Northumbria Research Link

ARCHITECTURAL THEORY, MULTITUDE, AND THE ANTHROPOCENE

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ABSTRACT

The aim of this article is to examine how to develop an architectural theory for the Anthropocene. If a lesson of the climate crisis is that there are less partitions between individual and collective life; more continuities across scale, nature, and culture; then there is a need to create approaches and frameworks that link different fields, figures, ideas, and methods. This article is organized as a sequence of close readings of McKenzie Wark, Paolo Virno, Aldo Rossi, and Diana Agrest. These authors are from different generations and disciplines, and from whom I mobilize concepts and practices, to read them together. One task for an architectural theory for the Anthropocene is to reflect on the critical tradition and appropriate the key terms and methods with which new texts, theories, and knowledge practices may be articulated. It may lead to new narratives, techniques, and collective imaginaries. The individuals discussed here are not normally put together. Yet they show compelling possibilities for contact. They show how concepts can be reworked into tools, tools may become design methodologies and thinking processes, which in turn suggest alternative actions, forms of thought, and forms of city that support collective life in the Anthropocene.

INTRODUCTION

We are amid a monumental climate crisis. The interaction between humans and the earth is out of joint.[1] Soils deplete, seas dry up, species are lost, climate changes; the planet is on fire. The climate crisis is a principal context to which architectural thought and practice ought to be directed.[2] It is an issue of power and the inequalities under capitalism. The climate crisis registers on multiple perspectives and scales, habits and forms of inhabitation, individual agency and collective life.

Architecture is burdened by its complicity in the expenditure of energy, labor, and resource extraction, and not least by its engagement in the forces of urbanization. Mass urbanization, human displacement, and the exploitation of nature by capitalist development blunt the perception of what architects and architecture can do in the context of climate crisis. At the building scale, architecture has responded primarily by attempts to increase energy efficiency through applied technology systems and building integrated management. Yet it is not adequate to leave ideas and approaches concerning the environment to industries such as geoengineering. Their focus on technical solutions is necessary, but nevertheless reduces questions on the climate to management, and fails to address intellectual perspectives and worldly imaginaries—the social and historical production of forms and ideas through which a concept of the world may be articulated and enacted. It is necessary to explore how architectural theory may confront the challenges of climate crisis, learn from the debates on the Anthropocene, and interpret the present order to change it.

In recent decades, architectural theory has offered some thoughtful contributions to the discourse around the Anthropocene. In a special issue of the *Journal of Architecture* on "Architectural History in the Anthropocene," Daniel Barber has reflected as follows: "The opportunity here is to engage a new perspective by which the world system of capital and the Earth system understood by the natural sciences can be seen according to their mutual intractable entanglements."[3] Barber argues that

new questions have opened about the "knowledge embedded in architectural ideas, relative to material metabolisms, to relationships between buildings and the polluted atmosphere, and to principles of urban growth."[4] Others pursue theoretical and critical practice to invent visceral images that articulate architecture's "planetary imagination" and to critique architecture as "carbon form."[5] These are stimulating contributions, and this article is in dialogue with them. What requires further development are the concepts and methods needed to articulate how different bodies of thought and practice make contact with each other.

One of the aims of this article is to examine how architectural thought can be placed into closer dialogue with Anthropocenic thought. It may be a broader collective task, but there is a need to create approaches and frameworks that link different fields, figures, ideas, and methods. Here I focus on some of the concepts and methods put forward by political philosopher and activist Paolo Virno and media theorist and educator McKenzie Wark. I interpret their thought in relation to architects and theorists Aldo Rossi and Diana Agrest towards an architectural theory for the Anthropocene.

READING MCKENZIE WARK AND PAOLO VIRNO WITH ALDO ROSSI AND DIANA AGREST

The Anthropocene is the present geological era where natural forces are in conflict with human forces. The Anthropocene is the age of one planet and all humans. To paraphrase Virno from *A Grammar of the Multitude*: the collective "we, the multitude," has never been more powerful for collective action. It names a potential solidarity of the many, of the shared resources, of the multitude of humans and species. In *Sensoria*, Wark argues: "The Anthropocene names a world transformed by collective human labor under the power of the commodity form. That world appears increasingly hostile to the endurance not just of our species-being but of many others as well."[7]

In this article I mobilize concepts developed by Wark and Virno transposed to architecture. Although Wark and Virno are not normally put together, they share aspects of thought. They both interpret the centrality of language as a practice, a concept, and the raw material that defines contemporary subjectivity and the entanglements of social relations with nature. They share a commitment to the productive power of language to shape "forms of life" (Virno). Both advance the use-value of language to treat the writing of theory as an open-ended material "knowledge practice" (Wark) within the relations of production—what Wark has termed the "information political economy." Both figures reflect on the formation of new collective subjects who Virno and others name the "multitude," and who Wark calls "hackers." I read the latter as a particular configuration of the former, who are presented as a more heterogeneous collective subject. That sense of reach and difference is what I emphasize here. Wark's reflections on the Anthropocene offer powerful tools and compelling narratives that I bring into connection with architecture.[8] Consequently, in the first two sections I discuss Wark followed by Virno to read the Anthropocene with the multitude.

In the next sections I test a genealogy of architectural theory for the Anthropocene by reading the thought of Rossi focused around his idea of analogical thinking about architecture and the city alongside the critical writings of Agrest on the architecture of nature and the urban-nature continuum. Rossi was at the center of critical practice and urban theory in the 60s and 70s, a period of sustained critiques of power, the linguistic turn in architecture, and the reintroduction of questions about nature.[9] Agrest followed in the 80s and continues today. Rossi was a key reference for Agrest's critique of the modern city, collectivity as a subject position, and their mutual interest in ideas around the "city as a text."[10] Rossi and Agrest argued for architecture as a distinct body of knowledge and as a critical tool. They were committed to the potential of architectural thought to stretch across fields, and of the agency of the architect to shape the ethos of the period. Although that ethos may no longer be so evident today, revisiting the lessons of Rossi and Agrest is promising. They can be updated through a reading of Wark and Virno.

All of these figures have reflected on questions of nature, language, collective imagination, and the organization of knowledge. They are exemplars for approaching how to mobilize the agency of theory and experimental practices that cross fields to appropriate concepts, methods, and projects, binding them together in new configurations. I argue that these figures and their ideas and approaches provide a launch point for an architectural theory for the Anthropocene that may help to frame new types of formal and collective agency. In particular, I use Wark's framework of critical thought and practice to investigate how these figures and ideas make contact with each other.

WARK: ANTHROPOCENE, EXTRAPOLATION, AND KNOWLEDGE PRACTICE

In McKenzie Wark's seminal text, *A Hacker Manifesto*, Wark addresses questions around the information political economy and intellectual property.[11] Wark develops a lexicon for the changes to the organization of knowledge and labor by reflecting on terms including abstraction, class, hacking, information, nature, production, representation, subject, and vector. She argues that a new class conflict has emerged that places the creators of information against a class that commodifies information.

The creators are a "hacker class," everyone who produces new information out of old information. Creators include artists, authors, biologists, chemists, educators, musicians, philosophers, programmers, researchers, theorists, architects. Wark argues that "hackers… must sell their capacity for abstraction to a class that owns the means of production, the vectoralist class—the emergent ruling class of our time."[12] The vectoralist class is named because they control the "vectors" along which information is abstracted, networked, and organized, including but not limited to Google, Apple, Amazon, and Facebook (Meta).

Wark's recent book, *Capital is Dead*, extends the argument put forward in *A Hacker Manifesto* but updates it to take account of the massification of data underway in the present, and its consequences in the time of the Anthropocene. Wark reprises the vectoralist class as follows: "The vector of information includes the capacity to transmit, store, and process information. It is the material means for assembling so-called big data and realizing its predictive potential. The vectoralist class owns and controls patents, which preserve monopolies on these technologies. It owns or controls the brands
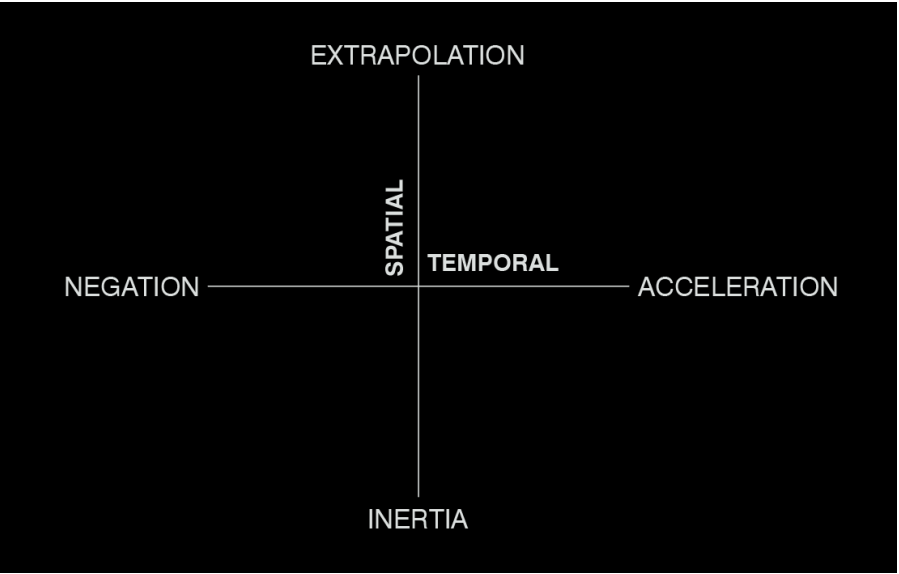

Figure 1: McKenzie Wark's framework for critical thinking and practice in the time of the Anthropocene. Extrapolation and inertia form a spatial axis; negation and acceleration define a temporal axis. The framework provides a base for thinking about how Wark, Virno, Rossi, and Agrest may make contact.

and celebrities that galvanize attention. It owns the logistics and supply chains that keep information in its proprietary stacks."[13] The typologies of the vectoralist class include big box stores such as Tesco, Walmart, and Amazon warehouses, but also their data centers, server farms, distribution hubs, and offices. Less visible are the branding, patents, customers' personal information, and the teams of intellectual workers who produce new forms of intellectual property and new ways of extracting information from consumers.[14]

Wark argues that "the instrumentalizing of information mobilizes the whole planet as a rationalized sphere of resource extraction under the sign of exchange value."[15] In the information political economy, the commons of knowledge is enclosed as intellectual property in a mutation of the private property form. The commodification of knowledge presses down on the resources of individuals— our thought, imagination, and desire; our time and energy. The commodification of knowledge stretches natural resources by exploiting land, water, air, and fossil fuels that enable the infrastructure that allows knowledge to circulate. A first nature of land is enclosed, a second nature of inhabitable built forms transforms nature by collective labor, and a third nature of information is overlaid. Third nature wraps the planet. In this context, Wark argues that social history is entangled with natural history.

In the chapter "Nature as Extrapolation and Inertia" in *Capital is Dead*, Wark reflects on the relationship between social and natural history in twentieth century and contemporary critical thought. She argues that critique has focused on social history in the form of a "temporal axis" between accelerationist and negative critiques. Accelerationism proposes that capital must be accelerated into another mode of production.[16] Negation takes the form of contradiction and is embodied by the working class who is a negation produced by class struggle.[17] Wark argues that both of those tendencies are concerned almost exclusively with social relations. She argues that another "spatial" axis is needed to help think about social and natural history together, the "continuities and partitions," because "one thing the Anthropocene might imply is that there's no taking for granted that there is any separation between natural history and social history."[18]

Wark adds two types of critical practice in the era of the Anthropocene. The first "extrapolates" from natural and social history alternative ways to learn about the forms and organization of material and knowledge. Extrapolation works by combining different kinds of knowledge—concepts, theories, practices—at different scales of organization and across fields that may create collective knowledge and lead to new social and built forms. Wark describes the practice using the combinatory term "natureculture" after Donna Haraway.[19] It is an example of a text-based extrapolation in that the term combines different concepts together to demonstrate the conjunction of nature and culture, its continuities rather than its separations. For Wark, "extrapolation might be one pole of an axis of thinking natureculture as an affirmative theory and experimental practice."[20] The counterpoint to extrapolation is "inertia." While extrapolation emphasizes the connective possibilities between natural history and social history, inertia is the tendency in critical thought and mainstream practice to remain the same within the already existing social order (Figures 1 and 2).

Wark argues that the dominant tendency today is the intensification of individual and collective actions forced into the commodity form, acting against the world. The individual-consumer-end experience of this is the unthinking noise of social media chains of misinformation; the spatial-end is incoherent urban form and the consumption of ever more planet by urbanization. Those acts produce a world against us out of habit and reproduce collective life in the image of capitalist development as a society of singularities.[21] Extrapolation articulates possibilities for thinking and acting collectively to build another civilization; inertia is a reminder of the challenge.[22]
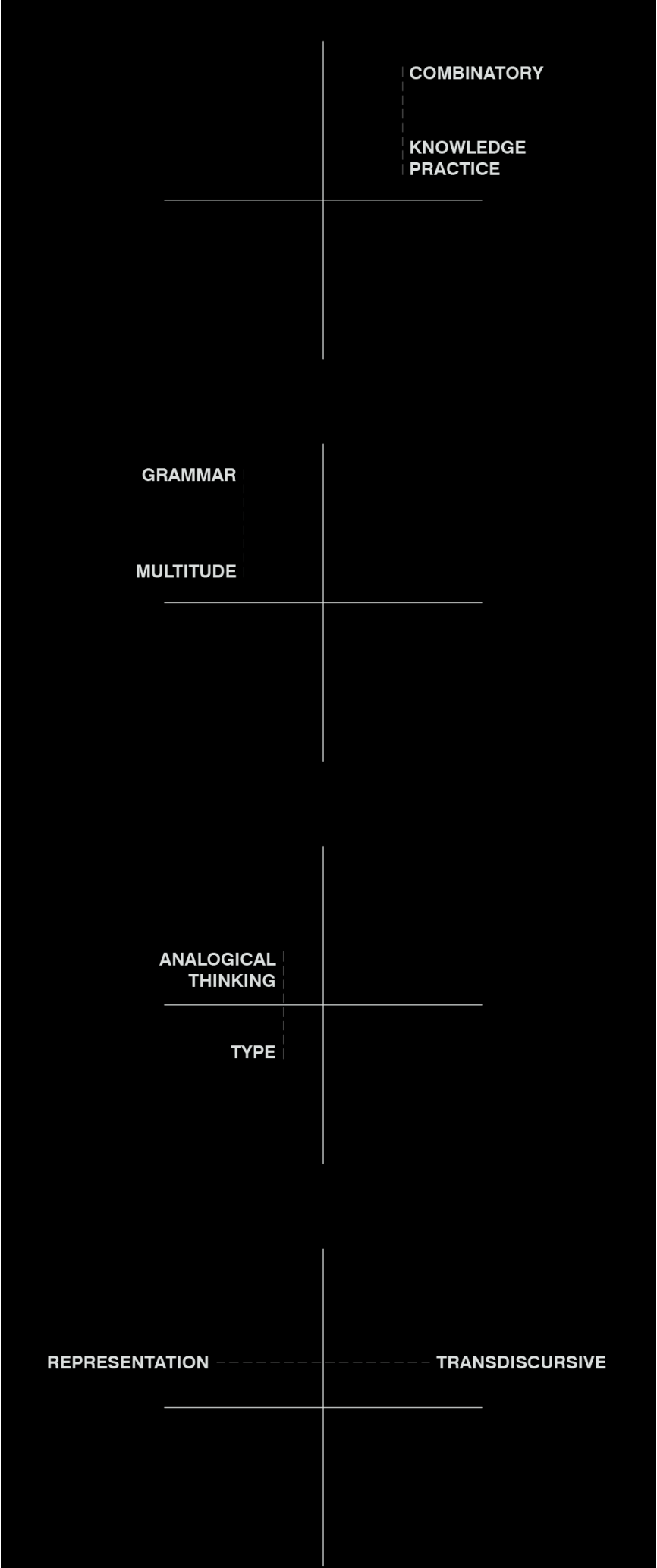
VIRNO: MULTITUDE, GRAMMAR, AND NATURAL HISTORY

Wark's ideas on the hacker class as a collective political subject, the need to reflect on the merging of social with natural history, and her framework for critical practice dovetail with Paolo Virno's ideas of multitude and anthropogenesis. While Wark's approach is extrapolative and combinatory, situated towards the acceleration and extrapolation poles outlined in Figure 1, Paolo Virno's work is also combinatory but it emphasizes negation as a critical approach. Virno is the subject of one of Wark's close readings in *General Intellects*, where Wark reflects on Virno's *A Grammar of the Multitude*.[23] She describes Virno's book as a "diagnosis of the times," a "project of bringing together a conceptual matrix appropriate to the historical moment."[24]

In *A Grammar of the Multitude*, Virno develops a grammar for understanding the current mode of production. Virno calls this post-Fordism—a mode of production no longer situated in specific sites such as the factory or even the office, but instead dispersed in diverse and varied places from the classroom to the care room, the call center to the coffee shop, and now the Zoom room. Virno critiques normative political categories such as public and private, the people, and the nation state. He reflects on the extent to which alternative categories may be more helpful as tools to understand contemporary issues. Those categories include individual and collective, the multitude, and general intellect. For Virno, those terms provide a different section cut through collective life.

Virno argues that the multitude is a critique of "the people." He argues that the state creates a people as an homogeneous "one" under a sovereign ruler bound by a transfer of rights between individual to State, whereas the multitude stands for the possibility of plurality and difference not limited to a single State.[25] For Virno, the multitude negates the people: "It is a negative concept this multitude:

Figure 2: Overlay of the key concepts and methods of Wark (top), then Virno, Rossi, and Agrest (bottom) within the same inertia/extrapolation and negation/acceleration axes presented in Figure 1.

COMBINATORY

KNOWLEDGE
PRACTICE

GRAMMAR

MULTITUDE

ANALOGICAL
THINKING

TYPE

REPRESENTATION — — — — — — — — TRANSDISCURSIVE

it is that which did not make itself fit to become a people."[26] The multitude is a collective political subject who gain unity by common linguistic faculties, in particular: capacity for abstraction, desire, language, and collective action. Virno argues that common experience includes the specifically human trait of a "non-specialized character" and the absence of a fixed environment.[27] The multitude constantly escape a "home" or "identity." They refuse to be bounded and partitioned. There is no distinction been public and private. Virno writes: "In advanced capitalism, the labor process mobilizes the most universal aspects of the species: perception, language, memory, affects. Roles and tasks, in the post-Fordist era, coincide largely with 'generic existence.'"[28] For Virno, the generic existence of the multitude is language. All of space and nature is a continuous space of communication. Language is the natural and historical production of our environment. It implies a dialogue with the Anthropocene.

In *When the Word Becomes Flesh*, Virno approaches the Anthropocene in the chapter entitled "Natural History." He writes: "The nature of 'natural history' is only and specifically a *first* nature. It is not an attempt at making the form of the commodity a chemical property of objects, but the unchanging biological core that characterizes the existence of the human animal in the most diverse social-economical formations."[29] For Virno, "first nature" is not primal nature such as the land, earth, and air. First nature is immediately human nature. It is socially produced historical nature such as language and institutions.[30] It is the capacity of human beings to be creative with language, and that human nature is an index of a particular period, manifest by institutions.

Virno writes: "The [linguistic] faculty is biological, the different languages are historical; the first is innate, the second is acquired; one pertains to the individual mind while the other is inconceivable outside of a social context."[31] The linguistic faculty coincides with the idea of human potential, which for Virno is the potential to produce, think, and act. It stands for the infinite possibility of human agency, and it coexists between social and natural history. The linguistic faculty of the individual is a natural phenomenon that manifests itself today in the organization of

work, information as raw material, and knowledge production. In post-Fordism, linguistic creativity and innate human "potential" are an economic resource and hence an historical product.

Consequently, Virno mobilizes the agency of the multitude entangled with natural and social history. Although he does not say it, understanding social history as part of natural history suggests the "metabolic rift" that opens when human labor interrupts the ecology of the planet.[32] The Anthropocene makes nature an historical product. The more nature is consumed by labor and technique, the less the cycle can renew itself. Planetary resources are finite.

READING THE ANTHROPOCENE WITH THE MULTITUDE TOWARDS ARCHITECTURE

The interpretive approach undertaken by Virno to read nature as the natural history of human beings, institutions, and language foregrounds questions of individual and collective agency around the figure of the multitude—one member of whom is Wark's hacker class. Overlaying Wark's framing of critical thought along the axes of negation/acceleration and inertia/extrapolation, Virno occupies an axis that joins negation and extrapolation.[33] Multitude negates the people. Nature is extrapolated into natural history. The individual becomes a multitude. There are compelling interpretive strategies and world perspectives at stake in the theories of Wark and Virno, especially when these figures are read together. Their thought may be further articulated and spatialized when overlaid onto architecture.

I want to transpose onto architecture the concepts and methods put forward by Wark and Virno on language, social and natural history, the agency of the multitude and the hacker class, and the approach of negation and extrapolation. Those categories are the framework through which I interpret ideas of analogical thinking, bodies, nature, and territory in the thought and projects of Aldo Rossi and Diana Agrest. Revisiting Rossi and Agrest and reflecting on how their work makes contact with the ideas and practices of Wark and Virno might open some pathways through which to think from past examples

to present conditions, Anthropocene to multitude, architectural theory to critical practice.

ROSSI: ANALOGICAL THINKING, TERRITORY, AND COLLECTIVE LIFE

There are aspects of Rossi's thought on the question of nature that are prescient for understanding how architecture can be a critical tool to reflect on the relationship between human and natural forces; in other words, the Anthropocene. Some clues can be found in *The Architecture of the City*. In the section on "Typological Questions," Rossi writes that architecture and the city are a transformation of nature: "The city as above all else a human thing is constituted of its architecture and of all those works that constitute the true means of transforming nature."[34] Rossi followed with reflections on the formal, typological, and associative condition of nature: "Natural artifacts as well as civic ones become associated with the composition of the city" so that natural and constructed artifacts, and the permanence of the plan, "constitute a whole which is the physical structure of the city."[35] In sections on "Geography and History: The Human Creation" and "Urban Ecology and Psychology" Rossi speaks about nature as "ecology" and brings his reading of nature into contact with history, memory, and social relations.[36] It was part of how Rossi framed his idea of the city as the "locus" of collective memory. Rossi asked: "how does the environment influence the individual and the collective?"[37] He always returned to the question of the individual within the collective life and memory of the city. Consequently, nature was social; it was historically produced human nature. It coincides with Virno's notion of natural history.

One of Rossi's most compelling statements on nature can be found in a short essay entitled "My Designs and Analogous Architecture." Here Rossi develops his analogical thinking about the architecture of the city. Rossi writes: "The body of architecture evolves from a doctrinal body into a physical body of territorial construction, and it is a common experience just like the human body—art and life."[38] There is a chain of association that moves from architecture as a body of knowledge to architecture's spatial capacity for organizing a territory—the

architecture of nature, the nature of architecture. Scale telescopes from the body of individuals as a multitude to the occupation of territory as a common experience. Rossi repositions architecture beyond the design of individual buildings towards a collective approach to understanding how architecture structures the city extending into the territory. The chain of association is a knowledge practice and an example of "extrapolation." It is connective and analogical. It puts forward the possibility of architecture to extrapolate from individual to collective, from different ideas and practices, across fields and scales. It is a practice of making worldviews.

Those categories are related to a key statement by Rossi in the section on urban ecology in *The Architecture of the City*. Rossi reflected as follows: "I maintain that in art or science the principles and means of action are elaborated collectively or transmitted through a tradition in which all the sciences and arts are operating as collective phenomena. But at the same time they are not collective in all their essential parts; individuals carry them out."[39] Rossi's statement suggests a collaborative approach—he mentions the arts and sciences; we can also say the humanities—coupled with a sense of individual agency. It resonates with Virno's notion of the heterogeneity of the multitude as distinct individuals who form the potential for collective action without necessarily congealing into a static "people." It seems to suggest an open procedure that combines the knowledge that individuals accumulate from their specific approaches. It is about how new knowledge is created out of the old.

Such a project is collective and crosses disciplines, modes of interpretation, and diverse knowledge practices. It is close to the method adopted by Wark, which she describes variously as extrapolation as I highlighted earlier, and as a "common task."[40] That approach emphasizes the connective possibilities between subject and the world, thought and action, between different levels of critique and representation. Rossi always had an eye on the old, the familiar, but he made the familiar strange. He found ways to articulate continuities and differences,

transforming historical urban and architectural types and typological knowledge into something fresh. We need a project to transform collective life and support new ways of thinking, living, and working. The common task is to know the world and find ways to inhabit, think, and act in the world, differently from our current habits.

AGREST: CONSTRUCTIONS OF NATURE, REPRESENTATION, AND TRANSDISCURSIVITY

In *Architecture of Nature/Nature of Architecture,* Diana Agrest has reflected on the relationship between architecture and the Anthropocene. Agrest argues that nature has always been part of architectural discourse, from the relationship between nature and culture, to that between nature and architecture, to the "nature/urban continuum."[41] For Agrest, this interaction takes on a prominent position during the climate crisis.

Nature is the object of study in *Architecture of Nature* and Agrest explores the interaction with architecture, primarily in relation to scientific and philosophical discourse. Natural phenomena are addressed using drawing and writing to rethink the power of nature and the limits of architecture as a body of knowledge. Agrest writes: "We work with existing data, selected from the various fields of science where natural phenomena are explored, and re-theorize them within our own discourse."[42] Phenomena studied include canyons, deserts, glaciers, oceans, radioactive winds, and volcanoes. Plans and sections reveal nature's organization and articulate entanglements between natural and human forces, scientific data and modes of seeing. The drawings have an aura of both fact and a disquieting sense of the sublime, or even terror, as we confront the climate catastrophe.

For Agrest, rethinking the question of nature is not necessarily about identifying immediate answers, but reflecting on possible questions. It is about using architecture's tools—drawing and writing—and the creative use of representation as a tool for thought in the production of knowledge. She describes her approach as "transdiscursive," which is the "construction of, or articulation between

discourses."[43] It resonates with Rossi's analogical approach and Wark's practice of extrapolation where one field enters into dialogue with another. In so doing, the discourse of architecture expands.

Agrest engages with the notion of Anthropocene, but also rebuts it. She writes: "While the Anthropocene as a position has directed attention to critical environmental issues, as a construction of nature it also carries an ideology of problem-solving and object-making that serves the powers that be."[44] Agrest refers to the writings of Haraway and Jason Moore, and their term "Capitalocene" to identify the primary agent of exploitation of nature as capitalist development.[45] Agrest argues that from an architectural perspective, the idea of the Anthropocene is problematic as it places Anthropos as "man" at the center again, historically connoting male-dominated Western culture.

Agrest recounts the concept of nature in architecture, beginning with Vitruvius to Alberti and Laugier. She argues that nature was incorporated into architectural thought as a referent for "beauty" and the "body" until a break was articulated by Le Corbusier. Nature returned as a pragmatic element in modern architecture and urban discourse. Nature was light, air, view, fluid interior to exterior connections, and also a formal element in the ground and roof plane where nature is duplicated, geometricized, and constructed. Nature is captured, repressed, and represented by a controlled green plane. Le Corbusier's Radiant City project is one example, but the principle became typical of subsequent postwar urban schemes.

Architecture of Nature follows on from texts such as "The Return of the Repressed: Nature" and "Architecture from Without: Body, Logic, and Sex."[46] In those writings, Agrest argued that nature had been absent from urban discourse after modernism, replaced by a focus on object buildings and a confrontation between the machine and the forces of nature. Agrest interprets the confrontation as a taming of the "double image of woman/nature" and with it the suppression of women as urban subjects.[47] Agrest writes: "Nature is first suppressed, via a metaphorical maneuver representing it as a 'green
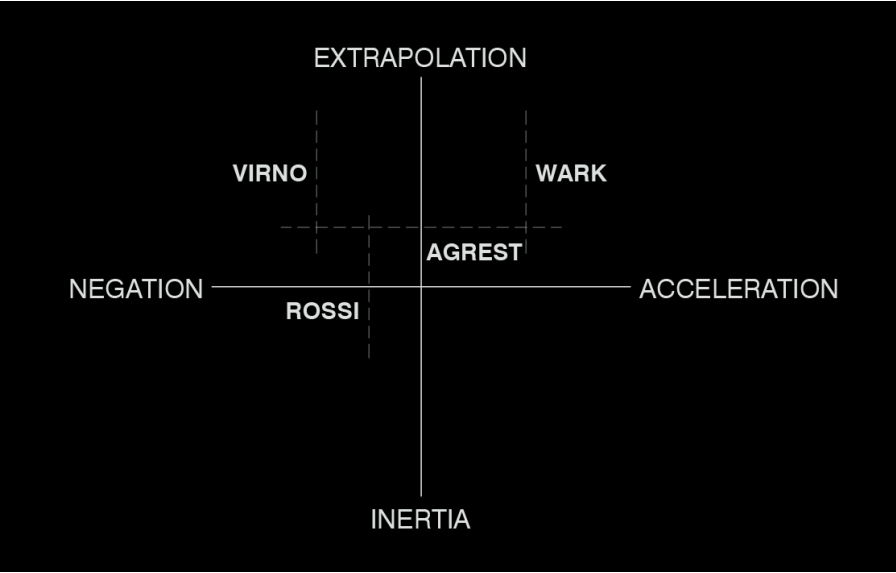

Figure 3: Mapping points of contact between figures, ideas, and methods of Wark, Virno, Rossi, and Agrest towards a discursive and materialist architectural theory for the Anthropocene.

plane,' as part of the urban machine; it is then relegated to a background, finally to be expelled by the economic-political forces of capitalism in a globalized market economy based on the exploitation and destruction of nature."[48] In Agrest's reflections, architecture has always been part of nature linked by a chain of association.

What characterizes Agrest's approach is its open-endedness. It is an extrapolative method that draws together subject and object, and multiple perspectives and approaches. Agrest allows questions to emerge, acquire depth, to open onto varied fields, and not to stop short by finding immediate answers. She uses architecture to expand the normative disciplinary boundaries and engage a spectrum of disciplines from the humanities to the sciences in a collaborative effort. It is a compelling strategy that allows a reflection on architecture's particular means of critique and representation, while also blurring the boundaries that would conventionally separate architectural theory from other practices.

CONCLUSION: TOWARDS AN ARCHITECTURAL THEORY FOR THE ANTHROPOCENE

Reading Wark and Virno with Rossi and Agrest offers new conceptual frameworks and methods of knowledge practice towards an architectural theory for the Anthropocene. They provide a toolkit of concepts and methods that can help shape the theoretical and practical efforts of architecture in the time of the Anthropocene. Wark and Virno argue that the language we use to describe capitalism and organize in resistance to capital must be reinvented. They are compelling figures because they scale thought and practice up, connecting historical, political, and technological regimes within a lucid theoretical framework. Thought transforms into action. Rossi and Agrest help to spatialize those efforts.

One task for an architectural theory for the Anthropocene is to reflect on the critical tradition and appropriate the key terms and strategies with which new texts, theories, and knowledge practices may be developed. It may lead to the invention of new narratives, techniques, and collective imaginaries as a step towards thinking about how new spaces and places of inhabitation might be constructed.

For Wark, such a method is a collaborative approach to the sharing and organization of knowledge as *extrapolation* from one field to another, from one historical era to the present. She works on theory to unravel new terms and processes, linking them together to put pressure on norms and habits that have congealed into what she terms inertia. For Virno, the mode of contemporary production demands a variety of analyses with a cluster of social and political concepts framed as a *grammar of the multitude.* He articulates alternative readings of labor and technique and keeps language-work oriented towards current conditions. Rossi's *analogical thinking* is formal and associative, poetic and political. Rossi shows how individuals and individual ideas condense into collectives and collective ideas. The analogue stands for thinking beyond, thinking in a chain of association. It may help to move a grammar of the multitude into a grammar of the city in the time of the Anthropocene. For Agrest, the approach is a *transdiscursive* method to transpose critiques between different domains of knowledge and practice such as the sciences and philosophy to architecture and urbanism. It leads to the blurring of boundaries, the interaction of disciplines, and loosening the inertia of habit.

We need to change our habits, habitats, and forms of inhabitation. A common aim must be to push against the fracturing of individual and collective agency, habits of overconsumption, and unethical forms of capitalist development. The urgent collective task for architecture is to mobilize its formal and imaginal agency to articulate ways of thinking and living otherwise.[49] An architectural theory for the Anthropocene would be open-ended and discursive, collective and materialist. It needs to seek points of contact that link ideas, methods, and figures across perspectives and scales (Figure 3). The figures discussed here begin to show how concepts can be reworked into tools, tools may become design methodologies and thinking processes, which in turn might produce alternative actions, forms of thought, and forms of city that support collective life in the Anthropocene. ▪

ENDNOTES

1. John Bellamy Foster, Brett Clark, and Richard York, *The Ecological Rift: Capitalism's War on the Earth* (New York: Monthly Review Press, 2010).

2. It is one context amongst other interrelated contexts that include the housing crisis, social injustice, health and wealth inequalities, and a more general sense of a crisis of collective imagination that architects and architecture must find ways to engage.

3. Daniel A. Barber, "Architectural History in the Anthropocene," *The Journal of Architecture* 21, no. 8 (2016): 1165–70 (1165). Also see Daniel A. Barber, *Modern Architecture and Climate: Design before Air Conditioning* (Princeton: Princeton University Press, 2020).

4. Barber, "Architectural History in the Anthropocene," 1166.

5. Dean Hawkes, *The Environmental Imagination: Technics and Poetics of the Architectural Environment* (London: Routledge, 2008); James Graham et al., eds., *Climates: Architecture and the Planetary Imaginary* (New York: Lars Muller, 2016); Elisa Iturbe, "Architecture and the Death of Carbon Modernity," *Log* 47 (2019): 10–23; Susannah Hagan, *Revolution? Architecture and the Anthropocene* (London: Lund Humphries, 2022). From a theoretical design practice perspective see Design Earth, Rania Ghosn, and El Hadi Jazairy, *The Planet After Geoengineering* (New York; Barcelona: Actar, 2021).

6. Paolo Virno, *A Grammar of the Multitude: For an Analysis of Contemporary Forms of Life* [2001], trans. Isabella Bertoletti, James Cascaito, and Andrea Casson (Los Angeles, CA: Semiotext(e), 2004).

7. McKenzie Wark, *Sensoria: Thinkers for the Twenty-First Century* (New York: Verso, 2020), 7. Also see McKenzie Wark, *Molecular Red: Theory for the Anthropocene* (London; New York: Verso, 2016). There are other compelling interventions in this debate that help unpack the concepts and material consequences as a grammar of the Anthropocene. See for instance: Timothy Morton, *Hyperobjects: Philosophy and Ecology after the End of the World* (Minneapolis: University of Minnesota Press, 2013); Jason W. Moore, *Capitalism in the Web of Life: Ecology and the Accumulation of Capital* (New York: Verso, 2015); Jussi Parikka, *A Geology of Media* (Minneapolis: University of Minnesota Press, 2015); Donna J. Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Durham: Duke University Press, 2016); Christophe Bonneuil and Jean-Baptiste Fressoz, *The Shock of the Anthropocene: The Earth, History and Us* [2013], trans. David Fernbach (London; New York: Verso, 2016); Dipesh Chakrabarty, *The Climate of History in a Planetary Age* (Chicago: University of Chicago, 2021); Nancy Fraser, "Climates of Capital: For a Trans-Environmental Eco-Socialism," *New Left Review*, no. 127 (2021): 94–127.

8. Wark's work was brought to an architecture audience in McKenzie Wark, *50 Years of Recuperation of the Situationist International* (New York: Princeton Architectural Press, 2008). The book was part of a series on the relationship of architectural texts to politics and urban life edited by Joan Ockman. It included texts by Pier Vittorio Aureli on Aldo Rossi, Archizoom, and the politics of autonomy; and Sven-Olov Wallenstein on modern architecture and biopolitics. Indeed, there is even a brief reference to Rossi in McKenzie Wark, *Telesthesia: Communication, Culture & Class* (Cambridge: Polity, 2012), 53.

9. For a concise survey of nature in architecture see the entry in Adrian Forty, *Words and Buildings: A Vocabulary of Modern Architecture* (London: Thames & Hudson, 2012).

10. See the collection of writings in Diana Agrest, *Architecture from Without: Theoretical Framings for a Critical Practice* (Cambridge, MA: MIT Press, 1991).

11. McKenzie Wark, *A Hacker Manifesto* (Cambridge, MA: Harvard University Press, 2004).

12. Wark, *A Hacker Manifesto*, 20.

13. McKenzie Wark, *Capital Is Dead: Is This Something Worse?* (London; New York: Verso, 2019), 13.

14. Also see Parikka, *A Geology of Media* who analyzes the interplay of resource extraction and hard labor on the perceived "immateriality" of contemporary modes of production.

15. Wark, *Capital Is Dead*, 96.

16. For a survey of accelerationist thought see Robin Mackay and Armen Avanessian, eds., *#Accelerate: The Accelerationist Reader* (Falmouth: Urbanomic, 2014).

17. For a paradigm of negative thought see the essays collected in Theodor Adorno and Max Horkheimer, *Dialectic of Enlightenment* [1944], trans. John Cumming (London; New York: Verso, 2010).

18. Wark, *Capital Is Dead*, 127.

19. Donna J. Haraway, *Manifestly Haraway* (Minneapolis: University of Minnesota Press, 2016).

20. Wark, *Capital Is Dead*, 129.

21. Andreas Reckwitz, *The Society of Singularities*, trans. Valentine A. Pakis (Cambridge, MA: Polity, 2020).

22. Wark, *Capital Is Dead*, 142.

23. McKenzie Wark, *General Intellects: Twenty-One Thinkers for the Twenty-First Century* (New York: Verso, 2017). Chapter 3 "Paolo Virno: Grammars and Multitudes."

24. Wark, *General Intellects*, 51, 64.

25. Virno draws on Arendt's idea of plurality as "the twofold character of equality and distinction." Hannah Arendt, *The Human Condition* [1958] (Chicago: University of Chicago Press, 1989), 175.

26. Virno, *A Grammar of the Multitude*, 23.

27. Paolo Virno, *When the Word Becomes Flesh: Language and Human Nature* [2003], trans. Giuseppina Mecchia (South Pasadena, CA: Semiotext(e), 2015), 189, 199. Also see Paolo Virno, "Natural-Historical Diagrams: The 'New Global' Movement and the Biological Invariant," in *The Italian Difference: Between Nihilism and Biopolitics*, ed. Lorenzo Chiesa and Alberto Toscano, trans. Alberto Toscano (Melbourne: re.press, 2009), 131–47.

28. Virno, *When the Word Becomes Flesh*, 227.

29. Virno, *When the Word Becomes Flesh*, 172–173. Virno's italics.

30. Virno draws on the debate between Noam Chomsky and Michel Foucault to develop this line of thought. See Noam Chomsky and Michel Foucault, *The Chomsky-Foucault Debate: On Human Nature* (New York: The New Press, 2006).

31. Virno, *When the Word Becomes Flesh*, 191.

32. Wark, *Molecular Red*, xiv.

33. Paolo Virno, *Multitude: Between Innovation and Negation*, trans. Isabella Bertoletti, James Cascaito, and Andrea Casson (Los Angeles, CA: Cambridge, Mass: MIT Press, 2007).

34. Aldo Rossi, *The Architecture of the City* [1966], trans. Diane Ghirardo and Joan Ockman (Cambridge, Mass.: MIT Press, 1982), 35.

35. Rossi, *The Architecture of the City*, 51, 86.

36. Rossi, *The Architecture of the City*, 97–101, 112–114.

37. Rossi, *The Architecture of the City*, 112.

38. Aldo Rossi, "My Designs and the Analogous City," in *Aldo Rossi in America: 1976–1979*, trans. Diane Ghirardo (IAUS New York: MIT Press, 1979), 16–19 (19). In the paragraphs preceding this statement, Rossi writes: "This analogous architecture was already described in things, an accretion through time; it referred to different times and situations, ultimately dissolving into nature."

39. Rossi, *The Architecture of the City*, 113.

40. Wark, *Sensoria*. See the introduction entitled "Toward the Common Task."

41. Diana Agrest, *Architecture of Nature/Nature of Architecture* (Novato, CA: ORO Editions/Applied Research & Design, 2018), 8.

42. Agrest, *Architecture of Nature/Nature of Architecture*, 12.

43. Agrest, *Architecture of Nature/Nature of Architecture*, 9, 78.

44. Agrest, *Architecture of Nature/Nature of Architecture*, 11.

45. Moore, *Capitalism in the Web of Life*; Donna Haraway, "Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin," *Environmental Humanities* 6, no. 1 (2015): 159–65.

46. Diana Agrest, "The Return of the Repressed: Nature," in *The Sex of Architecture*, ed. Diana Agrest, Patricia Conway, and Leslie Kanes Weisman (New York: Harry N. Abrams, 1996), 49–68; Diana Agrest, "Architecture from Without: Body, Logic, and Sex" [1988], in *Architecture from Without: Theoretical Framings for a Critical Practice* (Cambridge, MA: MIT Press, 1991), 173–95. To develop her argument Agrest refers to Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution* (New York: Bravo, 1990). Also see Carolyn Merchant, *The Anthropocene and the Humanities: From Climate Change to a New Age of Sustainability* (New Haven: Yale University Press, 2020).

47. Agrest, "The Return of the Repressed: Nature," 53.

48. Agrest, "The Return of the Repressed: Nature," 59.

49. Chiara Bottici, *Imaginal Politics: Images Beyond Imagination and the Imaginary* [2014] (New York: Columbia University Press, 2019).