Title of Project: The Creation of Bauddhakosa: A Treasury of Buddhist Terms and Illustrative Sentences

Akira Saito
(The University of Tokyo, Graduate School of Humanities, Professor)

Research Area: Indian Philosophy and Buddhist Studies
Keyword: Indian Philosophy, Buddhist Studies and the History of Buddhism

【Purpose and Background of the Research】
An enormous number of technical terms appear in Buddhist scriptures and treatises. While based on Sanskrit and Middle Indo-Aryan languages, many of these were translated into other languages, especially Chinese, and became established as terms that have been widely accepted in the world of East Asian Buddhism down to the present day.

Nonetheless, an attempt to reexamine the meaning of these many terms in their respective contexts and then gather together the wisdom of many experts with a view to bringing these terms to life in the contemporary languages might be a quite important task.

The objective of this research is to take up for consideration the important scriptures and treatises that were composed in India, extract the definitions (or rules about usage) of terms used in these works, and, as well as comparing these, establish standard translations, on the basis of which one could raise some substantial questions directed towards a full-scale examination by academia as a whole.

【Research Methods】
This project is carried out by the research team composed of a chief investigator, A. Saito, and five research scholars who have their own allotted tasks. The research is further supported by several related scholars as well as graduate students belonging to the each institute of the above research members.

As a methodological example, the chief investigator published in 2011 a booklet entitled Bauddhakosa: A Treasury of Buddhist Terms and Illustrative Sentences, in which the seventy-five elements (dharma) of Sarvastivada in the Abhidharmakosabhasya and related works were examined in detail. The above preliminary research was executed by the effective use of XML (Extensible Markup Language).

This project applies the above method to the other Buddhist terms, approximately 500 in total, related to the fields of Early Buddhism, Yogacara, Madhyamika, Buddhist Logic and

【Expected Research Achievements and Scientific Significance】
The research project provides us with a reliable modern Japanese-English glossary of Buddhist terms as well as illustrative sentences in which those terms are used.

The result of this research enables us to have pertinent understanding of Buddhist terms and thoughts which have long influenced the language, literature, philosophy, and culture in general in East Asia.

Besides, the research result can be shared by many people interested in Buddhist thoughts since it is opened to the public not only in a booklet but also in the Website.

It could be also supposed that with an international cooperation, the research is highly expected to complete in Japan since the works primarily or secondarily related are written in different languages such as Sanskrit, Pali, Tibetan, Chinese and Japanese.

【Publications Relevant to the Project】


【Term of Project】FY 2011-2015

【Budget Allocation】81,700 Thousand Yen

【Homepage Address and Other Contact Information】http://www.l.u-tokyo.ac.jp/intetsu/start_index.html
Title of Project: The Research and Study of the Shipwrecks at the Mongol invasions Using the Underwater Archaeological Method

Yoshifumi Ikeda (University of the Ryukyus, Faculty of Low and Letters, Professor)

Research Area: Humanities, History, Archaeology
Keyword: Mongol Invasions, Seabed site of Takashima, Underwater Archaeology

【Purpose and Background of the Research】
In 1281, Chinese Emperor Kublai Khan of the Yuan Dynasty reorganized the Forces and attempted to invade Japan. This is Known as the Battle of Kanai in Japan. The invasion failed primarily due to the courageous defensive mounted and a genuinely coincidental rainstorm.

This research will identify these shipwrecks on seabed based on the result of the sonar prospecting at Imari Bay as well as the geological maps and cross-sections of the area, and investigate them through an underwater archaeological study.

The study also aims to propagate around the world information about the remains on the seabed of Takashima, which is a key to understanding the Mongol invasions of Japan, as well as the research itself and the method employed, in order to garner global recognitions for the Study of the Mongol invasions of Japan.

【Research Methods】
The research team has in the past conducted studies on the wreckage remains related to the Mongol invasions of Japan at Imari Bay. In the process, the team conducted a seabed excavation in 2010 and confirmed wooden and brick material originating from the vessels involved in the Battle, and this research is intended to investigate these items thoroughly.

Salvaged remains will be also be scientifically analyzed (e.g. tree species identification, paste analysis of the bricks, radiocarbon dating) to understand them comprehensively. Also, based on the information acquired, the team will attempt restore a vessel.

Through this effect, the team will attempt to integrate underwater archaeology investigation system.

An international symposium will be organized with the aim to convey and share widely information relating to the Mongol invasion of Japan as well as the remains on the seabed of Takashima. As a part of the symposium, a special exhibition will be held with the cooperation of museum in Nagasaki Prefecture and Saga Prefecture or facilities such as Kyusyu National Museum, to showcase the relics found during the investigation and raise awareness about the topic.

Results and findings of the research will be compiled into and published as a report, and a book for the general readership will be authored and published to raise awareness about the Mongol invasion of Japan and the remains on the seabed of Takashima.

【Expected Research Achievements and Scientific Significance】
In the past, shipwrecks and other relics related to the Mongol invasion of Japan have been found sporadically from the Takashima seabed remains and other remains related to the invasion. However, salvaging of ship material in significant volume like this research intends to perform has never been done before. We expect this research to fill the missing pieces and make great contributions to the restoration of a vessel based on the findings and other resources.

This research will provide an opportunity for not just Japan but the rest of the world to become aware of the study of the Mongol invasion of Japan, a historic event—an event of historic significance—and the relics related to it.

Furthermore, the integration of physical sonar prospecting and underwater archaeological research methods being explored in the research will establish a new underwater archaeological research method in Japan that should also have an impact in the rest of the world.

【Publications Relevant to the Project】

【Term of Project】FY2011-2015

【Budget Allocation】80,800 Thousand Yen
Title of Project: Reinventing the Study of Andean Civilization through Analysis of the Foundation of Power

Yuji SEKI
(National Museum of Ethnology, Center for Research Development, Professor)

Research Area: Cultural Anthropology/ Folklore
Keyword: Archaeology, Anthropology, Civilization, Complex Society, Power

Purpose and Background of the Research
This project aims to clarify the formation of complex society in Andean Civilization (meso level analysis) and the formation of civilizations in the human history (macro level analysis) by introducing a new concept of “power” into the analysis, by using an interdisciplinary approach in our archaeological investigation (micro level analysis). New excavations will be carried out together with a systematic reanalysis of the results of Andean research by Japanese expeditions over the last 50 years.

Conventional theories about Andean civilization often take as their standing point images of the Inca Empire as it appears in historical records written after Spanish conquest. Previous Japanese investigations have emphasized the description of excavated sites and materials, with limited analysis. In our project we will avoid Inca-centric analysis, and at the same time we will reinterpret the huge quantity of data accumulated by the Andean expeditions. The new approach through new excavations to understanding “power” will be tested, and we will develop a new theory of civilization that does not depend primarily on studies of the Inca.

Research Methods
The main project activities will be:
1) Archaeological excavations at the Pacopampa site in the northern highlands of Peru, a site which belongs to the Formative Period (B.C.3000-A.D.1) in the early phase of Andean Archaeology (micro level analysis).
2) Interdisciplinary analysis of the materials recovered from the excavations using the methods of physical anthropology, geology and conservation science (micro level analysis).
3) In each analysis, the apparent sources of “power” will be identified in relation to economy, military affairs, and ideology and attention will be given to how social leaders could exercise “power” by combining the different sources of “power” (micro level analysis).
4) Comparisons of our new data with the data of other archaeological sites of the same period in the northern highlands. GIS database will be developed and published. To broaden the scope of our comparisons, we will conduct workshops with North American researchers who are working with other Formative Period sites (meso level analysis).
5) Symposiums will be held to relate our work to the formation of the civilizations more widely in the Americas and in Western Eurasia. By relating record in the Andes to records in other regions, we may discover new ways to interpret our data (macro level analysis).

Expected Research Achievements and Scientific Significance
“Power” has been a classical theme in archaeology and anthropology. However conventional research has been descriptive and methodology remains immature. Comparisons between regions and time periods have been hampered by lack of common theoretical frameworks. This project links the techniques of archaeology and natural science into a theoretical frame adopted from social science, and, as a result, the originality and the generality are expected to be lead to a more robust civilization theory. Moreover human science like archaeology will be able to contribute to the studies of “power” theory which have been discussed exclusively in the social science, and an archaeological point of view could give some hints to understand the “power” in the present-day society.

Publications Relevant to the Project

Term of Project FY2011-2015
Budget Allocation 140,300 Thousand Yen

Homepage Address and Other Contact Information
http://www.minpaku.ac.jp/staff/seki/
**Title of Project:** Private International Law (PIL) & Securities in Intellectual Property, applying a Law and Economics approach with the aim of developing and disseminating the methodology of PIL

**Toshiyuki Kono**
(Kyushu University, Graduate School of Law, Professor)

**Research Area:** International Law

**Keyword:** Private International Law

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<th>Purpose and Background of the Research</th>
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| In order to solve cross-border disputes whose parties are private individuals or enterprises, the law applicable to these disputes should be determined. This is the traditional function of private international law. Its methodology to determine applicable laws in most countries, which includes Japan, stems from theories established in Germany in the 19th Century. The methodology has been elaborated since then, but the underlying concepts remain largely unchanged. In the 1950's and 1960's, harsh criticism against this methodology was raised by some American scholars and their followers. However, with the exception of this period, the methodology of private international law has not been discussed in great detail. Until very recently, little attention has been paid to the possible implication of a law and economics approach for private international law.

IP increasingly gains its importance as collateral within commercial transactions. IP financing could become a cross-border financing, for example, if IP is a foreign patent or if a party is a foreign company. Due to differences in both securities and IP laws, as well as difficulties in unifying these rules, private international law needs to be further developed in order to cope with possible disputes, since no specific private international law has yet offered a detailed consideration of this issue.

UNCITRAL realized the importance of IP finance and the necessity of specific private international law rules, and adopted several private international law instruments as a part of the Legislative Guide at its 43rd session in 2012. However, the adopted rules are a combination of two opposing positions and therefore represent something of a political compromise. New rules need to be developed from the viewpoint of how securities in IP could contribute to more innovation and creativity.

The above mentioned outcome of the negotiations at UNCITRAL reveals that the conventional methodology has limits, particularly in coping with new situations. A law and economics approach could therefore be a useful tool to develop appropriate rules specifically for securities in IP.

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| Five types of transaction, which have the function as securities in IP, i.e. transfer, co-ownership, trust, pledge, and license will be the objectives of analysis. For each type of transaction and possible players, a model will be constituted based on game theory, concerning the appropriate choice of law, and it will be further elaborated. Concretely, in such a case that a party creates IP and another party uses this IP, what kind of choice of law rules would be most appropriate for the different players? Then what would be the situation, if a third party gets involved? How about the situation, if the number of third parties is plural? The usefulness of the obtained theoretical outcomes will be proven through surveys conducted for both supply and demand sides.

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<th>Expected Research Achievements and Scientific Significance</th>
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<td>New private international law rules on securities in IP will be developed and proposed. The usefulness of a law and economics approach for private international law will be promoted. The outcome will be presented at international fora, which includes special lectures scheduled in 2013 at the International Law Academy in The Hague, the sessions of the newly established Committee on Private International Law and IP in the International Law Association, and intergovernmental organizations, including UNCITRAL.</td>
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<th>Term of Project</th>
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<td>Budget Allocation</td>
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**Homepage Address and Other Contact Information**
A special project website will be soon created and outcomes will be uploaded.
Toru Kikkawa
( Osaka University, Graduate School of Human Sciences, Associate Professor )

Keyword : social science, sociology
Keyword : research, stratification, social psychology

**Purpose and Background of the Research**

Although it is clear that Japanese people’s appreciation of wealth and social position (class consciousness) has recently been greatly transformed by rising poverty and inequality, academic studies of this change are inadequate. This research project will fill gaps in our understanding of this important social issue by using social surveys and mathematical model-based experiments to reveal the mechanism of associative change between social stratification and social psychology.

From 1970 through the 1980s, interest in social stratification in Japan was drawn to the “Mass Middle Class.” However, thereafter, with the arrival of the “bubble economy,” the exploration of the relationship between actual social status and class identification was deemed a thing of the past.

But following the Lehman Shock in 2008, increasingly fluid employment and the difficult living conditions of lower class once again began to be the object of a critical public debate. Now, in the wake of the Great Tohoku Earthquake, we confront again the need to rethink inequality, social stratification, and abundance.

In the quarter century of Heisei, the structural tendency of Japanese society has shifted from “generally middle class” to “generally unequal.” Understanding the relationships that enabled this change is a meaningful sociological task.

**Research Methods**

The main purpose of this study is to design and carry out the 1st SSP (Social Stratification and Social Psychology) Survey in 2015. This is a nation-wide, face-to-face interview survey. The sample size in design will be 10,500. The SSP Survey will have strict comparability with 1985 and 1995 SSM (Social Stratification and Social Mobility) surveys. Both of them are known as reliable data sets in social stratification research.

Further, we will utilize experimental simulations in order to elaborate socio-psychological hypotheses. Plausible mechanisms derived from the process will be examined in the SSP Survey.

**Expected Research Achievements and Scientific Significance**

We will obtain empirical materials that will enable us to theorize the newest trends in social psychology related to social stratification. Establishing the SSP Survey will also contribute to the improvement of social research methodology under uncooperative current social environment.

**Publications Relevant to the Project**


**Term of Project** FY2011-2015

**Budget Allocation** 111, 600 Thousand Yen

**Homepage Address and Other Contact Information**

http://ssp.hus.osaka-u.ac.jp/
http://srdq.hus.osaka-u.ac.jp/
Title of Project: Psycho-neurological and institutional foundations of pro-social behavior

Toshio Yamagishi
(Hokkaido University, Graduate School of Letters, Professor)

Research Area: Social Psychology
Keyword: social interactions, interpersonal relations, cooperation

[Purpose and Background of the Research]
Based on the institutional approach which analyzes pro-social behavior (such as cooperation, empathy, reciprocity, fairness, etc.) that makes humans as social beings from the perspective of co-evolution of psychological and neural functioning and social niches consisting of behaviors, beliefs, and incentives (i.e., institutions), we propose to identify consistencies and inconsistencies in behavior across various types of experimental games. We further propose to find corresponding consistencies and inconsistencies in the neural activities of the players across these experimental games. In particular, we will focus our analysis on the following issues. 1) To identify the roles that social risk aversion (SRA) plays in producing consistencies across various types of experimental games. For this purpose, we are proposing to develop several alternative measures of SRA, and apply these alternative measures to demonstrate the robustness of the currently available findings. 2) To analyze the neural bases of the consistencies in behavior across various games using the brain scanning data, with particular focus on the roles SRA plays in producing the consistency. 3) To conduct replication studies in Western and Asian societies to demonstrate the robustness and cultural variations of the major findings.

[Research Methods]
The core of the proposed study is to conduct a battery of experimental games (such as prisoner's dilemma game, social dilemma game, trust game, dictator game, ultimatum game, assurance game, etc.) with the same set of non-student participants over three years to identify consistencies in behavior across those games. We also propose to measure participants’ demographic traits, personality traits, beliefs, attitudes, values, including IQ, EQ, empathy, and so on, and examine how these individual traits are related to the pro-social behavior across experimental games. In addition to measuring participants’ individual traits, we propose to take fMRI images of the brain activities of some of the participants as they make decisions in the experimental games. Participants’ saliva samples will be used to measure their levels of stress-related and other hormones.

[Expected Research Achievements and Scientific Significance]
Pro-social behavior in experimental games has traditionally been explained in terms of pro-social preferences (i.e., preferences for particular social outcomes). Such pro-social preferences, however, are known to be activated depending on particular situational cues. Our research will identify how cognitive processes interact with motivational processes in activating a particular set of social preferences under certain social situations. In addition, we will make the experimental data together with individual trait and brain scanning data public after the study is completed so that a wide range of social scientists and behavioral scientists, especially those who have limited access to experimental data, can use experimental and individual trait data. This will be the first public data set of experimental game studies.

[Publications Relevant to the Project]


[Budget Allocation] 150,000 Thousand Yen

[Homepage Address and Other Contact Information]
http://lynx.let.hokudai.ac.jp/members/yamagishi/