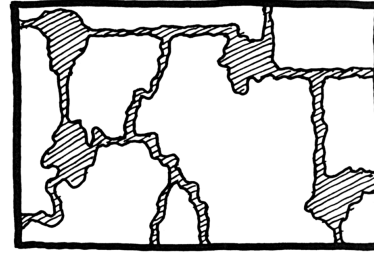
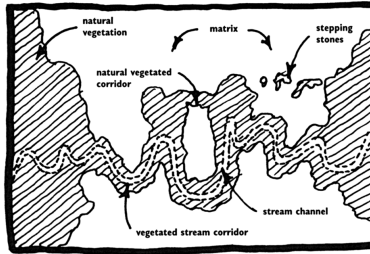
**C7. Cluster of stepping stones**

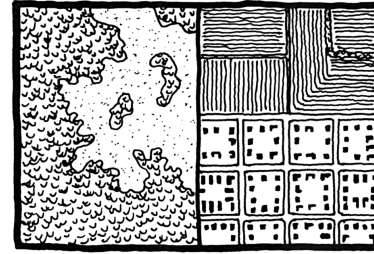
The optimal spatial arrangement of a cluster of stepping stones between large patches provides alternate or redundant routes, while maintaining an overall linearly-oriented array between the large patches.

**M6. Dispersal and small connected patch**

Small patches or nodes along an existing network are effective in providing habitat in which individuals pause and/or breed, resulting in a higher survival rate for dispersing individuals and, hence, more dispersing individuals in the network.

**M2. Loops and alternatives**

Alternative routes or loops in a network reduce the negative effects of gaps, disturbances, predators, and hunters within corridors, thus increasing efficiency of movement.

**E6. Natural and human edges**

Most natural edges are curvilinear, complex, and soft, whereas humans tend to make straight, simple, and hard edges.

Diagrams from Landscape Ecologist Richard Forman's research. Proto-translators of Landscape Ecology theory into landscape/mat/infrastructural urbanism echoed the scientist's turn toward non-equilibrium models and championed the shift from delimited sites or buildings to the dynamics of material process at varying spatial and temporal scales.

programmed urban surface with a "functioning matrix of connective tissue that organizes not only objects and spaces but also the dynamic processes and events that move through them."<sup>15</sup>

2. *The script*: Both the cabbage morphology and OMA's Tree City diagram, deployed parametric algorithms for non-linear, non-equilibrium material organization; modeled on the computational biologic of flocks, flora, and phyla and described by Andrew Kudless as "methodologies of performative integration through geometric and material differentiation."<sup>16</sup>

3. *The smart matrix* of Field Operations' proposal for Parc Downsview relies on a meta-site process, where spatio-formal practice (the site plan) is replaced by a geo-temporal matrix of ingredients (a phasing of material states). As Kristina Hill points out, "If the related notions of bounded sites and bounded bodies [cease] to function as useful concepts because of a theoretical emphasis on the open nature of systems in space, then new conceptions of demarcation in space [are] more dependent on the density (and intensity) of biological interactions that occur over time."<sup>17</sup>

To some degree all three methodologies offer a model for process in which indeterminacy is the goal, but also the problem. Some critics have pointed out that vague program and ambient figuration/organization are not the same thing as indeterminacy but instead are "terminal" forces.<sup>18</sup> The process-plus-time incrementalism of these projects results in a lack of precision that public attention spans, and budget cycles, find difficult to sustain. At the same time, the pure instrumentalization of materials and systems risks designer-less design; the matrix simply replaces the hegemony of the master plan. There is a risk here too of editing out the "smartness," or resiliency, of ecological models. Matrices and scripts are capable of responsiveness based upon given coordinates, positional and temporal values, material properties, and so forth, but have little ability to mutate in unpredictable directions/dimensions; although results are not controlled, the inputs and relationships, to a significant degree, are. For example, in OMA's Tree City proposal, there is little opportunity for vari-

ation outside the loose but strictly linear sequence of material, figural, and programmatic development (fix the soil + 1000 paths + trees). In OMA's project description, the scheme offers an attempt

"to do more by building less, producing density with natural permeability, property development with perennial enrichment... This will be staged as three long term phases: (1) site and soil preparation; (2) pathway construction; (3) cluster landscaping. The outcome is a matrix of circular tree clusters covering 25% of the site which is supplemented by meadows, playing fields and gardens. Tree city treats the park as if it is an adult soon capable of sustaining itself rather than a child in need of eternal care. While most infrastructures decrease in value over time, Tree City's natural network will appreciate as the park matures."<sup>19</sup>

Major disturbances would be castratophic rather than catalytic. There is a bit of Oedipal irony here as urbanism at the turn of the millennium, so deeply rooted in the theories of landscape ecology, reveals its desire to sublimate applied ecology in order to get into bed with the post-Fordist metropolis.

That infrastructural/mat/landscape urbanism endorses a leakage between techniques of representation (sampling, indexing, montage, exaggeration, animation) and modes of speculation (meta process, adaptive program, material protocols) is one of its most salient attributes. Its tactical aesthetics are reminiscent of super-realism, a term first used by art critic Malcolm Morley in the mid-1960s. According to Tissot in *Myth and Ideology in American Culture*, aspects of super-realism include: "aggressiveness, tension; fabricated reality; representation on representation to constitute an everyday, heroic iconography."<sup>20</sup> (Super-Realism has also recently been aligned with the literary style practiced by writers such as Raymond Carver, Richard Yates, Richard Ford, Zadie Smith, Tobias Wolff, and others.) The web site [www.artandculture.com](http://www.artandculture.com) points out that "writers of