

Why do nation-states choose to develop national space programs? How can they justify national efforts to acquire capabilities by arguing for membership of the space club? This book presents a unique and insightful perspective on the factors that drive states to indigenously develop world-class space technology in the past, present, and future of space exploration and technological development in world politics. Based on a rich and detailed analysis of a range of space programs in states that are not usually at the focus of world politics and its research, the author shows that joining the space club is a legitimate and rational decision. A country that sees itself as a power deserving of a seat at the table of world governance is expected to race for space. The book provides a different way of looking at international relations through a relatively understudied area of policy – the space club.

"Advanced space capabilities provide a nation state with both tangible and symbolic geopolitical, strategic, and security benefits. By using the concept of a 'space club' as a way to analyze a state's decision to acquire those capabilities and competition and cooperation among space faring countries, Deganit Paikowsky provides fresh insights and a productive way of understanding global space activity."

John Logsdon, Professor Emeritus, George Washington University and Founder of GW's Space Policy Institute.

"A fresh look at the international politics of space activity with well-researched case studies. Paikowky's book is a valuable addition to the field." James Clay Moltz, Naval Postgraduate School

Cover image: An artist's depiction of a probe investigating a heavily cratered moon in deep space @ Marc Ward/Stocktrek Images





The Power of the Space Club

Deganit Paikowsky

Tel Aviv University



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To my grandparents, Holocaust survivors who rebuilt their lives in Israel and were a source of inspiration for their will to overcome, live, and do, precisely because it is hard; and to my sons, the shining stars of my life. I sent the club a wire stating, PLEASE ACCEPT MY RESIGNATION. I DON'T WANT TO BELONG TO ANY CLUB THAT WILL ACCEPT ME AS A MEMBER.

Groucho Marx, 1959

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Deganit Tel Aviv, 2017



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1 Introduction

The exploration of space will go ahead, whether we join in it or not, and it is one of the great adventures of all time, and no nation which expects to be the leader of other nations can expect to stay behind in the race for space.

John F. Kennedy, September 12, 1962

In different eras in history, certain qualities or areas of expertise are identified as indicators of power and symbols of high standing. Usually, acquiring and developing these qualities require massive investments of resources and large-scale national efforts. Despite the difficulties, risks, and high costs, or because of them, nations that aspire to power and high standing often invest valuable resources and efforts in acquiring expertise in these areas. The nations that have succeeded in this task are recognized by many as an elite group – a club. In line with this reality, decision-makers and state officials often choose to emphasize the political aspect of their country's accomplishments and justify national efforts to acquire such qualities by arguing for membership in the club.

Historically, we can identify several nation-state clubs. At the end of the nineteenth century and into the early twentieth century, acquisition of battleships was an indicator of power and high standing. Each country that had battleships, or dreadnoughts (as they were later referred to), was considered a world power, and as a group, they were perceived as a superior club. After World War I, the dreadnought club declined. Total mechanization of air and ground warfare became an indicator of power and a symbol of high standing. The introduction of nuclear weapons at the end of World War II changed the rules of the game again. As of the 1950s, the group of countries that possessed nuclear weapons was recognized as the nuclear club. In the 1960s, the status of this superior group was somewhat formalized with the signing of the Non-Proliferation Treaty (NPT), by which means the international community formally accepted the N5, i.e. the five nuclear nations, as a legitimate, superior, and elite group – the nuclear club. At the same time, the countries

reaching outer space were also recognized as a superior and exclusive group under the axiom developed in the Cold War space race: "Control of space means control of the world."

This reality raises a number of questions: What are nation-state clubs? What role do they play in world politics? What is their life cycle? And what distinguishes a nation-state club from other models organizing the international system? Journalistic and historiography references to a "club" of nation-states when discussing expertise in areas of space technology, nuclear weapons, and other fields are frequent. Despite that, for the most part, the concept of such a "club" has been neglected or discounted by the vast majority of contemporary international relations (IR) scholars. IR scholars have not developed a comprehensive analytical or theoretical foundation to identify the behavioral and theoretical implications of states' activities in clubs. This book is designed to respond to this neglect by providing a systematic overview of the role of nation-state clubs in world politics. It explores the aforementioned questions using the case study of the space club.

This book focuses on the space club and on the national logic to join it, because space affects our terrestrial life far more than we often realize. A large diversity of applications and services are useful and sometimes even crucial for daily military, civil, and commercial functioning on Earth. The world space industry is an evolving international business. Space capability helps states to develop areas of commercial expertise, which diversifies their economies and enhances their global competitiveness.² Advanced space technologies, especially when used for spreading information, are believed to be the means for a quick transition from a traditional undeveloped society to an industrial and post-industrial nation.³ Communication satellites today are like the railroads of the nineteenth century, enabling desolate parts of a country to be settled and connecting them with the center of the country. 4 Data that come from space or pass through space enable us to run a global and modern economy. We communicate with each other from every point on Earth, use financial systems throughout the world, and continuously access news from around the world via communications satellites.

¹ Johnson, Lyndon B., Summary Statement, Hearings of the Preparedness Subcommittee, Senate Armed Services Committee, Senate Inquiry on Missiles, January 8, 1958.

³ Mistry, D.," The Geo-Strategic Implications of India's Space Program," *Asian Survey*, 41:6, (2001), 1034.

⁴ Pacey, A., *Technology in World Civilization*. (Cambridge, MA: MIT Press, 1990), 141.

² Pace, S., "Emerging Challenges: National Security Requirements and Economic/Commercial Interests," in D. Johnson and E. Levite, (eds.), Toward Fusion of Air and Space: Surveying Developments and Assessing Choices for Small and Middle Powers. (Washington, DC: RAND & Fisher Institute, 2003), 48.