Streamlines of Desire:
Performative Techniques, Endless Deviation, Beauty and Open Play in the Evan Douglis Studio

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Clement Greenberg controversially declared in 1962, "Contemporary art criticism is absurd not only because of its rhetoric, its language and its solecisms of language. It is also absurd because of its repetitiousness...every step in the evolution of modernist art has been hailed, or condemned, as a revolutionary break with the past, and in each instance only the passing of a little time has refuted this claim. Yet this hardly deters anybody, and the epochs of art succeed one another faster than ever."[1] While a similar crisis might be identified in a good deal of writing on contemporary architecture at the turn of this century – focused as it has been on the *perpetual revolutions* enabled by various technologies, conscientiously reiterated French theory and the newness of *yet another* avant-garde – there is much in the teaching, writing and work of Evan Douglis to suggest a vector of research and production that represents an authentic budding of *another new*architecture. Unlike many contemporaries engaged in the difficult project of manufacturing novelty, contemporaneity and a panoply of special effects, Douglis has evolved a body of teaching that is simultaneously revolutionary and *repetitive*, radical and *systematic*, novel and *old school*. Specifically, what has emerged out of the very exacting series of studios he has conducted at Columbia's GSAP during the late 1990s and early 2000s, is a deep taxonomy of morphological innovation that, encouragingly, can also be read within a genealogy of now historical avant-garde practices. Aligned with a critical material and exhibition practice, his pedagogy has doggedly pursued the discovery of new topological blends and typological/formal mixes via a set of variable but consistent performative techniques, which have been obsessively catalogued and classified by his students. As this essay will set out, these riffs on the intertwined themes of performative technique, deviant modular systems, material suppleness, beauty and play, characterize the Douglis studio as an important pedagogical effort within a larger discourse of critical experimentation and formal innovation at Columbia's GSAP.

I. PERFORMATIVE TECHNIQUES AND NOVEL TOPOLOGICAL BLENDS

Evan Douglis guides his students through a rigorous series of self-contained *and* linked pedagogical routines that assign material and performative values to processes of mathematically derived abstraction. He has called these routines a string of notational loops that describe analogical propositions, intended to elicit specific material performances and indexical architectural effects. Douglis' students typically begin the semester by studying and diagramming natural and/or artificial migrational systems such as animal population movements, the territorial transmission of dialects, disease "vectors," or the genesis of musical forms across cultures and eras. Although the initial drawings produced at this stage of the studio tend to be representational rather than generative, the analysis incites an obsession with mutational, systemic morphogenesis that will erupt in later investigations. This compulsion to build, track and modulate deviant material organizations is a hallmark of his teaching.

The second stage of the studio involves the development of remarkable machinic drawing systems. Working within the two-dimensional space of Adobe Illustrator, the students invent figural growth systems that transform a linear emblematic outline from a two-dimensional profile into a deep three-dimensional topological surface. The drawings that emerge from this exercise are extraordinarily filigreed and highly articulated. To eyes familiar with Maya's smoothed forms or lightscapes generated in 3D Studio Max, the *true depth* gained by the use of a two-dimensional drawing tool is perplexing yet recognizable.

The third phase of Douglis' instruction reveals the studio's most specific material training – the dynamic manipulation of flat rubber sheet foam into seemingly liquid, highly supple topolog-

ical systems. Cutting 1/32-inch thick sheets of rubber foam into 3" squares, the students produce a series of architectonic finger exercises that eventually give rise to a rich vocabulary of new topological blends and typological/formal mixes. Gridded with three-square or four-square patterns of dots, the sheetlets are prepared to undergo topological transformation. As the dots are sequentially repositioned and fixed with adhesive to new locations along the sheetlet's two-dimensional surface, three-dimensional figures emerge like pliant and softly folded origami figures. These strange offspring of the gridded sheetlets resemble tropical flowers, wonton dumplings, deep-sea creatures, *farfalle* pasta (more literally butterflies), or reproductive organs. The outcomes of these efforts are pinned to black foamcore and labeled like exotic insects. They are simultaneously beautiful and grotesque.

Developed serially through slight variations in deformative technique, the sheetlets evolve into families of topological surfaces, like siblings of a species. Each individual membrane is studied and eventually indexed as both a singular building unit and later as an aggregate in a larger modulated field. In the final stage of the studio, the individual units are fused to form scalar, deviant and supple modular systems that are enmeshed with program and site. The total membrane is taxonomized and re-qualified as a planning logic tied to systems of scalar growth. Specific material properties and intended performative objectives are networked to induce what Douglis terms *sentient expressions* — "... tracked changes in dimension, climatic adjustment, and a range of material suppleness due to memory retention"[2] — that attend to programmatic fitness and the matter of manufacturing the very small and the very large simultaneously.

II. ENDLESS DEVIATION — AN IMPULSE FOR A SCALABLE MODULARITY AND SUPPLE ORGANIZATION

Scalable Modularity

Konrad Wachsmann — Walter Gropius' prefabricated building systems collaborator and the inventor of a variety of modular deep-span hangar systems — observed in 1965 that the task of designing the large or immense and the minute or intricate in parallel requires something akin to an acrobatic balancing act:

"The image of scale. The scale which leads us to believe that we have to think in terms of the greater scale, of the enormous complexities of scale without which we can not even grasp the image of the object with which we have to deal. But strangely enough, the scale I have in mind is a minor scale. It is the scale of the small element, the nucleus, of the detail. We are actually the accumulation of small details, and if we do not control these small details, we are not permitted to think in terms of the large scale.

From a small scale to the large scale is no problem at all, but it is a great problem to reduce the large scale into a small scale if the large scale exists before we even know what we mean by the small scale...It is this tiny little bit of difference which makes all the difference. I say it here because I want to come back to the point in which I say it is not what excites me, the big scale, it is the tiny little thing which makes all the difference...And this whole world is a world of small objects, the tiny ones, the little details. They make the whole thing."[3]

Wachsmann understood firsthand that the resolution and enactment of the *large scale* plagued and ultimately defeated many strains of postwar functionalist architecture. Modernist systems of thinking and their concomitant regularizing planning devices — grids, lattices, stems and fixed branching systems — produced excessive standardization. While we know all too well these criticisms of modernist architecture, to expand somewhat further on the matter one should note, peculiarly, that Modernism passed the dilemma of scale onto the diverse and reactionary modes of postmodern architecture. In spite of the apparent breaks and revolutions of the mid 1960s and late 1980s (cf. *Complexity and Contradiction in Architecture*: "Deconstructivist Architecture" at MOMA), the large scale continues to challenge postmodern architecture and its varieties of de-systematized planning.

Deconstructivism, Folding, Bigness, and more recently, Intricacy, share an aversion to the invariability of functionalist modularity, and so encourage contrasting doctrines of variety, flexibility, difference, de-standardization, and complexity at every scale. Curiously, Rem Koolhaas' assertion that Bigness instigates a *regime of complexity* that as a *strategy of scale* accumulates *maximum difference* through a "...promiscuous proliferation of events in a single container... [organizing]...independence and interdependence within a larger entity in a symbiosis that exacerbates rather than compromises specificity."[4] is echoed in the all-over amorphousness of Greg Lynn's Intricacy, which underwrites a "...multi-faceted approach towards detail, structure, and form relying on slippages between complex interconnectedness and singularity, between homogeneity at a distance-and near formal incoherence in detail, between disparate interacting systems and monolithic wholes..."[5] Their shared concerns for the resolution of *scales of difference* are symptomatic of our era's near pathological discourse on the outsized — a discourse that is at times repetitiously fixated on redressing of the *failure of scale* endemic to Modernism.

In his teaching, Douglis does not stage a conflict between vast and minute material scales. Rather he conceives of vastness and minuteness together, through the application of *deviant, modular growth systems* and the concept of an *endless scalability*. Deviant modular growth systems are non-standardized, pliable coordinations of spontaneous escalation and self-

organization that can be adjusted at the unit-to-unit connection point or as an entire assemblage. The endless scalabilityof these growth systems allows the continuous potential for transformation inherent in topological systems to be wed with the latent combinatory possibilities unique to the studio's sibling-like *archival membranes*. This amalgamation of continuous field or total surface transformations, with singular re-combinations at the unitary level produces a condition that posseses extreme variation *and* continual correspondence-a condition that is drastically unlike functionalist standardization and growth.

Writing on the new modalities of standardization availed to suburban consumers by the mass-customized, just-in-time American "dream home industry," Douglis has noted that "this standardization is quite different than the one derived from early Modernism which advocated the rearrangement of modular components in pursuit of a functionalist paradigm. Here uniformity is neither linked to flexibility nor to an overt economy of fabrication..."[6] This new form of modularity, he suggests, is linked to "..a hyper-aesthetisized taxonomy of beauty based upon artificially constructed norms of social behavior."[7] The Douglis studio has bypassed the *failure of scale* endemic to Modernism by linking a deviant modularity to taxonomies of splendor constructed around activist and critical cultural behaviors. The individual *indexical membranes* developed throughout each semester, categorized as both singular construction elements and as aggregates in a larger field, create non-standardized modular systems entwined with program and site. These membranes are developed as a supple, systematized planning logic that productively instrumentalizes the problematic of concurrently building the immense and the minute through the *fortuitous accidents of growth*.

Supple Organizations

Organic growth was a key fascination of post-functionalist architects such as Frederick Kiesler, who established and ran the Laboratory for Design Correlation at Columbia University's School of Architecture between 1936 and 1942. Kiesler wrote, citing a scientist, "Take the freshwater polyp...that can be found on water lilies in ponds, and cut it up into bits. Tomorrow you will find that each bit will have given birth to a complete new polyp."[8] In his "Manifeste du Corréalisme," 1947, Kiesler extended this notion of cellular reproduction to architecture and to the city itself, declaring that each, "...part of a building or city...is seen as a nucleus of possibilities, which will be developed in coordination with the other parts."[9]

Kiesler's *nuclear space*, like Wachsmann's *accumulation of small details*, should also be discussed here in light of other organically derived scaling systems such as Kisho Kurakawa's *agglomeration of living cells* – Metabolism. [Figures 1-3] Kurokawa described two types of growth systems employed by Metabolism — *porous space* and *fiber form*. He portrayed fiber form as a "homogenous, plant-like, information-like, linear,

infrastructural system," and explained porous space as a "heterogeneous, animal-like, metaphoric, spatial, membranous, master-space system."[10] Other architects of the postwar period such as Jacob Bakema, the Smithsons and Shadrach Woods developed comparable systems of organic growth in order to circumvent the constraints of functionalism.[Figure 4] As Alain Guiheux has noted, writing on Kurakawa, the postwar generation invented organic models "... to speak about the city, words developed to reflect new spatial concepts and new modes of operating on the city. The Smithsons adopted *the cluster* which designated a united grouping of neighborhoods or communities...[a term that] corresponds to Kurakawa's *agglomeration of living cells...*"[11] Metabolism, Guiheux writes, "...produced its own proper vocabulary: connector, organnector, capsule, metabolist energy, metabolist rhythms... etc."[12]

It is compelling to revisit these mid-century architects and their spatial concepts in light of current theories of self-organization, growth and variable modularity. Within the emerging discourse of the Douglis studio, a unique vocabulary of narrative terms has developed to describe innovative approaches to spatial organization. The studio's terminology – "hyper-branchs," "tethered poly-orbits," "stippled eddies," "zipper systems," "lattices of liquid assets," "deployable skins," "archival membranes," etc. – simultaneously recalls and advances old school notions of organic planning and the *new school's* super-plasticity of form.

Douglis' pedagogy approaches the matter of scaling by means of bottom-up self-organization and the *logic of the accident*, ultimately encouraging what might be termed *supple organizations* of materiality, scale and program, that induce morphological invention. Supple organizations are the result of pliable growth strategies applied to a family of deployable skins. Supple organizations produce endless difference but not endless standardization. While the organically derived planning efforts at mid-century were often incapable of resolving the integration of new spatial modules and models into existing contexts, the promise of supple organizational systems is found in their integrative potential at a variety of scales and across a mixture of materials. Supple organizations reveal, following Manuel De Landa's *A Thousand Years of Nonlinear History*, what might be termed the internal morphogenetic potential that lies within the flows of matter.

III. TAXONOMIES OF SPLENDOR — INDEXING THE BEAUTIFUL, THE UGLY, AND THE GROTESQUE

"Beauty is not the platonically pure beginning but rather something that originated in the renunciation of what was once feared, which only as a result of this renunciation-retrospectively, so to speak, according to its own *telos*-became the ugly. Beauty is the spell over the spell, which devolves upon it. The ambiguousness of the ugly results

from the fact that the subject subsumes under the abstract and formal categories of the ugly everything condemned by art: polymorphous sexuality as well as the violently mutilated and the lethal."
Theodor W. Adorno[13]

The *ambiguousness of the ugly* and the disagreeable magnificence of the monstrous are typically overlooked in contemporary architectural discourses, focused as they have been on novel material forms and techniques. Yet, the irregularity of the abject and its latent potentials quietly continue to vex architecture. The resistance of contemporary architecture to expressions of the grotesque can rightly be traced to Modernism, especially to its platonically derived aesthetic canons and regimes of social hygiene. While contemporary practitioners have over-explored (and one might add over-exposed) the promise of the irregular, the challenge of acknowledging the difficult discourse of the grotesque – even the hideous – has been taken up by the Douglis studio with significant results.

Many of the categories of architectural beauty that have been historically constructed are fictions of a universal, natural beauty that may no longer correspond to other cultural values or to scientific measures of natural systems and bodies. That other forms of cultural production and critique have examined the abject as a political and artistic tool seems lost on architecture (cf. *Formless, A User's Guide* by Krauss and Bois). Further, the dialectic of the beautiful and the ugly ignores what Adorno ascribed to nature itself, an essential indeterminateness, "...manifest in the fact that every part of nature, as well as everything that is made by man that has congealed into nature, is able to become beautiful, luminous from within."[14] It is an imprecise expression, an indeterminateness that motivates much of what we have come to appreciate in natural splendor, and it is this morphological imprecision that is not found in what was once understood as ideal – the symmetrical, the whole and the totemic. The multiplicity of splendor, and not the singularity of beauty, provides and promotes variety, deviance and growth.

The work of the Douglis Studio asks of us that we reconsider the historiography of beauty within architecture and that we question culturally predetermined judgments endowed to us by an older aesthetic regime. Evan Douglis imagines that in the aesthetics of abnormality an opportunity exists to examine new political and cultural territories for architecture, opening up "the illegality of disorder as a deviant cultural model [to] develop a new sphere of cultural influence."[15] The taboos associated with the grotesque, the monstrous and the ugly undermine the inherently rich potential of a *taxonomy of splendor* that, like a fortuitous accident of growth, promote the blooming of a rich, endless diversity. "Today's challenge," Douglis writes, "might be to re-empower...specimens of irregularity. To pass through those arbitrary breaks in uniformity and reveal the other side of an excess of repetition."[16]

IV. OPEN PLAY — THE MUSIC OF OBJECTS

John Cage once imagined a process for studying the *music of objects*. The environment, he reasoned, could only be understood acoustically as a process, and not as an object. "We know," he said, "the air is filled with vibrations we can't hear...We can't consider that environment as an object. We know that it is a process. While in the case of an ashtray, we are indeed dealing with an object. It would be extremely interesting to place it in a little anechoic chamber and listen to it through a suitable sound system. Object would become a process: we would discover, thanks to a procedure borrowed from science, the meaning of nature through the music of objects."[17] A similar alchemical procedure is at work in the Douglis studio. Through the application of supple systems of growth and variation, Evan Douglis' students learn to "play" their *animate vehicles*. Open Play, via the fortuitous accidents of growth, combines and recombines the mutational, systemic possibilities for morphogenesis latent within the archival membrane, to produce an emergent endlessness which we as viewers/visitors are encouraged to float across endlessly, optically, as if we were gliding over vast, shifting, indeterminate landscapes.

V. CONCLUSIONS

Expressive sentience is a quality that Evan Douglis has observed that the contemporary lifestyle product market offers the consumer, "... a heterogeneous collection of portable, exotic hardware permitting the individual an extraordinary degree of personal autonomy, mobility and control over the alienation of travel. Alluringly soft and hard, crisp or curved, glossy or grained, slippery or matte, convex or concave, these streamlined, ergonomically precise vehicles of oneiric desire represent the infinite range of *topological blends* available in the postmodern surface."[18] The postmodern surface is equally a product of desire *and* of an accumulative intelligence. Each ergonomically or aerodynamically designed generation of prostheses – typified by the car body and the cellular phone as much as by the personal sex toy and the artificial muscle – learns from the last, its contours defined through trial and error. One suspects that much of Douglis' teaching aims to open up these *streamlines of desire* to a persuasive architectural investigation that replaces marketing with cultural perception, accumulation with critique, and trial and error with the poetry of the accident. Regulating these lines of desire through performative analogue and digital techniques, the Douglis Studio has entered previously unobtainable arenas of abstraction.

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NOTES

[1] Clement Greenberg, *The Collected Essays and Criticism, Volume 4*. John O'Brian ed. (Chicago: The University of Chicago Press. 1993), p.143.

[2] Evan Douglis, "Squeeze Scapes." Studio Brief. AAD Program Summer 2002. Columbia University.

[3] Konrad Wachsmann. "To Build is Everything or Nothing is Built." *Aspen #1* (1965). Wachsman presented his paper at the 15th Annual International Design Conference in Aspen in 1965. The title of the Conference. chaired by designer George Nelson was. ominously, "CONFIGURATIONS OF THE NEW WORLD. The end of the world as we know it."

[4] Rem Koolhaas. *S.M.L.XL*. (New York: Monacelli Press. 1995). p.511.

[5] Greg Lynn. "Intricacy." collected in the exhibition catalogue. *Intricacy* (Philadelphia: Institute of Contemporary Art. University of Pennsylvania. 2003)

[6] Evan Douglis. "Building in Reverse: Anagrammatic Assemblages in the New Mail-Order House." Studio Brief. AAD Program Summer 2001. Columbia University.

[7] Ibid.

[8] Beatriz Colomina. *Frederick Kiesler – Artiste-Architecte* (Paris: Editions du Centre Georges Pompidou. 1996), p.86.

[9] Frederick J. Kiesler. *Endless Space*, (Ostfildern: Hatje Cantz Verlag, 2001). This includes a facsimile of the "Le Manifeste du Corré alisme."

[10] Noriaki Kurokawa. "Two Systems of Metabolism." *Japan Architect*(December 1967). p.83.

[11] Alain Guiheux. *Kisho Kurokawa, Le Metabolisme 1960-1975* (Paris: Editions du Centre Georges Pompidou. 1997), p.41.

[12] Ibid.

[13] Theodor W. Adorno. *Aesthetic Theory* (Minneapolis: University of Minnesota Press, 1997), p.47.

[14] Ibid.. p.70.

[15] Evan Douglis. "Museum of Accidents." *Space* (July 2001), p. 157.

[16] Ibid., p.155.

[17] John Cage. *For the Birds* (Boston: Boyars. 1981)

[18] Evan Douglis, "Building in Reverse: Anagrammatic Assemblages in the New Mail-Order House." Studio Brief, AAD Program Summer 2001. Columbia University, New Yoprk.