Beyond Progress

To this day, the concept of progress has largely positive connotations. After all, the results of mankind’s thirst for knowledge are indeed impressive: We fly into space and dive to the bottom of the Mariana Trench. We are globally interconnected and reachable at any time, anywhere in the world. We split atoms, modify plants, animals and people with the help of genetic engineering. But progress comes at a price, as we increasingly find ourselves confronting the dramatic effects of these advances on human beings and the environment. Does progress necessarily spell improvement? Is perpetual growth something we should strive for? Beyond Progress casts a critical light on the scientific and technological achievements of our time and discusses their ecological, economic and ethical impact.

01 Manned Space Travel – A Waste of Time and Money?
Space exploration has claimed the lives of more than 100 people. The cost of the International Space Station to date totals some 100 billion euros – an investment that critics say has yielded few groundbreaking insights for us on Earth. They see the future of space travel not in manned missions but in robotics.

02 Turbo-Powered Muscles – Gene Doping for All? HD
The future belongs to gene doping. Athletes can now benefit from gene therapies developed to tackle otherwise incurable hereditary diseases, despite the immense risks involved in such interference in the genetic makeup of humans. Is it right that gene therapies be used for recreational purposes? Should they be reserved for healing the sick?

03 Mass Produced Meat – What are the Prospects for Cloning?
It may have been inconceivable not long ago, but today it is a reality: thousands of cloned livestock with millions of progeny, primarily on the American continent. But while there is little public resistance to such intensive production practices in the US, many in Europe take a skeptical view of food from cloned animals.

04 The Race for Gas – What Price Fracking?
The Earth holds large reserves of natural gas embedded in porous rock. The extraction of this gas is complex and expensive, but is proving lucrative. The negative impact of this process known as ‘fracking’ is huge, with polluted water and gas emissions threatening both humans and the environment.

05 The Hunt for Underwater Resources – Progress At Any Price?
In their search for oil, industrial concerns are probing ever deeper into uncharted territory in the Earth’s oceans. But scientists are issuing urgent warnings over the negative impact of this exploration on marine life. The biodiversity of the seas is in danger of being destroyed, even before it has been properly documented and understood.
06  **Robot Wars – The Future of Warfare?**
Robots and drones are deployed by a number of nations in conflicts worldwide. Advocates say their use protects the lives of those nations’ soldiers and of innocent civilians. But critics fear the increased use of drone technology will lead to sanitized warfare with little regard for errors or the legality of unmanned strikes.

07  **Accelerating the World – Can We Manipulate Time?**  
Many technological advances are aimed at saving time – this as numerous studies show that the rhythms of everyday life are getting faster all the time. Do new gadgets really save us time? Or are we stuck in a time trap?