



On the Integrative Program

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1. *There is no architecture without action, no architecture without events, no architecture without program.*
2. *By extension, there is no architecture without violence.*

-Bernard Tschumi¹

Introduction

In *Violence of Architecture*, Bernard Tschumi identifies the "fundamental and unavoidable" relationship between architecture and violence as they together manage "the intensity of a relationship between individuals and their surrounding spaces."² He goes on to articulate two types of violence: formal and programmatic. The first is a metaphorical violence, "nothing but the polemical violence of difference. The second type is not a metaphor. Programmatic violence encompasses those uses, actions, events and programs that, by accident or by design, are specifically evil and destructive."³ Architecture has since adopted a more ethically ambivalent stance through Foucaultian biopolitics and Bergson-Deleuzian vitalism. In having done so, the reality of programmatic violence in architecture remains and intensifies as formal vs. programmatic, good vs. evil, productive vs. destructive and by-design vs. by-accident distinctions dissolve into one another. Most importantly, Tschumi's reflexive articulation of bodies and space against one another describes a fundamental ambition of the integrative program – the exploitation of corporeal/spatial distinctions toward the production of new bodies and new spaces.

The ACADIA 2011 conference, "integration through computation," constitutes the latest achievements in architectural research toward the integrative program. This program is one in which "methods, processes, and techniques are discovered, appropriated, adapted, and altered from 'elsewhere,' and often 'digitally' pursued."⁴ As such, integrative violence presents itself as *the* empowering agent for research that employs computation toward purposefully violating boundaries, hybridizing processes and instrumentalizing nature in the name of architecture. It is at once easy and impossible to imagine the extraordinary power necessary to undertake such a task, yet we find ourselves thoroughly immersed in processes that exploit the world as we know it so that we might be able to design worlds that have not yet been imagined. But what makes the integrative program possible, how is it administered, and what constitutes "an effective digital exchange of information?"⁵ While the best answers to these questions lie in the research presented and projects exhibited at this conference, I'd like to take a moment to examine how the integrative program operates and how its operation has evolved programmatic violence.

Always Already In-between

Elizabeth Grosz defines the in-between as "that which is not a space, a space without boundaries of its own, which takes on and receives itself, its form, from the outside, which is not *its* outside (this would imply it has form) but whose form is the outside of the identity, not just of an other (for that would reduce the in-between to the role of object, not of space) but of others, whose relations of positivity define, by default, the space that is constituted as in-between."⁶ By inhabiting this non-space, architecture becomes specifically capable of forming a relationship with the world as an integrative and reflexive project of power production. This relationship makes use of tactics that resist a concrete identity of its own in order to produce new territories, new worlds and new natures. In other words, integration – finding and exploiting the in-between – concerns itself with the potential for architecture, like nature, to make conditions such that life can flourish, grow and evolve. The integrative project perpetuates dynamic life.

It should come as no surprise that architecture has continued to intensify its relationship with nature⁷ as both have become informationalized. Environmentally responsive building skins, agent-based modeling, evolutionary algorithms, parametric models and biomorphological buildings all stem from architecture's insatiable obsession with making, mimicking, borrowing, instrumentalizing, producing and controlling life at every imaginable scale and from every possible orientation. By controlling and responding to information, buildings and building processes become information. But questions of control, response and incorporation are difficult and often generate rational contradictions that prevent or obscure the ability to make decisions. And so, an essential problem faces architecture: How does one induce decisions within the integrative project?

The integrative program is fundamentally a "how to" problem defined by how one makes integrative decisions. They are neither top down commands – made over and above things – nor are they bottom-up constructs that ignore or disregard their technological, material, cultural and historical contingencies. Rather, integrative decisions are made throughout things – starting from the interior and moving outward in search of intensive boundary conditions that most certainly will prove incomplete; matters of scope more than scale. Integrative decisions are made *with* things and as such operate through an imminent internal violence that incorporates decisions into solutions. But what does it mean, in terms of violence and architecture, to make decisions *with* things when the decision itself is something that has a history of autonomy?

Vital Weakness

As Carl Schmitt famously argued in *Political Theology*, "sovereign is he who decides on the exception"⁸ thus structuring a space both within and outside of the law when a system proves incapable of preserving itself. It is toward this purpose that architecture has historically looked to nature in managing, imaging and imagining the polis when its complexity simply overwhelms the capacity for any isolated act of design to matter enough. Within the context of nature-oriented systems (both organic and inorganic), decisions once placed solely in the hands of the sovereign now go untouched but for the programming of the system itself. Integrative violence could then be understood as a means of distributing sovereign decision-making through the material specificity of any design. However, the accessibility of life (particularly when imaged as information) made available through its bodies and its spaces, its ability to become integrative and integrated, makes it an explicitly involuntary prisoner of architecture.⁹ It should come as no surprise, then, that as integration becomes a primary act of architecture, so too life becomes an object and subject of power.

The zone of indistinction occupied by bare life¹⁰ and sovereign power is the same space that makes possible an integrative polis. Within the integrative polis, *whatever life* becomes the vital substrate that interchangeably reproduces life "as threat, as threatened and as response."¹¹ As bodies and spaces weaken one another in this process of involution, so too is sovereignty weakened.¹² Paradoxically, the weakness of any single instance of bare life is evidence of the resilience of *life itself* – existing as a means and ends of a lasting and meaningful duration within dynamic environments. Integrative architecture then becomes the project *par excellence* of a vital weakness concerned with the smooth distribution of sovereignty through the polis as power continually migrates away from individual bodies and into populations at large.¹³ This problem, of course, is only made more complex and enduring when distinctions between individuals and populations reveal themselves as indeterminate – caught between one another in perpetual migration; threatened individuals, responsive populations, etc.

Inducing Solutions

Michel Foucault, in developing the concept of biopolitics, provides a roadmap outlining how the population may provide integrative solutions.

The population appears therefore as a thick natural phenomenon in relation to the sovereign's legal volunteerism. To say that population is a natural phenomenon that cannot be changed by decree does not mean, however, that it is an inaccessible and impenetrable nature, quite the contrary... The naturalness identified in the fact of population is constantly accessible to agents and techniques of transformation, on condition that these agents and techniques are at once enlightened, reflected, analytical, calculated and calculating.¹⁴

Biopolitics concerns itself with the calculation and management of flows "in the very broad sense of movement, exchange, and contact as form of dispersion and distribution [by asking] how should things circulate or not circulate?"¹⁵ Integrative design becomes a thinking-through-the-population as a set of processes to be managed at the level and on the basis of what is natural within these processes. Nature becomes a materially specific behavioral property rather than a divine concept. Materials, assemblies, machines, disciplinary norms, software protocol all become informationalized in one form or another when subjected to the question. In biopolitical terms, the integrative program asks how otherwise disparate populations should be made to naturally circulate between one another.

The premise of the integrative program also poses a disciplinary paradox for architecture within an increasingly complex network society.¹⁶ The paradox is as follows: An integrative architecture concerns itself with exploiting weak boundaries between things, processes and practices for the purpose of maintaining the ability to make new architectural bodies and spaces. These bodies and spaces consist of (amongst other things) a complex mixture of geometric, material, computational and cultural information. Architecture, in order to survive as a discipline, must immerse itself within this dynamic milieu while reproducing necessarily dynamic boundaries of its own by "experiment[ing] out of architecture."¹⁷ Put in more precise terms, integrative architecture is an extension of the experimental architectural project founded on the indeterminacy of its own existence; experimental acts of integration serving to reify architecture as well as the integrated. Metaphor and literalism collapse into one another as systems of communication intensify information into (and beyond) realization. *Experimenting outside of itself* presents a complex limit condition whereby an absence of a priori boundaries enables an implicit disciplinary ability to establish, contest, maintain and exceed whatever boundaries it sees fit. Perhaps more problematically, these boundaries necessarily do not exist within the discipline; rather architecture seeks new forms of control that autopoietically¹⁸ incorporate the outside into its interior in the name of a spatial vitality that cannot be defined but through the integrative program.

While in the pursuit of increasing control (more intense program), the exuberant production of violent monstrosity within the sphere of biopolitics should not be forgotten or dismissed. As Manfredo Tafuri correctly notes, "The order in the details does not, therefore, lead simply to *tumulte dans l'ensemble*, but indeed to a monstrous pollution of symbols bereft of meaning. The Piranesian forest, like the sadistic atmospheres of his *Prisons*, shows that it is not only the "sleep of reason" that produces monsters; "reason awake" can also create deformity, even when the goal at which it aims is the sublime."¹⁹ In going further, failure to wholly embrace the untamable ferocity of nature would relegate design to the status of a deadly prophylactic that prevents rather than nurtures, cleaves rather than grafts, separates rather than combines. In forming such an embrace, we should remind ourselves of John Ruskin's *Nature of the Gothic*.²⁰ Placed before the love of change or love of nature, savageness, the primary characteristic of his revolutionary gothic, describes the fundamental necessity for an untamable and unmanageable image of architecture and nature toward freeing systems of production, emerging aesthetics and the realization of a robust integrative project. His call remains as a template for decoding the corporeal and spatial objects of the integrative program. This is especially useful as nature has become indistinguishable from human systems of production in the form of the Anthropocene²¹ and post-humanism.²²

Reconsidering Integrative Violence

In returning to Tschumi's programmatic violence, we may now be able to understand a number of differences that were not originally articulated in his text. First, by expanding programmatic violence from an extensive spatial condition to intensive design-process oriented architectural events, classical distinctions between bodies and space become blurred, signaling the success of violence as an integrative force. Second, the informationalization of bodies and space has enabled a massive

expansion of technologies that make use of connecting particular sets of information with one another – the virtualization of programmatic violence. The programming of virtual violence may then best describe the project of integration through computation. Lastly, integrative violence concerns itself with three precise territories: otherwise disparate populations, interface (virtual, physical or otherwise) and new effects. It is important to note that violence wants to behave differently between these three entities. Within disparate populations, violence tends toward invisibility as to avoid disrupting the conditions that make an exploit possible. Interface tends toward induction as to promote use of the design. New effects must be sensed in order to express value and thus violence is amplified as to produce maximum sensation. This tripartite mixture constitutes the violent structure of the integrative program and provides a basic model for architecture as it intensifies its production of new and vital things to operate between. The possibility of a future for architecture and the polis depends entirely on our ability to intelligently embrace the violence and monstrosity of the integrative program. The ACADIA 2011 annual conference might just be the discipline's latest and best efforts toward becoming accomplished integrationists.

Notes

1. B. Tschumi, "Violence of Architecture," *Art Forum* 20, no. 1(1982): 44.
2. *Ibid.*
3. *Ibid.*, 47.
4. B. Kolarevic, "Post-Digital Architecture: Towards Integrative Design" First International Conference on Critical Digital: What Matter(s), ed. K. Terzidis, 149 (Cambridge: Harvard University Graduate School of Design, April 18-19, 2008).
5. *Ibid.*, 152.
6. E. Grosz, "In-Between: The Natural in Architecture and Culture," *Architecture from the Outside, Essays on Virtual and Real Space*, (2001): 91.
7. See also D. Gissen's book, *Subnature*, which examines the architectural potentials afforded by nature's fall from grace.
8. C. Schmitt, "Political Theology: Four Chapters on the Concept of Sovereignty," (Stanford University Press 2006): 5.
9. Borrowing the term from F. Scott, "Involuntary Prisoners of Architecture," *October* 106 (Autumn, 2003): 75-101.
10. G. Agamben, "Homo Sacer: Sovereign Power and Bare Life," trans. D. Heller-Roazen (Stanford University Press, 1998).
11. E. Thacker, "Biological Sovereignty," *Pli*, Warwick, journal of philosophy, vol. 17 (2006): 19.
12. The term weakness in this article should be understood according to G. Vattimo's "Weak Thought" introduced in *Death of Modernity*, 1985.
13. J. Nealon, "Foucault Beyond Foucault: Power and its Intensifications Since 1984" (Stanford University Press, 2008).
14. M. Foucault, "Security, Territory, Population: Lectures at the College de France 1977-1978," eds. M. Foucault, M. Sellenart, and F. Ewald, 71 (Picador, 2009).
15. *Ibid.*
16. M. Castells, "The Rise of the Network Society" (Wiley Blackwell, 2000).
17. P. Cook, "Experimental Architecture" (New York: Universal Books, 1970).
18. H. Maturana and F. Varela, "Autopoiesis and Cognition: The Realization of the Living" (Springer, 1980).
19. M. Tafuri, "Toward a Critique of Architectural Ideology," *Contropiano* 1 (Jan-Apr 1969).
20. J. Ruskin, "The Nature of Gothic," *The Stones of Venice*, 1849.
21. J. Zalasiewicz et al. "Are we now living in the Anthropocene" *GSA Today* 18, no. 2, (2008).
22. For a distinctly military-technological account of the integrative project as it relates to post-humanism, please refer to N.K. Hayles *How We Became Posthuman*, 1999.