Chapter XIV
Towards an Ethical Approach to Commercial Space Activities

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ABSTRACT

This chapter introduces the ethical questioning in the field of space activities, especially space commerce. If the 1967 Outer Space Treaty defines space as the “property of all” and its exploration as the “province of all mankind,” the future utilization of near-Earth (and tomorrow Greater Earth) space probably needs new ethics (if ethics means not only legal applications, but also and for example the application of the rule of three Ps: protection, promotion, and preparation). Orbital debris mitigation, the International Charter on Space and Major Disasters or, in the future, the safety of private astronauts crews, offer lessons in realism and sources of prospective reflections. Space ethics is still in its infancy.

INTRODUCTION

What have we achieved and where are we going with this remarkable adventure, which has its roots deep in the human imagination, which we began just 50 years ago and which has undoubtedly reached its climax with the 12 men who traveled to the Moon? I am, of course, referring to the space adventure. And what have we achieved and where are we going when we consider the use of space for full-scale commercial enterprise? Yesterday’s astronauts had the stuff of heroes, but will they be succeeded by bellboys in space hotels open to wealthy space tourists, while sentinel constellations offer costly services for those using satellite data to support their terrestrial businesses? Business as usual?

The time would seem ripe for public—and private—sector space players to consider how, insofar as we can envision this evolution, to bring some ethics into the equation through codes of conduct, regulations, and treaties. There are many issues to address.

Today, orbits are occupied according to international procedures approved by all, but will the same apply to the disposal of satellites at the
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end of their life and to orbital debris mitigation? What resources should governments be prepared to commit to tracking such debris, for the benefit of commercial business? And what of the use of satellite-based observation, communication, and positioning systems? Once strictly private and commercial, are they no longer bound by rules of discretion? What ties will they maintain with services like those provided by the International Charter on Space and Major Disasters? And how will the safety of private crews be guaranteed? If they are no longer “envoys of humanity” in the accepted modern legal sense, what duties will governments have toward them on Earth and in space?

Clearly, space ethics is still in its infancy. It is building on the experience gained in other scientific and technical fields, and is adding its own touches. Not the least of these is its readiness to question the ends of astronautic activities before tackling questions so urgent or precise that it might be tempted to put the cart before the horse. The ethical question of the commercialization of space is one we must address without delay.

WHAT DO WE MEAN BY SPACE ETHICS?

Our societies, and we ourselves, consider ethical issues on two occasions.

First, when we need to answer doubts and fears inspired by an urgent decision likely to have a major impact on humans, or by a catastrophic event. For this reason, many governments have set up ethics committees to support the development and application of new medical technologies or genetic engineering techniques. In 1986, the Chernobyl disaster and Challenger shuttle accident led to questions and decisions, and with them a greater awareness of the ethical issues involved (Bell, 1998; Martin & Schinzinger, 1996).

The second occasion, which is less dramatic and part of the making of social history, is when we are ready to question rationale and purpose before or after taking an action, as well as the consequences and responsibilities that go with it. This type of questioning precedes or accompanies the drafting of treaties, agreements, legislation, and codes of conduct; indeed, we expect decision-makers, politicians, engineers, and medical experts to consider these issues, without necessarily talking about ethics per se. Yet ethics it is. In other words, people often take an ethical approach without even realizing it. And setting up ethics committees or appointing ethics officers within organizations must never prevent or excuse people from addressing these concerns themselves.

It would be wrong to approach ethics in a way that reduces it to a simple authorization/veto procedure applied to certain sensitive activities or, worse still, that leaves the whole issue to the ethics committee. Rather than getting into the details of historical, philosophical, or cultural nuances, my aim is to briefly consider the ethical approach from two perspectives. First, the perspective outlined above, which can be summed up in two questions: What are the rationale and purpose behind an action or activity? And what are the consequences and responsibilities that go with it? The second perspective I call the “rule of three Ps”: protection, promotion, and preparation. Protect the past, promote the present, and prepare for the future. In other words, the ethical approach is tied to the notion of heritage, which we will discuss below. Space ethics takes these two perspectives very seriously.

Over the last 50 years, the space endeavour has seen its share of disasters; I have already mentioned the Challenger accident, but we could also cite the Columbia disaster and others that have caused loss of material assets and, in the worst cases, human life. While we have had to wait until the start of the third millennium for space agencies to take an overt interest in ethical issues, space players have not waited so long. Working groups have existed since the mid 1980s, dedicated to protecting our planet (such as...