

Cold War Aerospace. A hypothesis of multi-layered historical approach to scientific diplomacy

Date: June 29, 2021

Slot: 9.15 a.m. – 13.00 p.m. CET

Platform: [Microsoft Teams](#)

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Working languages: English, French

Programme:

9:15 Welcome address by Prof. **Giulia Lami**, Director of the Centre of Foreign Policy Studies – University of Milan

9:30 Panel 1. Aviation technology

Mauro Elli (State University of Milan), *Anglo-Romanian dealings in aeroengines and the opening of China market*

Peter Svik (Graduate Institute of Geneva, University of Vienna), *Short and long spans: how can Braudel help us to understand the contemporary history*

David Burigana (State University of Padua, InsSciDE), *A l'arrière-cour de la Diplomatie ? Au beau milieu de la Diplomatie. L'Aérospatial, un cas d'études des multiples interactions entre Guerre froide et processus de construction européenne*

10:30 Panel 2. Space research

Matteo Landoni (State University of Milan), *American technology and European integration of the Italian space industry. Coopetition in the Atlantic space?*

Olga Dubrovina (State University of Padua, InsSciDE), *Share and conquer: Soviet international policy in the Space during the Cold War*

Gemma Cirac-Claveras (Pompeu Fabra University of Barcelona), *Meteosat. Global weather, international science, national technology*

11:30 Discussion-note by Prof. **Christophe Bouneau**, University of Bordeaux-Montaigne

12:00 Roundtable

Rationale: The seminar is going to consider aerospace as a crucial sector in terms of financial investments, techno-scientific expertise, and politico-military relevance in the Cold War arena. Historians from different backgrounds will consider a range of case-studies in order to focus on a concept of scientific diplomacy which encompasses the three areas of foreign policy, economics, and science and technology. This concept is expected to present scientists, as well as industrial managers, as fully-fledged diplomatic actors and diplomacy not merely as a suprastructure to business interests or scientific ambitions. The participants, confronting their experiences, will develop a critique of the cross-fertilization among political, economic, and scientific interests by considering possible structures of interconnecting the national, regional/European,

global/international levels of activity and actors. Up to what point did Cold War constraints affect these dynamics? How did the latter substantiate the international regime that was the Cold War? Is their temporality structurally linked to the unfolding of Cold War phases? Is the Cold War era just a defining moment in a longer time span? Though binary answers will be most likely insufficient, the aim of the seminar is to contrive a conceptualization of scientific diplomacy that is able to offer an interpretative key of the development of international society.

Abstracts

Mauro Elli, *Anglo-Romanian dealings in aeroengines and the opening of China market*

The contribution deals with the Romanian interest in acquiring the ability to build under licence from Rolls-Royce aeroengines, starting with the Viper turbojet. This was to become the engine of an aircraft at the heart of Romanian-Yugoslav cooperation and a starting point for repeated attempts to convince Rolls-Royce to collaborate in the design of an afterburner. In general, contacts in the military sector demonstrate, on the one hand, the continued effectiveness of CoCom's restrictions on exchanges with the Soviet bloc and, on the other hand, the impracticability of the ambitions of the regime in the face of the difficulties of the Romanian productive apparatus to assimilate the technology obtained. The relations in this area, however, allowed Rolls-Royce to activate, through good Romanian offices, those contacts with the Chinese authorities that led to the sale of the production licence for the Spey 202 turbofan to the People's Republic. The conclusion of the Chinese deal paradoxically further limited British willingness towards the Romanians in the military area, examines relations in the military sector, stressing the importance of Romania being a Warsaw Pact country after the invasion of Czechoslovakia in 1968.

Peter Svik, *Short and long spans: how can Braudel help us to understand the contemporary history*

Referring to Fernand Braudel's concept of three currents of historical time flow, the historians Per Högselius, Arne Kaijser and Erik van der Vleuten suggested in their 2016 monograph *Europe's Infrastructure Transition: Economy, War, Nature* that the advancement and growth of technological infrastructures during the last two centuries led to a transition from a nature-based to a network-based geography. Looking at the civil aviation sector, my recent monograph argues that it was primarily East-West rivalry that triggered the development of engines, aircrafts and even flight routes and these, in turn, became essential for the rapid spread of globalization processes since the 1970s and since 1990s in particular. Yet, Braudel's ideas can eventually be extended even further as enabling to situate the ongoing global developments marked by renewed Great Power rivalry and "re-nationalization" within the larger historical framework spanning last two centuries. The conference paper will thus be divided in two parts. First, it will describe how Braudel's ideas are used in my monograph *Civil Aviation and the Globalization of the Cold War*. Second, it will extrapolate book's analytical perspective and link European colonial expansions, Cold War confrontation between the East and the West and the current wave of "neo-colonialism" while regarding the quest for natural resources to sustain technological, military and economic growth as a common denominator.

David Burigana, *A l'arrière-cour de la Diplomatie ? Au beau milieu de la Diplomatie. L'Aérospatial, un cas d'études des multiples interactions entre Guerre froide et processus de construction européenne*

En définissant l'Aerospace comme l'union de l'aéronautique et de l'espace, celui est un secteur où la coopération internationale est devenue, depuis les blocs de la Guerre froide jusqu'à la nouvelle mondialisation après la fin de la lutte des idéologies, un outil inévitable pour n'importe quel pays afin de confirmer ou affirmer ses capacités dans un milieu très compétitif au niveau de plus en plus global. C'est un champ de la « co-opétition » – de la fusion des mots *competition* et *cooperation* selon les *business studies* – aussi au sein de deux blocs, qui n'exclue pas des liens entre Etats « ennemis » même si les grandes coopérations restent au sein des « alliées ». Un exemple classique est celui de la célèbre coopération spatiale franco-soviétique lancée par De Gaulle par l'accord du 30 juin 1966, relancé par Pompidou le 2 octobre 1970 avant sa visite à Baïkonour. De même pour l'aéronautique, avec Airbus d'une part, Tornado de l'autre, les Etats européens membres de l'Alliance Atlantique et de la Communauté Economique Européenne, tout en flirtant avec les pays du bloc misaient sur des consortiums européens en compétition avec les Etats-Unis. Ils choisirent la voie intergouvernementale soit pour l'aéronautique soit pour l'Espace avec Airbus et Tornado/Eurofighter et avec l'Agence Spatiale Européenne et Arianespace/Eutelsat. Celle-ci était la seule voie non pas pour relancer un dialogue technoscientifique avec « les autres », c'est-à-dire Moscou. C'était la seule voie pour garder les mains libres pour miser le leadership européen d'une part, de l'autre pour pouvoir coopérer avec la meilleure technologie de l'époque, et avec les plus importants débouchés de marché : celle des Etats-Unis. Dans cette histoire qui continue encore aujourd'hui il a fallu agir selon la diplomatie. Les acteurs qui s'y sont prêtés n'étaient pas... ne sont pas, aujourd'hui même, au-delà de la diplomatie. Ils n'ont pas créé une autre diplomatie, ils font de la diplomatie tout simplement. Ils sont parmi les différents acteurs (techniciens, managers d'entreprise publics ou privés, hauts fonctionnaires de l'état, diplomates, militaires) d'un même processus décisionnel amenant à constituer une politique étrangère à travers les dynamiques de la diplomatie.

Matteo Landoni, *American technology and European integration of the Italian space industry. Coopetition in the Atlantic space?*

The surprising early development of the Italian activities in space dates back at least to Luigi Broglio's San Marco program, which started in the Fifties and was launched in 1964 in collaboration with Nasa. Soon, however, the collaboration that allowed the US to sell - and control - technologies to Italy became an open competition, with the Italian development being able to match US performance at lower costs. This way, the Italian space industry became a pillar of the European space sector. However, the development of the Italian space industry was more than the transfer of technologies from the US. American technologies served the purpose of developing a domestic industry up to the expansion in the European market, yet the Italian space industry did not simply bridge markets at the two ends of the Atlantic, but continuously interacts with both in search of autonomy and recognition, otherwise hard to realize. A strategy mixing cooperation and competition (i.e. coopetition) that produced brilliant results and opens questions about its reliability.

Olga Dubrovina, *Share and conquer: Soviet international policy in the Space during the Cold War*

The contribution explores three areas of collaboration that the USSR established during the Cold War: with countries of the socialist bloc ("Intercosmos"), with the West (France, ESA and USA) and with the developing in that period countries (India and China). Each category of partners envisaged a certain model of cooperation characterized by different objectives, structures of contacts, internal balances, media treatment and results obtained. In particular, the internal balances established between the USSR and junior partners is examined in terms of concrete advantages drawn by both parties from bilateral collaboration in various sectors of space exploration (from human spaceflights to scientific research). In addition, a focus is given to the triangle formed by space engineers, scientists from the Soviet Academy of Sciences and the Soviet political leadership (CPSU, military ministries) and their weight in the decision-making process inherent in space, conditioned by

the international configuration. Finally, the legacy of bilateral relations formed during the Cold War period and their impact on the subsequent period up to the current situation is analyzed.

Gemma Cirac-Claveras, *Meteosat. Global weather, international science, national technology*

In 1967, the World Meteorological Organization and the International Council of Scientific Unions established the Global Atmospheric Research Program (GARP), a 15 years international research program aimed at gathering data to improve short-term weather forecasting by numerical prediction models. An important experiment of GARP was the Global Weather experiment of 1978-1979. Inspired by the International Geophysical Year of 1957-1958, which saw the launching of the Sputnik, its scope was unprecedented: scientists from 140 countries participated in collecting and analysing weather data from existing weather networks, new buoy and balloon systems, aircraft and ships, two polar orbiters, and five geostationary satellites. One of these satellites was Meteosat, launched in 1977. Meteosat was approved by the French Space Agency in 1968 (although transferred to the European Space Agency in 1975) and its chief purpose was to be the most visible French contribution to this global experiment. While it clearly served as a foreign policy tool, it also served professional ambitions to modernize the field of meteorology, institutional needs of the space agency to expand areas of interest, and industrial goals. The field of meteorology has often been described by historians of science as an instance of scientific internationalism. On the basis of the early history of Meteosat (1968-1975), this paper will draw on the history of technology to discuss the tensions between international collaborative efforts in science and national objectives to retain control over the technology.