

An Envioning Technology: Satellites and the Perception of the Earth

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Last year marked the 60th anniversary of the launch of Sputnik 1. The first human-made satellite orbited the earth on the 4th of October 1957. If there are dates in the history of twentieth-century science and technology to be remembered, that date would qualify.

Satellite technology has been extremely influential in a great variety of dimensions. We have surveillance satellites, weather satellites, telecom satellites, TV satellites, remote sensing satellites, and scientific satellites. Sometimes the distinction is not so easy to make. Some are national, some are private, some are state owned, some are supranational, some are small, some are the size of a bus, some use low orbits, others use the geosynchronous orbit, and some have polar orbits. They all have equipment that needs to work after launch and as long as possible, since this is technology that is hard to maintain directly. This puts specific demands on the payload, and needs specific expertise and advanced production facilities.

Even though most people might not know it, they use satellites or the services that originate with them, every day. Satellite technology is part and parcel of information society. They are still a matter of national pride and prestige, but they are also commercial projects and part of general telecom infrastructures. Television depends heavily on satellites, as does international journalism. Meteorology as we know it demands weather satellites, and national intelligence services use surveillance satellites in parallel with traditional methods of gathering information. Mostly, like other infrastructures for information, we do not notice the carrier—we simply rely on the service. The system is, in practice, invisible.

Several thousand satellites have been launched since Sputnik; the debris from them, from the launch, from the Space shuttle, and all other activities by humankind in space has resulted in an increased amount of so-called space junk. We do live in the space age, but what characterizes it is not that we fly to the moon and back. “The future is not what it used to be” has been attributed to among others, Arthur C. Clarke, the famous scientist and science fiction writer.

During my stay at the RCC I will bring together and finalize work on the satellite technosphere that I have pursued over a long period of time. I want to write up, finish, and submit several articles that I have been working on lately. They are rather different in character but all deal with aspects of satellite technology and its consequences for society, culture, and environment.

While working on the individual articles, I would like to take a step back and compile these different pieces into a volume that can say more than the single journal articles alone. I believe that the empirical material I can bring to such a volume is not only timely but also unique. Media studies and history of technology dealing with adjacent topics are rather US focused, which allows for narratives in a very different context than the European ones. The Nordic countries almost never appear in this literature, so there is a distinct case to be made for the kind of perspective that I can bring. Looking at small nations on the periphery, including supranational cooperation, the complicated role of multilingualism, and the domination of public service broadcasting are only a few features that make for distinct differences in context. An alternative title for this project is “Encircling the Earth: Satellites as an Extended Technosphere.”