"European-Russian Space Cooperation - From de Gaulle to ExoMars"

a book review - by Jacqueline Myrrhe and interview with the author Brian Harvey



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6 chapters (Early days/ Scientific cooperation/Human spaceflight/Industrial cooperation/ExoMars/Conclusions) with extensive annexes of lists of acronyms and abbreviations, a timeline of milestone events, a list of heads of governments and space agencies, a bibliography and a very useful index.

It might not often happen that an up-to-date account turns overnight into an historical and archival one. It did happen to the book "European-Russian Space Cooperation - From de Gaulle to ExoMars" by Brian Harvey. The status change was caused by the events since February when space cooperation with Russia was suspended by the European Space Agency and most European national space agencies. On the day of writing this review, 12 July 2022, ESA Member States had their final word: cooperation with Russia on the ExoMars mission is terminated. This serious result was announced by the blink of a tweet on Twitter... Only the letter, sent on 17 March 2022 by ESA Director General Josef Aschbacher to Director General of Roscosmos, Dmitry Rogozin, was worse.

But despite this bitter turn of European decision makers, the book remains a contemporary testimony of decades of successful cooperation and win-win achievements.

First and foremost, the book is solid journalism: well researched information and first-hand accounts through numerous interviews of key persons involved in cooperation projects. Thanks to this book, many interesting and anecdotical stories are now available to the interested reader and cannot be forgotten anymore. Brian Harvey's special expertise is his capabil-ity to put things into wider context and see the historical dimension of what is happening or has happened. That gives a vivid and complete picture of the many years and many projects of space cooperation between Europe and Russia.

Of high value are the conclusions at the end of the book. They are summarising the achievements as well as the lessons learnt. This is why this book is also a highly recommendable read for persons interested in the Chinese space programme. On the one hand, Europe can and should learn from its experience in cooperation with Russia to pave the way for closer cooperation with China in the future. Many stories in the book from the early days of space cooperation reassemble numerous aspects and problems Europe is facing when trying to set-up cooperation relations with China. On the other hand, Europe might not avoid to get into gear again with Russia. China has decided to settle on the Moon together with Russia. This cooperation is up for more and might also become an imperative for other nations to join, in particular for the experienced space powers. The book – for the moment – ended with the Exo-Mars project. The cooperation

on that has ended and it seems that the book has not an open but rather a definite end. But it might well be that the book can serve as a "handbook" or "manual" for the time when Russian partners are wanted again. And then it could serve "dual use" to help Europe in its interaction with China.

" ... 'it's easy to stop things, but a hundred times harder to built things up again' ..."

interview with the author Brian Harvey

What was the motivation for you to write this book?

The idea was suggested by Clive Horwood, the publisher, so he deserves the credit. Cooperation between Europe and Russia (since 1966) had a long history but no one had ever written about it systematically or comprehensively before. Some studies had been undertaken of American-Russian cooperation (for example the Apollo-Soyuz Test Project) and there was some literature about France-Russia, but much less about the other countries. The idea was not just the story of cooperation, but how it worked, the gains on each side, outcomes, difficulties, personalities, why some countries more than others and the politics involved.

Is the book still relevant? Or is it even more relevant than ever? At one level, you could say that since European-Russian cooperation has ended, it is no longer relevant. That's not my view. Europe and Russia cannot wall themselves off from one another forever and the lessons from the cooperation experience can be applied once more. There were considerable benefits to both sides, in different ways and there will be so again.

You are a profound expert on the Chinese space programme. Are there any conclusions to be drawn or lessons learned for the space cooperation with China in general and for European-Chinese space cooperation in particular?

Cooperation between Europe and China is much less well developed. Although there have been joint projects (e.g. Tan Ce, earthquake satellite, Simbox, SVOM, CFOS) they are isolated and not an organic, systematic programme of cooperation with joint learning. By contrast, the France-Russia programme was highly structured from 1966 onward and there were formal Russia-Germany and Russia-ESA agreements/structures on a rolling basis. That could still be the case between China and Europe, especially with China's expanding, ambitious space science programme. China has repeatedly stressed its willingness to engage in more cooperation, so the problem is not on that side. The American isolation of China from 1949, renewed in 1999, has not helped and has acted as a disincentive to European cooperation with China (Beidou/Galileo was a case in point). There is a danger that the Artemis accords (France signed recently) will further inhibit European cooperation with China.

What is your estimation: will European space cooperation with Russia have a future?

For the future, it will indeed be difficult to reconstruct the pre-2022 cooperation between Europe and Russia. If so, it will probably not be around any of the present projects that have been abandoned (ExoMars, ISS, Luna 25, 26, 27, Spektr etc) but others which have not even been conceptualized, probably not till the 2030s. The ball is in Europe's court. Russia endured 20 years of isolation from Europe over the 1920s and 1930s, during which it made significant scientific achievements (e.g. aviation, stratospheric balloons, arctic exploration, Earth sciences) on its own, so it's a mistake to assume that Russia cannot manage or progress on its own. A colleague once pointed out that 'it's easy to stop things, but a hundred times harder to built things up again'. It's up to Europe to decide when cooperation will resume, how and in what way.