Thriving Systems Theory
translating Christopher Alexander’s theory of the "nature of order" found in beautiful art & architecture onto the domain of models and systems.

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This research began as a sabbatical in 2006 in search of design principles to assess the quality of object-oriented models. What has always appeared to be a qualitative exercise mirrors closely the challenge of assessing quality in art and physical architecture. Christopher Alexander's work defining elemental qualities in architecture inspired the translation of Alexander's properties from the physical domain to the conceptual domain of models and systems. Alexander's properties translated to properties in the domain of models & systems; and actions that strengthen them.

A balanced range of sizes is pleasing and beautiful.

Background should reinforce rather than detract from the center.

Good design offers areas of focus or weight.

Outlines focus attention on the center.

The proportional use of space and pattern create harmony.

Simple forms create an intense, powerful center.

Texture and imperfections convey uniqueness and life.

Repeating various elements creates a sense of order and harmony.

Simulations should repeat themselves throughout a design.

Use only essentials and avoid extraneous elements.

Organic, micro-scale symmetry works better than precise, overall symmetry.

Empty spaces offer calm and contrast.

Unity is achieved with visible opposition.

Designs should be connected and complementary, not egocentric and isolated.

Alexander’s properties translated to properties in the domain of models & systems; and actions that strengthen them.