Protocol

1) any means of formatting and instructing an environment with an organizational procedure

2)a set of constraints governing timing, organization, interactivity and process

3)*computing* common language between different operating environments

<a ~ is not necessarily a stepwise or repeatable procedure for which there is an absolute expression>

<the architect often attempts to describe with geometry, the complex ~s of process and possible behaviors for different kinds of physical spaces>

<In a spatial environment, ~s may describe the systemic structure of development—the controlling factors organizing markets, construction techniques, financing, etc.>

<~ for the construction, demolition and program were not part of the higher aesthetic purpose and remained unexploited determinants of spatial and material consequences.>

Distinct from TEMPLATE, FORMULA, ALGORITHM

> TEMPLATE 1)a protocol which unifies an entire organization into a single fixed pattern derived at a single moment; a protocol with no time component
>
> 2)a mold or pattern for producing identical products
>
> FORMULA 1)rule, equation or recipe
>
> <the professional conducted surveys of people on the street in an attempt to compile a complete list of "design factors." *Homo sapiens*, he liked to call them. Armed with this information, and help from a computer, he would derive the ideal formula for the smallest unit of development>

Differentiation

1) the development from the one to the many, the simple to the complex, the homogeneous to the heterogeneous[2]

<"polygon intensity," they swaggered, "contributes to the volume of ~ we need to optimize form. No one understands complexity like we do. We *design* complexity">

<in both biology and computing there are examples of organizations which maintain not a single optimal constitution, but operate by constantly diversifying, cross-referencing and *differentiating* their own constitution with parallel or redundant operations>

<Infrastructure networks within terrestrial, highway and residential systems provide sites for the contemplation and identification of an architecture which is not described by geometry or aesthetics, but by protocols of ~, interplay, adjustment and timing.>

distinct from DIFFERENTIAL (see below)

Differential

1)*math.* . sets of differences between variables

2)*mech.* A system of gears translating one increment of movement to another **differential gear**: enabling power to be divided between two axles in line with one another and able to rotate at different speeds, as when a vehicle corners[3]

3)*adj.* descriptive of a system which generates variation not within itself but across distinct environments

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[2] *Websters Ninth New Collegiate Dictionary.* Springfield, Mass.: Merriam-Webster, 353.

[3] *The New Shorter Oxford English Dictionary.* Oxford: Clarendon Press, 1993, 668.

<Neither natural selection in evolution nor neuronal group selection necessarily requires a growing population. What is required is ~ reproduction (for evolution) and ~ amplification (for neuronal group selection by changes in synaptic strength)--Gerald Edelman[4] >

<created by cycles of redundancy and obsolescence, the many segregated layers of transportation infrastructure establish unconventional and ~ sites in the interstitial space between networks>

Modifies PARALLELISM, SWITCH, FUNCTION

Parallel

1)*computing* simultaneous activation of a number of conductors or circuits.

2) *Parallelism* separate environments or species of information working in concert to amplify power, intelligence or adaptability

<   In ~ processing, networks of circuits or multiple process components activate simultaneously, rapidly accessing information and compounding computational memory and power, whereas serial arrangements process information sequentially.>

<~ism increases the quantity and simultaneity of connections as well as creating cross-environmental connections between different operationing environments.>

>   REDUNDANCY 1)superfluous repetition
>   2)repetition designed to produce a temporary surplus of options
>   <~ between train and highway routes provides for a relay between carriers designed to best fit the needs of the trip>
>   <in mental processes, ~ies produce greater precision to handle even repeated tasks>
>   <through trial and error, a of pathway ~ies continually maintain and eliminate multiple options>
>   <optional versus optimal ~ies>

Remote activation/Partial activation

1)effects resulting from an adjustment of one in a series of connected elements which affects another element to which it is not directly connected, either by position or by an increment of time i.e. where A, B and C are connected, C may be changed by changing B or A.

<adjustments to network connections are never discrete and so are powerful even when partial or tactical ~>

<architects may only be able to adjust small pieces of an environment effectively, but that adjustment when sited precisely amplifies the move by taking advantage of connectivity and ~>

<having reached no solutions by pursing aesthetics, the most important spatial problem was solved by ~>

<by a process of ~, changing the position of the stair will entirely recircuit non-adjacent spaces separated by several floors>

<the possibility of ~ places the tactic and the strategy on a continuum>

<connectivity renders many activites reciprocal, e.g. rotation, subtraction, partition etc musts be part of some kind of exchange

>   SUBTRACTION/EXCHANGE removal
>   <spatial ~ is distinct from demolition><though not generally regarded as a constructive architectural tool, ~ performed with an awareness of the possible r esponse or release of other active surrounding parts becomes a positive space making device>
>   PARTITION subdivision of a group into smaller groups

[4]Gerald Edelman. *Bright Air Brilliant Fire: On the Matter of the Mind.*. New York: Basic Books, 1992,.94-95.

<the architecture of ~ may contribute to the composition of the whole by determining the composition of constituent parts>
<~ by states and counties produced an entirely different response than ~ by geological features>
<computer space was ~ed not only into directories but into time-frames>

Summation

1)collective power within a group of identical elements which would not exist in any individual element

2)*neurophysiology* effect achieved by multiple firings of neurons which could not be achieved by a single neuron

3)*imaginary.* effect over a repeated element or standard specification

4)process of addition, TOTAL , INCREASE, AMPLIFICATION

<specifications for the smallest repeated details, increments or fasteners, in ~, completely reformat and recalibrate the architecture of a larger environment>

<widespread application of standard specifications for building supplies in 8'x4' increments, when in ~ across a large number of budget homes, changed the critical dimensions of living spaces in residential architecture>

<given the prevailing organization of repeated generic conditions, the only means of being effective was through ~>

Switch

1) a device for making, breaking or changing a connection

2) an insertion controlling flow at a particular point. *binary vs. analogic switches* binary switches have two positions, on and off whereas analogic switches perform a more continuous operation of translation or control

<the network will be ~ed at each individual terminal>

<the architecture of the larger networks existed within a single ~, which unlocked a complex of relationships in part of an expanding network>

<every passage and stair was designed to be a smart ~ between the different species of space and program>

<"in other words, the switch is not except at the moments of its change of setting, and the concept 'switch' has thus a special relation to time. It is related to the notion 'change' rather than to the notion 'object.'"--Gregory Bateson[5]>

GOVERNOR,VALVE

GOVERNOR 1) regulator

2) agent of an intermediate organization with some parameters or constraints

<the wide strip of landscape will act as a ~ to absorb and deflect some of the effects of development>

<with a 300 mile extent, an electrical grid operates as a distributed ~ in the landscape>

<undesignated or vacant spaces together function as a ~ to absorb from and reactivate the surrounding sites>

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[5]Gregory Bateson. *Mind and Nature: A Necessary Unity.* New York: Dutton, 1979, 109.

Function
1)*math.* a variable quantity described in terms of its dependence on another value.
2) *math.* expression governing interdependent variables and mapping infinitesimal changes between specific derivative instants in time.
3)something dependent on as in "a function of".
4) an organizational agent expressing its behavioral constraints
<a ~al expression may describe the behavior a family of curves without displaying every possible value related to that expression>
<while there is no master plan there is a ~al relationship between the growth of several different species of space>
<in biology, computing and mathematics, organizations are often instructed by some intermediate agency or governor which is expressed as a ~ of variables within the organization itself.>
< ~s are the fittings, toolings, or gadgets which express relationship and architecture within an organization of active parts.>
<it is this ample enthusiasm for ~s and gadgetry which fortifies the "sumptuousness of our progress" towards felicitous innovations and consequences- after *Useful knowledge and new inventions, a confidential letter from Pa Ubu,* Alfred Jarry>

Keller Easterling, 1996, *Virtual Dimension*