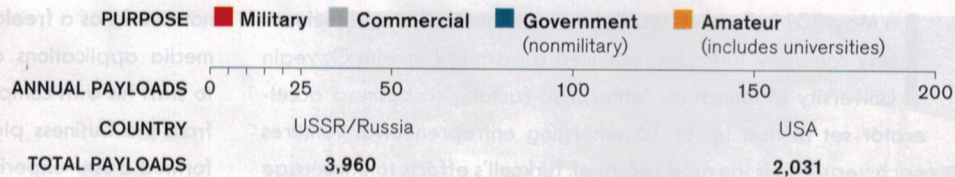


## SPACE LAUNCHES (payloads by country and purpose, annually)



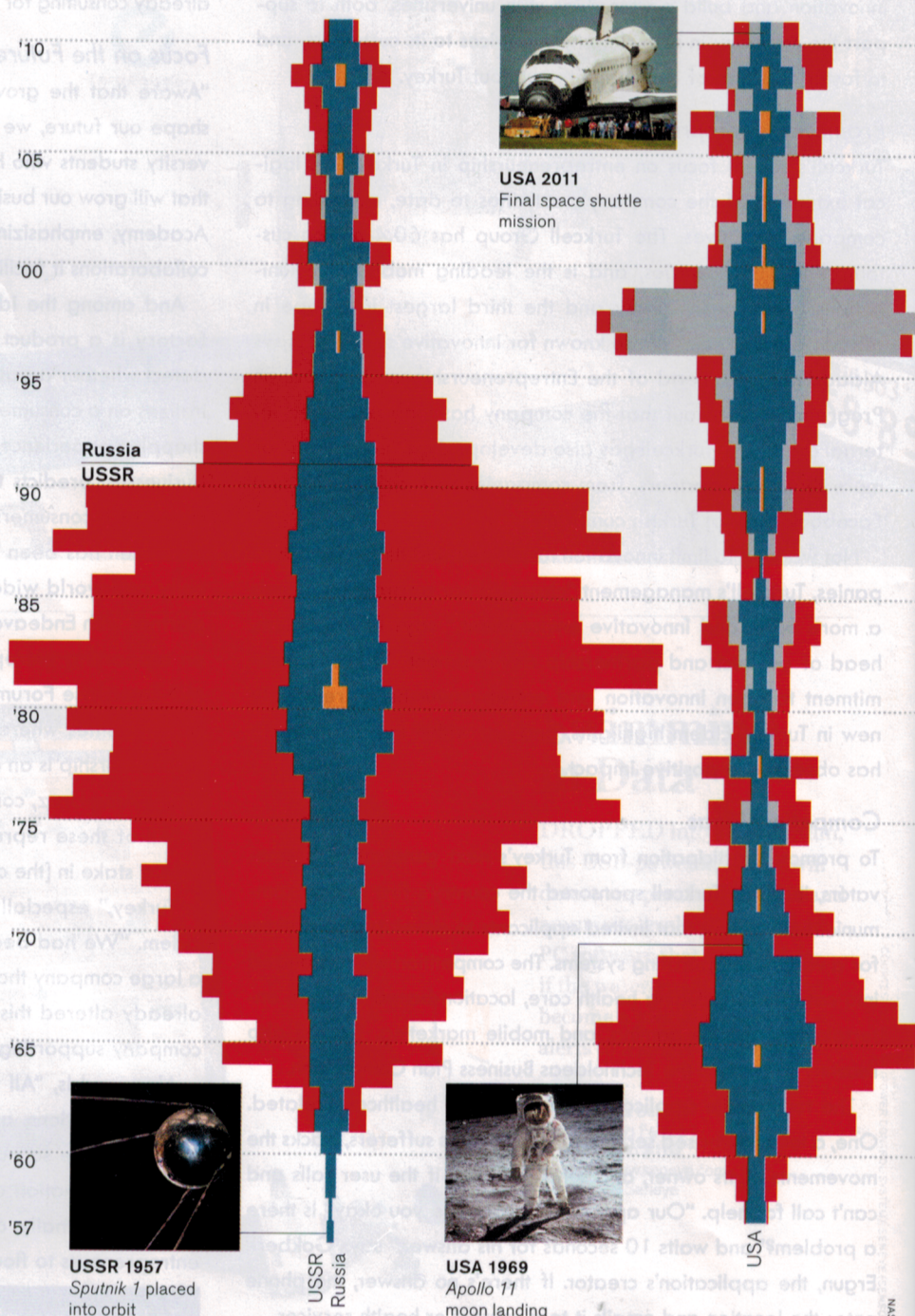
### Space over Time

Human exploration is the most visible use of spaceflight, but business and defense satellites fill the sky.

The retirement of the space shuttles marks the end of NASA's human spaceflight program, at least for now. But human missions funded by the U.S. government have represented only a small part of the action in space.

Of the 7,000 spacecraft that have been launched into orbit or beyond, more than half were defense satellites used for such purposes as communication, navigation, and imaging. (The Soviet Union sent up a huge number, partly because its satellites tended to be much shorter-lived than those from the United States.) In the 1970s, private companies began increasingly adding to the mix, launching satellites for telecommunications and broadcasting.

This graphic groups payloads by the nationality of the owner. A satellite, a capsule of cosmonauts, or a deep-space probe would each count as one payload. The data, which run through July 2011, were drawn from hundreds of sources, including space agency documents, academic journals, and interviews. They were compiled by Jonathan McDowell, an astrophysicist at the Harvard-Smithsonian Center for Astrophysics and author of *Jonathan's Space Report*, a newsletter that tracks launches. —Mike Orcutt



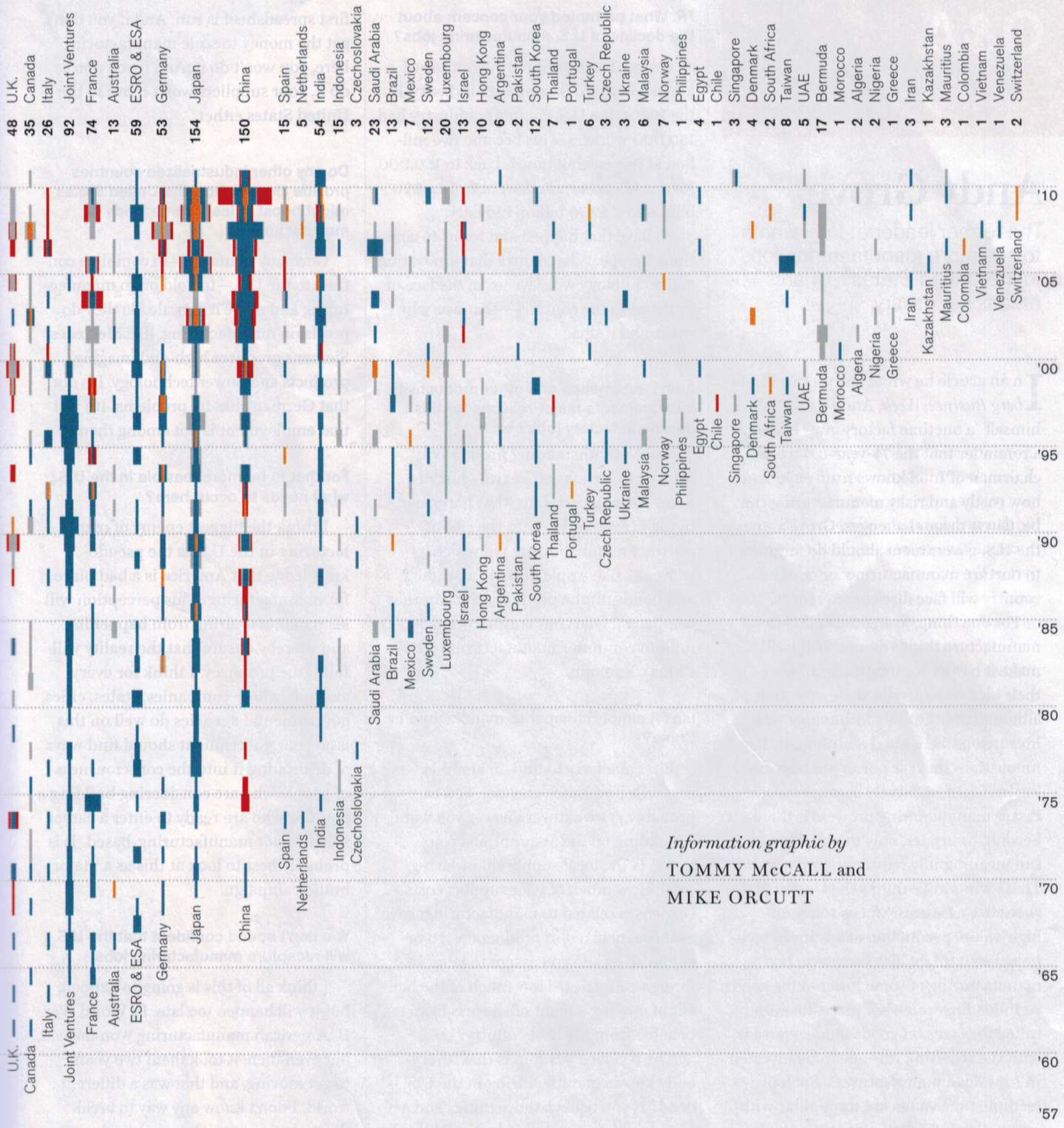
USA 2011  
Final space shuttle mission



USSR 1957  
Sputnik 1 placed into orbit



USA 1969  
Apollo 11 moon landing



Information graphic by  
TOMMY McCALL and  
MIKE ORCUTT

**Notes:** "Joint Ventures" refers to the multinational satellite consortia INTELSAT, INMARSAT, EUTELSAT, and EUMETSAT. The European Space Research Organization (ESRO) was a forerunner to the European Space Agency (ESA), which was formed in 1975.