density of the study, 7 du/ac (17 du/ha), was deliberate, an initial decision to exclude from investigation one-family dwellings on very big lots as inappropriate for urban housing. On the other hand, the high end of the range, 128 du/ac (316 du/ha), was not deliberate but the result of the design and envelope rules systematically set for each of the four projects. This density range embraces a remarkable variety of ways to live in the city within a height range of three to seven stories. Ample opportunities exist in this midsize range to provide both energy conservation and a better quality of life without constricting development options for urban growth.

Graph of Study Results:
All 150 designs fall within the elbow of the curve, covering a density range of 7 to 128 du/ac (17 to 316 du/ha).

The single most important discovery of the study is represented on the graph by the clustering of symbols in the elbow of the curve. This clustering represents a critical lower cutoff value of S:V=0.1, which corresponds with a maximum density of about 100 du/ac (247 du/ha). A few special conditions, such as a park or wide boulevard where longer shadows could be cast without harming a neighboring property, resulted in taller buildings with fractionally lower S:V values. Otherwise, for good solar access and cross-ventilation in a compact and continuous urban fabric, the rule holds. Designers who break this rule lose the choice of architectural means to sustain building comfort and must depend on energy-intensive systems.

So far, the solar envelope has been described as a fixed boundary on development. There is, however, a dynamic potential of the solar envelope that offers a new promise for architecture. The solar envelope can do more than guarantee solar access; it can open design options for major building transformations.

Because of the seasonally shifting earth–sun geometry, the solar envelope can expand its boundaries in summer and contract them in winter without overshadowing neighbors. Between the summer and winter envelopes, there is an interstitial space where flexible structures can expand and contract with the seasons as a means of adapting to program and climate change. This *interstitium* thus creates the potential for architecture to recapture a time-rich basis for the ritual use of space.