**Early Experiences with a 3D Model Search Engine**

search engine can be partitioned into three main components:

(1) acquisition: 3D models have to be collected from the web,

(2) analysis: they have to be analyzed for later matching, and

(3) query processing and matching: an online system has to match user queries to the collected 3D mod- els.

**Text search**

Attempting to find a 3D model using just text keywords suffers from the same problems as any text search: a text description may be too limited, incorrect, ambiguous, or in a diffierent language. Furthermore, 3D models contain shape and appearance information, which is hard to query using just text.

**This paper**

We have developed a search engine for 3D models that supports shape-based queries, as well as textual ones. In many cases, a shape query is able to describe a property of a 3D model that is hard to specify using just text. For example, Figure 1 shows a combined text and 2D shape query, in which the keyword "key" is used to select the class of models we are interested in (keys), and a simple 2D outline sketch is used to pinpoint the particular kind of key we want (old-fashioned keys with an open handle and a simple bit).