## GOLIJO

Another disquieting riddle was proposed by the mathematician Benoît Mandelbrot, who in 1967 raised the seemingly innocuous question, "How long is the coastline of Britain?" What he found was startling: that the smaller the increments of measurement, the longer the measured length became. For instance, if one was to lie a yardstick over a large map of Britain or any coastline one would get a particular measurement, say, 6 inches. Yet if he were to use a small ruler with finer increments he would find, impossibly, that the length was now slightly larger, say, 6.01 inches. Reducing the measuring stick still further would yield ever-increasing lengths —6.015, then 6.0157, then 6.01579 and so on, without end. This observation spawned the science of fractals, the mysterious broken dimensions that lay between whole numbers.

Few realize, however, that fractal dimensions are more than just theoretical constructs. A case in point is the city of Goliijo, an island city-state that has flummoxed geometers and travelers alike throughout its existence. No matter which direction the traveler approaches Goliijo from, the landscape is the same—an etched bank of lichen-rich clefts flanked by two great shelves of rock, each with a thousand outstretched fingers. On arrival, he comes upon a spattering of zinc-roofed houses and narrow,

canal-combed streets, where merchants sell silver-scaled fish and red bell peppers. A funeral procession leads up a cobblestone path toward the golden-spired cathedral. Near the center of town sits the forum, a wide structure of polished limestone, inside which villagers shop at small bakeries and a portly senator orates at the rostrum.



The first five iterations of the Koch Curve, whose finite area is paradoxically enclosed within an infinite perimeter.

However, something curious befalls the traveler once he passes the busy central market with its wide cement colonnades. At every intersection, it seems, the paths subdivide into others, each a mirror image of the last, and in two or three more turns he finds himself hopelessly lost.

For the inhabitants of Golijo, however, there is no such thing as lost, no such concept. There is no need for maps because the city is itself a map. Every detail of Golijo is an inscription of its own layout. A single iteration of a leaf

matches the shape of the full tree. Viewing Goliijo's coastline from a satellite reveals the same image as one of its grains of sand under a microscope. Everywhere is home. Every child is one's own.

If the traveler stays long enough, he too will become inscribed into its landscape; he will be absorbed into its history, its future "lostness" itself will be lost.

## Picture This

The only way for a traveler to escape is to have brought a spool of twine with which to trace his route back like Ariadne.