it lacks any ground, any external reference through which multiple arguments can be confronted or valorized. Given the historical failure of different strains of critical architecture, current situation of critical literature and the strategy of blending or reformulating already-existing paradigms, just inflates discourse bulk and deepens the crisis of critical discourse. The story becomes even more depressing by adding post-critical narration, a recent paradigm which bypasses any critical or oppositional agenda in favor of innovative technological experiments and adapts firmly with prevailing neo-liberal system. Despite critical camp which remained stock to polemics of judgement and negation, post-critical engages 'dirt' of real world and positivizes nagativities through internalized multiplicity to hold up experimental and pragmatic detrritorialisation of objects. In this post-critical era, criticality is compelled to: "lead, follow, or get out of the way".

citation ???

By admitting this crisis, second phase would be detecting causes of crisis, to explain where does the crisis come from? And provide then a possible trajectory to get out of it. In this sense this thesis is dedicated to critical analysis of discourse through philosophy of Critical Realism, and trying to explain how discourse works as a causal force to direct architectural theory and practice. As such, it is based on this tenet that discourse is causally efficacious in producing actions.

Critical realism opposes the (post-) structuralist principle of critical tradition that the relation between architecture and its knowledge is arbitrary and totally subjective, but there is always a third pillar, the object in itself, which both signified and signifier must refer to. This ontological move, entails a huge paradigm shift in critical architecture rhetoric, so that legitimacy of narratives cannot be found in the interrelation of various knowledges or ideas, but in their power to explain architectural reality and its causal mechanisms more comprehensively. Tracing loss of reality in critical discourse, highlights Tafuri's primary role in deviating discourse from objectivity of architecture toward a merely cultural reading and thus preventing discipline to gain a holistic insight on stratified reality of architecture and the potentials of agency that lie on each. By Tafuri, fallacies of structuralism propagated in architecture, and sedimented at the heart of critical discourse, while architecture's disciplinary content was inadequate to provide appropriate theoretical tools to excavate this inheritance. While different narrations of criticality struggled to positivize Tafuri through formal criticism (Eisenmann) or exceed his critique through visionary activism (Koolhaas), they reproduced the very conflation of his that 'object of study' is the same 'real object'. If architecture is a set of signs assembled by human mind with no need to correspond with external reality, then it is possible to criticize reality through inventing a set of self-critical codes (American mode), or to change it through reassembling of those signs and creating new meanings by resorting Surreal idea of unconscious (European mode).

object orientation …

Tafuri's role is also distinguishable in initial phases of formation of post-critical trend. If borders of intelligibility (criticality) are limited to borders of language, then criticality naturally fades by stepping into pre-linguistic domain virtuality. So any struggle for criticality would be a futile effort of reviving an already dead paradigm. In its shift from representational and indexical to diagrammatic and experimental concerns, post-criticality found neo-materialist ontology applicable to get rid of general ideas of (and confrontations with) criticality, society and human, and found intelligibility in efficient managerialism of symmetrical components. As for new materialism reality was the flat domain of events no

(actualized or still virtual) in which homogenized objects freely assemble (or dissemble) together and constitute external real world.

Critical Realism also opposes this flat ontological account by arguing that reality is structured and differentiated. Accordingly, there is an underlying domain of structures and mechanisms which causes events of actual domain, and what emerges through this process lies in a specific ontological level different than constituents. As such, from a critical realist perspective, if critical paradigm suffered from loss of reality, post-critical one is involved in a flawed account of reality. This deficiency of robust and comprehensive conceptualization of reality is what I call crisis of (post-)critical. This ontological deficiency of architecture discourse hinders development of architectural knowledge and infects produced theories with fallacies and conflations. In wider realm of architecture reality, discourse, in a dialectical relation with non-discursive mechanisms, acts as a causal mechanism in directing architectural actions toward collusion with status quo, at the same time that takes possibilities to actualize architecture's transformative potentials.

Acceding to Critical Realism reality is not exhausted by its structures. It is true that agents are constrained within structures, but they are not simple bearers of them, rather, along (mostly unconscious) reproduction of structures they have the potential to consciously transform these structures. Also, Reality is not exhausted by flux of events either. There are contingent relations as there are necessary ones too. It is true that causal relation does not necessitate emergent phenomena, but it doesn't mean that emergence is totally unintelligible or open to any possibility. If we identify underlying structures and mechanisms of power can predict what forces will be in effect and how the phenomenon will inclined to be.

Critical Realism also proposes an infinite stratification of reality, so that a single emergent layer acts as a root layer for a higher emergent one. This highlights the fact that any emergent layer results from specific processes and possesses a specific ontological value (so demands an specific account of conceptualization). Critical realism categorizes these strata in four ecological, social, political and psychological domains [9]and argues for their dialectical interdependence[10]. This stratified account of reality in CR (which seems widely applicable in

[9] These domains include: (a) material transactions with nature (ecological aspects), (b) social interaction between agents, (c) social structure proper and (d) stratification of embodied personalities of agents (psychological aspects)

[10] Dialectic shouldn't be understood in Hegelian tradition. Bhaskar's dialectic starts with absence (of an un-established or an un-detected relation) that is present in multiple layers, and develops through process of

withdrawl in OOO

void in eisenman

"neutrality" as undecided in computational paradigms … (not "neutral" as "unbiased" ….)

architecture) along with its robust abstraction of causality and its mechanisms, in my view, provides a compelling departure point to transcend long-standing crisis of architecture discipline. Critical Realism's ontological account allows discipline to conceptualize multiple layers of architecture's reality, investigate what borders and boundaries of this reality might be, develop its knowledge of mechanisms which are at work in any given context and then determine 'where' (what layer) and 'how' to engage to fulfil a transformative agenda. Without such coherent knowledge of architectural reality, critical architecture will not move beyond a discursive fallacy.

internationality

Bhaskar in preface of 'Possibility of Naturalism' quotes Marx that "sociology is necessary if we are to avoid 'that kind of criticism which knows how to judge and condemn the present, but not how to comprehend it". Applying Critical Realist philosophy this study tried to disclose necessity and possibility of this comprehension in architecture realm, but the process of (ever-developing) explanatory investigation and then using it as means of transformative action requires a further severe and collective practice of science.

absenting this absence through transformative agency. So it neither starts from presence (of thesis) nor seeks to reach a preservatiove unity (hypothesis).

to absent the absent
this is either a fake or mysticism.
if the latter, how to "legitimize" it ??

References:

Adorno, Theodor (1965). ‘Functionalism Today’. in Oppositions, no. 17, pp. 30–41.1979

Albert, Eliot (2004). ‘A Thousand Marxes’, in Mute, Vol. 1

Albritton, Robert (1999). ‘Dialectics and Deconstruction in Political Economy’. Palgrave Macmillan

Althusser, Louis. (1970), ‘Ideology and Ideological State Apparatuses’. Verso, 2014

Althusser, Louis. (1965). ‘For Marx’. Verso, 2005

Ansell-Pearson, Keith (2017). ‘Deleuze and New Materialism’. in The New Politics of Materialism. Routledge

Archer, Margaret (1988). ‘Culture and Agency: The Place of Culture in Social Theory’. Cambridge University Press, 1996

Archer, Margaret (1995). ‘Realist Social Theory: The Morphogenetic Approach’. Cambridge University Press

Asadpour, Forough (2014). ‘Critical Realism and Marxism’. Kandokav

Barber, Daniel (2006). ‘Militant Architecture: Destabilising architecture's disciplinarity’, in Critical Architecture, Routledge.

Benjamin, Walter (1934). ‘The Author as Producer’. in Understanding Brecht. Verso Books 1973

Benjamin, Walter (1936), ‘The Work of Art in the Age of Mechanical Reproduction’, in Illuminations. Schocken Books, 2007

Benton, Ted (1984). ‘The Rise and Fall of Structural Marxism: Louis Althusser and His Influence’. Palgrave Macmillan

Bhaskar, Roy. (1975). ‘A Realist Theory of Science’. Verso, 2008

Bhaskar, Roy. (1998). ‘Societies’. in Critical Realism: Essential Readings, pp. 206-257

Bhaskar, Roy. (1993). ‘Dialectic: The Pulse of Freedom’. Routledge, 2008

Bhaskar, Roy. (1994). ‘Plato Etc: The Problems of Philosophy and their Resolution’. Routledge, 2010.

Bhaskar, Roy. (1991). ‘Philosophy and the idea of freedom’. Routledge, 2011.

Bhaskar, Roy. (1998). ‘Philosophy and scientific realism’. in Critical realism: Essential readings, 1998, pp. 16–47

Bhaskar, Roy. (1989). ‘Reclaiming Reality: A Critical Introduction to Contemporary Philosophy’. Routledge, 2011

Bhaskar, Roy. (1979). ‘The Possibility of Naturalism’. Routledge, 2005

Boyle, Brian O. (2014). ‘Epistemological Problems and Ontological Solutions’. in Sraffa and Althusser Reconsidered, pp. 183 – 237

Braidotti, Rosi (2011). ‘Nomadic Theory: The Portable Rosi Braidotti’. Columbia University Press

Cache, Bernard (1995). ‘Earth Moves: The Furnishing of Territories’. The MIT Press

Clark, Alexander M. (2008). ‘Critical Realism’. in The SAGE Encyclopedia of Qualitative Research Methods

Coleman, Nathanael. (2014). ‘Lefebvre for Architects’. Routledge

Collier, Andrew. (1994). ‘Critical Realism’. Verso

Cowherd, Robert (2009). ‘Notes on Post-criticality: Towards an Architecture of Reflexive Modernisation’, in Footprint, No.4: Agency in Architecture.

Crawford, Margaret. (2009). ‘Agency and Architecture: How to Be Critical?’. in Footprint, no. 4, , pp. 7-20

Cunningham, David and Goodbun, Jon (2006). ‘Marx, architecture and modernity’. in The Journal of Architecture, vol. 11, n. 2, pp. 169-185

Cunningham, David. (2016). ‘Architecture, the Built and the Idea of Socialism’. in Can Architecture Be An Emancipatory Project?. Verso

Cunningham, David. (2006). ‘Architecture as Critical Knowledge’. in Critical Architecture. Pp. 31-39

Deamer, Peggy (1997). ‘The Everyday and the Utopian’, in Architecture of the Everyday. Princeton Architectural Press

DeLanda, Manuel (2006). ‘A New Philosophy of Society’. Continuum

DeLanda, Manuel (2011). ‘Emergence, Causality and Realism’, in The Speculative Turn. pp. 381-392. re.press

Demetriou, Chares. (2009). ‘The realist approach to explanatory mechanisms in social science: More than a heuristic?’ In Philosophy of the Social Sciences, no. 39, pp. 440-462

Dobson, PJ. (2001). ‘The Philosophy of Critical Realism’, in Information Systems Frontiers. pp. 199–210

Doucet, Isabelle & Cupers, Kenny. (2009). ‘Agency in Architecture: Reframing Criticality in Theory and Practice’. in Footprint, no. 4

Dovey, Kim. (2006). ‘I Mean to be Critical, But . . .’. in Critical Architecture. Routledge

Eckhard, Petra (2017). ‘A Concrete Fantasy: Edward James’ Las Pozas’, in Fantasy in Reality: Architecture, Representation, Reproduction conference. The Courtauld Institute of Art, London

Elder-Vass, Dave (2008). ‘Searching for realism, structure and agency in Actor Network Theory’. in Actor Network Theory, Vol. 59, no. 53, pp. 455-473

Ferretter, Luke. (2006). ‘Louis Althusser’. Routledge

Fletcher, AJ. (2016). ‘Applying Critical Realism in Qualitative Research’, in International Journal of Social Research Methodology. pp. 181-194

Fraser, Murray. (2006). ‘Introduction: The Cultural Context of Critical Architecture’, in Critical Architecture. Routledge

Fraser, Murray. (2006). ‘Beyond Koolhaas’. in Critical Architecture. Routledge

Giddens, Anthony and Sutton, Philip W. (1989). ‘Sociology’. Polity Press

Graafland, Arie. (2006). ‘On Criticality’. in Constructing a New Agenda. Princeton Architectural Press, 2010

Graafland, Arie. (2009). ‘Looking into the Folds’. DSD Publications

Gramsci, Antonio. (1929-1935). ‘Selections from the Prison Notebooks’. Lawrence & Wishart Ltd, 1971

Hartoonian, Gevork. (2015). ‘Global Perspectives on Critical Architecture: Praxis Reloaded’. Routledge

Hays, Michael (1984). ‘Critical Architecture: Between Form and Culture’, in Perspecta, Vol. 21, pp. 14-29

Heynen, Hilde (2006). ‘A Critical Position for Architecture?’, in Critical Architecture. Routledge

Heynen, Hilde (1999). ‘Architecture and Modernity: A Critique’. The MIT Press

Hsu, Frances (2010). ‘The Operative Criticism of Rem Koolhaas’, in ReBuilding: Proceedings of the ACSA Annual Meeting

Jameson, Fredric. (1982). ‘Architecture and the Critique of Ideology’. in Architecture Theory Since 1968. The MIT Press

Jameson, Fredric (1998). ‘The Cultural Turn’. Verso

Jameson, Fredric (2003). ‘Future City’. in New Left Review, No.21. pp, 65-79

Jessop, Bob. (2015). ‘The Symptomatology of Crises, Reading Crises and Learning from Them: Some Critical Realist Reflections’. pp. 238-271

Joseph, Jonathan (1998). ‘In Defence of Critical Realism’, in Capital & Class, Vol. 22, pp. 73-106

Koolhaas, Rem (1978). ‘Delirious New York: A Retroactive Manifesto for Manhattan’. The Monacelli Press, 1997

Koolhaas, Rem (1992). ‘Finding Freedoms: Conversations with Rem Koolhaas’, El Croquis 53, vol. 11, pp. 6-32

Lahiji, Nadir. (2014). ‘Architecture Against the Post-Political’. Routledge

Lefebvre, Henri. (1974). ‘The Production of Space’. Wiley-Blackwell, 1991

Llorens, Tomas (1981). ‘Manfredo Tafuri: Neo-Avant-Garde and History’, in On the Methodology of Architectural History, pp. 82-95

Martin, Reinhold. (2006). 'Critical of What? Toward a Utopian Realism'. in Constructing a New Agenda. Princeton Architectural Press, 2010

Martin, Reinhold. (2010). 'Utopia's Ghost: Architecture and Postmodernism, Again'. Univ of Minnesota Press

Maxwell, Joseph. (2012). 'A Realist Approach for Qualitative Research'. SAGE Publications, Inc

Meillassoux, Quentin (2006). 'After Finitude: An Essay on the Necessity of Contingency'. Continuum, 2008

Miller, Tyrus. (2014). 'The Historical Project of Modernism', in Filozofski vestnik, p. 83–101

Morely, David (1997). 'Theoretical Orthodoxies: Textualism, Constructivism and the 'New Ethnography' in Cultural Studies'. in Cultural Studies in Question. SAGE Publications Ltd

Ockman, Joan. (2016). 'Afterward'. in Can Architecture Be an Emancipatory Project?. pp. 145-155. Verso

Ockman, Joan. (2015). 'Foreword'. in The Architect as Worker. pp. xxi-xxvi. Bloomsbury

Parr, Adrian (2010). 'The Deleuze Dictionary'. Edinburgh University Press

Porpora, Douglas V. (2017). 'Dehumanization in theory', in Journal of Critical Realism, Vol. 15, pp. 353-367

Puehretmayer , Hans. (2001). 'Critical Realism, Cultural Studies and Althusser on Ideology', in IACR-conference 'Debating Realism(s)', Roskilde University

Rendell, Jane and Hill, Jonathan. (2006). 'Critical Architecture'. Routledge

Rendell, Jane. (2006). 'Introduction'. in Critical Architecture. Routledge

Resch, Robert Paul. (1992). 'Althusser and the renewal of Marxist social theory'. University of California Press

Rice, Charles (2006). 'Critical Post-Critical: Problems of Effect, Experience and Immersion', in Critical Architecture, pp. 261-268. Routledge

Sabini, Maurizio (2010). 'Re-setting the Critical Project', in Re-Building, proceedings of the 2010 ACSA Annual Meeting.

Sayer, Andrew. (1992). ‘Method in Social Science’. Routledge

Sayer, Andrew. (2000). ‘Realism and Social Science’. SAGE Publications Ltd

Schneider, Tatjana and Till, Jeremy (2009). ‘Beyond Discourse: Notes on Spatial Agency’. in Footprint, no. 4

Schumacher, Patrik (2012). ‘The Autopoiesis of Architecture’. Wiley

Scott, John. (2012). ‘Sociological Theory: Contemporary Debates’. Edward Elgar Pub

Spencer, Douglas. (2017). ‘The Architecture of Neoliberalism’. Bloomsbury

Spuybroek, Lars (2011). ‘The Sympathy of Things’, Bloomsbury

Stanek, Lukas. (2012). ‘Architecture as Space, Again?’, in Spéciale'Z. pp. 48-53

Till, Jeremy and Awan, Nishat and Schnider, Tanjana. (2011). ‘Spatial Agency, Other Ways Of Doing Architecture’. Routledge

Tafuri, Manfredo. (1976). ‘Architecture and Utopia’. The MIT Press

Tafuri, Manfredo. (1986). ‘There is No Criticism, Only History’. in Design Book Review, No. 9

Tafuri, Manfredo. (1968). ‘Theories and History of Architecture’. Harper & Row, 1980

Tafuri, Manfredo. (1987). ‘The Sphere and the Labyrinth’. MIT Press

Tafuri, Manfredo. (1986). ‘There is no criticism, only history’, an interview with by Richard Ingersoll, in Design Book Review, no. 9, pages 8–11

Tschumi, Bernard. (1994). ‘Architecture and Disjunction’. The MIT Press

Tschumi, Bernard (1996). ‘Architecture and its Limits I’, in Theorising a New Agenda for Architecture’. Princeton Architectural Press

Venturi, Robert. (2004). ‘Architecture as Signs and Systems’. Harvard University Press

Wallenstein, Sven-Olov. (2016). ‘Architecture, Critique, Ideology’. Axl Books

Wight, Colin. (2004). ‘Theorizing the mechanisms of conceptual and semiotic space’ in Philosophy of the Social Sciences, no. 34, pp. 283-299

Zaera-Polo, Alejandro (2008). 'The Politics of the Envelope'. in Log, No. 13/14, Aftershocks: Generation(s) since 1968, pp. 193-207