

BBC JAMES LOVELOCK ON THE COMING AGE OF HYPERINTELLIGENCE

Science Focus

To infinity and beyond

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**APOLLO
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Moon Landing

How to argue with someone
who thinks it was fake

Small Steps

How NASA prepared
for the first moonwalk

The Missions

50 years of lunar
exploration visualised

Data crunch

Missions to the Moon

On 13 September 1959, the Soviet Union's Luna 2 probe became the first human-made object to reach the Moon's surface. Since then, more than 100 missions from eight national agencies have been attempted, with around half being deemed a success. In recent years, China has been the most active nation launching lunar missions. Its Chang'e 4 mission became the first craft to land on the far side of the Moon in January 2019.

LANDING SITES

△ Luna Programme
Soviet space programme, USSR
Twenty-four robotic spacecraft were named Luna, although more were launched and only eight successfully landed.

- Luna **2** Sep 1959
- Luna **9** Jan 1966
- Luna **13** Dec 1966
- Luna **16** Sep 1970
- Luna **17** Nov 1970
- Luna **20** Feb 1972
- Luna **21** Jan 1973
- Luna **24** Aug 1976






○ Project Apollo
NASA, USA
Of the 18 missions, six succeeded in landing the first humans on the Moon.

- Apollo **11** Jul 1969 
- Apollo **12** Nov 1969 
- Apollo **14** Jan 1971 
- Apollo **15** Jul 1971 
- Apollo **16** Apr 1972 
- Apollo **17** Dec 1972 

○ Surveyor Programme
NASA, USA
Of the seven robotic spacecraft sent to the Moon, five successfully landed.

- Surveyor **1** May 1966
- Surveyor **3** Apr 1967
- Surveyor **5** Sep 1967
- Surveyor **6** Nov 1967
- Surveyor **7** Jan 1968

MISSIONS

-  Successful past mission
-  Failed past mission
-  Ongoing/future mission
-  Crewed missions 

INFOGRAPHIC: VALENTINA D'EFILIPPO

The early years of lunar exploration were dominated by the Cold War-era rivalry between the Soviet Union and the USA. The two nations made a total of 82 attempts between 1958 and 1976.

Apollo 13 was called a successful failure. While they failed to land on the Moon, the men did return home safely.

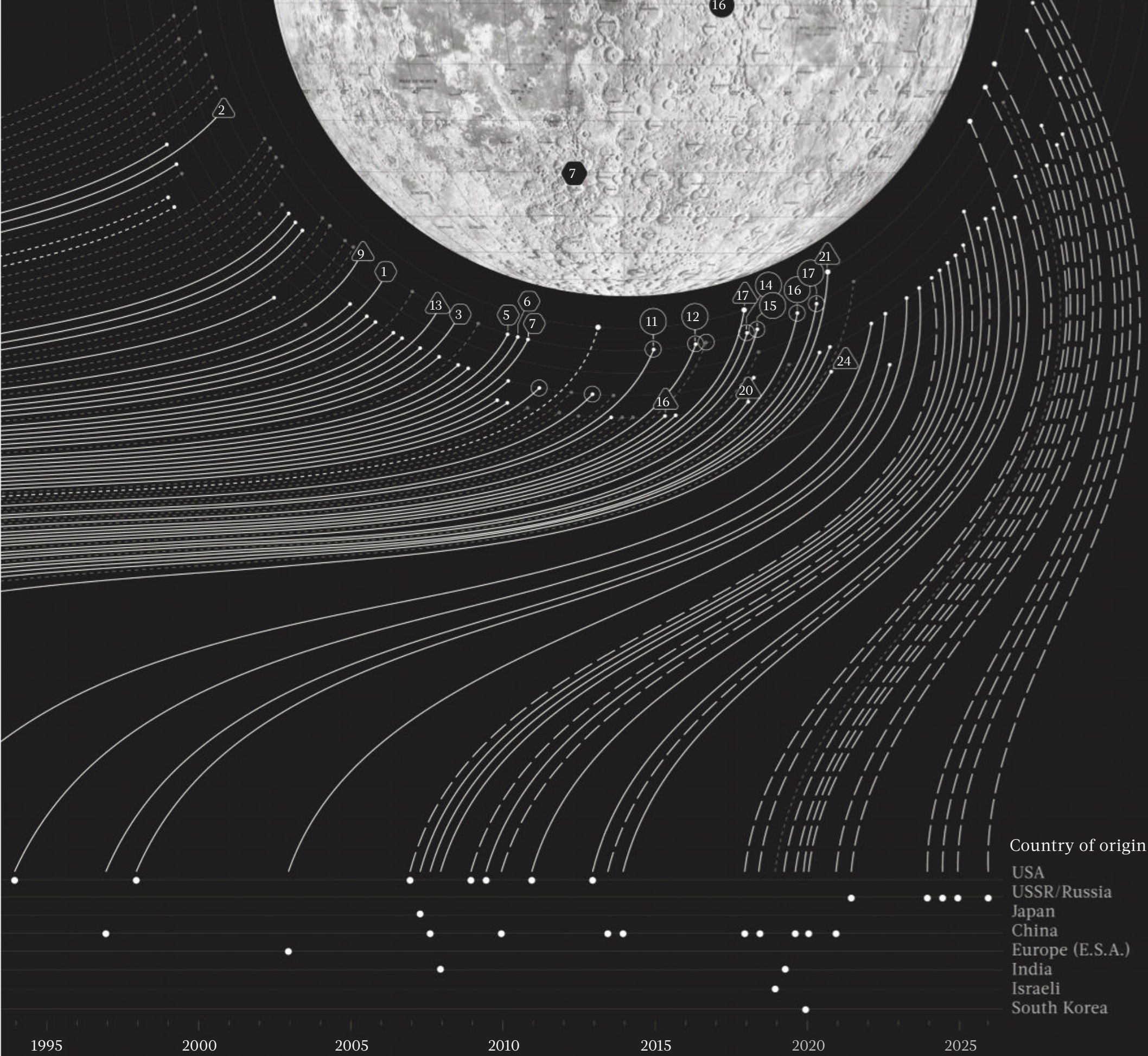
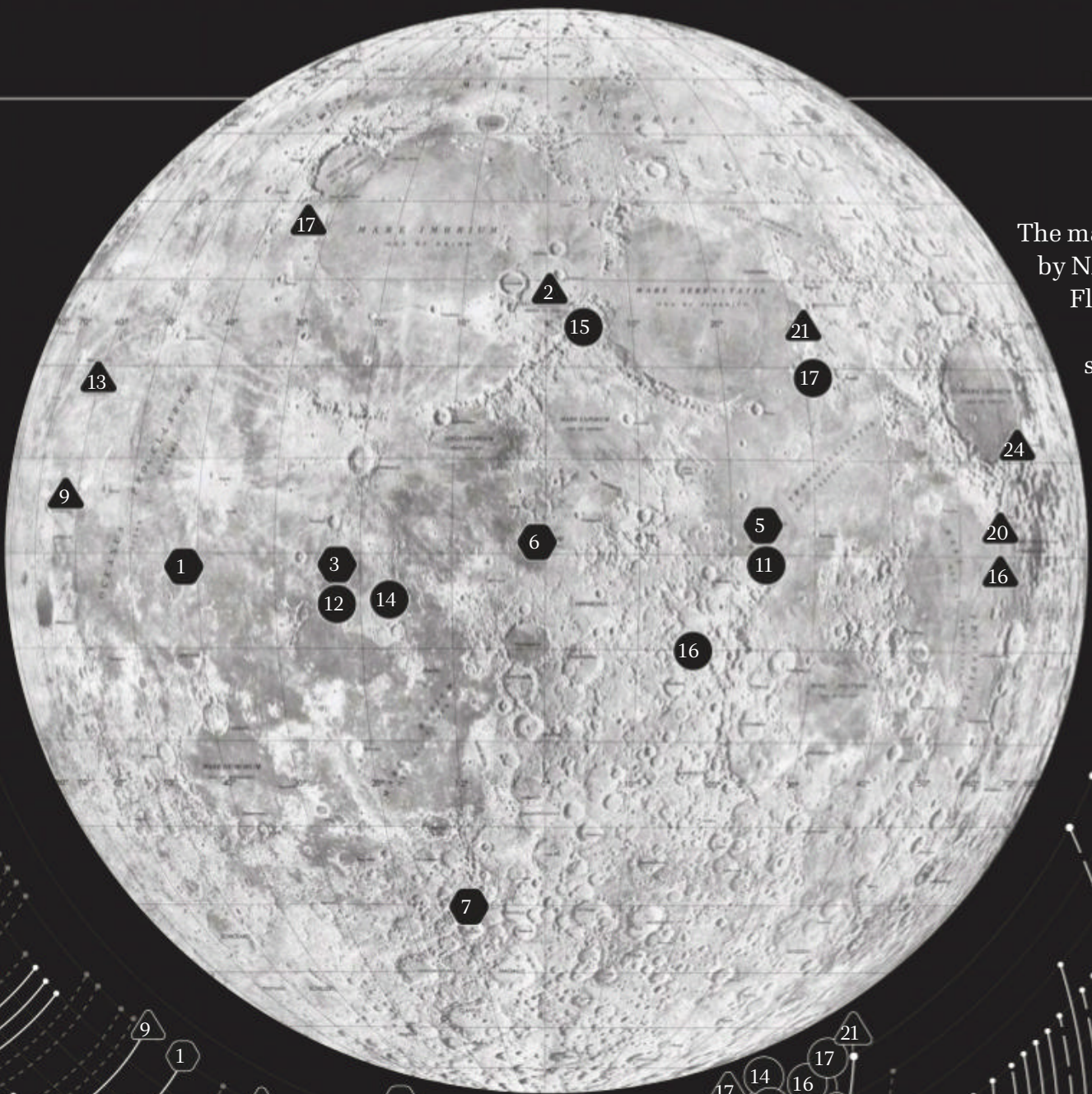
Launch year 1960 1965 1970 1975 1980 1985 1990

The map of the landing sites by NASA's Goddard Space Flight Center shows the locations of the many spacecraft that landed on the Moon.

- △ Luna
- Apollo
- ◻ Surveyor

Mission type

- Rover
- Lander
- Impactor
- Orbiter
- Flyby & back / Sample return
- Flyby
- Test flight



Country of origin

- USA
- USSR/Russia
- Japan
- China
- Europe (E.S.A.)
- India
- Israeli
- South Korea

1995 2000 2005 2010 2015 2020 2025