

B. 3rd SYMPOSIUM ON ASTROSOCIOLOGY

Program Chair
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Program Co-Chair
TBD

The astrosociology symposium focuses on topics common to the space community, though from a social-scientific perspective. That is, a strong consideration of how each topic relates to society, culture, and the individual – the traditional purview of the social and behavioral sciences, humanities, and the arts (hereafter referred to as the “social sciences” for brevity) -- defines astrosociology. A major theme of the symposium focuses on how traditional knowledge and findings of the social sciences, which normally focus on terrestrial matters, actually possess important applications for space exploration and related issues. Moreover, the direct application of social science research and theory-building in contemporary and future timeframes receive attention as vital components in the understanding of humanity’s efforts in space environments in terms of exploration, settlement, work, and recreation. Examination of the impact of space exploration on terrestrial societies and cultures receives attention in addition to that of humans in space.

Papers and presentations are solicited that address astrosociology themes, focusing on the topics described below.

B01. Astrosociology: Definition, Scope, and Relevance/Astrosociology in the Classroom

Chair: Jim Pass, Astrosociology Research Institute, Huntington Beach, CA, (714) 317-6169; jpass@astrosociology.org

Co-Chair: TBD

Papers are solicited that examine the definition, scope of coverage, and relevance of a relatively new social science field called astrosociology that focuses on the intersection between space and society. The purpose of this session is to introduce astrosociology to the audience in the context of (1) the general absence of the social sciences in space exploration and research and (2) the vital need for a coherent social science field as humanity moves to increase its presence in space in terms of its permanence, numbers of spacefarers, and distance from Earth. The scope of astrosociology represents a wide-ranging number of issues, but these issues have received little attention in the past even while their relevance to mainstream social life continues to increase. Additionally, papers are solicited that examine the issues related to the need for establishing astrosociology in existing programs and departments within both the social sciences and physical/natural sciences. It relates to a formal collaboration between the two major branches of science.

B02. Science Fiction and Scientific Actuality

Chair: John M. (Jay) Falker, NASA-HQ, Washington, DC, 202-358-4545; jfalker@nasa.gov

Co-Chair: TBD

Papers are solicited that examine the relationship between science fiction and science. The astrosociological perspective looks at the two-way exchange between these fields, specifically at 1) the way science fiction absorbs current scientific discourse and casts it in a predictive model that tries to anticipate the human consequences of its potential fallout, and 2) the usefulness this speculative procedure can have for astrosociology, space exploration, and contributions toward the formation of spacefaring societies.

B03. Space Policy and Space Law in a Societal Context

Chair: Christopher M. Hearsey, University of North Dakota, (818) 209-7029; outer.space.analysis@gmail.com

Co-Chair: TBD

Papers are solicited that focus on issues that relate societal concerns concerning how space policy and law are developed and carried out from perspective oriented toward historical analysis, contemporary issues, and future possibilities. The astrosociological approach places space policy and law in a societal context that includes issues such as the cultural perspectives of different nations, cooperation among nations to reach a consensus on space issues, and cooperative ventures in space. Conflict among nations and the militarization of space fall under the scope of this session as well.

B04. Astrosociology and Astrobiology (and SETI)

Chair: TBD

Co-Chair: TBD

Papers are solicited that examine the relationship between astrosociology and astrobiology (as well as the Search for Extraterrestrial Intelligence, or SETI). Issues include the benefits of astrobiology and SETI to societies based solely on their very pursuit, philosophical issues about the possibility of life in the universe (including why we should seek out such life), how we should construct messages meant for an intelligent extraterrestrial species, and the impact of discovering extraterrestrial life (of any sort) on societies, their cultures, and social groups (such as religious groups). How does an astrosociological perspective enhance our understanding of humanity's quest to find extraterrestrial life?

B05. Planetary Defense and Societal Protection

Chair: TBD

Co-Chair: TBD

Papers are solicited that address planetary defense in terms of its traditional approach (i.e., its focus on detection of threatening objects and defense of Earth), but the approach here is to place such traditional issues in the context of protecting societies and their cultures (in addition to individuals) should the detection or defense components fail. How much effort and resources should societies devote to ensuring that their traditional ways of life can continue with minimized disruption? How much preparation is prudent, how much is wasteful? What plans should politicians make to evacuate and protect their citizens? What types of cooperative relationships between nations should receive consideration? Such questions require attention by experts in the planetary defense field.

B06. Space Societies/The Settlement of Space Environments

Chair: TBD

Co-Chair: TBD

Papers are solicited that examine the social environment in addition to the traditional attention to the physical environment (i.e., the habitat) based on an engineering and architectural approach provides the focus for this session. Why the social environment is largely ignored? Can the physical environment function properly while the social environment fails? A space settlement or colony should be thought of as a "space society," an astrosociological concept that acknowledges the reality that any settlement will function like a society with subcultures and social groups, and will become an increasingly social structure as additional individuals join it. Participants focus on what it will take for the social environment to function properly and how the two environments must successfully survive together.

B07. Technology Transfers and Spinoffs: How Space Technologies Improve Life on Earth

Chair: Douglas A. Comstock, Director, Innovative Partnerships Program (NASA HQ),
1 202 358-2221, doug.comstock@nasa.gov

Co-Chair: Daniel P. Lockney, Spinoff Editor, NASA Center for AeroSpace Information (CASI),
301-621-0224, Daniel.P.Lockney@nasa.gov

Papers are solicited that examine technology transfers and spinoffs from the nation's space program. The perspectives addressed could include technical, historical, social, economic, and legal. The session also seeks to frame the topic within the larger context of the space program by addressing the degree of importance and relevance of spinoffs relative to other space issues. To what degree can or should spinoffs be used to justify the space program? Can similar technologies develop without a space program? What is the public perception and/or importance of spinoffs? How are space technologies currently being used to assist developing countries and in what other ways might they be used? Examples of technology transfer and spinoffs will accompany discussions.

B08. Spacefaring Societies

Chair: TBD

Co-Chair: TBD

Papers are solicited that examine the future of social change in terrestrial societies, which can be addressed in terms of the very real possibility of moving from post-industrial social structures to spacefaring societal structures. Current nations that possess spaceflight abilities are considered “space-capable” societies. The term “spacefaring society” is reserved for an ideal type of social system in which space becomes a central aspect of everyday life and infused into its various social institutions and larger cultures of societies. Issues include the steps societies may take in moving toward the spacefaring society ideal type as well as what characteristics spacefaring societies may possess. How far along is the United States, for example, on the continuum toward a spacefaring society?

B09. Medical Astrosociology

Chair: TBD

Co-Chair: TBD

Papers are solicited that expand the traditional approach associated with space biomedicine by focusing on social-scientific issues consistent with disciplines such as psychology, social psychology, sociology, and anthropology. Behavioral health, operational psychology, medical sociology, and medical anthropology serve as common analogous models on Earth. In space environments, issues related to medical astrosociology capture larger issues as well. Ethical dilemmas may include compromises between providing the best healthcare for one person and ensuring the welfare of the rest of the crew/population. How do the various space agencies handle the relationship between biomedical operational and social scientific issues in the context of contemporary missions within nations and across nations? What is the evolution of the relationship between biomedical operations and social scientific issues over time, from the beginning of spaceflight and into the future?

B10. Overview Effect

Chair: Frank White, The Overview Institute

Co-Chair: TBD

The papers solicited in this session should explore the idea of the overview effect (simplicistically, the effect an image of Earth from outside has on our perception of humanity's role within a cosmic context) as the first true astrosociological experience in mankind's history. Coffee-table books of HST pictures of the universe; newsreels

featuring footage of the ISS, the space shuttles, and astronauts on a spacewalk; movies and TV series; multimedia educational packages for children; software planetariums; all these packets of information bring home to our overwhelmingly planet-bound, barely planet-wide civilization the sense of a larger context, as well as a certain awareness of the presence of a much wider territory than the one we are used to considering. To some extent, this awareness shapes public perception of the human adventure into space – how and why we should go out, what the consequences might be, and what this endeavor might entail in terms of shaping our existential perspectives. How does the real view from space differ from Earthbound perspectives? From an astrosociological viewpoint, what role has the overview effect played in shaping space-related social dynamics? Is it possible to guide such a role, and steer it so it can help us deliver the first true astrosociological message to the human collective?

B11. Space and Society: a Cultural History of the Space Age, 1900-2009

Chair: Theodore Swanson, NASA Goddard Space Flight Center, Greenbelt, MD 20771, (301) 286-7854;
Ted.Swanson@nasa.gov

Co-Chair: Bob Zimmerman, 301-937-0394; zimmerman@nasw.org

The papers in this session should focus on mapping out the social relevance of the history of the first space age. So far, we have largely perceived this history as a very contained phenomenon, the almost exclusive province of the astronauts, technicians and administrators who more or less directly brought it about. But the world at large watched the rockets fly, looked at Neil Armstrong and others walk on the Moon, and gazed at the first pictures of Earth seen from outside. The history of the space age is everybody's history, and astrosociology should examine it to identify its shape and characteristics. What were the dreams of its fathers, and how were these dreams fulfilled – or denied? What meaning did the exploration of space have, not for the astronaut or the rocket scientist, but for the taxpayer and the man on the street? How will the experience gathered from studying this meaning help us shape a new meaning for a new space age?

B12. Cosmic Political Economy

Chair: Christopher M. Hearsey, Astrosociology Research Institute, (818) 209-7029;
outer.space.analysis@gmail.com

Co-Chair: TBD

Papers for this session should address issues related to the political economy of space environments as described here. Cosmic political economy projects the academic study of production, buying and selling, and their relations with law, custom, and government, into the environment of outer space. As an interdisciplinary field, it draws on many distinct academic schools, including political science and economics, as well as international relations, sociology, and history, and also considers the enabling and constraining effects of aerospace technology.

We welcome ideas for additional session topics.