

The importance of ocean space for Europe

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The seas around Europe traditionally play an important role in human activities such as transportation, fisheries, and exploration. Favourable climate conditions around 1000 AD also stimulated, due to population growth and urbanisation the development of marine fisheries and trade in Europe. In the Low Countries this successively led to the metropolises of the North Sea: Brugge, Gent, Antwerp and finally Amsterdam.

Spanish and Portuguese explorers of the fifteenth century set out to discover the world. They started to explore and exploit the 'other side of the ocean' by discovering and then exclusively claiming sea-routes to the East Indies and Americas. In the wake of this, human activities such as piracy, whaling, and slavery flourished for centuries.

Scientific exploration of the ocean started in 1872 with the circumnavigation of the globe during the British Challenger Expedition. Following oceanographic research by European countries led to a perception change. From then the ocean was seen in 3D, and teeming with life. The sea seemed an inexhaustible and free resource for various human activities. This perception change from 2D to 3D matured into a 4D-vision during the last quarter of the twentieth century. The notion of 'ocean space' elegantly reflects this. We now know that the oceans jointly form an immense space with time as a fourth dimension. The ocean has a 'memory' that allows for ocean and climate forecasting, and a wide variety of ocean services.

Rapid population growth, and as a consequence a fast increase in human activities have a downside. This is expressed in the overexploitation of many marine species, waste full fisheries, pollution, and global warming. Although the negative effects of human activities are known at the local level for centuries, and at the regional one for decades, the global dimension of them is now also dawning through, sea-level rise and ocean acidification. Both are threatening the activities that are causing them at a local to global scale. Small changes in the temperature of the upper part of ocean space have outsizing effects on its chemistry as well as its ecology. Half of the coral reefs have died or suffered a sharp decline; hundreds of so-called 'dead zones' are found in the coastal seas and especially in front of the outflows of large rivers. In Europe, the Baltic is, despite many efforts to manage the system, still the worst polluted sea since decades.

Outer space exploration showed us the real dimensions of our planet, wrongly called Earth. Perceptions as Spaceship Earth, System Earth, Mother Earth or the Blue Pearl colour our visions towards the planet we share with so many other life forms. We are just part of a complicated and hardly understood planetary system. Yet, some scientists strongly advocate a new era dominated by human activities: the Anthropocene. This notion rapidly became popular, but is also misleading as it suggests the idea that we should and could save our planet or that we could manage it through new and innovative bio- and geo-engineering skills. On the other hand, conservation organisations like IUCN, WWF and NGOs such as Greenpeace, strongly argue for the establishment of marine parks etc. for conservation purposes.

But, how will we conserve things we hardly know about or understand? That was one of the central questions during the 1998 International Year of the Ocean. It's still a central question in all new policymaking like Europe's Integrated Maritime Policy (2007). Outreach, a well-structured and focussed outreach at various levels in Europe, has to be the answer on how to inform the taxpayer and voter about the relevance and social and economic importance of ocean space in their daily live. Through education this awareness raising process should become an intrinsic part of the thinking of Europe's citizen of tomorrow. Together, focussed educational and outreach efforts will make young people, the next generation, aware of an 'ocean of opportunities' in the age of twitter and the other new media.

References

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