

Astrosociology and Japanese Youth: A Report on the "Constructing the Future Society" series of courses and symposium at Meiji University

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This paper will serve as an introduction to the activities conducted through the "Constructing the Future Society" series of classes – specifically the "Astrosociology" unit – and outline the results gleaned from the interdisciplinary discussions undertaken at the Symposium of the same name at Meiji University in Tokyo on March 31st, 2013. "Constructing the Future Society" began as a course based in critical thinking, under the category of the Special Themed Practicum courses at the University's School of Commerce, with the aim of introducing to the students how new ideas can be implemented to shape the direction of Japanese society in a way beneficial for all. This paper will report on the achievements attained thus far after the third year of conducting these classes and holding the Symposium under the same title in Japan and describe the potential of mmultidisciplinary forum such as this, for the exchange of opinions given not just by the experts from a variety of fields (from the media industry to JAXA members) that were brought together for the classes and symposium, but by the students themselves, who were exposed to unique stimuli during this time.

I. Introduction

THE "Special Themed Practicum" series of courses at Meiji University's School of Commerce in Tokyo are designed to be different from the standard lecture- or seminar-based classes inasmuch as their main aim is to provide an outlet for activity-based learning for students. This is done mostly through experimental projects where motivated students – usually with the assistance of representatives from a certain company such as UC Coffee or JTB (a large Japanese travel agency), depending on the theme of the class – set up some enterprise which provides a certain service, or undergo a certain activity, the results of which are presented at a final conference.

In spring 2010 I was approached by Meiji University to administer one of these "Special Themed Practicum" courses, and having come fresh from my postgraduate research in Sociology at Kyoto University while working at Kyoto Seika University, which together had built up a partnership in a research group called "Uchuu Seizon Kenkyuukai" that stemmed from their "Space and Art" joint project, I was convinced that further research on the relationship between society and space, from a sociological perspective, was urgently needed, and I decided to plan out a class based around that concept, while pursuing the field of study further with colleagues. At this point in time, a breakthrough publication in the Japanese language from Kyoto University had just been released, entitled "A Humanities and Social Sciences Approach to Space Issues"², and the concepts outlined in this collection of academic papers exploring problems such as space governance and the effects of space tourism, formed the basis of the lesson. Another reason why I felt a class of this nature was necessary at this time was that Japan had begun to experience a resurgence in interest in space phenomena, palpable on the level of the general public. This is important to contrast with the interest seen in the United States, where NASA's missions have an inherent air of national pride and astronauts, historical events and vehicles such as Neil Armstrong, the Apollo missions and Space Shuttles remain highly patriotic symbols. It is difficult to argue that Japan has anything similar on a sociological level in terms of space technology, that captures the imagination and instils national pride in the average Japanese. Nevertheless, mid-2010, just before the class was due to start (Meiji University's second semester, from which this

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particular class starts, begins in late-September), saw the triumphant return of the Hayabusa capsule, an extremely well-publicized event that captured the hearts and minds of the general public to an extent few could have predicted.

The underpinning notion of the course was that the nature of Japanese society is changing – it is suffering from a disparity of different groups of people, where the mainstream is becoming lost within the gaps, information between different age groups and strata is not circulating, and members of the younger generation are seemingly finding themselves unable to connect with others unless there are certain pre-ordained systems in place for them to do so.

As such, the course was meant to promote thinking outside the box and so the topics chosen as focal points were case studies with little previous classroom exposure, such as attitudes – both domestic and global – towards popular culture and subcultures, which made up the first semester's course entitled "Reconstructing 'Cool Japan'". The theme of the second semester, Astrosociology, is the focus of this paper, and it too was a pioneering experiment in ideology exchange, brainstorming and social entrepreneurship, as it was a topic describing the hitherto untapped potential of analysis of space exploration and development from the human sciences perspective. The social, cultural, moral and economic issues of space tourism, space debris, space elevators and hotels were ones to which the students had little prior exposure to – thus providing a blank slate to work with, and one which could potentially form the template for a new, interconnected community.

II. Course Methodology

The first semester of the course in 2010 began with the title "Our Entry into a New Space Age". From the second year onwards, the title was changed to "Constructing the Future Society: An Introduction to Astrosociology". The early plans laid out for the course, as well as the significance of the topics at hand were laid out in a separate paper I wrote entitled "Teaching 'Astrosociology': Science-fiction as classroom material for humanities-based hypothetical discourse of space exploration and development."³ In it, I outlined the relationship between the popularization in mainstream society of theories and experiment results published in academic journals, such as the orbital elevator concept, through the reach of science-fiction writers, and the potential researchers and creators of a newer generation whom they influence. In many cases, science-fiction had fuelled further research on a certain subject, and this cycle is continuously repeating even today.

Japanese society is well-renowned for its rich and vast subcultures, a topic for the other "Special Themed Practicum" class I administer, and so it is natural to come across rich science-fiction stories in a variety of media that can be utilized within the classroom setting, as a hypothesis for a certain vision of the future, where social problems arise as a result of advanced technology clashing with cultural norms and/or through its misuse.

Coincidentally, however, once the class had started, many more recent space-related news items were placed on the agenda as points of discussion, such as the Hayabusa phenomenon and the closing of JAXAi as part of a government budget screening process⁴, and lastly the current affairs magazine Shuukan Diamond's special feature, entitled "2010: A Space Business Odyssey",⁵ outlining the current line-up of private enterprises investing in "space business", as well as bringing to the foreground some theoretical "out there" concepts towards which these may be a stepping stone. These topics were focused upon as a way to stimulate discourse on the subject of space and society and their relation with each other -a topic which does not get as much focus in itself within the media - and, as a result, within everyday discussion - as the separate elements which comprise it, such as new technology, government subsidies, new enterprises, and the like. Thus one of the first steps for the students was to split into groups and begin to collect data on public awareness and understanding of space and space-related issues, and how strongly people believe that space as an entity is involved within everyday life. Based upon these results, each group of students would formulate a project - hypothetical or otherwise - to raise public awareness and understanding of space phenomena and use this to promote critical analysis within different sectors of society. Clearly, these tasks have extremely ambitious aims for a single-semester course comprising only 15 90-minute classes, but with the option for the students to re-take the same course the following year if they so wished (considering the material itself was constantly evolving as news regarding space-phenomena was becoming more prevalent year upon year), plus the general mantra of the "Special Themed Practicum" being that the week in between the classes themselves was when most of the activities had to be done (thus meaning that the class time itself was mostly for discussion on group progress, aside from new disseminated information), in retrospect having high aims proved highly beneficial when considering the accumulated momentum which led to the endeavours which followed.

III. Expansion: Collaboration with JAXA and Astrosociology Research Institute

My discovery of the Astrosociology Research Institute goes back to 2009, roughly around the time that Kyoto University and Kyoto Seika University were merging to formulate the "Space-art" experiment. I was moved by the realization that I was not alone in my seemingly-strange will to promote genuine discussion on the way that space affects society, our usage of space technology, legal and cultural ramifications of space-related business enterprises and what future forms of society such technology will bring about – along with what sorts of social problems it will incur. Thus, it seemed natural that I would sooner or later need to contact ARI, even though our distance apart gave us little hope of any real collaboration – especially considering that I had no real background in astrophysics outside of a brief course as an undergrauate and an interest in astronomy as a hobby from childhood.

At the same time, the contacts I had made through the "Space-art" and "Uchuu Seizon-gaku Kenkyuukai" research groups were very cooperative in providing me with many of the technical sides of the equation with regards to material for discussion in class, and we negotiated an arrangement where JAXA representatives would come to the class and give talks and answer questions for two of the 15 classes out of the course. Additionally, together we organized a field trip to JAXA Space Centre in Tsukuba City, where the students had the opportunity not only to participate in a typical public tour of the facilities, but also have special access to areas typically not shown to the public, such as the chance to step inside the isolation chambers trainee astronauts use, explore the enormous satellite bays and visit the vast water pools where spacewalk training is undertaken. All of these were extremely moving for the students, but they were reminded that they were there also to investigate the relationship between JAXA and the public, so, for example, the abundance of families with young children who seemed a little disappointed was a particular point of observation by some of the students who noted that this was perhaps not all that could be done to promote a more exciting and involving image of space to children.

The opportunity to discuss such opinions with other young students came in the form of a further collaboration, this time with the SDF – the Space Development Forum – an NPO funded by a variety of space-related sponsors, made up of mostly undergraduate students, with the aim to promote public awareness of space issues from a variety of perspectives, which I found very similar to my own aims. By introduction from JAXA, we arranged to have a joint discussion session at the Tsukuba Space Centre, in the hall above the mission control floor. While this may have seemed somewhat overwhelming for my School of Commerce students, the general idea of having individuals of different backgrounds bring their ideas to the table and hold an energetic discussion proved beneficial for all.

IV. Symposium

Having had a place on the executive committee producing a Fashion Business Symposium at Meiji in late 2011, I was determined to bring the work of the "Constructing the Future Society" students, who hitherto had presented their results at small venues within the university, to the public eye, and to bring to fruition their investment in space and society. My hope was that setting up a public forum where multidisciplinary discussion could take place would be a catalyst for an inspired movement to seriously consider space issues not just as a "science and technology" affair. I felt that Japan is particularly guilty of this pigeonholing, especially when one carefully compares newspaper headings – the English-language (and decidedly U.S.-centric) periodical "The Japan Times" very often featured space-related news stories with a front-page headline, but rarely did the Japanese-language papers do the same, instead relegating them to the often-single page science section, where only people with an already-established interest in the topic would care to look. This phenomenon in itself is one which is a typical idiosyncrasy of Japanese society worth its own investigation and analysis, and indeed has been a point of debate during some of the classes.

To this end, in Spring 2012 I applied for the opportunity to hold an International Symposium which would be an extension of the course, with the essence of the classes intact and ample participation from the students, past and present, as well as talks from a wide range of respected individuals, each from a different field of expertise, in keeping with the multidisciplinary aspect.

Later in 2012 I finally met with Christopher Hearsey, the Deputy Chief Executive Officer for Programs & Special Projects at ARI, and we discussed the possibility of having him and Dr. Jim Pass, the Chief Executive Officer, to give talks at the Symposium. Unfortunately, lack of funds meant that I was unable bring them to Tokyo for the event, but we worked out a system in which they would perform a video presentation, the data of which I then translated in the form of subtitles, and it would be played back during the event.

Ultimately, the list of presenters looked like this:

James R. Bowers (Meiji University School of Commerce) Tatsu Hirukawa (Meiji University School of Information and Communication) Hiroki Okada (Kobe University Graduate School of Intercultural Studies)

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Hiroaki Isobe (Kyoto University Center for the Promotion of Interdisciplinary Education and Research) Jim Pass (Astrosociology Research Institute)(Video presentation) Christopher Hearsey (Astrosociology Research Institute)(Video presentation) Yoshiyuki Tomino (Animation director/Kyoto Seika University Guest Professor) Leiji Matsumoto (Manga artist/Young Astronauts Club Japan)(Video presentation) Norio Saito (JAXA Kibo Forum) Nasa Yoshioka (Space Development Forum)

A full run-down of the Symposium can be found in the official ARI Newsletter⁶. However, I should highlight the importance in the mixture of individuals in this list. Aside from astrophysicists, sociologists and anthropologists on the academic side, there are notable additions in the form of artists such as Leiji Matsumoto (creator of internationally-renowned comics and animated series Space Pirate Captain Harlock and Space Battleship Yamato) and Yoshiyuki Tomino (director of Mobile Suit Gundam). The reasoning behind their inclusion in the line-up of presenters comes from the aforementioned power of media and popular culture to stimulate the popularization not only of scientific concepts, but also their relation to the human world. To further clarify, science-fiction authors, inasmuch as they incorporate scientific theories into their stories, must also engage the reader and/or audience through the clever use of a relatable protagonist. Thus, they are already at this stage putting into practice the thought process which is the essence of astrosociology, that is to say, they are constantly aware of the relationship between space and society, as they need to be in order for their story to be properly constructed. Therefore, listening to their opinions and theories allows astrosociological thinking itself to be further popularized and not be treated as such a foreign, unrelatable concept - instead, one which has been on people's minds for many generations, but is only now coming to the front stage. Lastly, Nasa Yoshioka, the young outgoing head of the SDF made a particularly strong impression on to my students, as she was also then an undergraduate, yet they found that her record of achievement was highly inspirational.

The Symposium's final session was a panel discussion and Q&A session hosted by nightclub DJ and international Japanese popular culture proliferator "Miwaku no Kunio", whom I chose for the role due to his expertise in involving young people in a wide range of activities, and doing so with a sharp sense of humour. Framing the session – where many subjects were expanded upon, ranging from those such as military usage of space technologies to depictions of space colonies in science fiction – within an air of "entertainment" perfectly complimented the otherwise heavy-handed nature of some of the topics. To a certain extent, while perhaps this may not be standard procedure for many academic conferences, for the purpose of this event, that is, to involve more young Japanese people into the proceedings, it proved quite successful. Feedback from the audience questionnaires was mostly positive, with the only recurring negative point was that the advertising for the event was minimal. Indeed, it was concentrated mostly online, again, for reasons to do with the very limited funding. Many, however, expected a follow-up event in the next year.

V. Conclusion

It has been seen how the "Constructing the Future Society" series of courses has grown into a forum for critical thinking on a variety of topics, mostly focusing on young persons' relationships to their society, and space-related phenomena and technology play a large role in that. It is important to keep this momentum and continue to provide an accessible arena for discussion on these subjects, as well as for interaction between participants of different backgrounds, in order to further develop discourse within society and thus have a greater purpose when facing the future. Further collaboration with individuals incorporating space topics into human sciences syllabi such as Kobe University's Professor Hiroki Okada, an anthropologist whose talk on the ramifications for Japanese culture in the age of space colonies were well received in the Symposium, and also with ARI, to put together a curriculum for the education sector may be the next big step in this wide-ranging mission.

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² Kinoshita, T., (ed.), Uchuu mondai e no jinmon/shakaikagaku kara no apuroochi (A Humanities and Social Sciences Approach to Space Issues), Zaidan-houjin Kokusai Koutou Kenkyuusho, Kyoto, 2009.

³ Rivera Rusca, R., "Teaching 'Astrosociology': Science-fiction as Classroom Material for Humanities-based Hypothetical Discourse of Space Exploration and Development", *The Journal of Humanities, Meiji University*, Vol. 17, 2011, pp. 25-34.

⁶ Rivera Rusca, R., "Report from 'Constructing the Future Society in Japan' Symposium at Meiji University, Tokyo, Japan (March 31, 2013)", *Astrosociological Insights: The Newsletter of the Astrosociology Research Institute, Vol.2*, pp. 8-10, URL: <u>http://www.astrosociology.org/Library/PDF/Newsletters/ARI-Newsletter_Vol-2_Iss-2_05-2013.pdf</u>, [cited August 1, 2013]

⁴ JAXAi: A small public facility comprising of an information booth, a small screening area featuring instructional videos about Tanegashima rocket launches and satellite mission simulations and other resources, located very close to the central Tokyo JR station. It closed on 28th December, 2010 in accordance with the government budget screening decision, much to the protest of families and children writing letters in newspapers.

⁵ "Nisenjuunen uchuu bijinesu no tabi (2010: A Space Business Odyssey)", *Shuukan Diamond*, pp. 32-69, 2010, Tokyo, Diamond-sha