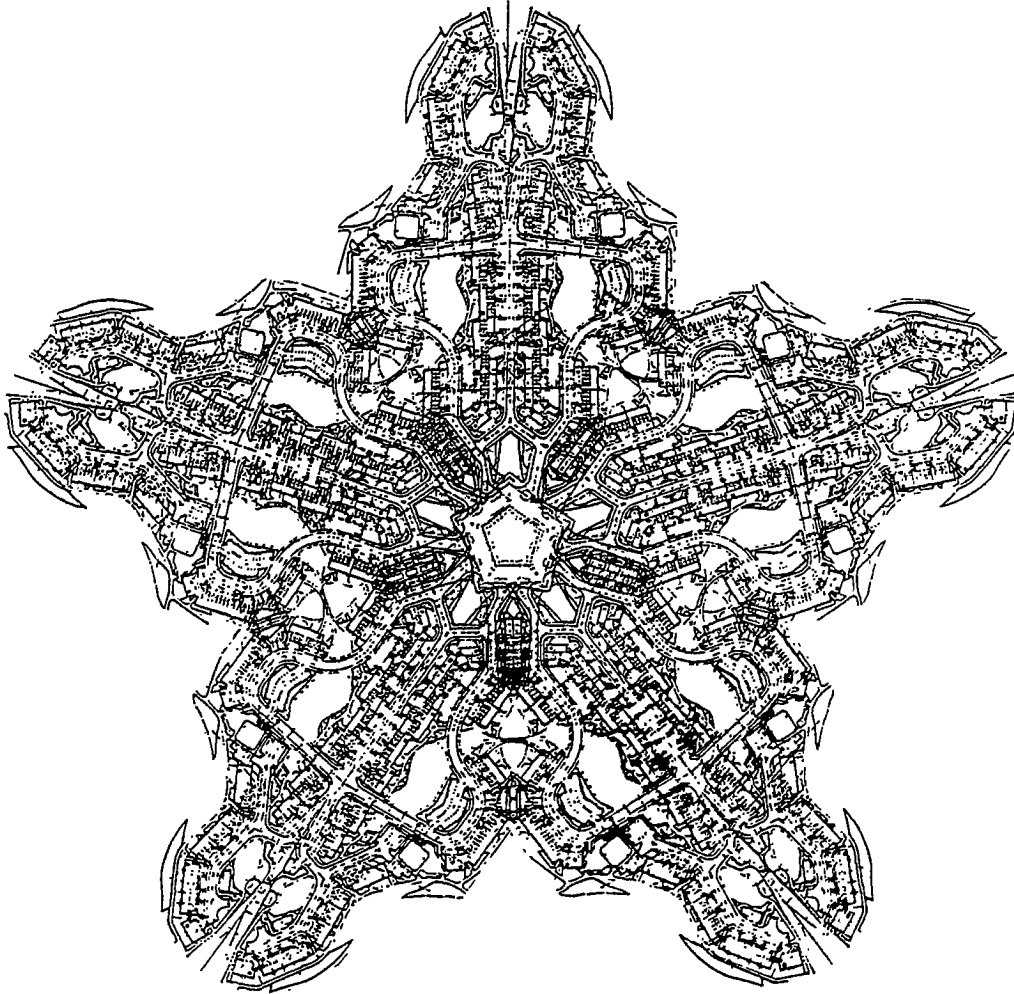


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Pentad City

Pentad City proposes a new environment of urban structure which constitutes itself in the wake of recent upheavals in crystallography, materials science, mathematics and structural morphology.

The discovery and verification of the existence of new forms of matter, based on pentagonally arranged clusters of atoms, which fit together to form perfect quasicrystals (having a translational order corresponding to the "golden mean") resolves the issue of symmetry versus asymmetry in "architectural" systems. Architecture and Urban Design rise to the creative challenge

posed by these new developments in science, recognising that it is possible to resolve the historic contest between orthogonal and hexagonal ("circular") forms of settlement organisation.

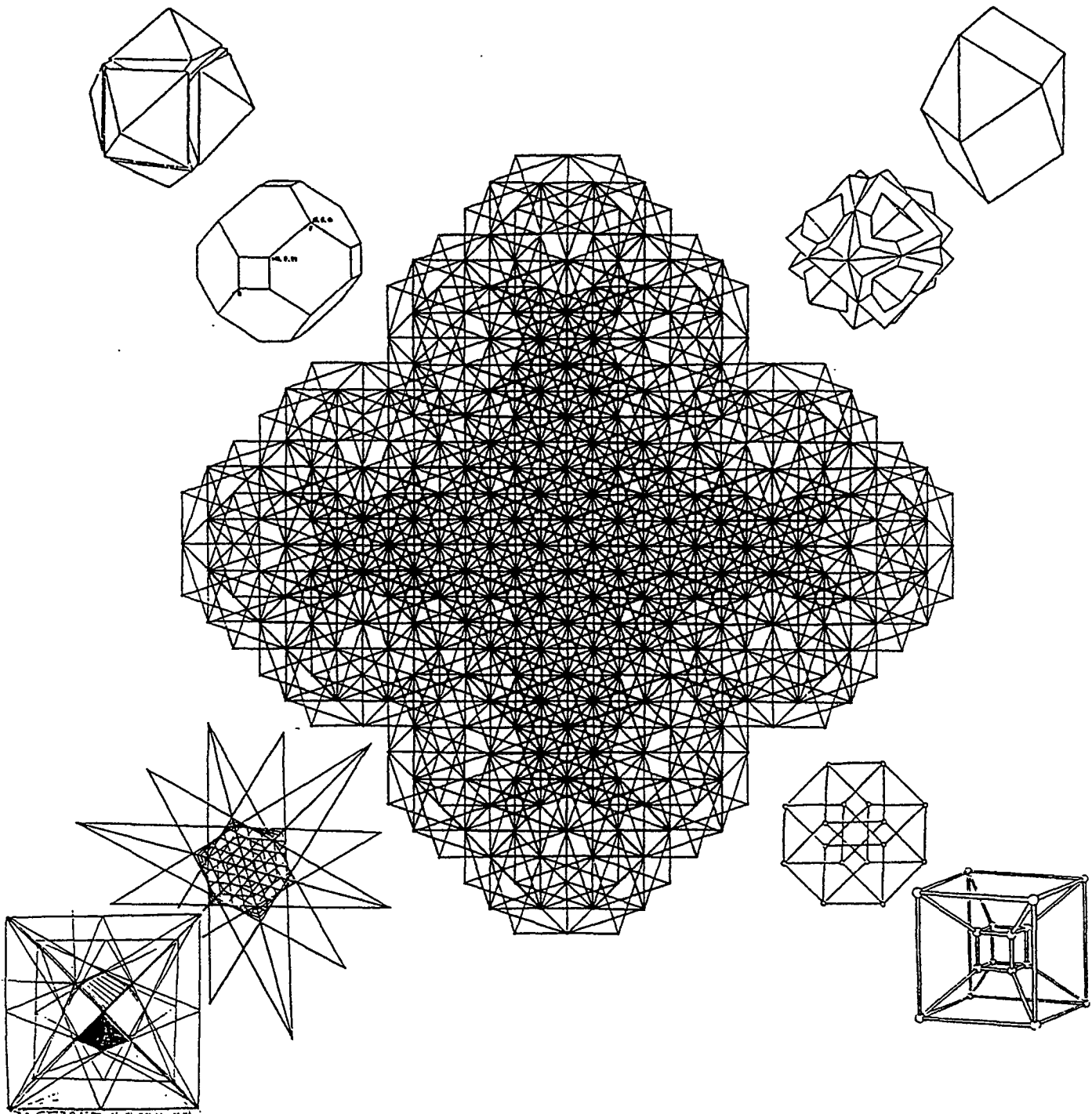
Five-fold symmetry (the hitherto "forbidden symmetry" in crystallography) permits us to increase, substantially, the density of urban configurations without abandoning the attributes of quadrangular forms and systems as appertaining to human orientation spatial and movement patterns and typology.

The proposed urban structure resolves the ancient dichotomy between quantity and quality, inclining creativity towards

economy. Indeed as we move towards the twenty first century architecture will be forced by virtue of economic realities, if not aesthetic tastes, to be more rigorous and disciplined in order to contend with the exigencies of escalating population indices (as projected by the United Nations).

The exemplar offers a non-convex spatial pattern for town tomorrow disposed on (an initial) 25 hectares, housing an infrastructure of 2000 medium-rise dwellings (10,000 inhabitants) with ancillary functions. (Maximum axial distance from centre 330 metres).

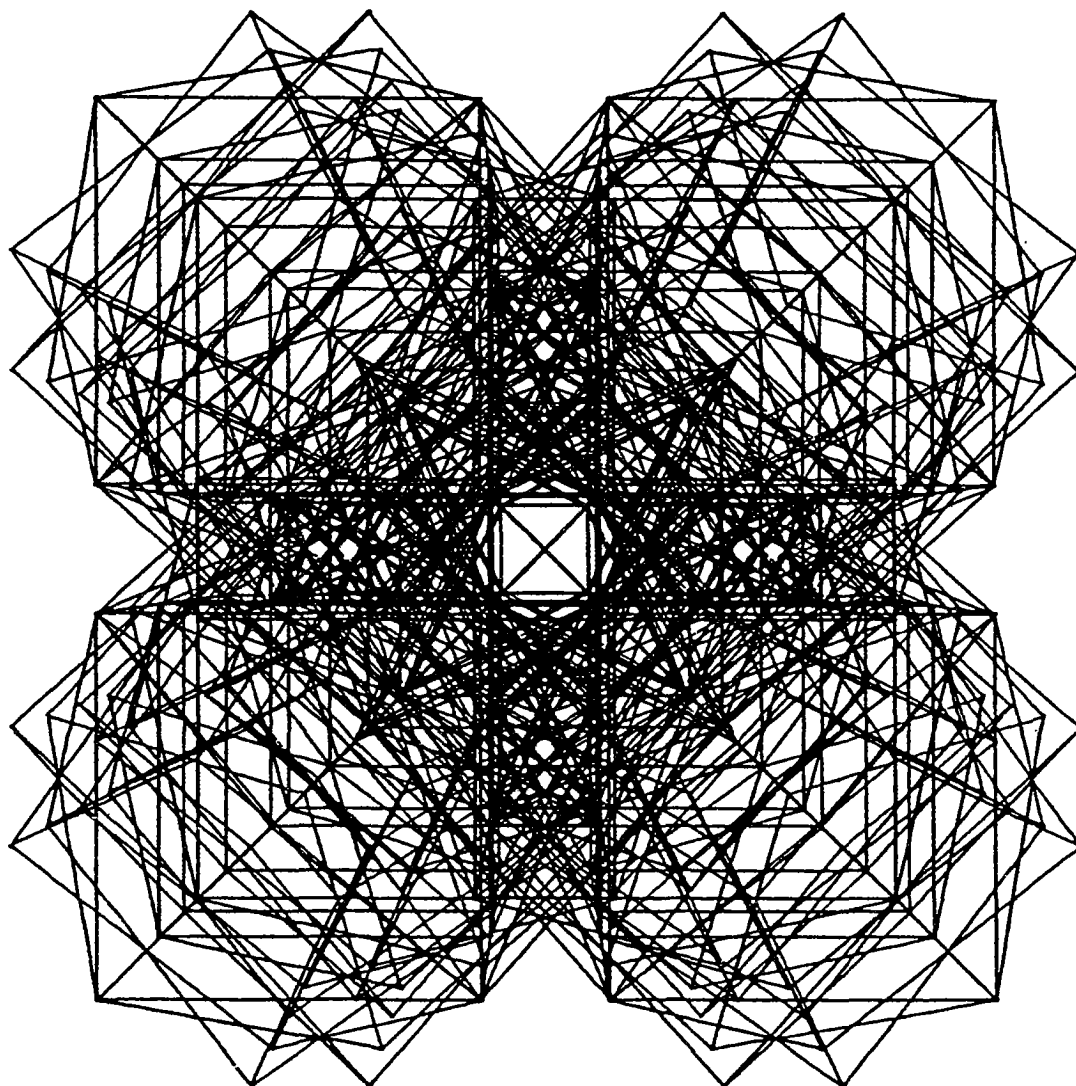
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Morphology of the Polycubic Lattice

Wolf Pearlman

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POLYHEDRIC ANALOGUES OF RADIOLARIA

Wolf Pearlman